

# MARKETING MANAGEMENT JOURNAL

VOLUME 20  
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Fall 2010

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## FROM THE EDITORS

*The Marketing Management Journal*, first published in Fall, 1991, is dedicated as a forum for the exchange of ideas and insights into the marketing management discipline. Its purpose was and continues to be the establishment of a platform through which academicians and practitioners in marketing management can reach those publics that exhibit interests in theoretical growth and innovative thinking concerning issues relevant to marketing management.

Submissions to *The Marketing Management Journal* are encouraged from those authors who possess interests in the many categories that are included in marketing management. Articles dealing with issues relating to marketing strategy, ethics, product management, communications, pricing and price determination, distribution sales management, buyer behavior, marketing information, international marketing, etc. will be considered for review for inclusion in *The Journal*. *The Journal* occasionally publishes issues which focus on specific topics of interest within the marketing discipline. However, the general approach of *The Journal* will continue to be the publication of combinations of articles appealing to a broad range of readership interests. Empirical and theoretical submissions of high quality are encouraged.

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The Co-Editors thank *The Journal's* previous Editor, Dub Ashton and his predecessor David Kurtz, *The Journal's* first Editor, for their work in developing *The Marketing Management Journal* and their commitment to maintaining a quality publication.

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The mission of *The Marketing Management Journal* is to provide a forum for the sharing of academic, theoretical, and practical research that may impact on the development of the marketing management discipline. Original research, replicated research, and integrative research activities are encouraged for review submissions. Manuscripts which focus upon empirical research, theory, methodology, and review of a broad range of marketing topics are strongly encouraged. Submissions are encouraged from both academic and practitioner communities.

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## RELATIONSHIP MARKETING IN A DEVELOPING ECONOMY

**SUBHRA CHAKRABARTY**, *Mississippi State University*

**GENE BROWN**, *University of Missouri—Kansas City*

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*The sales representatives of a pharmaceutical manufacturer in India were surveyed to explore the effects of relationship marketing on sales performance. Specifically, the effect of buyer-seller relationship quality on sales performance was assessed. The results indicated that customer oriented selling behaviors helped in developing buyer-seller relationship quality and adaptive selling behaviors fully mediated the effects of buyer-seller relationship quality on sales performance. Based on the findings, managerial implications for US firms operating in developing economies, such as India, are discussed.*

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### INTRODUCTION

Relationship marketing has been a major focus of theoretical and empirical research in marketing. Morgan and Hunt (1994) viewed relationship marketing as a “major directional change in both marketing theory and practice” (p. 20). Not surprisingly, a large number of studies have been conducted on buyer-seller relationships in the last two decades (e.g., Mysen and Svensson 2010; Bradford and Weitz 2009; Palmatier et al. 2008; Palmatier, Dant and Grewal 2007; Hewett, Money and Sharma 2002; Hibbard, Kumar and Stern 2001; Williams and Attaway 1996; Morgan and Hunt 1994). However, empirical studies on relationship marketing have focused almost exclusively on US and European markets. Although developing economies, such as, China and India are expected grow at 8.8 percent and 6.6 percent respectively ([www.forbes.com](http://www.forbes.com)), few studies have examined whether developing buyer-seller relationships are profitable in these markets. Since salespeople span the boundaries of selling and buying organizations, the manner in which they develop and manage buyer-seller relationships in developing economies should be of interest to US firms who have entered or plan to enter

these markets. The current study attempts to fill this void by exploring the relationships among buyer-seller relationship quality, selling behaviors, and salesperson performance in India.

USA continues to be India's largest trading partner with bilateral trade in merchandise and commodities totaling US\$ 31.91 billion in 2006 ([www.mea.gov.in](http://www.mea.gov.in)). India's middle class exceeds 200 million. US companies represent the largest share of foreign firms operating India ([www.business.mapsofindia.com/india-company/america.html](http://www.business.mapsofindia.com/india-company/america.html)). US Fortune 500 firms in India include Microsoft, American Express, IBM, McDonald's, Procter & Gamble, Pfizer, General Electric, Ford etc. Consequently, practitioners and academicians will be interested in whether the theories of selling which evolved in US can be applied to developing economies, such as India.

Scholarly research on selling and sales management in India has addressed various issues, such as, performance implications of causal attributions of salespeople (DeCarlo, Agarwal and Vyas 2007), effects of managerial behaviors and job autonomy on job satisfaction of salespeople (DeCarlo and Agarwal 1999), relationships among managerial behaviors, role stress, and organizational commitment in salespeople (Agarwal, DeCarlo and Vyas 1999), vendor selection criteria of purchasing



managers (Karande, Shankarmahesh and Rao 1999), etc. The current study adds to this growing body of literature on selling in India by studying the effects of buyer-seller relationship quality and selling behaviors on sales performance.

In the sales literature, customer oriented selling behaviors (hereafter refereed to as COSB) and adaptive selling behaviors (hereafter referred to as ASB) have received extensive scholarly attention (e.g., Jaramillo and Grisaffe 2009; Rapp, Agnihotri and Forbes 2008; Jaramillo et al. 2007; Giacobbe et al. 2006; Franke and Park 2006; Boorum, Goolsby and Ramsey, 1998; Spiro and Weitz 1990; Saxe and Weitz 1982). COSB has been defined as “the practice of the marketing concept at the level of the individual salesperson and customer” (Saxe and Weitz 1982, p. 343). ASB has been defined as “the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation” (Weitz, Sujan and Sujan 1986, p. 175). Although both COSB and ASB are key selling behaviors that are available to salespeople to manage their relationships with customers, the implications of choosing levels of these behaviors are quite different. Salespeople with “both low and high customer orientation will adapt sales presentations to customer interests” (Saxe and Weitz 1982, p. 344).

Although the effects of selling behaviors on sales performance have been studied at the customer-salesperson level, the effects of buyer-seller relationship quality (hereafter referred to as RQ) has been studied primarily at the interorganizational level (e.g., Athanasopoulou 2009; Palmatier, Dant and Grewal 2007; Cannon and Perreault, Jr. 1999; Kalwani and Narayandas 1995; Morgan and Hunt 1994). Studies that explored RQ at the customer-salesperson level (e.g., Bradford and Weitz 2009; Belonax, Jr., Newell and Plank 2007; Campbell, Davis and Skinner 2006; Rutherford, Boles, Barksdale, Jr. and Johnson 2006; Boles, Barksdale, Jr. and Johnson 1997; Crosby, Evans and Cowles 1990) used

respondents from US and assessed the effects of RQ on customer retention, customer referrals and customer recommendations (Boles, Barksdale Jr. and Johnson 1997), and sales effectiveness (Crosby, Evans and Cowles 1990). The current study contributes to this growing body of literature by exploring the relationships among COSB, ASB, RQ, and sales performance among a sample of pharmaceutical salespeople in India.

## BACKGROUND LITERATURE

### Selling Behaviors

In their boundary-spanning role, the selling behaviors of salespeople are crucial to sales performance. COSB is needed to implement the marketing concept and achieve the sales objectives of the selling firm in the long-run. While interacting with customers, salespeople engaged in COSB are expected to increase “long-term customer satisfaction,” and “avoid actions which sacrifice customer interest to increase the probability of making an immediate sale” (Saxe and Weitz 1982, p. 344). Thus, in the long-run, the effect of COSB on sales performance is expected to be positive. However, empirical evidence on the COSB – sales performance link has been mixed. The relationship between COSB and sales performance has been positive (e.g., Martin and Bush 2006; Franke and Park 2006; Jaramillo et al. 2007), non-significant (e.g., Wachner, Plouffe and Grégoire 2009; Plouffe, Hulland and Wachner 2009; Jaramillo et al. 2009), and negative (Saxe and Weitz 1982). It is noteworthy that Saxe and Weitz (1982) found a significantly positive relationship between COSB and sales performance only for salespeople who were able to help their customers with whom they had long-term cooperative relationships. Consequently, successful implementation of the marketing concept by using COSB will depend on whether salespeople have developed RQs, and whether they have the ability to leverage RQs to satisfy customer needs.

Salespeople engaged in ASB use different presentations for different customers. They customize their sales strategy to fit the needs of the customer and the sales situation. By doing market research on each customer (Weitz, Sujan and Sujan 1986) “salespeople can engage in a unique behavior pattern oriented to each customer” (Weitz 1981, p. 92). Consequently, ASB “forces the salesperson to practice the marketing concept” (Weitz, Castleberry and Tanner 2009, p. 151). Given that the benefits exceed the costs, ASB is expected to improve sales performance. Scholars have reported a significantly positive relationship between ASB and sales performance (e.g., Jaramillo et al. 2009; Giacobbe et al. 2006; Boorum, Goolsby and Ramsey 1998; Spiro and Weitz 1990).

### **Buyer-Seller Relationship Quality**

Based on Palmatier et al. (2006, p. 138), RQ is defined as an “overall assessment of the strength of a relationship, conceptualized as a composite or multidimensional construct capturing the different but related facets of a relationship.” Although there is no consensus on the components of RQ and the relationships among them, scholars have typically used trust (e.g., Dwyer, Schurr and Oh 1987; Crosby, Evans and Cowles 1990; Morgan and Hunt 1994; Bradford and Weitz 2009), conflict (e.g., Weitz 1981; Anderson and Narus 1984), anticipation of future interaction (e.g., Weitz 1981; Noordewier, John and Nevin 1990; Jap 2001), and satisfaction (e.g., Crosby, Evans and Cowles 1990; Jap 2001; De Wulf, Odekerken-Schröder and Iacobucci 2001). In the current study, RQ is conceptualized as a composite of trust, conflict, anticipation of future interaction, and satisfaction. Salespeople evaluate RQ by assessing their customers’ trustworthiness, the degree to which they disagree with customers on various issues, their expectations of continuity of customer-salesperson relationships, and their level of relationship satisfaction.

### **Sales Performance**

Achieving high sales performance and attaining the goals of the selling organization are the key measures of success of salespeople. Consequently, salespeople engaged in relationship marketing should expect to achieve high levels of sales performance. Therefore, sales performance is conceptualized as the degree to which salespeople achieve the sales objectives of their firms.

### **DEVELOPMENT OF HYPOTHESES**

COSB enables salespeople to stress the benefits of their products and the selling organizations, “meet unique customer needs,” “continuously serve customers,” and build credibility by making a balanced presentation (Schwepker, Jr. 2003, p. 152). COSB incorporates low pressure selling (Saxe and Weitz 1982) and helps customers reach their own buying decisions (Bursk 2006). Thus, COSB is expected to increase long-term customer satisfaction (Stock and Hoyer 2005; Saxe and Weitz 1982) and facilitate the development of RQ (Williams and Attaway 1996; Williams 1998). Saxe and Weitz (1982) reported a significant positive correlation between COSB and sales performance only in high RQ conditions. Based on a meta-analysis of COSB, Franke and Park (2006, p. 700) found that the effects of COSB on manager-rated and objective performance was nonsignificant and concluded that “the meta-analysis raises questions about how effectively customer-oriented selling implements the marketing concept at the salesperson-customer level.” If COSB helps implement the marketing concept primarily by developing RQ, the COSB – sales performance relationship may not be significant in all sales situations (e.g., Wachner, Plouffe and Grégoire 2009; Plouffe, Hult and Wachner 2009; Jaramillo et al. 2009). COSB has been found to explain 65 percent (Williams and Attaway 1996) and 72 percent (Williams 1998) of the variance in buyer-seller relationship development. Therefore,

Hypothesis 1: A salesperson’s customer-oriented selling behaviors will be

positively related to his/her buyer-seller relationship quality.

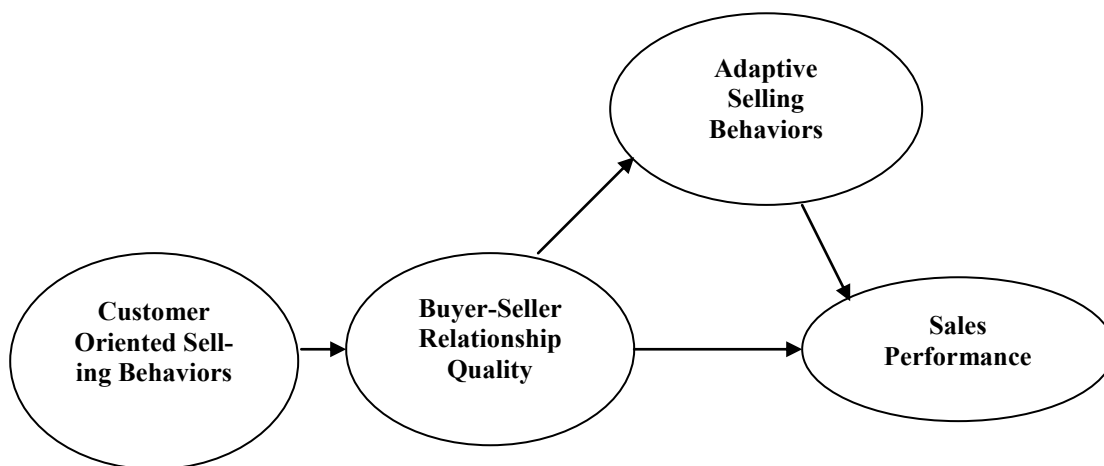
For salespeople, the purpose of developing RQ by engaging in high levels of COSB is to achieve his/her sales objectives, such as, achieving the sales quota, increasing the profits of the selling firm, etc. However, these benefits of COSB are realized in the long-run since the development of RQ takes time. Saxe and Weitz (1982) asserted that the costs of engaging in high levels of COSB include, the opportunity cost of sacrificing short-term sales to increase long-term customer satisfaction, the time spent in identifying customer needs and demonstrating solutions to those needs, etc. Consequently, a salesperson manages a set of RQs by adjusting his/her selling behaviors to the uniqueness of each RQ. A salesperson's success in matching the behavioral responses to the characteristics of each RQ is necessary for the successful implementation of relationship marketing strategies by selling firms. By enabling salespeople to alter their selling behaviors based on perceived information about the RQ and its corresponding customer needs, ASB is expected to increase sales performance.

According to Baron and Kenny (1986, p. 1176), "mediators explain how external physical

events take on internal psychological significance." While interacting with customers, RQ represents a characteristic of a salesperson's microenvironment (Weitz 1981) which determines ASB by salespeople who categorize the selling situation and access the declarative and procedural knowledge associated with that category (Weitz, Sujan and Sujan 1986). For example, the manner in which salespeople handle objections during the exploration stage (Campbell, Davis and Skinner 2006) will differ from that of other stages of RQ. Knowledge to recognize sales situations and access to appropriate sales strategies are triggered by a salesperson's assessment of RQ, and the salesperson responds by ASB. Thus, salespeople respond to RQ by determining the appropriate ASB, which in turn determines their sales effectiveness. Consequently, ASB mediates the effect of RQ on sales performance. Empirical evidence exists for the mediating effects of ASB (e.g., Jaramillo et al. 2009; Franke and Park 2006). Formally stated, Hypothesis 2: A salesperson's adaptive selling behaviors will mediate the effect of his/her buyer-seller relationship quality on sales performance.

Figure 1 summarizes the research hypotheses.

**FIGURE 1**



## METHOD

### Sample and Data Collection

The sampling frame consisted of 253 missionary salespeople employed for a pharmaceutical manufacturer in India. These salespeople represented the selling firm to physicians, retail pharmacies, distributors, and wholesalers across the entire nation. A self-report mail questionnaire was used to measure the study variables. Salespeople were promised confidentiality and completed questionnaires were received from 146 respondents, thereby providing a response rate of 57.7 percent. Missionary salespeople are appropriate to study the relationships among COSB, ASB, RQ, and sales performance, since adaptability is an important ability for their success (Weilbaker 1990), and the variability in physicians' needs, the risks of side effects of pharmaceuticals, and the need to develop RQ with physicians for continued patronage makes pharmaceutical selling an "adaptive condition" requiring ASB (Giacobbe et al. 2006).

Non-response bias was assessed by comparing early and late respondents on the study variables (Armstrong and Overton 1977). There was no significant difference between early and late respondents with regard to the scores on the study variables. Consequently, nonresponse is unlikely to bias the study findings. Regarding subject characteristics, 92 percent of the respondents were male, 78 percent were college graduates and 12 percent had post-graduate degrees. On average, they were 28.5 years old and had six years of selling experience. Consequently, the respondents were predominantly male, highly educated, young and relatively less experienced.

### Measures

A combination of emic and etic approaches was used to measure the study variables (Herche, Swenson and Verbeke 1996). Selling behaviors and sales performance was measured using the etic approach and established scales developed in US was utilized. It was assumed that concern

for customers and adapting to the selling situations should be universal traits of effective salespeople. Consequently, COSB was measured by the 24-item SOCO scale (Saxe and Weitz 1982) and ASB was measured by the 16-item ADAPTS scale (Spiro and Weitz 1990). Sales performance was measured by the 7 items representing the "sales objectives" dimension of the 31-item scale developed by Behrman and Perreault, Jr. (1982).

With regard to the measurement of RQ, an emic approach was used for several reasons. First, "there is no consensus on this measure" (Bradford and Weitz 2009, p. 31). Second, in interdependent cultures, such as India, the "thoughts, feelings, and actions of others in the relationship" (DeCarlo, Agarwal and Vyas 2007, p. 135) determines one's behavior. Thus, in collectivistic cultures, such as India, salespersons' perceptions of RQ are expected to be largely determined by customers' thoughts, feelings, and actions, and the social situations surrounding the customer-salesperson interactions. Consequently, it was necessary to develop items to measure RQ that are specific to the context of the study, rather than assuming the measures of RQ developed in independent cultures, such as US, can be transportable to India.

A key informant technique was used where the national sales manager of the firm was interviewed to generate items measuring RQ. For example, the sales manager revealed that for his salespeople, conflict with customers happens primarily on prices and quality of products sold. In addition to the interviews, the sales manager determined the face validity of several items representing the dimensions of RQ, such as, trust, and anticipation of future interaction. These items were combined to generate an overall measure of RQ. The actual items used to measure the study variables are displayed in the appendix.

## RESULTS

Despite using the etic approach to measuring COSB, ASB, and sales performance, the

measurement properties of these constructs required scrutiny since scholars have debated the unidimensionality of these scales. For example, with regard to the ADAPTS scale, Spiro and Weitz (1990, p. 65) cautioned that “the 16-item scale is not unidimensional on the basis of statistical tests using confirmatory factor analysis.” Marks, Vorhies and Badovick (1996) confirmed the lack of unidimensionality and Robinson et al. (2002) proposed ADAPTS-SV, a shorter version of the original scale. Scholars have also used shorter versions of the 24-item SOCO scale (e.g., Jaramillo et al. 2009; Jaramillo and Grisaffe 2009; Brown et al. 2002; Thomas, Soutar and Ryan 2001).

First an item-analysis was performed on the SOCO, ADAPTS, and sales performance measures by examining the item-to-total correlations. After eliminating items with low item-to-total correlations, exploratory factor analyses were used to eliminate items that loaded poorly or cross-loaded. The remaining items were subjected to confirmatory factor analyses where the covariance matrix was input in LISREL 8.72, and the models were respecified based on theoretical (item content) and statistical grounds (modification indices and standardized residuals). The fit statistics of the respecified models were satisfactory and they are displayed in Table 1.

In the current study, RQ was conceptualized as a “global construct of relationship quality” (Palmatier et al. 2006, p. 136) reflecting a combination of trust, satisfaction, conflict, and

anticipation of future interaction. RQ has been conceptualized as a higher order construct (e.g., Dorsch, Swanson and Kelley 1998; Hewett, Money and Sharma 2002; Hibbard, Kumar and Stern 2001; De Wulf, Odekerken-Schröder and Iacobucci 2001), “an overall assessment of the strength of a relationship” (De Wulf, Odekerken-Schröder and Iacobucci 2001, p. 36). Although RQ has been studied mostly at the interorganizational level, its conceptualization at the customer-salesperson level can be gleaned from the marketing literature.

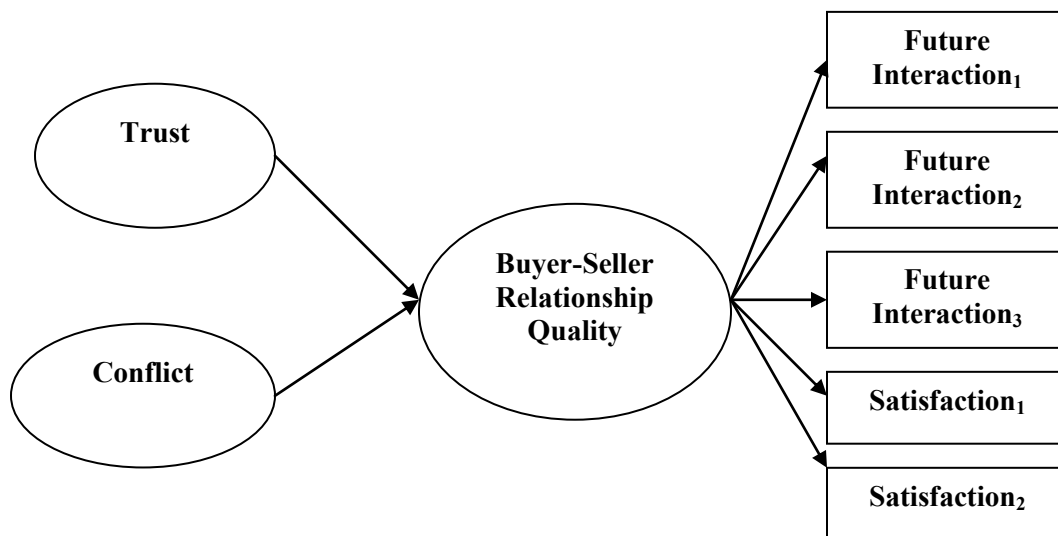
Weitz (1981) argued that a good RQ is characterized by a low level of conflict and a high anticipation of future interaction. Due to disagreements between customers and salespeople, conflict can cause RQ (e.g., Bradford and Weitz 2009) and the degree to which salespeople anticipate future interactions with their customer may depend on RQ (Crosby, Evans and Cowles 1990). As a “pivotal facet of expectations development” (Dwyer, Schurr and Oh 1987, p. 22), trust will cause RQ, and as an overall appraisal (Anderson and Narus 1990) satisfaction will be an outcome of RQ. Consequently, RQ was modeled as a formative second order construct with two reflective first order factors (conflict and trust) and items measuring satisfaction and anticipation of future interaction as its reflective indicators. Table 1 includes the fit statistics of RQ and Figure 2 displays the conceptual model (See appendix for the items).

**TABLE 1**  
**Fit Statistics of the measurement models**

Construct	Fit Statistics	$\alpha^1$
Customer Oriented Selling Behaviors	$\chi^2 = 97.30$ , $df = 76$ , $p > 0.01$ , GFI = 0.90, CFI = 0.97, RMSEA = 0.05	.81
Adaptive Selling Behaviors	$\chi^2 = 24.97$ , $df = 14$ , $p > 0.01$ , GFI = 0.95, CFI = 0.98, RMSEA = 0.07	.81
Sales Performance	$\chi^2 = 11.06$ , $df = 9$ , $p > 0.10$ , GFI = 0.97, CFI = 0.99, RMSEA = 0.04	.85
Buyer-Seller Relationship Quality	$\chi^2 = 39.86$ , $df = 24$ , $p > 0.01$ , GFI = 0.94, CFI = 0.97, RMSEA = 0.07	

<sup>1</sup> Coefficient alpha

FIGURE 2



A covariance matrix of the items measuring COSB, ASB, and sales performance was input in LISREL 8.72 to assess validity. The initial fit of the model ( $\chi^2 = 531.21$ ,  $df = 318$ ,  $p > 0.001$ ,  $GFI = 0.75$ ,  $CFI = 0.92$ ,  $RMSEA = 0.07$ ) indicated a low goodness of fit index. After carefully evaluating modification indices, standardized residuals, and item content, the measurement model was respecified. Only 2 items from each of the constructs were deleted. Although the  $\chi^2$  statistic was significant, the fit statistics of the final model was satisfactory ( $\chi^2 = 260.33$ ,  $df = 183$ ,  $p > 0.001$ ,  $GFI = 0.83$ ,  $CFI = 0.96$ ,  $RMSEA = 0.06$ ). This model consisted of a 12-item measure of COSB, a 5-item measure of ASB, and a 4-item measure of sales performance (See appendix).

The measures met the criteria of convergent validity since the t-values of each of the path estimate was significant (Anderson and Gerbing 1988). However, for 4 items measuring COSB, the standardized path estimate was less than 0.60. To assess discriminant validity, each pairwise positive correlation was constrained to unity (perfect correlation) and the change in model fit ( $\chi^2$  for 1 df) was examined. In each

case, the  $\chi^2$  value was significantly positive for each pair of perfectly correlated constructs, implying a deterioration of the overall fit of the measurement model. The smallest  $\chi^2$  was 29.97 for 1 df. Since the  $\chi^2$  statistic was significantly lower in the unconstrained model than in the constrained models, discriminant validity was established (Bagozzi and Phillips 1982).

The research hypotheses were tested by OLS regressions using summated scores of the items measuring COSB, ASB, RQ, and sales performance. To test hypothesis 1, RQ was regressed on COSB. The model was significant ( $F_{1,130} = 58.90$ ,  $p < 0.001$ ) and explained 31 percent of the variance in RQ. Thus, as in US, COSB helps salespeople develop RQ in India. Therefore, hypothesis 1 was supported.

The multi-step procedure recommended by Baron and Kenney (1986) was used to test hypothesis 2. To establish mediation, RQ should affect sales performance and ASB (mediator), and in the presence of ASB the effect of RQ on sales performance should become non-significant. Accordingly, three OLS regressions were run and the results are displayed in Table 2.

As Table 2 indicates, the direct effect of RQ on sales performance was non-significant. However, RQ significantly predicted ASB ( $a = 0.50$ ,  $t = 5.10$ ,  $\text{adj. } R^2 = 0.16$ ) and ASB significantly predicted sales performance ( $c = 0.42$ ,  $t = 4.63$ ,  $\text{adj. } R^2 = 0.14$ ). Since there is a significant relationship between RQ and ASB and between ASB and sales performance, and RQ does not explain any additional variance beyond ASB ( $b' = -0.12$ ,  $t = -1.05$ ), ASB fully mediates the effect of RQ on sales performance (Schneider et al. 2005). The z-score of the mediated effect was significant ( $z = 3.39$ ) (Sobel 1982). Consequently, hypothesis 2 was also supported. These findings have important managerial implications for US firms selling in India.

## DISCUSSION

Scholarly research on relationship marketing has been limited to US and European markets. Although developing economies in South Asia, such as India, represent potential opportunity for US firms, no research has been conducted to explore whether selling behaviors help develop customer-salesperson relationships, and whether these relationships improve sales performance. The currently study shed light on the measurement of selling behaviors, and the inter-relationships among these behaviors, customer-salesperson relationships, and sales performance.

The results indicated that scales such as SOCO and ADAPTS, that have been developed in US to measure COSB and ASB of salespeople respectively, can be transported to developing economies such as India. Thus, sales managers of US firms selling in India can measure the

degree to which salespeople implement the marketing concept by engaging in COSB. They can also measure the extent to which salespeople adjust their selling behaviors based on differences in selling situations by practicing ASB.

COSB had a significantly positive relationship with RQ and explained 31 percent of the variance in RQ. Consequently, market oriented US firms should train and encourage salespeople in India to engage in COSB. By implementing the marketing concept, salespeople in this study developed strong RQs that enabled them to adapt to selling situations better, and in turn yielded higher performance. ASB fully mediated the effects of RQ on sales performance, meaning that salespeople in India can leverage the RQs they have developed by adapting to their customers. RQ facilitated market research on each customer and allowed salespeople to “implement a sales presentation that is maximally effective for that customer” (Weitz, Sujan and Sujan 1986, p. 174). The higher levels of ASB explained 14 percent of the variance in sales performance. Consequently, the ASB – sales performance relationship that has been supported in US (e.g., Jaramillo et al. 2009; Giacobbe et al. 2006; Franke and Park 2006; Spiro and Weitz 1990) also holds in India.

The study underscores the importance of high levels of COSB. Although salespeople with both high and low levels of COSB can adapt their sales presentation to the situational uniqueness (Saxe and Weitz 1982), high levels of COSB is recommended when the benefits outweigh the costs. High levels of COSB will yield better RQs which will strengthen ASB.

**TABLE 2**  
**Results of Mediation Analysis (Hypothesis 2)**

Predictor (X)	Mediator (M)	Outcome (Y)	$M = aX + e$	$Y = bX + e$	$Y = b'X + cM + e$
Buyer-Seller Relationship Quality	Adaptive Selling Behaviors	Sales Performance	$a = 0.50$ $t = 5.10^*$	$b = 0.09$ $t = 0.81$	$b' = -0.12$ , $t = -1.05$ $c = 0.42$ , $t = 4.63^*$

\*  $p < 0.01$

Higher levels of ASB will increase sales performance. Support for the causal chain COSB-RQ-ASB-sales performance in a developing economy such as India adds significantly to the growing body of sales literature in international markets.

The results also indicate that US firms can recruit locally in India since salespeople are capable of implementing the marketing concept at the customer-salesperson level. India maintains a large pool of highly educated English speaking professionals (DeCarlo, Agarwal and Vyas 2007) who can be trained to practice COSB and ASB, and assess RQ.

Finally, the conceptualization of RQ paralleled those that have been developed in US. This means, for salespeople willing to develop RQ, managing conflict is just as important in India as in US (Bradford and Weitz 2009). Further, salespeople should be able to trust their customers to successfully leverage RQ. Taken together, managing conflict with trustworthy customers will facilitate the development of RQ resulting in mutual satisfaction and continuity of the buyer-seller relationships. If salespeople have the ability to manage these relationships by practicing ASB, sales performance will improve.

### Limitations and Future Research

The data was obtained from salespeople of a single firm of a specific industry using self-report mail questionnaires. Although the homogeneity of the respondents may limit the generalizability of the effects, the primary goal of this study was to examine whether the theories of selling that have been proposed and tested in developed markets such as US, are generalizable in developing economies, such as India. With regard to respondents, Calder, Phillips and Tybout (1981, p. 199) recommended that "the ideal theory falsification procedure, however, is to employ maximally homogeneous respondents." Consequently, field research on salespeople from a single firm of a specific industry may actually strengthen the falsification procedure

since unmeasured variables that may affect COSB, ASB, RQ and sales performance, such as, market orientation (e.g., Siguaw, Brown, and Widing 1994), leadership (e.g., Jarmanillo et al. 2009), etc. have been held constant. However, due to the cross-sectional study design, caution should be exercised in inferring causality.

To check for common method bias, confirmatory factor analyses were used to test the hypothesis that a single factor can account for all the variances in the data by testing the fit of one and two factor models. As Podsakoff et al. (2003) argued, a poorer fit of these models compared to the hypothesized model will indicate that common method bias is unlikely to affect the findings. The fit statistics indicated that the data fit the hypothesized three factor (COSB, ASB, and sales performance) measurement model much better than any other specifications. Thus, common method variance was unlikely to bias the results.

Future research should extend the results of this study by incorporating constructs that might affect the COSB-RQ-ASB-sales performance causal chain. For example, firm market orientation has been found to positively affect COSB (e.g., Siguaw, Brown and Widing II; Mengüç 1996; Langerak 2001). Since COSB directly affects RQ, the mediating effects of ASB on the relationship between RQ and sales performance might be stronger for highly market oriented selling organizations. Further, based on an empirical test of the consequences of behavior-based and outcome-based sales control systems, Oliver and Anderson (1994, p. 60) concluded that "contrary to expectations, perceived control systems do not appear, for the most part, to affect the salesperson's behavioral strategy." In their study, the behavioral strategies used by salespeople did not include COSB and ASB, and RQ was not controlled for. In fact, Oliver and Anderson (1994, p. 64) called for additional research on the "effect of control on the *customer's* perception of the salesperson's performance." Thus, scholarly research on the effects of behavior-based versus outcome-based sales control systems on the



COSB-RQ-ASB-sales performance chain will shed more light on the organizational determinants of the effectiveness of salespeople.

Finally, future research should study these research questions on salespeople across industries dealing with a variety of products and services. The results will strengthen the generalizability of the effects (Calder, Phillips and Tybout 1981), and shed more light on the selling situations where the benefits of developing RQ outweigh its costs. For example, a transactional selling model is appropriate “when the product or service is not of strategic significance to the buyers” (Cron and DeCarlo 2009, p. 7). In those situations, buyers may not value RQ as much and attempts to increase sales by engaging in COSB may not yield the desired returns. Studying the COSB-RQ-ASB-sales performance relationship from the buyers’ point of view is needed to ensure that perceptual differences in customer-salesperson dyads do not undermine the relationship marketing strategies of selling organizations.

## REFERENCES

- Agarwal, Sanjeev, Thomas E. DeCarlo, and Shyam B. Vyas (1999), “Leadership Behavior and Organizational Commitment: A Comparative Study of American and Indian Salespersons,” *Journal of International Business Studies*, 30 (4), 727-743.
- Anderson James C and David W. Gerbing (1988), “Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach,” *Psychological Bulletin*, 103 (May), 411-423.
- Anderson, James C. and James A. Narus (1984), “A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships,” *Journal of Marketing*, 48 (Fall), 62-74.
- Anderson, James C. and James A. Narus (1990), “A Model of Distributor Firm and Manufacturer Firm Working Partnerships,” *Journal of Marketing*, 54 (January), 42-58.
- Armstrong J. Scott, and Terry S. Overton T (1977), “Estimating Nonresponse Bias in Mail Surveys,” *Journal of Marketing Research*, 14 (August), 396-402.
- Athanasopoulou, Pinelopi (2009), “Relationship Quality: A Critical Literature Review and Research Agenda,” *European Journal of Marketing*, 43 (5/6), 583-610.
- Bagozzi, Richard P. and Lynn W. Phillips (1982), “Representing and Testing Organizational Theories: A Holistic Construal,” *Administrative Science Quarterly*, 27 (September), 459-489.
- Baron M. Reuben and David A. Kenny (1986), “The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations,” *Journal of Personality and Social Psychology*, 51 (6), 1173-1182.
- Behrman, Douglas N. and William D. Perreault, Jr. (1982), “Measuring the Performance of Industrial Salespersons,” *Journal of Business Research*, 10 (September), 355-370.
- Belonax, Jr., Joseph J., Stephen J. Newell, and Richard E. Plank (2007), “The Role of Purchase Importance on Buyer Perceptions of the Trust and Expertise Components of Supplier and Salesperson Credibility in Business-to-Business Relationships,” *Journal of Personal Selling and Sales Management*, 27 (Summer), 247-258.
- Boles, James S., Hiram C. Barksdale, Jr. and Julie T. Johnson (1997), “Business Relationships: An Examination of the Effects of Buyer-Salesperson Relationships On Customer Retention and Willingness to Refer and Recommend,” *Journal of Business and Industrial Marketing*, 12 (3/4), 248-258.
- Boorom Michael L, Jerry R. Goolsby and Rosemary P. Ramsey (1998). “Relational Communication Traits and their Effect on Adaptiveness and Sales Performance,” *Journal of the Academy of Marketing Science*, 26 (December), 16-30.
- Bradford, Kevin D. and Barton A. Weitz (2009), “Salespersons’ Management of Conflict in Buyer-Seller Relationships,” *Journal of Personal Selling and Sales Management*, 29 (Winter), 25-42.

- Brown, Tom J., John C. Mowen, D. Todd Donavan and Jane W. Licata (2002), "The Customer Orientation of Service Workers: Personality Trait Effects on Self and Supervisor Performance Ratings," *Journal of Marketing Research*, 39 (February), 110-119.
- Bursk, Edward C. (2006), "Low-Pressure Selling," *Harvard Business Review*, 84 (July/August), 150-162.
- Calder, Bobby J., Lynn W. Phillips and Alice M. Tybout (1981), "Designing Research for Application," *Journal of Consumer Research*, 8 (September), 197-207.
- Campbell, Kim Sydow, Lenita Davis and Lauren Skinner (2006), "Rapport Management During the Exploration Phase of the Salesperson-Customer Relationship," *Journal of Personal Selling and Sales Management*, 26 (Fall), 359-370.
- Cannon, Joseph P. and William D. Perreault, Jr. (1999), "Buyer-Seller Relationships in Business Markets," *Journal of Marketing Research*, 36 (November), 439-460.
- Cron, William L. and Thomas E. DeCarlo (2009), *Dalrymple's Sales Management*, John Wiley & Sons, Inc: New Jersey.
- Crosby, Lawrence A., Kenneth R. Evans and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," *Journal of Marketing*, 54 (3), 68-81.
- DeCarlo, Thomas E., Sanjeev Agarwal and Shyam B. Vyas (2007), "Performance Expectations of Salespeople: The Role of Past Performance and Causal Attributions in Independent and Interdependent Cultures," *Journal of Personal Selling and Sales Management*, 27 (Spring), 133-147.
- DeCarlo, Thomas E. and Sanjeev Agarwal (1999), "Influence of Managerial Behaviors and Job Autonomy on Job Satisfaction of Industrial Salespersons," *Industrial Marketing Management*, 28, 51-62.
- De Wulf, Kristof, Gaby Odekerken-Schröder and Dawn Iacobucci (2001), "Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration," *Journal of Marketing*, 65 (October), 33-50.
- Dorsch, Michael J., Scott R. Swanson and Scott W. Kelley (1998), "The Role of Relationship Quality in the Stratification of Vendors as Perceived by Customers," *Journal of the Academy of Marketing Science*, 26 (2), 128-142.
- Dwyer Robert F., Paul H. Schurr and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (April), 11-27.
- Franke, George R. and Jeong-Eun Park (2006), "Salesperson Adaptive Selling Behavior and Customer Orientation: A Meta-Analysis," *Journal of Marketing Research*, 43 (November), 693-702.
- Giacobbe, Ralph W., Donald W. Jackson Jr., Lawrence A. Crosby and Claudia M. Bridges (2006), "A Contingency Approach to Adaptive Selling Behavior and Sales Performance: Selling Situations and Salesperson Characteristics," *Journal of Personal Selling and Sales Management*, 26 (Spring), 115-142.
- Herche, Joel, Michael J. Swenson and Willem Verbeke (1996), "Personal Selling Constructs and Measures: Emic Versus Etic Approaches to Cross-National Research," *European Journal of Marketing*, 30 (7), 83-97.
- Hewett, Kelly, R. Bruce Money and Subhash Sharma (2002), "An Exploration of the Moderating Role of Buyer Corporate Culture in Industrial Buyer-Seller Relationships," *Journal of the Academy of Marketing Science*, 30 (Summer), 229-239.
- Hibbard, Jonathan D., Nirmalya Kumar and Louis W. Stern (2001), "Examining the Impact of Destructive Acts in Marketing Channel Relationships," *Journal of Marketing Research*, 38 (February), 45-61.
- Jap, Sandy D. (2001), "Pie Sharing in Complex Collaboration Contexts," *Journal of Marketing Research*, 38 (February), 86-99.
- Jaramillo, Fernando, Daniel M. Ladik, Greg W. Marshall and Jay Prakash Mulki (2007), "A Meta-Analysis of the Relationship between Sales Orientation-Customer Orientation (SOCO) and Salesperson Job Performance," *Journal of Business and Industrial Marketing*, 22 (5), 302-310.

- Jaramillo, Fernando and Douglas B. Grisaffe (2009), "Does Customer Orientation Impact Objective Sales Performance? Insights from a Longitudinal Model in Direct Selling," *Journal of Personal Selling and Sales Management*, 29 (Spring), 167-178.
- Jaramillo, Fernando, Douglas B. Grisaffe, Lawrence B. Chonko and James A. Roberts (2009), "Examining the Impact of Servant Leadership on Sales Force Performance," *Journal of Personal Selling and Sales Management*, 29 (Summer), 257-275.
- Kalwani, Manohar U. and Narakesari Narayandas (1995), "Long-Term Manufacturer-Supplier Relationships: Do They Pay Off for Supplier Firms?" *Journal of Marketing*, 59 (January), 1-16.
- Karande, Kiran, Mahesh N. Shankarmahesh and C. P. Rao (1999), "Marketing to Public and Private-Sector Companies in Emerging Countries: A Study of Indian Purchasing Managers," *Journal of International Marketing*, 7 (3), 64-83.
- Langerak, Fred (2001), "Effects of Market Orientation on the Behaviors of Salespersons and Purchasers, Channel Relationships, and Performance of Manufacturers." *International Journal of Research in Marketing* 18(3), 221-234.
- Marks, Ronald, Douglas W. Vorhies and Gordon J. Badovick (1996), "A Psychometric Evaluation of the ADAPTS Scale: A Critique and Recommendations," *Journal of Personal Selling and Sales Management*, 16 (Fall), 53-65.
- Martin, Craig A. and Alan J. Bush (2006), "Psychological Climate, Empowerment, Leadership Style, and Customer-Oriented Selling: An Analysis of the Sales Manager-Salesperson Dyad," *Journal of the Academy of Marketing Science*, 34, 419-438.
- Mengüç, Bülent (1996), "The Influence of the Market Orientation of the Firm on Sales Force Behavior and Attitudes: Further Empirical Results." *International Journal of Research in Marketing* 13(3), 277-291.
- Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.
- Mysen, Tore and Goran Svensson (2010), "RELQUAL's Impact on Satisfaction in Norwegian Business Relationships," *Journal of Business and Industrial Marketing*, 25 (2), 119-131.
- Noordewier, Thomas G., George John and John R. Nevin (1990), "Performance Outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships," *Journal of Marketing*, 54 (October), 80-93.
- Oliver, Richard L. and Erin Anderson (1994), "An Empirical Test of the Consequences of Behavior and Outcome-Based Sales Control Systems," *Journal of Marketing*, 58 (October), 53-67.
- Palmatier, Robert W., Lisa K. Scheer, Kenneth R. Evans and Todd J. Arnold (2008), "Achieving Relationship Marketing Effectiveness in Business-To-Business Exchanges," *Journal of the Academy of Marketing Science*, 36, 174-190.
- Palmatier, Robert W., Rajiv P. Dant and Dhruv Grewal (2007), "A Comparative Longitudinal Analysis of Theoretical Perspectives of Interorganizational Relationship Performance," *Journal of Marketing*, 71 (October), 172-194.
- Palmatier, Robert W., Rajiv P. Dant, Dhruv Grewal and Kenneth R. Evans (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis," *Journal of Marketing*, 70 (October), 156-173.
- Plouffe, Christopher R., John Hulland and Trent Wachner (2009), "Customer-directed Selling Behaviors and Performance: A Comparison of Existing Perspectives," *Journal of the Academy of Marketing Science*, 37 (Winter), 422-439.
- Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee and Nathan P. Podsakoff (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88 (October), 879-903.

- Rapp, Adam, Raj Agnihotri and Lukas P. Forbes (2008), "The Sales Force Technology – Performance Chain: The Role of Adaptive Selling and Effort," *Journal of Personal Selling and Sales Management*, 28 (Fall), 335-350.
- Robinson, Jr., Leroy, Greg W. Marshall, William C. Moncrief and Felicia G. Lassk (2002), "Toward a Shortened Measure of Adaptive Selling," *Journal of Personal Selling & Sales Management*, 22 (Spring), 111-118.
- Rutherford, Brian N., James S. Boles, Hiram C. Barksdale, Jr. and Julie T. Johnson (2006), "Single Source Supply Versus Multiple Source Supply: A Study into the Relationship between Satisfaction and Propensity to Stay Within a Service Setting," *Journal of Personal Selling and Sales Management*, 26 (Fall), 371-379.
- Saxe Robert and Barton A. Weitz (1982), "The SOCO Scale: A Measure of the Customer Orientation of Salespeople," *Journal of Marketing Research*, 19 (August), 343-351.
- Schneider, Benjamin, Mark G. Ehrhart, David M. Mayer, Jessica L. Saltz, and Kathryn Niles-Jolly (2005), "Understanding Organization-Customer Links in Service Settings," *Academy of Management Journal*, 48 (6), 1017-1032.
- Schwepker, Jr., Charles H. (2003), "Customer-Oriented Selling: A Review, Extension, and Directions for Future Research," *Journal of Personal Selling and Sales Management*, 23 (Spring), 151-171.
- Siguaw, Judy A., Gene Brown and Robert E. Widing II. (1994), "The Influence of the Market Orientation of the Firm on Sales Force Behavior and Attitudes," *Journal of Marketing Research*, 31(February), 106-116.
- Sobel, Michael E. (1982), "Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models," in *Sociological Methodology*, Samuel Leinhardt, ed. San Francisco: Jossey-Bass, 290-312.
- Spiro, Rosann L. and Barton A. Weitz (1990), "Adaptive Selling: Conceptualization, Measurement, and Nomological Validity," *Journal of Marketing Research*, 27, (February), 61-69.
- Stock, Ruth Maria and Wayne D. Hoyer (2005), "An Attitude-Behavior Model of Salespeople's Customer Orientation," *Journal of the Academy of Marketing Science*, 33, 536-552.
- Thomas, Raymond W., Geoffrey N. Soutar and Maria M. Ryan (2001), "The Selling Orientation-Customer Orientation (S.O.C.O.) Scale: A Proposed Short Form," *Journal of Personal Selling and Sales Management*, 21 (Winter), 63-68.
- Wachner, Trent, Christopher R. Plouffe and Yany Grégoire (2009), "SOCO's Impact on Individual Sales Performance: The Integration of Selling Skills as a Missing Link," *Industrial Marketing Management*, 38, 32-44.
- Weilbaker, Dan C. (1990), "The Identification of Selling Abilities Needed for Missionary Type Sales," *Journal of Personal Selling and Sales Management*, 10 (Summer), 45-58.
- Weitz Barton A, Harish Sujan and Mita Sujan.(1986), "Knowledge, Motivation and Adaptive Behavior: A Framework for Improving Selling Effectiveness," *Journal of Marketing*, 50 (October), 174-191.
- Weitz, Barton A., Stephen B. Castleberry and John F. Tanner, Jr. (2009), *Selling: Building Partnerships*, 7<sup>th</sup> edition. New York. McGraw-Hill Irwin Companies, Inc.
- Weitz, Barton A. (1981), "Effectiveness in Sales Interactions: A Contingency Framework," *Journal of Marketing*, 45 (Winter), 85-103.
- Williams, Michael R. and Jill S. Attaway (1996), "Exploring Salespersons' Customer Orientation as a Mediator of Organizational Culture's Influence on Buyer-Seller Relationships," *Journal of Personal Selling and Sales Management*, 16 (Fall), 33-52.
- Williams, Michael R. (1998), "The Influence of Salespersons' Customer Orientation on Buyer-Seller Relationship Development," *Journal of Business and Industrial Marketing*, 13 (3), 271-287.

**APPENDIX**

**Customer Oriented Selling Behaviors** (True for NONE of your customers 1.....True for ALL of your customers 9)

- I try to help customers achieve their goals.
- I try to achieve my goals by satisfying customers.
- A good salesperson has to have the customer's best interest in mind.
- I try to get customers to discuss their needs with me.
- I try to influence a customer by information rather than by pressure.
- I answer a customer's questions about products as correctly as I can.
- I try to give customers an accurate expectation of what the product will do for them.
- I try to figure out what a customer's needs are.
- If I am not sure a product is right for a customer, I will still apply pressure to get him to buy.\*
- I decide what products to offer on the basis of what I can convince customers to buy, not on the basis of what will satisfy them in the long run.\*
- I begin the sales talk for a product before exploring a customer's needs with him.\*
- I treat a customer as a rival.\*

**Adaptive Selling Behaviors** (Very Strongly Disagree 1.....Very Strongly Agree 9)

- When I feel that my sales approach is not working, I can easily change to another approach.
- I don't change my approach with customers.\*
- I am very sensitive to the needs of my customers.
- I vary my sales style from situation to situation.
- I try to understand how one customer differs from another.

**Buyer-Seller Relationship Quality** (True for NONE of your customers 1.....True for ALL of your customers 9)

- I would expect my customers to play fair.

I expect my customers to tell me the truth.

I have an intense disagreement with my customers regarding the prices of my products.\*

I have an intense disagreement with my customers regarding the quality of my products.\*

It is important that my customer continues to buy from me.

I expect my customers to support our relationship in the future.

My customers will continue using my products for a long time.

My customer is very pleased with me.

I am very satisfied with my customers.

**Sales Performance** (Your performance is very low compared to an average salesperson 1.....Your performance is very high compared to an average salesperson 9)

Making sales of those products with the highest profit margins.

Generating a high level of dollar sales.

Quickly generating sales of new company products.

Identifying and selling major accounts in your territory.

\* Reverse coded items.

# PERSONALITY TRAITS AND THEIR EFFECT ON BRAND COMMITMENT: AN EMPIRICAL INVESTIGATION

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*The proliferation of new brands, increased use of sales promotions, the explosion of alternative forms of distribution and a reduction in advertising impact, make maintaining brand commitment, increasingly difficult. This study empirically examines the roles of personality traits on brand commitment. More specifically, this study investigates the effects of personality traits of preference for consistency (PFC), resistance to change, agreeableness, introversion, openness to experience, and conscientiousness on consumers' brand commitment. Based on our study, the elemental trait of conscientiousness was found to be positively related to preference for consistency but no significant relationship was found between preference for consistency and resistance to change, however a significant relationship was found between resistance to change and brand commitment. Hence, it is suggested that in order to maximize returns, it is necessary to have brand-committed customers.*

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## INTRODUCTION

Customer loyalty can give an important competitive advantage to companies (Dick and Basu 1994). In markets, which are becoming increasingly competitive, building loyalty in consumers is becoming a key factor in winning market share (Lowenstein 1997; Heere and Dickson 2008), and the key to long term, sustainable competitive advantage (Aaker 1996; Chakraborty, Srivastava and Marshall 2007). Loyal customers lower a firm's acquisition costs, as the cost of acquiring a new customer is much higher than the cost of retaining an old customer (Kotler 2000). In addition, highly loyal customers account for a significantly higher percentage of a firm's revenues. For example, in one study of paint purchasers, highly loyal customers accounted for 26 percent of the firm's customers, but 43 percent of the firm's revenues, while the low loyalty group accounted for 23 percent of the firm's customers, but only 4.5 percent of revenues (Owens, Hardman and Keillor 2001).

In spite of the said advantage, the dynamics and psychology behind the development of customer loyalty is not well understood, with

potentially multiple conditions or cognitions at work within the loyalty construct (Jacoby and Kyner 1973; Shapiro 1990; Owens, Hardman and Keillor 2001; Hill and Alexander 2006). Loyalty measures, based on repeated purchase decisions, do not distinguish between true or spurious loyalty to one brand because of many reasons such as there might be no other brand readily available, a brand offers a long series of deals, has a better shelf or display location, etc. (Day 1969). These spuriously brand loyal buyers may lack any attachment to the brand and they can be easily attracted to another brand that offers a better deal, a coupon, or enhanced point of purchase visibility (Day 1969). For example, one comprehensive study across 27 brands found that after a year only 53 percent of "high loyalty" users remained highly loyal to the brand (Baldinger and Robinson 1996).

## LITERATURE REVIEW AND HYPOTHESES

### Brand Commitment

A brand loyal consumer nearly always purchases the same brand, while a non-loyal consumer typically switches brands based on availability, convenience, price, or a brand promotion. Acknowledging the realities of the

marketplace, Totten and Block (1994) note that it is rare for a consumer to purchase only one brand, and therefore define brand loyal consumers as those who usually purchase a particular brand. Also, it is possible to buy a brand again and again, but not be committed to it. Hence, the concept of commitment provides an essential basis for distinguishing between brand loyalty and other forms of repeat purchasing behavior (Jacoby and Chestnut 1978). Jacoby and Chestnut (1978) suggest that brand loyalty has been viewed and measured as an attitudinal concept, a behavioral concept, and simultaneously as a behavioral and attitudinal concept. To distinguish between these different brand loyalty constructs, the construct of brand commitment will be used within this study. Brand commitment is an attitudinal construct (Dick and Basu 1994).

When individuals are more concerned about their purchases within a product category, they are inclined to establish strong preferences and develop brand loyalties more readily. Empirical evidence for this linkage comes from the positive linkage between perceived risk and brand loyalty (Jacoby and Chestnut 1978). Also, Beatty, Kahle and Homer (1988) proposed that ego involvement is a precursor of product involvement, which in turn precedes brand commitment. On the other hand, Warrington and Shim (2000) found negligible correlation between product involvement and brand commitment.

Day (1969) noted that consistency in a person's purchase behavior does not necessarily mean that he/she is brand loyal. Brand attitude should to be assessed as well as brand behavior. Day (1969) viewed brand loyalty as consisting of repeated purchases prompted by a strong internal disposition. Individual's dispositional basis for repeat purchase and appraisal of the target is seen as inseparable from the notion of loyalty (Jacoby and Chestnut 1978). As repeat purchase is premised on choice within the set of alternatives, a consumer's relative appraisal of targets within the relevant set is likely to assume significance. Attitude serves as an object appraisal function. Attitudes have been

related to behaviors, but one may hold a favorable attitude toward a brand but not purchase it because of greater attitudinal extremity toward another brand. Hence the nature of relative attitude is likely to provide a stronger indication of repeat patronage than the attitude toward a brand determined in isolation (Dick and Basu 1994). Two dimensions, the degree of attitudinal strength and the degree of attitudinal differentiation, seem to underlie an individual's relative attitude toward a brand. Relative attitude will be highest for strong attitude strength and clearly differentiated attitude toward brand and will be lowest for weak attitude strength and no perceived differentiation. Customer loyalty is defined as the relationship between relative attitude and repeat patronage (Dick and Basu 1994; Heere and Dickson 2008). Evidence in different research domains shows that holding strong commitment to specific objects/events/issues demonstrates enhanced resistance to persuasion attempts (change). Many in the marketing field have also defined loyalty as a composite blend of brand attitude and behavior, with indexes that measure the degree to which one favors and buys a brand repeatedly (e.g., Day 1969; Pritchard et al.1999). Commitment differs from this composite definition as it is generally considered in purely cognitive terms that assess consumer attitudes of attachment to a brand. Morgan and Hunt (1994) describe commitment as an enduring desire to continue an attachment.

Psychologists defined commitment as decisions or cognitions that fix or bind an individual to a behavioral disposition (Kiesler 1971). Crosby and Taylor (1983) provided a definition of commitment as a stable preference that was bound by an attitude of resistance to change. They argue that the need to maintain a consistent informational structure helps maximize one's resistance to change (informational process). This is related to maintaining cognitive consistency regarding brand knowledge and information and the confidence in the brand's consistent performance. Another process deals with personal attachment and whether people identified with important values and self-image

linked to a preference (identification process). The more strongly consumers identified with the values and images embodied by a particular brand, the greater their sense of resistance to change that preference (Pritchard et al. 1999). The identification of values and images associated with a brand, may assume an increasingly important role in developing commitment, given that products in today's marketplace are often differentiated more on their symbolic values than on their physical attributes and functions. The third process refers to people's perception that their preferences are free (volitional process). When people sense that their choices are unhindered, the resulting commitment is likely to be stronger and more deeply held (Salancik 1977). This perspective specifies information, identification, and volition as antecedent processes of commitment that facilitate resistance to change.

Commitment to a relationship is a relatively stable, strong, and intense psychological state or attitude towards maintaining the relationship (Allen and Meyer 1993; Chakraborty, Srivastava and Marshall 2007). States of commitment may arise from different motivations (Geyskens et al. 1996). Affective commitment exists when one has the desire to maintain the relationship based on a generalized sense of positive regard for, a liking of, and an enjoyment of the relationship (Matilla 2006; Evanschitzky et al. 2006). Calculative commitment, on the other hand, occurs when one needs to maintain a relationship due to the significant anticipated costs associated with leaving the relationship (Matilla 2006). In the consumer market, since both the buyer and the seller often have numerous alternatives at the individual level, the market relationship is generally characterized by low buyer-seller interdependence and low costs associated with leaving the relationship for either party. As a result, consumers' commitment to the brand tends to be more affective than calculative (Matilla 2006; Evanschitzky et al. 2006). Crosby and Taylor (1983) provided a definition of commitment as a stable preference that was

bound by an attitude of resistance to change. In this paper, brand commitment is defined as the degree to which the consumer is attitudinally loyal to a particular brand in a product class. It is the strength of the individual's belief system toward a brand, and is different from calculative commitment often observed in other relationship domains (Matilla 2006; Evanschitzky et al. 2006). As per the definition, preference for consistency should have positive impact on resistance to change and brand commitment.

### **Preference for Consistency (PFC)**

Preference for consistency (PFC) of a person is the desire to be consistent within his/her own responses termed as "internal consistency," the desire to appear consistent to others, "public consistency," and the desire that others be consistent, "others' consistency" (Cialdini et al. 1995; Bator and Cialdini 2006). Individuals with high PFC decide how to respond to incoming information by taking into account its relationship with already established information and factors; they are likely to be receptive and responsive to the new information to the degree that it fits with the implications of existing variables. PFC measures a tendency to be consistent with existing information, not the information of any sort. Cialdini et al. (1995) found a positive correlation between low-PFC and the personality trait of openness. Also they found evidence of the relatively greater extraversion of low-PFC participants. Low-PFC individuals may like people, especially strangers, more than high-PFC individuals. Cialdini et al. (1995) found a positive relationship between consistency-based effects, such as foot-in-the-door effect and cognitive dissonance, to high-PFC scores. PFC is the tendency to respond to incoming stimuli in a way that integrates these stimuli with existing variables. High-PFC individuals weight these prior entry variables (e.g., commitments, choices, previous expectations) to a considerable degree, adjusting their subsequent responding accordingly (Cialdini et al. 1995; Bator and Cialdini 2006). Low-PFC



individuals on the other hand, do not weight the implications of such variables so heavily in their response decisions.

There are several possible meanings of consistency like *uniformity*, which implies invariance, or *regularity*, which implies lawfulness. But the most frequent meaning used by social psychologists is *coherence*, which implies a high degree of agreement or a fit between a particular element and other relevant elements. Cialdini et al. (1995) argued that individuals who identify themselves as consistent choose to make their attitudes fit with the implications of the established rather than the new. Consistency motivation may best be defined as an inclination toward *adherence* - adherence to the implications of what has happened before.

### Other Personality Traits

The elemental trait of *introversion* is the tendency to reveal feelings of bashfulness and shyness (Mowen 2000). This should relate *positively* with PFC as PFC is a tendency to be consistent with existing information. Hence an individual high on introversion should show indication of maintaining consistency. The trait of *openness to experience* is defined as the need to find novel solution (Mowen 2000), should relate *negatively* with PFC as people with high need for experience will always look for new things. The trait of *agreeability* is the need to express kindness and sympathy to others (Mowen 2000) and should relate *negatively* with preference for consistency as an individual high on agreeability will tend to agree with others and will not remain consistent in his/her responses. The elemental trait of *conscientiousness*, which is defined as the need to be organized, orderly, and efficient in carrying out task (Mowen 2000) should relate *positively* with PFC. A person who is organized and efficient should make their attitudes fit with the implications of the established rather than new information and hence should be high on PFC. Finally, the elemental trait of need for arousal should be *negatively* related to PFC because a person with

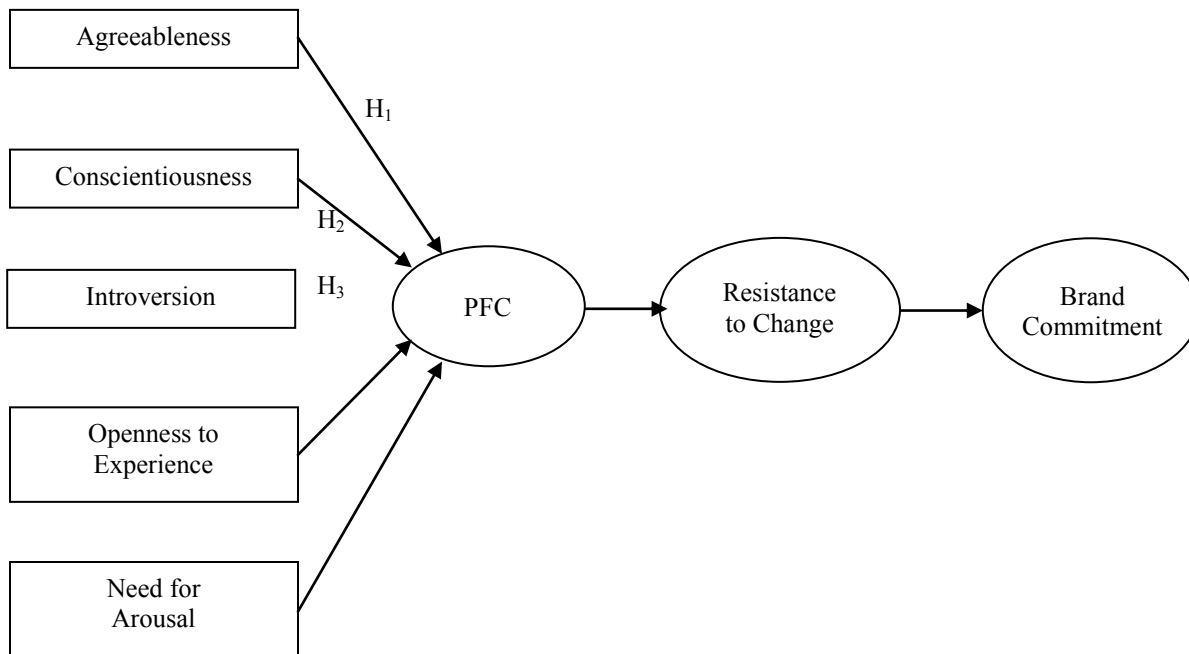
high need for arousal is drawn toward risk taking and new experiences with risks.

As mentioned earlier, brand commitment is defined as the degree to which the consumer is attitudinally loyal to a particular brand in a product class. It is the strength of the individual's belief system toward a brand, and is different from calculative commitment often observed in other relationship domains (Matilla 2006; Evanschitzky et al. 2006). This affective commitment can often be manifested through an enduring preference for a particular brand over other brands, continuing to use the brand, recommending the brand to friends, and resistance to competing brand's switching inducement (Aaker 1991; Bettencourt 1997; Zeithaml, Berry and Parasuraman 1996). Many authors contend that commitment differentiates true brand loyalty from other repeat purchase behaviors that have been termed habit, inertia, or spurious loyalty (Beatty and Kahle 1988; Dick and Basu 1994). Based on the above discussion, the following hypotheses are proposed (Please see Figure 1 for the model):

### Hypotheses

- H<sub>1</sub>:** *Agreeableness* will be *negatively* related to *preference for consistency*.
- H<sub>2</sub>:** *Conscientiousness* will be *positively* related to *preference for consistency*.
- H<sub>3</sub>:** *Introversion* will be *positively* related to *preference for consistency*.
- H<sub>4</sub>:** *Openness to experience* will be *negatively* related to *preference for consistency*.
- H<sub>5</sub>:** *Need for arousal* will be *negatively* related to *preference for consistency*.
- H<sub>6</sub>:** *Preference for consistency* will be *positively* related to *resistance to change*.
- H<sub>7</sub>:** *Resistance to change* will be *positively* related to *brand commitment*.

**FIGURE 1**  
**Brand Commitment Model**



## METHODS

### Sample

This study was conducted at a large mid-western university in the USA. The study dealt with soft drink consumption. The primary target market for soft drinks is people under 35 years of age. According to the National Soft Drink Association (NSDA), consumption of soft drinks is now over 600, 12-ounce servings per person per year. Since the late 1970s the soft drink consumption in the United States has doubled for females and tripled for males. The highest consumption is in the males between the ages of 12 - 29; they average 1/2 gallon a day or 160 gallons a year. Thus college undergraduates are appropriate match for the topic area under study. Students who were enrolled in undergraduate business courses at a large mid-western university participated in this study. Data were collected by distributing questionnaires randomly. The personality traits were measured approximately two weeks before measuring brand commitment and resistance to change. The participants

responded to brand commitment and resistance to change measures in reference to the most favorite brand of soft drink. The total sample size consisted of 125 participants including 54 males (43 percent) and 71 females (57 percent). Average age of males was 21.3 years and of females 21.8 years with overall average age of 21.6 years.

### Measures

All measures for the study have been used in previous studies and have been well established for their reliability and validity. Items for personality traits agreeableness, conscientiousness, introversion, openness to experience, and need for arousal, were taken from scales developed by Mowen (2000). These scales were employed because of their high reliability and validity. In addition, the scales are short and averaged four items in length. The use of short scales is supported by Burisch (1997), who found in a series of studies that carefully developed scales of two to four items can outperform longer scales. To assess the traits, respondents were presented with

short phrases and asked, "How often do you feel/act this way." Responses were taken on a nine-point Likert scale anchored by "never-always." Items for brand commitment were taken from scales developed by Beatty and Kahle (1988) and Muncy (1983). It consisted of five items. The four items resistance to change scale was adopted from scale developed by Pritchard et al. (1999). The seven items brief scale of Preference for Consistency (PFCB) was adapted from Cialdini et al. (1995). Respondents provided answers to nine-point Likert-type statements anchored by "strongly disagree-strongly agree." Appendix 1 contains the measures employed in the study.

## ANALYSIS AND RESULTS

### Measurement Model

Before performing the hypotheses testing, we conducted a series of analyses to evaluate the properties of the measurement scales. As recommended by Gerbing and Anderson (1988) examining the scales of a study for composite reliability and convergent and discriminant validity is of utmost importance. We first performed an exploratory factor analysis on the scale items, taking one scale at a time to see if the items for a construct share a single underlying factor (i.e., unidimensionality). In every case, only one factor was extracted, using an eigen value of 1.0 as the cut-off point. Next, consistent with the approach advocated by Anderson and Gerbing (1988), we estimated a measurement model to examine model fit and unidimensionality (confirmatory factor analysis). We used AMOS 18.0 (Arbuckle 2009) to estimate the models. We divided the variables of the model into two subsets: independent variable group (Agreeableness, Conscientiousness, Introversion, Openness to experience, Need for arousal) and dependent variable group (PFC, Resistance to change, Brand commitment), and then performed a measurement model estimation for each of these groups. We expected the variables within each of these groups to correlate with one another. Considering our sample size and the number of constructs in the current study, we

took this approach following Bentler and Chou (1987) and Moorman and Miner (1997).

Given the sensitivity of chi-square and its unreliability in the case of assessing the model fit in SEM, we relied on a variety of other fit indices and standards to assess model fit. The estimation results of the measurement model provided a reasonable model fit to the data: the five personality trait independent variables (exogenous) ( $\chi^2_{(160)} = 299.1, p < .01, CFI = 0.92, IFI = 0.93, TLI = 0.90, RMSEA = 0.08$ ) and the three dependent (endogenous) variables ( $\chi^2_{(87)} = 201.8, p < .01, CFI = 0.91, IFI = 0.91, TLI = 0.89, RMSEA = 0.10$ ). Taken collectively, the values of fit indices (CFI, IFI, TLI) exceeded or were close to the standard of 0.90 for model fit (Hu and Bentler 1999; Kelley, Longfellow and Malehorn 1996), which also confirmed the unidimensionality of each construct in the model (Gerbing and Anderson, 1988; Kohli, Shervani and Challagalla 1998).

We next assessed the convergent and discriminant validities of our constructs. Convergent validity is established if each loading is greater than twice its standard error (Anderson and Gerbing 1988), which also suggests that each loading is significant at  $t = 0.01$  level (Gefen et al. 2000). Table 1 shows that all ratios of loading to standard error were exceeding this minimum criterion. All loadings were significant at  $t = 0.01$  level. We also calculated composite reliability (CR) for each of the constructs. Analogous to coefficient alpha, CR assesses the internal consistency of a measure. We calculated CR using the following equation (Fornell and Larcker 1981, p. 45):

$$CR = \frac{\left( \sum_{i=1} \lambda_{yi} \right)^2}{\left( \sum_{i=1} \lambda_{yi} \right)^2 + \sum_{i=1} Var(\varepsilon_i)}$$

The numerator in the above equation is the square of the sum of standardized factor loadings, whereas the denominator is numerator plus the sum of the variance due to random measurement error for each loading. Variance

due to random measurement error is computed as 1 minus the square of each loading. As shown in Table 1, the CR values range from 0.847 to 0.933. These findings give robust support for convergent validity of the items in each scale.

Next, we assessed the discriminant validity. We calculated average variance extracted (AVE), which measures the amount of variance captured by a construct in relation to the variance due to random measurement error, using the following equation (Fornell and Larcker 1981, p. 46):

$$AVE = \frac{\sum_{i=1} \lambda_{yi}^2}{\sum_{i=1} \lambda_{yi}^2 + \sum_{i=1} Var(\varepsilon_i)}$$

The numerator in the above equation is the sum of the square of the standardized factor loadings, whereas the denominator is the number of items. Table 1 presents the AVE values for different constructs. All AVE values were more than the 0.50 limit (ranged from 0.530 to 0.777) suggested by Fornell and Larcker (1981). Also, performing a confirmatory factor analysis using Maximum Likelihood (ML) estimation in AMOS 18.0, we noted that all items loaded significantly on their corresponding latent construct, with the lowest *t*-value being 6.08 ( $p < .01$ ), thereby providing evidence of convergent and discriminant validity.

### Hypotheses Testing

After checking the measurement model, we tested our hypotheses by investigating the relationship of five personality traits with the trait of preference for consistency, as well as relationships between PFC and resistance to change, and between resistance to change and brand commitment, using multivariate regression. We also used structural equation modeling for testing our hypotheses to compare differences between regression and structural equation model.

Hierarchical regression analyses were conducted to confirm the relationships between different constructs. The elemental trait of agreeableness was found to be positively related with PFC ( $t = 1.79$ ,  $p = 0.07$ ), which was in the opposite direction of Hypothesis H<sub>1</sub> when analyzed as only independent variable but was not significant when all elemental traits were entered as independent variables, rejecting H<sub>1</sub>. The elemental trait of conscientiousness was positively related with PFC ( $t = 2.07$ ,  $p < 0.05$ ), supporting H<sub>2</sub> significantly. No significant relationship was found between the trait of introversion and PFC, the trait of openness to experience and PFC, and the trait of need for arousal and PFC. Hence H<sub>3</sub>, H<sub>4</sub>, and H<sub>5</sub> were *not* supported. Also, no significant relationship was found between PFC and resistance to change. Hence H<sub>6</sub> was *not* supported as well. A significant negative relationship was found between introversion and resistance to change ( $t = -3.392$ ,  $p < 0.01$ ). Resistance to change and brand commitment were significantly related ( $t = 9.812$ ,  $p < 0.01$ ). Therefore, H<sub>7</sub> was significantly supported. Table 2A provides standardized estimates and *t*-values.

We also ran a structural equation model using AMOS 18.0 to check if results differ. The overall model was satisfactory and similar relationships were found significant. The relationship between elemental trait of agreeableness and PFC was found to be not significant ( $\beta = .144$ ,  $t = 1.37$ ,  $p = 0.17$ ), not supporting Hypothesis H<sub>1</sub>. The elemental trait of conscientiousness was positively related with PFC ( $\beta = .222$ ,  $t = 2.07$ ,  $p = 0.038$ ), supporting H<sub>2</sub> significantly. No significant relationship was found between the trait of introversion and PFC ( $\beta = -0.051$ ,  $t = -0.52$ ,  $p = 0.604$ ), the trait of openness to experience and PFC ( $\beta = -.160$ ,  $t = -1.37$ ,  $p = 0.171$ ), and the trait of need for arousal and PFC ( $\beta = -.040$ ,  $t = -0.34$ ,  $p = 0.734$ ). Hence H<sub>3</sub>, H<sub>4</sub>, and H<sub>5</sub> were *not* supported. Also, no significant relationship was found between PFC and resistance to change ( $\beta = -0.027$ ,  $t = -0.29$ ,  $p = 0.774$ ). Hence H<sub>6</sub> was *not* supported. Resistance to change and brand commitment were significantly

**TABLE 1**  
**Measurement Properties**

Construct	Items	Std. Loading	S.E.	Composite Reliability	Cronbach Alpha	AVE
Introversion	Intro 1	0.911	--	0.924	0.92	0.752
	Intro 2	0.924	0.060			
	Intro 3	0.794	0.073			
	Intro 4	0.833	0.062			
Conscientiousness	Consc 1	0.924	--	0.859	0.86	0.618
	Consc 2	0.935	0.072			
	Consc 3	0.709	0.064			
	Consc 4	0.490	0.076			
Openness to Experience	Open 1	0.830	--	0.918	0.91	0.738
	Open 2	0.810	0.070			
	Open 3	0.924	0.077			
	Open 4	0.869	0.085			
Agreeableness	Agree 1	0.810	--	0.847	0.84	0.586
	Agree 2	0.730	0.081			
	Agree 3	0.573	0.102			
	Agree 4	0.910	0.103			
Need for Arousal	Arous 1	0.913	--	0.933	0.93	0.777
	Arous 2	0.802	0.064			
	Arous 3	0.908	0.063			
	Arous 4	0.899	0.067			
Preference for Consistency	PFC 1	0.570	--	0.892	0.90	0.586
	PFC 2	0.702	0.215			
	PFC 3	0.719	0.201			
	PFC 4	0.716	0.196			
	PFC 5	0.895	0.234			
	PFC 6	0.933	0.231			
Resistance to Change	Resist 1	0.794	--	0.917	0.91	0.735
	Resist 2	0.963	0.098			
	Resist 3	0.834	0.100			
	Resist 4	0.828	0.102			
Brand Commitment	BComm 1	0.676	--	0.848	0.85	0.530
	BComm 2	0.666	0.151			
	BComm 3	0.699	0.176			
	BComm 4	0.834	0.177			
	BComm 5	0.751	0.162			

**TABLE 2A**  
**Results of Hypotheses Testing**  
**Hierarchical Regression Analysis**

	Dependent Variables					
	Model 1		Model 2		Model 3	
	PFC		Resistance to Change		Brand Commitment	
Independent Variables	$\beta$ (S.E.)	t-value	$\beta$ (S.E.)	t-value	$\beta$ (S.E.)	t-value
Agreeableness	.137 (.10 )	1.436	.046 (.20)	.491	.005 (.15)	.073
Conscientiousness	<b>.186 (.07)</b>	<b>2.07<sup>a</sup></b>	-.106 (.14)	-1.189	-.002 (.11)	-.024
Introversion	-.025 (.06)	-.272	-.308 (.12)	-3.392 <sup>a</sup>	.016 (.10)	.217
Openness to Experience	-.074 (.08)	-.788	.087 (.17)	.947	-.033 (.13)	-.463
Need for Arousal	-.109 (.06)	-1.175	.079 (.11)	.863	-.113 (.09)	-1.586
<b>PFC</b>			.005 (.18)	.055	.069 (.14)	.989
<b>Resistance to Change</b>					<b>.703 (.07)</b>	<b>9.812<sup>a</sup></b>
<b>R<sup>2</sup></b>	<b>.08</b>		<b>.132</b>		<b>0.48</b>	
<b>Model F</b>	<b>1.98</b>		<b>2.98</b>		<b>15.34</b>	
<b>P-Value</b>	<b>.08</b>		<b>.009</b>		<b>.000</b>	

Note: a – Significant at  $p < .05$  level

**TABLE 2B**  
**Results of Hypotheses Testing**  
**Structural Equation Model**

	Hypothesis	Std. Estimate	S. E.	t-value
AgreeablenessàPFC	H <sub>1</sub>	0.144	0.077	1.37ns
ConscientiousnessàPFC	H <sub>2</sub>	0.222	0.126	2.07
IntroversionàPFC	H <sub>3</sub>	-0.051	0.460	-0.52ns
Openness to ExperienceàPFC	H <sub>4</sub>	-0.160	0.059	-1.37ns
Need for ArousalàPFC	H <sub>5</sub>	-0.040	0.052	-0.34ns
PFCàResistance to Change	H <sub>6</sub>	-0.027	0.221	-0.29ns
Resistance to Change àBrand Commitment	H <sub>7</sub>	0.834	0.096	6.97

(Goodness-of-Fit Statistics:  $\chi^2_{(543)} = 916.4$ ,  $p < 0.01$ ; RMSEA = .074; CFI = 0.882; IFI = 0.885; TLI=0.863).

positively related ( $\beta=0.834$ ,  $t=6.97$ ,  $p=0.000$ ).  $H_7$  was supported. Table 2B provides path coefficients and t-values.

Since no significant relationship was found between PFC and resistance to change and PFC and brand commitment, as an exploratory purpose, a moderation analysis was conducted to examine if PFC moderates the relationship between resistance to change and brand commitment. But, no significant moderation effect was found.

## DISCUSSION

The model received strong support for the hypothesized path from resistance to change to brand commitment. The lack of any relationship between PFC and resistance to change is interesting. Perhaps this relationship is moderated by other variables. Also as more than half of the respondents scored below the midpoint of the scale, the data suggest that college students do not seem to care for consistency. It is also possible that most of the non-significant relations between personality traits and PFC were due to the small sample size. Another possibility is that the scale used to measure PFC which was a brief scale consisting of only seven items and these seven items might not have been able to capture the whole construct of PFC.

True loyalty is commitment based, and must be distinguished from non-commitment based spurious loyalty. Loyalty measures such as repeat purchase can be misleading because they overlook factors such as inertia and habit. Hence measure for a brand's loyal consumer base should take brand commitment into consideration. We can distinguish between those who buy products strictly from habit or convenience and those who make repeat purchases based on genuine attachment.

Brand commitment should be viewed as a long-run end pursued to achieve long-run competitive advantage. It is a good predictor of loyal consumers and positively influences the customer retention rate. Promotional efforts

should be used as a strategic tool to improve customers' commitment to the brand and enhance their retention over time (Martin and Goodell 1991). Lowenstein (1997) has also placed commitment based loyalty in the top tier of the "Customer Loyalty Pyramid<sup>SM</sup>". As per Hofmeyr and Rice (2000) "Committed customers are the backbone of the value of a brand." Brand-committed consumers will stick with the brand even when the brand changes its attributes within certain limits (Aaker 1991). In a given product category, they are expected to use and purchase the particular brand exclusively, whenever possible.

## LIMITATIONS AND FUTURE RESEARCH

Generalization of these results beyond the product category of soft drink should proceed with caution. The product category utilized here was selected because it represented a frequently purchased product. Limitation lies in the nature of the data because of the product category and sample profile. The student sample, though representing an important consumer group, is a limitation due to potential differences between students and nonstudents as consumers. Future research should examine the relationships in other product categories using more representative samples and through multiple studies. Also the model presented here consists only of a small set of preference for consistency, resistance to change, and brand commitment correlates. Future research should develop a more comprehensive model with a larger set of antecedent and consequences. Non-significant relationship between PFC and resistance to change was interesting and may be moderated by other variables. Future research should try to investigate these variables. Also, instead of brief scale of only seven items, the full scale of PFC should be used to measure the construct. Finally, importance of this research lies in a better understanding of how increased brand commitment could stem the growth of a more promiscuous customer base.

# REFERENCES

- Aaker, David A. (1991), *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, New York, The Free Press.
- Aaker, David A. (1996), *Building Strong Brands*, New York: The Free Press.
- Allen, N. and J. Meyer (1993), "Organizational Commitment: Evidence of Career Stage Effect," *Journal of Business Research*, 26 (1), 49-61.
- Arbuckle, James L. (2009), *Amos Users' Guide Version 18.0*, Chicago, IL: SPSS Inc.
- Baldinger, Allan L. and Joel Rubinson (1996), "Brand Loyalty: The Link Between Attitude and Behavior," *Journal of Advertising Research*, 36 (November/December), 22-34.
- Bator Renée J. and Robert B. Cialdini (2006), "The Nature of Consistency motivation: Consistency, Aconsistency, and Anticonsistency in a Dissonance Paradigm," *Social Influence*, 1 (3), 208-233.
- Beatty, Sharon E. and Lynn R. Kahle (1988), "The Alternative Hierarchies of the Attitude-Behavior Relationship: The Impact of Brand Commitment and Habit," *Academy of Marketing Science*, 16 (2), 1-10.
- Beatty, Sharon E., Lynn R. Kahle and Pamela Homer (1988), "The Involvement-Commitment Model: Theory and Implications," *Journal of Business Research*, 16 (2), 149-167.
- Bettencourt, Lance (1997), "Customer Voluntary Performance: Customer as Partner in Service Delivery," *Journal of Retailing*, 73 (3), 383-406
- Burisch, M. (1997), "Test Length and Validity Revisited," *European Journal of Personality*, 11, 303-315.
- Chakraborty, Gautam, Prashant Srivastava and Fred Marshall (2007), "Are Drivers of Customer Satisfaction Different for Buyers/Users from Different Functional Areas?" *Journal of Business and Industrial Marketing*, 22 (1), 20-28.
- Cialdini, Robert B., Melanie R. Trost and Jason T. Newsom (1995), "Preference for Consistency: The Development of a Valid Measure and the Discovery of Surprising Behavioral Implications," *Journal of Personality and Social Psychology*, 69 (2), 318-328.
- Crosby, Lawrence A. and James R. Taylor (1983), "Psychological Commitment and Its Effects on Post-Decision Evaluation and Preference Stability among Voters," *Journal of Consumer Research*, 9 (March), 413-431.
- Day, George S. (1969), "A Two-Dimensional Concept of Brand Loyalty," *Journal of Advertising Research*, 9 (2), 29-35.
- Dick, Alan S. and Kunal Basu (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework," *Journal of Academy of Marketing Science*, 22 (2), 99-113.
- Evanschitzky, Heiner, Gopalkrishnan R. Iyer, Hilke Plassmann, Joerg Niessing and Heribert Meffert (2006), "The Relative Strength of Affective Commitment in Securing Loyalty in Service Relationships," *Journal of Business Research*, 59 (12), 1207-1213.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.
- Gefen, D., Straub, D. and M. Boudreau (2000), "Structural Equation Modeling and Regression: Guidelines for Research Practice," *Communications of AIS*, 4 (7), 1-78.
- Gerbing, D. W. and J.C. Anderson (1988). "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment", *Journal of Marketing Research*, 25(May), 186-192.
- Geyskens, I. J., B. Steenkamp, L. Scheer and N. Kumar (1996), "The Effect of Trust and Interdependence on Relationship Commitment: A Trans-Atlantic Study," *International Journal of Research in Marketing*, 13 (4), 303-317.



- Heere, Bob and Geoff Dickson (2008), "Measuring Attitudinal Loyalty: Separating the Terms of Affective Commitment and Attitudinal Loyalty," *Journal of Sport Management*, 22, 227-239.
- Hill, Nigel and Jim Alexander (2006), *Handbook of Customer Satisfaction and Loyalty Measurement*, Hampshire, England: Gower Technical Press.
- Hofmeyr, Jan and Butch Rice (2000), *Commitment-Led Marketing: The Key to Brand Profits is in the Customer's Mind*, New York: John Wiley & Sons.
- Hu, L. and P. M. Bentler (1999), "Cutoff Criteria for Fit Indices in Covariance Structure Analysis: Conventional Criteria versus New Alternatives," *Structural Equation Modeling*, 6, 1-55.
- Jacoby, Jacob and Robert Chestnut (1978), *Brand Loyalty Measurement and Management*, New York: John Wiley & Sons.
- Jacoby, Jacob and David B. Kyner (1973), "Brand Loyalty vs. Repeat Purchasing Behavior," *Journal of Marketing Research*, 10 (February), 1-9.
- Kelly, S.W., T. Longfellow and J. Malehorn (1996), "Organizational Determinants of Service Employees' Exercise of Routine, Creative, and Deviant Discretion", *Journal of Retailing*, 72 (2), 135-157.
- Kiesler, Charles A. (1971), *The Psychology of Commitment: Experiments Linking Behavior to Belief*, San Diego, CA: Academic Press.
- Kohli, Ajay K., Tasadduq A. Shervani and Goutam N. Challagalla (1998), "Learning and Performance Orientation of Salespeople: The Role of Supervisors," *Journal of Marketing Research*, 35 (2), 263-274.
- Lowenstein, Michael W. (1997), *The Customer Loyalty Pyramid*, Westport, CT: Quorum Books.
- Martin, Charles L. and Phillips W. Goodell (1991), "Historical, Descriptive and Strategic Perspectives on the Construct of Product Commitment," *European Journal of Marketing*, 25 (1), 53-60.
- Matilla, Anna S. (2006), "How Affective Commitment Boosts Guest Loyalty (and Promotes Frequent-guest Programs)," *Cornell Hotel and Restaurant Administration Quarterly*, 47 (2), 174-181
- Morgan, Robert B. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.
- Mowen, John C. (2000), *The 3M Model of Personality and Motivation: Theory and Empirical Application to Consumer Behavior*, Boston, MA: Kluwer Academic Publishers.
- Owens, Deborah L., Michael Hardman and Bruce Keillor (2001), "The Differential Impact of Price-Related Consumer Promotions on Loyal versus Non-loyal Users of the Brand: A Field Study Investigation", *Journal of Promotion Management*, 6 (1), 113-131.
- Pritchard, Mark P., Mark E. Havitz and Dennis R. Howard (1999), "Analyzing the Commitment-Loyalty Link in Service Contexts," *Journal of Academy of Marketing Science*, 27 (3), 333-348.
- Salancik, G. R. (1977), "Commitment and the Control of Organizational Behavior and Belief," In *New Directions in Organizational Behavior*. Eds. B. M. Staw and G. R. Salancik. Chicago: St. Clair, 1-54.
- Shapiro, Arthur (1990), "Advertising versus Promotion: Which is Which?", *Journal of Advertising Research*, 30, June. 13-18.
- Totten, John C. and Block, Martin (1994), *Analyzing Sales Promotions*, 2<sup>nd</sup> Edition, Chicago: The Dartnell Corporation.
- Warrington, Patti and Soyeon Shim (2000), "An Empirical Investigation of the Relationship between Product Involvement and Brand Commitment," *Psychology and Marketing*, 17 (9), 761-782.
- Zeithaml, V., L. Berry and A. Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60 (April), 31-46

## APPENDIX

### Measurement Scales of the Study

#### ***Brand Commitment (9 pt. Likert type “strongly disagree/strongly agree”)***

1. If my preferred brand or type of soft drink were not available at the store, it would make little difference to me if I had to choose another brand. (r)
2. I consider myself to be highly loyal to one brand of soft drink.
3. When another brand is on sale, I will generally purchase it rather than my usual brand. (r)
4. To me, XYZ is the same as other soft drinks. (r)
5. I try to use XYZ soft drink because it is the best choice for me.

#### ***Resistance to Change (9 pt. Likert type “strongly disagree/strongly agree”)***

1. My preference to use XYZ brand of soft drink would not willingly change.
2. It would be difficult to change my beliefs about XYZ brand of soft drink.
3. Even if close friends recommend another brand of soft drink, I would not change my preference for XYZ soft drink.
4. To change my preference from the XYZ soft drink would require major rethinking.

#### ***Preference for Consistency (9 pt. Likert type “strongly disagree/strongly agree”)***

1. It is important to me that those who know me can predict what I will do.
2. I want to be described by others as a stable, predictable person.
3. The appearance of consistency is an important part of the image I present to the world.
4. I typically prefer to do things the same way.
5. It is important to me that others view me as a stable person.

6. I make an effort to appear consistent to others.
7. It doesn't bother me much if my actions are inconsistent. (r)

### **Elemental Traits (9 pt. “never/always”)**

#### ***Introversion***

1. Feel bashful more than others.
2. Introverted.
3. Quite when with people.
4. Shy.

#### ***Openness to Experience***

1. Frequently feel highly creative.
2. Imaginative.
3. Find novel solutions.
4. More original than others.

#### ***Agreeableness***

1. Tender hearted with others.
2. Agreeable with others.
3. Kind to others.
4. Softhearted.

#### ***Conscientiousness***

1. Precise.
2. Efficient.
3. Organized.
4. Orderly.

#### ***Need for Arousal***

1. Drawn to experiences with an element of danger.
2. Seek an adrenaline rush.
3. Actively seek out new experiences.
4. Enjoy taking more risks than others.

## UNDERSTANDING COGNITIVE AGE: THE BOOMERS' PERSPECTIVE

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*The baby boomer generational cohort consists of consumers born between 1946 and 1964. This study addresses this large, heterogeneous group and how cognitive age is a key discriminating variable that can be used in segmentation efforts. Results from the study indicate that baby boomers with a higher cognitive age will have less fashion interest, will report lower levels of innovativeness, and will be less socially involved. Also, higher cognitive age did not have an impact on brand/product loyalty or risk aversion. Implications for managers and academicians are discussed.*

### THE BABY BOOMER GENERATIONAL COHORT

The baby boomer generational cohort, the gray market, or the third generation (Haynes 2004), consists of consumers born between 1946 and 1964. Baby boomers comprise over 40 percent of the adult population in the US (76 million), which is substantially greater than the elderly (26 million) and Generation X (46 million) generational cohorts (Maples and Abney 2006). To illustrate the size and influence of this group, it is predicted that, in 2011, when the first baby boomers reach age 65, the group of those 65 and older is going to grow faster than the population in each of the 50 states (Gottlieb 2005). This future group of seniors will grow from 33 million people in 2000 to 45 million in 2015 and 62 million in 2025 (Gottlieb 2005). Boomer retirements will cause such significant work shortages that some employers are making it easier for baby boomers to keep working into retirement (Gutner 2006; Jorgensen 2006).

“Despite the recession, boomers still have assets estimated at \$45 trillion” (Allen 2009, p. 30) and it would be a mistake to underestimate this group due to the current economic climate. Over the long term, the baby boomers group is becoming more affluent (Formichelli 2007;

Ingram 2006; Wolff 2007) as they age and their purchasing power increases accordingly (Rice 1988). Moreover, Gloede (2005) and Clement (2004) contend that they are the most affluent group of consumers in US history. They control 70 percent of the nation's wealth and spend one trillion dollars annually (Chay 2005). They are sophisticated consumers with money to spend and they are not averse to spending it on products and services. Boomers are the biggest spenders at both malls and department stores, according to the International Council of Shopping Centers (Zmuda 2006). They are mobile, interested in consuming, respond to changing trends, and are advertising literate (Haynes 2004). This above average socioeconomic group is two times as likely as the average person to earn over \$50,000 (Brown 2001).

Thus, baby boomers have better prospects than the 50+ people of the past. Boomers have money, are willing to spend it, and seem to be prepared to consume for years to come. They end up spending on entertainment, both inside and outside the home (Ingram 2006), leisure activities, travel, personal toys, and now everything that grandparents buy (Formichelli 2007; Potter 2002). They also remodel, redecorate, and replace a lot of things. Boomers tend to spend more as they age, especially when their children are grown. It is estimated that they have \$5,000 to \$10,000 more annually in disposable income to spend once the children leave home.

While some advertisers are targeting this affluent market for various products and services, baby boomers have been nicknamed the “forgotten generation” (Brown 2001). More marketers have aggressively targeted other generational cohorts, particularly the youth segment, with the belief that young people are spending all of the money (Zmuda 2006). Additionally, the diversity of this group and the subsequent difficulty of targeting boomers may be the major reason that some advertisers have avoided this group. Working patterns, parenthood and marital status, career experiences and economic status often make consumers less alike as they continue to age. This growing diversity makes it increasingly challenging for marketers to effectively target this lucrative group via traditional segmentation strategies.

#### PURPOSE OF THE STUDY

While boomers are in many ways a very like-minded group, possibly due to the “cohort effect”, i.e., the common experiences shared by boomers when they were young (Harmon, Webster and Weyenberg 1999), there does not appear to be general or universal principles that can be attached to marketing to boomers. Additionally, as appealing as the baby boomer group may be to marketers (Zmuda 2006), over time academicians have noted that it is not homogeneous in terms of consumption (Chay 2005; Hanley 1986; Levy and Weitz 2001). Wolff (2007) labels the group, “wildly diverse,” and their needs escalate and alter as they move into retirement. There is more diversity in this generational cohort than any other due to their cultural differences.

Surprisingly, Mummert (2004) emphasizes that the number one mistake made by organizations targeting baby boomers is that they do not recognize the diversity of this market. Spanning nearly two decades, the boomer market is far too large to be targeted as an undifferentiated whole. Many academicians researching the baby boomers imply the inherent heterogeneity of the group via segmentation strategies based on psychographics as well as demographics

(Chay 2005; Coleman, Hladikova and Savelyeva 2006). Others have suggested that generational marketing, coupled with more precise cohort segmentation, is appropriate (Meredith and Schewe 1999; Morton 2001; Suman 2003).

Segments clearly exist within this large market. The group has been divided into as many as four distinct age segments based solely upon demographic variables (Gibson 1993). Traditionally, many researchers have simply divided the group into two segments based upon the different life experiences of younger and older members of this cohort (Dinkins 1993; Morton 2001). Yet, the demographic variable of chronological age may not be a good discriminator among consumers who age differently and age at different rates. One method of differentiating consumers has been by their self-perceived age (Barak and Schiffman 1981) or cognitive age, which may ultimately present a useful approach to segmenting the baby boomer market (Szmigin and Carrigan 2001; Wei 2005). While cognitive age is believed to be a more robust variable than more commonly used variables, e.g., demographics, in explaining some consumer behaviors (Catterall and Maclaran 2001; Gwinner and Stephens 2001; Johnson 1996), it is notably a complex psychological construct, requiring much analysis in order to define it more accurately and adequately. Segmenting the baby boomer segment by cognitive age, despite its level of complexity, may be worthwhile, since it is postulated in this study to be a key discriminating variable of this group.

Thus, the purpose of this study is to examine the variables that may influence cognitive age in baby boomers. In this study, the effect of cognitive age on fashion interest, innovativeness, social involvement, loyalty toward the brand/product, and risk aversion is examined. Substantial research has been conducted in the area of the elderly and cognitive age (see Barak and Schiffman 1981; Chua, Cote and Leong 1990; Eastman and Iyer 2005; Mathur and Moschis 2005; Mathur,

Sherman and Schiffman 1998; Sherman, Schiffman and Mathur 2001; Schiffman and Sherman 1991; Szmigin and Carrigan 2001; Van Auken and Barry 2004; Van Auken, Barry and Bagozzi 2006; Wei 2005; Weijters and Geuens 2006; and Wilkes 1992). In contrast, there is relatively little written in the area of baby boomers and cognitive age (Catterall and Maclaran 2001; "Market to Mid-Life Boomers' Sense" 1998). Specifically, Catterall and Maclaran (2001) present a conceptual discussion on cognitive age, including methodological issues for researchers. "Market to Mid-Life Boomers' Sense" (1998) is a brief practitioners' discussion about cognitive age and boomer women. Furthermore, Barak and Schiffman (1981) suggest that the cognitive age variable should be employed in studies that do not focus solely on the elderly; it should be used in studies that concentrate on other age groups.

## LITERATURE REVIEW

### Cognitive Age

Schewe (1989) states that aging is an individual event as no two persons age the same way at the same time. The biology of aging is dependent on genetic inheritance and on the environment. Moreover, personal intervention of the aging process can be achieved by weight control, diet, smoking cessation, and a reduction of psychological stress (Schewe 1988). Therefore, some individuals really do age more gracefully than others and it is improper to group people by chronological age and assume that the same physiological and psychological changes have taken place.

Some researchers (Barak and Schiffman 1981; Van Auken, Barry and Bagozzi 2006; Wei 2005; Wilkes 1992) have noted that self-perceived age, non-chronological age, or cognitive age may contribute more than chronological age in understanding how older consumers view themselves and how they consume. As is consistently shown in the research, older persons frequently see themselves as perceptually younger than their

chronological age. Many aging consumers today feel as if they are 20 to 25 years younger than they really are. They are very much like any cross-section of any age group in terms of personality and act and even look far younger than any age group that has gone before them (Barak and Schiffman 1981; Eastman and Iyer 2005; Leventhal 1997; Schewe and Meredith 1994; Wilkes 1992). Barak and Schiffman (1981) noted the problems with the use of chronological age as a predictor of attitudes and behaviors and defined cognitive age in terms of four dimensions (feel-age, look-age, do-age, and interest-age) and found that cognitive age captured different and separate aspects of age better than chronological age.

Major global demographic changes are redefining "old," including increasing lifespans, declining birth rates, and aging large generational cohorts, such as baby boomers (Crosby, Johnson and Carroll 2006). Moreover, baby boomers themselves are redefining what "old" means. Being old used to mean reaching the half-century mark. The first wave of boomers is already past this formerly magic number, as reaching old age is becoming a less distant event. Furthermore, trend spotter, Faith Popcorn, feels that baby boomers won't acknowledge "old" at all, and the terms mature and elderly will be considered insults (Crosby, Johnson and Carroll 2006). Gottlieb (2005, p. 24) contends that the baby boomers cohort, "is a fighting generation that wants to stay young." Baby boomers define old age as starting at 80 years of age, which is three years beyond the average lifespan (Crosby, Johnson and Carroll 2006). They never view themselves as getting older (Voight 2000), and fight to stay young through physical activity and managing their physical appearance. According to a study by Euro RSCG Worldwide, over 75 percent of boomers view sports and fitness as a key to staying young (Milner 2006). Additionally, the addition of anti-aging properties to products in the cosmetics and toiletries industry has significant appeal among baby boomers (Newman 2006). In sum, baby boomers, in contrast to the elderly, wish to stay young,

which may significantly impact their cognitive age.

### Fashion Interest

The literature describes fashion interest as an important construct to define those avid consumers who are sensitive to their image via their physical attractiveness (Goldsmith and Stith 1992-1993; Szmigin and Carrigan 2006; Wilkes 1992). The literature of fashion theory attempts to explore why and how fashion-related behaviors or preferences are related to self-concept and psychological traits. The first approach emphasizes psychological processes of fashion diffusion (e.g., Goldsmith and Stith 1989; Schrank 1973; Stanforth 1995). These studies examined who the fashion or trendsetters are and how others follow and adopt fashion. Schrank (1973) found that opinion leadership and innovativeness are two important variables to predict fashion adoption. Goldsmith and Stith (1989) reported that fashion innovators are younger and place greater importance on social values, such as being respected, excitement, and fun/enjoyment aspects of life than fashion non-innovators. Stanforth (1995) found that fashion innovators are more related to traits such as sensation seeking, adventure seeking, boredom susceptibility and clothing individuality.

Research by NPD Group estimates that boomer women account for 25 percent of the \$100 billion total women's apparel sales, a share that is rapidly growing (Karimzadeh 2006). Brown (2001) noted that baby boomers are not slaves to fashion, yet style matters to them. Traditionally youth-oriented firms are now releasing retailing concepts that target the more classic customer. American Eagle Outfitters is targeting the post-college consumer with its Martin + Osa retail concept. J. Crew's recent Madewell targets a more classic taste level. Gap, Inc. now offers Forth & Towne apparel for women over 35 (Karimzadeh 2006). However, a problem for many Gap chains and their approach to boomers is that the fashions are not as exciting as they might be (Misonzhnik 2006). Additionally, Aldridge

(2004, p. 13) claims that baby boomer women are "shamefully under-served." In any event, fashion is likely to remain a higher priority for the boomer cohort. This is partly due to their desire to focus on fitness, wellness, and natural products in order to address age rather than mask it (Seckler 2004). Thus, the following hypothesis is proposed:

*Hypothesis 1: Baby boomers with a higher cognitive age will have less fashion interest.*

### Innovativeness

Mary Furlong, founder of ThirdAge.com, notes that baby boomers have a sense of being trendsetters and individuals. They are innovative in their own way (Voight 2000). Hanley (1986) suggests that the baby boomer generation has a positive self-image and includes active, innovative risk-takers, i.e., they are good targets for new ideas and technology. Brown (2001) concurs that they will try new products and services and, specifically, they are more likely than the average consumer to try new food products, recipes, gadgets, appliances and holiday destinations. Based on this discussion, the following hypothesis is proposed:

*Hypothesis 2: Baby boomers with higher cognitive age will report lower levels of innovativeness.*

### Social Involvement

Extroversion, the degree to which people are outer-directed and seek social involvement, is a significant psychological factor in segmentation (Wilkes 1992). Chua, Cote and Leong (1990) found that younger cognitive age was related to greater life satisfaction, activity and social involvement. Additionally, older cognitive age was correlated with poorer perceived health and signs of aging.

Chay (2005) found that the majority of boomers are optimistic. They are active and participate in athletics, attend movies and the theater, and surf the Internet. Money and saving time are important for boomers, since they desire to

maximize their time traveling and eating out. Boomers are also motivated by causes. They expect to continue to contribute to society. For example, baby boomers rallied around the campaign to increase awareness for breast cancer (Voight 2000). Thus, the following hypothesis is proposed:

*Hypothesis 3: Baby boomers with higher cognitive age will be less socially involved.*

### **Loyalty to the Brand/Product**

A traditional assumption is that younger age groups are more likely to switch brands and that older consumers are more brand loyal and thus difficult to persuade to buy a new brand or product (Parpis 2002). Much research has shown that younger consumers are more likely to experiment with brands, while older consumers are more likely to remain brand loyal, which simplifies the purchasing process. However, Lipke (2001) and Kapferer (2005) reported that brand loyalty is on the decline among all age groups, and the most significant drops are in the older age cohorts. Older consumers are no longer as brand-loyal as they have been (Lipke 2001).

Boomers thrive on independence and challenge convention. They were once described as active, skeptical, quality-conscious, restless, media-savvy, capricious (Coeyman 1996) and the first brand-focused generation in history, facing thousands of mass media ads for a plethora of brands. They became more demanding of brands and therefore less loyal. Furthermore, since many boomers work well into their retirement years, their enhanced financial strength will increase their willingness to experiment with brands (Lipke 2001).

In sum, as baby boomers continue to move into the 50-plus group, marketers are recognizing that the relationship between brand loyalty and age has changed. Similarly, Dychtwald and Flower (1989) state that aging baby boomers are less likely to be brand loyal and that they will make careful evaluations of the quality of competing products. Potter (2002) concurs that

baby boomers are not necessarily blindly brand loyal. They certainly have more experience in making buying decisions, so if a brand does not appear to understand their perceived needs or assaults them with ads that insult their sensitivities, or maybe worse yet, ignores them altogether, a brand switch is likely. Brown (2001) also concluded that baby boomers are no more brand loyal than average consumers. The following hypothesis is proposed:

*Hypothesis 4: Baby boomers with higher cognitive age will be more loyal to the brand/product.*

### **Risk Aversion**

An advertising study by Stephens (1991) found that cognitively old adults tended to score high on cautiousness, which implies that they would play it safe with brands that are known and accepted rather than trying something new. In sum, they appear to be risk averse. Generally speaking, the aging consumer will try new products, but will try them for different reasons than the younger market (Leventhal 1997). Aging consumers will try something if it can meet a personal, specific need that they have and they are frequently comparison shoppers.

In contrast, according to Schiffman and Sherman (1991), cognitively younger consumers differ from this stereotype in terms of traits and values. Particularly, they are more in control of their lives and are more self-confident than cognitively older consumers. They are also more likely to be risk takers and more willing to accept change, which is shown in their willingness to adopt new products and services. Thus, the following hypothesis is proposed:

*Hypothesis 5: Baby boomers with higher cognitive age will be more risk averse.*

## **METHODOLOGY**

### **Data Collection and Sample**

The study sample was a regional sample. The respondents consisted of people who had been recently contacted by upper level undergraduate

marketing students who were trained in data collection procedures and used as interviewers. This approach has been successfully used in previous research (e.g., Arnold and Reynolds 2003; Bitner, Booms and Tetreault 1990; Jones and Reynolds 2006). Interviewers were instructed to recruit non-student participants only. To ensure accurate responses, the respondents were promised complete confidentiality and were asked to return the questionnaire where the research was conducted. A total of 295 respondents participated in the study. The inclusion criteria for participants were those 40-58 years of age that wished to participate in the study. This convenience sample was deemed appropriate, because the purpose of the study was not to provide point estimates of the variables, but to test the relationships among them (Calder, Phillips and Tybout 1981). A description of the demographic information about the sample is provided in Table 1.

### Design and Procedure

All scales used to test the proposed model can be found in Table 2. In addition, sources used in the creation of the scales are also provided. All the scale items were measured on a seven point Likert scale from "1 = strongly disagree" to "7 = strongly agree." Each scale was first investigated using exploratory factor analysis and the results supported a single dimension for each scale. In addition, item-total correlations were higher (greater than 0.50) for each construct. Descriptive statistics for each scale as well as correlations between all constructs are presented in Table 3. A measurement model using LISREL with maximum likelihood estimation was then conducted, consistent with Anderson and Gerbing's (1988) two-step approach. The results indicated an acceptable measurement model fit ( $\chi^2_{(120)} = 179.34$ ,  $p < 0.01$ ; RMSEA = 0.04, CFI = 0.97; IFI = 0.97; NNFI = 0.97) (Hair et al. 1998). The results supported the internal consistency of all scales, as the composite reliability was greater than 0.75 for all scales (see Table 2). Variances extracted for all scales were greater than the generally acceptable value of 0.50 (see Table

2), indicating a high level of shared variance between the indicators of cognitive age. The completely itemized standardized loadings for all measurement items are also included in Table 2.

The results also support the convergent and discriminant validity of all of the scales. The items of each scale loaded highly on its respective construct (t-values ranging from 9.50 to 17.13), providing evidence of convergent validity (Anderson and Gerbing 1988). As evidence of discriminant validity, none of the confidence intervals of the phi matrix included 1.00 (Anderson and Gerbing 1988). Discriminant validity was also tested by comparing variance extracted estimates with the squared phi estimates (Fornell and Larcker 1981). The variance extracted estimates were greater than the squared phi estimates for all sets of constructs, supporting discriminant validity.

The structural model (see Figure 1) using LISREL was then estimated to test the proposed relationships. The fit statistics indicated an acceptable model fit ( $\chi^2_{(130)} = 304.57$ ,  $p < 0.01$ ; RMSEA = 0.06, IFI = 0.93; CFI = 0.93; NNFI = 0.92) (Hair et al. 1998) and the results can be found in Table 4.

## RESULTS

Hypothesis 1 was supported in that baby boomers with a higher cognitive age will have less fashion interest ( $t = -4.91$ ). Hypothesis 2 was supported in that baby boomers with a higher cognitive age will have a lower level of innovativeness ( $t = -2.97$ ). Hypothesis 3 was supported. Baby boomers with a higher cognitive age will engage in lower levels of social involvement ( $t = -5.24$ ). Hypothesis 4 was not supported. The higher cognitive age did not have an impact on loyalty ( $t = 0.51$ ). Hypothesis 5 was not supported. Higher cognitive age did not have an impact on being risk averse ( $t = -1.61$ ).



**TABLE 1**  
**Descriptive Information of Sample**

<b>Items</b>	
<b>Gender:</b>	
Male	46%
Female	54%
<b>Income:</b>	
0-10k	1%
10,001-30k	21%
30,001-50k	29%
50,001-70k	17%
Above 70k	32%
<b>Occupation:</b>	
Homemaker/Not Employed	5%
Self-Employed	13%
Educator	7%
Professional	19%
Work for Company/Business	48%
Other	8%
<b>Education Completed:</b>	
GED	4%
High School	36%
Undergraduate	27%
Graduate	23%
Professional Degree	10%
<b>Marital Status:</b>	
Married	75%
Single	10%
Living with another	3%
Widowed	2%
Separated	1%
Divorced	8%
Rather not say	1%
<b>Race:</b>	
White (Caucasian)	74%
African American	20%
Hispanic American	1%
Pacific Islander	1%
Asian American	2%
Native American	1%
Other	1%

**TABLE 2**  
**Measurement Items**

Scale/Items <sup>a</sup>	Standardized Loading	Source/adapted from
<b>Cognitive Age (CR=0.81, VE=0.51)</b>		Barak and Schiffman (1981)
Most of the time... feel like I'm in my:	0.70	
I look like I'm in my:	0.66	
My interests are those of a person in his/her:	0.72	
I do the things a person does in his/her:	0.77	
<b>Fashion Interest (CR=0.81, VE=0.58)</b>		Reynolds and Darden (1971); Summers (1970);
When I choose between the two, I usually dress for fashion, not for comfort.	0.67	
An important part of my life and activities is dressing smartly.	0.87	Wilkes (1992)
I like to shop for clothes.	0.74	
<b>Social Involvement (CR=0.81, VE=0.68)</b>		Wells (1971); Reynolds and Darden (1971); Cooper and Marshall (1984); Chua, Cote, and Leong (1990)
I like to be around and involve myself with other people.	0.85	
I enjoy having people around.	0.80	
<b>Innovativeness (CR=0.84, VE=0.61)</b>		Goldsmith and Hofacker (1991)
I know more about shopping over the Internet than other people.	0.83	
If I heard that a new product that I was interested in, was available over the Internet,		
I would be interested enough to buy it.	0.78	
I will consider buying something over the Internet, even if I haven't heard of it before.	0.74	
<b>Loyalty to the Brand (CR=0.87, VE=0.70)</b>		Lichtenstein, Netemeyer and Burton (1990); Raju (1980)
I generally buy the same brands that I have always bought.	0.80	
Once I get used to brand I hate to switch.	0.84	
Even though certain products/services are available in a different number of brands,		
I always tend to buy the same brand.	0.86	
<b>Risk Aversion (CR=0.75, VE=0.50)</b>		Donthu and Gilliland (2002)
I would rather be safe than sorry.	0.67	
I want to be sure before I purchase anything.	0.80	
I avoid risky things.	0.65	

<sup>a</sup> Composite Reliability (CR) and variance extracted (VE) are provided for each scale

**TABLE 3**  
**Construct Correlations, Means, Standard Deviations and Coefficient Alphas**

Construct	Mean	Standard Deviation	Coefficient Alpha	1	2	3	4	5	6
1. Cognitive Age	2.00	0.71	0.80	1					
2. Fashion Interest	3.77	1.68	0.79	-0.268**	1				
3. Social Involvement	5.11	1.38	0.81	-0.233**	0.429**	1			
4. Innovativeness	3.05	1.57	0.83	-0.129*	0.331**	0.228**	1		
5. Loyalty to Brand	4.68	1.58	0.88	0.046	0.003	0.001	0.014	1	
6. Risk Aversion	5.53	1.21	0.72	-0.071	0.072	0.053	-0.150*	0.344***	1

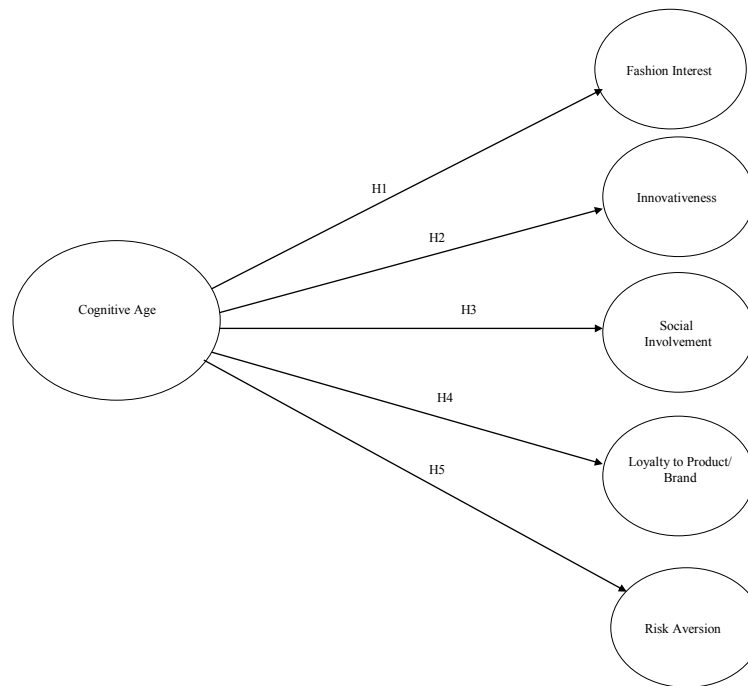
\* correlation significant at  $p < 0.05$

\*\* correlation significant at  $p < 0.01$

**TABLE 4**  
**LISREL Results for the Hypothesized Model**

Hypothesis	Path	Standardized Estimate	t-value	Result
H <sub>1</sub>	Higher cognitive age → lower fashion interest	-0.37	-4.91	Supported
H <sub>2</sub>	Higher cognitive age → lower innovativeness	-0.21	-2.97	Supported
H <sub>3</sub>	Higher cognitive age → lower social involvement-	0.33	-5.24	Supported
H <sub>4</sub>	Higher cognitive age → more loyalty	0.04	0.51	Not Supported
H <sub>5</sub>	Higher cognitive age → higher risk aversion	-0.12	-1.61	Not Supported

**FIGURE 1**  
**Conceptual Model of Cognitive Age**



## DISCUSSION

The support for hypothesis 1 states that boomers with higher cognitive age have lower fashion interest. Based on this result, it becomes important for fashion marketers to focus all their marketing efforts on cognitively younger boomers. One area to emphasize is the importance of age-defying products and solutions. As these boomers are a very active working population, age defying products that are quick and easy to apply would be easily

adopted by this cohort group. Another area of emphasis is clothing and apparel accessories. As fashion becomes ubiquitous with the younger generation (Generation Y consumers), these boomers whose children are in the same age category want to feel accepted by their children. They feel that dressing up like their children in trendy fashions will give them more acceptance and make them feel “cool” in the eyes of their children. Besides, such fashion will also portray them as being young, hip, and one with the crowd. Fashion that is trendy and

at the same time comfortable, displaying a sense of elegance, will be a good market for these boomers.

The support for hypothesis 2 indicates that boomers scoring high on cognitive age do not want to take any more chances in life. They are comfortable with their present level of adoption practices. The younger boomers, however, are an interesting group. They are venturesome. They want to make sure that their second half of life is shaped well to meet their needs. This group has the resources and the endurance to enforce such changes. One area that has gained a lot of attention in recent times is the retirement program. New retirement programs that can allow boomers to enjoy the same quality of life will be very successful and gain ready acceptance. Another area of growth is technology; the new innovations in technology may be very appealing and readily accepted by younger generations (Generation X and Generation Y consumers), but it is the boomers who have the buying power to afford to make these purchases. Besides, the boomers have adopted many new technologies and hence they need not be educated on how to use the innovations.

The support for hypothesis 3 suggests that boomers with higher cognitive age do not want to engage in social activities. They do not want to interact with others. The younger boomers, on the other hand, are more active and like to be seen by others. They want to be admired and appreciated. They like to engage in activities that emphasize and promote their lifestyle. Marketers need to capitalize on such consumers and emphasize the importance of luxury automobiles, high-end electronics, country club memberships, etc., which carry prestige and at the same time make boomers feel good in front of their peers.

### MANAGERIAL IMPLICATIONS

Within a general conceptual framework, this study identified characteristics of cognitively younger baby boomers that shape consumer innovativeness. These relationships may

provide a better picture of baby boomers, since it has been fairly well-established that cognitive age may be a more discriminating segmentation variable in older consumers than chronological age. The empirically supported relations are important to management, since they help marketers to better focus on the cognitively younger baby boomer segment. It helps advertisers understand their audience by providing specific information around the behavior of cognitively younger baby boomers. It allows advertisers to tailor their messages based on these demographic and lifestyle characteristics. Marketers need to understand that boomers have a creative passion. There's urgency to their choices. Marketers need to realize that they should market around the things that are important to boomers: simplifying their lives, finding their passion, maximizing their wealth, and taking hold of their sense of beauty and self.

Specifically, this study revealed that those with higher cognitive age have less interest in fashion, are lower in innovativeness, are less socially involved, and avoid risk. Additionally, those respondents high in innovativeness and are more likely to be interested in fashion.

Restated, those who have a lower cognitive age will be more interested in fashion, will be higher in innovativeness and are more socially involved. Each of these characteristics is attractive to marketers of innovations, that is, marketers of new products and services aimed at cognitively younger baby boomers. Therefore, marketers of new products and services directed at baby boomers may wish to focus their communications strategies at the cognitively younger subsegment of this important generational cohort.

With a better understanding of the impact of cognitive age, marketers will in turn be better able to develop products and services that truly reflect the interests and lifestyles of baby boomers in particular and older consumers in general (Schiffman and Sherman 1991). Additionally, Wei (2005) concluded that marketers can create a younger cognitive age in

consumers through communications strategies. In other words, cognitive age can become a controllable strategic variable. This study has hopefully provided foundational work toward understanding baby boomers and cognitive age and may also provide an impetus for future study in the area. The boomer consumer is a worthwhile segment not only for now but also for the future. The growth in the boomers segment is expected to remain a steady trend, requiring special marketing strategies to deliver specific messages of caring and reassurance to the consumer. Marketers need to become attuned to the members of the boomer segment and treat them with love and respect.

### LIMITATIONS AND FUTURE RESEARCH

Future research involving baby boomers should address the role of cognitive age and its measurement properties and its relationship to both demographic antecedent variables and non-demographic consequential variables. The importance of other variables (AIO: activities, interests and opinions) needs to be addressed using the baby boomer context. The role of technology and how the baby boomers perceive and interpret it needs to be addressed.

Since the study was conducted in a southeastern city, the results of the study cannot be easily generalized over other populations. Besides, the study used a convenience sample. The study can be replicated to test and see if the same relationships hold true using a national sample.

### REFERENCES

- Aldridge, Amanda (2004), "Clothes Retailers are Freezing Out Baby Boomers," *Marketing*, (November 10), p. 13.
- Allen, Melissa (2009), "Look for a Potential Boom from Baby Boomers," *Kitchen and Bath Design News*, Vol. 27 (11), p. 30.
- Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, Vol. 10 (May), pp. 411-23.
- Arnold, Mark. J. and Kristy E. Reynolds (2003), "Hedonic Shopping Motivations," *Journal of Retailing*, Vol. 108 (2), pp. 1-20.
- Barak, Benny and Leon G. Schiffman (1981), "Cognitive Age: A Nonchronological Age Variable," *Advances in Consumer Research*, Vol. 8, pp. 602-606.
- Bitner, Mary Jo, Bernard H. Booms and Mary S. Tetreault (1990), "The Service Encounter: Diagnosing Favorable and Unfavorable Incidents," *Journal of Marketing*, Vol. 54 (1), pp. 71-84.
- Brown, Pete (2001), "Are the Forties the New Thirties?" *Brand Strategy*, 153 (November), p. 26.
- Calder, Bobby J., Lynn W. Phillips and Alice M. Tybout (1981), "Designing Research for Application," *Journal of Consumer Research*, Vol. 8 (September), pp. 197-207.
- Catterall, Miriam and Pauline Maclaran (2001), "Body Talk: Questioning the Assumptions in Cognitive Age," *Psychology & Marketing*, Vol. 18 (10), pp. 1117-27.
- Chay, Dick (2005), "New Segments of Boomers Reveal New Marketing Implications," *Marketing News*, (March 15), p. 24.
- Chua, Caroline, Joseph A. Cote and Siew Meng Leong (1990), "The Antecedents of Cognitive Age," In *Advances in Consumer Research*, Vol. 17, ed. Marvin E. Goldberg et al., Ann Arbor, MI: Association for Consumer Research, pp. 880-85.
- Clement, Douglas (2004), "Is Gray the New Gold?" *Fedgazette*, Vol. 16 (3), pp. 9-13.
- Coeyman, Marjorie (1996), "Gray Matters," *Restaurant Business*, Vol. 95 (17), pp. 42-7.
- Coleman, Linda Jane, Marie Hladikova and Maria Savelyeva (2006), "The Baby Boomer Market," *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 14 (3), pp. 191-210.

- Crosby, Lawrence A., Sheree L. Johnson and John Carroll III (2006), "When We're 64," *Marketing Management*, Vol. 15 (6), pp. 14-15.
- Dinkins, Julia M. (1993), "Expenditures of Younger and Older Baby Boomers," *Family Economics Review*, Vol. 6 (2), pp. 2-7.
- Dychtwald, Ken and Joe Flower (1989), "Marketing Toward the Year 2000," *Marketing Communications*, Vol. 14 (2), pp. 20-25.
- Eastman, Jacqueline K. and Rajesh Iyer (2005), "The Impact of Cognitive Age on Internet Use of the Elderly: An Introduction to the Public Policy Implications," *International Journal of Consumer Studies*, Vol. 29 (2), pp. 125-36.
- Formichelli, Linda (2007), "Grandparents: Redefining a Role," *Target Marketing*, Vol. 30 (7), pp. 26-28.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, Vol. 18 (3), pp. 39-50.
- Gibson, Campbell (1993), "The Four Baby Booms," *American Demographics*, Vol. 15 (11), pp. 36-40.
- Gloede, William F. (2005), "Make Room for the Empty Nesters," *Restaurant Business*, Vol. 104 (14), pp. 34-36.
- Goldsmith, Ronald E. and Melvin T. Stith (1989), "Race, Sex, and Fashion Innovativeness: A Replication," *Psychology & Marketing*, Vol. 6 (Winter), pp. 249-62.
- Goldsmith, Ronald E. and Melvin T. Stith (1992-1993), "The Social Values of Fashion Innovators," *Journal of Applied Business Research*, 9 (Winter), pp. 10-17.
- Gottlieb, Richard (2005), "The Coming Senior Shopper Boom," *Design News*, Vol. 60 (13), p. 24.
- Gutner, Toddi (2006), "Still Working and Loving It," *Business Week*, (October 16), pp. 108-110.
- Gwinner, Kevin P. and Nancy Stephens (2001), "Testing the Implied Mediational Role of Cognitive Age," *Psychology & Marketing*, Vol. 18 (10), pp. 1031-48.
- Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham and William C. Black (1998), *Multivariate Data Analysis*, Englewood Cliffs, NJ: Prentice Hall.
- Hanley, Kevin (1986), "Making Boomers Buyers," *Target Marketing*, Vol. 9 (8), pp. 8-9.
- Harmon, Harry H., Robert L. Webster and Stephanie Weyenberg (1999), "Marketing Medium Impact: Differences Between Baby Boomers and Generation Xers in Their Information Search in a Variety of Purchase Decision Situations," *Journal of Marketing Communications*, Vol. 5, pp. 29-38.
- Haynes, Laura (2004), "Baby Boomers," *Brand Strategy*, (February), 31.
- Ingram, Cinde W. (2006), "Paddy O' Furniture: Keeps Focus Tight on Outdoor Furnishings," *Casual Living*, Vol. 46 (9), 54.
- Jones, Michael A. and Kristy E. Reynolds (2006), "The Role of Retailer Interest on Shopping Behavior," *Journal of Retailing*, Vol. 82 (2), pp. 115-26.
- Johnson, Edna (1996), "Cognitive Age: Understanding Consumer Alienation in the Mature Market," *Review of Business*, Vol. 17 (3), pp. 35-41.
- Jorgensen, Barbara (2006), "Forever Young?" *Electronic Business*, Vol. 32 (5), p. 18.
- Kapferer, Jean-Noel (2005), "The Roots of Brand Loyalty Decline: An International Comparison," *Ivey Business Journal Online*, (March/April), pp. 1-6.
- Karimzadeh, Marc (2006), "Youth Isn't Everything: Brands Chase Boomers with the Power to Spend," *Women's Wear Daily*, Vol. 192 (54), pp. 1-30.
- Leventhal, Richard C. (1997), "Aging Consumers and Their Effects on the Marketplace," *Journal of Consumer Marketing*, Vol. 14 (4), pp. 276-81.
- Levy, Michael and Barton A. Weitz (2001), *Retailing Management*, Boston: McGraw-Hill.
- Lipke, David J. (2001), "Pledge of Allegiance," *American Demographics*, Vol. 22 (11), pp. 40-43.

- Maples, Mary Finn and Paul C Abney (2006), "Baby Boomers Mature and Gerontological Counseling Comes of Age," *Journal of Counseling and Development*, Vol. 84 (1), pp. 3-10.
- \_\_\_\_\_"Market to Mid-Life Boomers' Sense That the Rules of Aging Do Not Apply to Them" (1998), *About Women & Marketing*, Vol. 11 (1), p. 11.
- Mathur, Anil and George P. Moschis, (2005), "Antecedents of Cognitive Age: A Replication and Extension," *Psychology & Marketing*, Vol. 22 (12), pp. 969-94.
- Mathur, Anil, Elaine Sherman and Leon G. Schiffman (1998), "Opportunities for Marketing Travel Services to New Age Elderly," *The Journal of Services Marketing*, Vol. 12 (4), pp. 265-77.
- Meredith, Geoffrey E. and Charles D. Schewe (1999), "Market by Cohorts, Not Generations," *Marketing News*, Vol. 33 (3), p. 22.
- Milner, Colin (2006), "In Search of the 'Fountain of Health'," *Club Industry's Fitness Business Pro*, Vol. 22 (1), p. 29.
- Misonzhnik, Elaine (2006), "Sixty Something: A New Chapter for the Boomer Consumer," *Retail Traffic*, Vol. 45 (11), pp. 24-32.
- Morton, Linda P. (2001), "Segmenting Baby Boomers," *Public Relations Quarterly*, Vol. 46 (3), pp. 46-48.
- Mummert, Hallie (2004), "One Generation, Many Segments," *Target Marketing*, Vol. 27 (3), pp. 61-63.
- Newman, Karen A. (2006), "Premium Growth: The Latest Wrinkle," *Global Cosmetic Industry*, Vol. 174 (10), pp. 5-7.
- Parpis, Eleftheria (2002), "Shades of Gray," *Adweek*, Vol. 43 (43), pp. 18-20.
- Potter, Donald (2002), "The 50+ Boomer: Your Key to 76 Million Consumers," *Retail Merchandiser*, Vol. 42 (8), p. 58.
- Rice, Faye (1988), "Wooring Aging Baby-Boomers," *Fortune*, Vol. 117 (3), pp. 68-73.
- Schewe, Charles D. (1988), "Marketing to Our Aging Population: Responding to Physiological Changes," *The Journal of Consumer Marketing*, Vol. 5 (3), pp. 61-73.
- Schewe, Charles D. (1989), "Effective Communication with our Aging Population," *Business Horizons*, (January-February), pp. 19-25.
- Schewe, Charles D. and Geoffrey E. Meredith (1994), "Digging Deep to Delight the Mature Adult Consumer," *Marketing Management*, Vol. 3 (3), pp. 20-36.
- Schiffman, Leon G. and Elaine Sherman (1991), "Value Orientations of New-Age Elderly: The Coming of an Ageless Marketing," *Journal of Business Research*, Vol. 22, pp. 187-94.
- Schrank, H. L. (1973), "Correlates to Fashion Leadership: Implications for Fashion Process Theory," *The Sociological Quarterly*, Vol. 14, pp. 534-43.
- Seckler, Valerie (2004), "Will Boomers Come of Age in Fashion Ads?" *Women's Wear Daily*, Vol. 188 (30), pp. 12-13.
- Sherman, Elaine, Leon G. Schiffman and Anil Mathur (2001), "The Influence of Gender on the New-Age Elderly's Consumption Orientation," *Psychology & Marketing*, Vol. 18 (10), pp. 1073-89.
- Stanforth, N. (1995), "Fashion Innovators, Sensation Seekers, and Clothing Individualists," *Perceptual and Motor Skills*, Vol. 81, pp. 1203-10.
- Stephens, Nancy (1991), "Cognitive Age: A Useful Concept for Advertising?" *Journal of Advertising*, Vol. 20 (4), pp. 37-49.
- Suman, Alicia Orr (2003), "Understanding Boomers," *Target Marketing*, Vol. 26 (9), p. 48.
- Szmigin, Isabelle and Marylyn Carrigan (2001), "Time, Consumption, and the Older Consumer: An Interpretive Study of the Cognitively Young," *Psychology and Marketing*, Vol. 18 (10), pp. 1091-1105.
- Szmigin, Isabelle and Marylyn Carrigan (2006), "Consumption and Community: Choices for Women Over Forty," *Journal of Consumer Behaviour*, Vol. 5 (4), pp. 292-303.
- Van Auken, Stuart and Thomas E. Barry (2004), "A Segmentation of College-Educated Japanese Seniors Using Cognitive Age," *American Marketing Association Winter Educators' Conference Proceedings*, Vol. 15 (Winter), pp. 229-230.

- Van Auken, Stuart, Thomas E. Barry and Richard P. Bagozzi (2006), "A Cross-Country Construct Validation of Cognitive Age," *Journal of the Academy of Marketing Science*, Vol. 34 (3), pp. 439-55.
- Voight, Joan (2000), "Mary Furlong-Interview," *Adweek*, Southeast Edition, Vol. 21 (48), pp. Q22-28.
- Wei, Shen-Chung (2005), "Consumers' Demographic Characteristics, Cognitive Ages, and Innovativeness," *Advances in Consumer Research*, Vol. 32, pp. 633-40.
- Weijters, Bert and Maggie Geuens (2006), "Evaluation of Age-Related Labels by Senior Citizens," *Psychology & Marketing*, Vol. 23 (9), pp. 783-98.
- Wilkes, Robert E. (1992), "A Structural Modeling Approach to the Measurement and Meaning of Cognitive Age," *Journal of Consumer Research*, Vol. 19 (2), pp. 292-301.
- Wolff, Carlo (2007), "Getting Older, Thinking Younger," *Lodging Hospitality*, Vol. 63 (5), pp. 29-33.
- Zmuda, Natalie (2006), "Boom Time; A Huge Wave of Americans Will Turn 60 this Year. But is This Aging Group – Who is Both Fashionable and Affluent – Being Overlooked by Footwear Retailers?" *Footwear News*, Vol. 62 (5), pp. 50-55.



## THE FASHION CONSCIOUS MALL SHOPPER: AN EXPLORATORY STUDY

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*This paper models the relationship between the variables of fashion consciousness, price consciousness, variety seeking, comparison shopping, and attitude towards shopping. A mall intercept study found that those mall shoppers who are fashion conscious are also price conscious, have a positive attitude towards shopping, are variety seekers, and engage in comparison shopping. The results suggest that fashion conscious mall shoppers differ significantly from those mall shoppers who are not as fashion conscious. The implications for mall and retail managers are discussed.*

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### INTRODUCTION

In the early 1990s, half of all retail sales were mall transactions (Feinberg and Meoli 1991). Trends now indicate that malls are not effectively meeting the varied needs of shoppers and mall shopping is declining (Nichols, Li, Kranendonk and Roslow 2002). Fewer people are going to the mall, they are going less often, and they are spending less time there (Berry 1996; Nichols et al. 2002). The decline in mall patronage can be attributed to several factors. Mall shoppers find most malls look alike with malls basically offering the same services (Wakefield and Baker 1998) and that mall shoppers do not find shopping an enjoyable (Berry 1996; Wakefield and Baker 1998), comfortable or safe activity (Underwood 1994). Additionally, the busy lifestyle of shoppers and (Balabanis and Vassileiou 1999; Groover 2006; Wakefield and Baker 1998) and the advancements made by e-tailers to accommodate the Internet savvy shopper has contributed to the decline (Groover 2006). Finally, concerns about the economy and job security have alerted shoppers to be more prudent with their spending (ICSC 2006).

What is happening is that more shoppers do not like going to the mall, they do not think it is

worth their time or financial resources to go to the mall, and there are now many other non-mall retailing alternatives. Shopping centers face increased competition from power centers, discount malls, discount stores and home shopping (Barnes 2005; Groover 2006). Given the increase in competition and concerns of shoppers, mall owners and retailers need to determine who are their most profitable customers, what do they need from their shopping experience, and how can they meet those needs effectively (Carpenter and Fairhurst 2005; Yavas 2001). In today's current economy, the need for mall retailers to more effectively reach their key markets is becoming even more critical. While it is becoming increasingly difficult for retailers to differentiate themselves on the basis of merchandise, price, promotion, or location, the store itself can offer a unique environment that may influence shoppers' patronage (Roy and Tai 2003). For many mall retailers, this will suggest a change in strategy as they have reduced service and ambience as they have been trying to compete in terms of price with discount retailers.

Studies in the past have looked at a variety of factors impacting mall shopping behavior such as service quality (Laroche, Teng, Michon and Chebat 2005), the emotional components of shopping (Dawson et al. 1990), excitement (Wakefield and Baker 1998), retailer interest (Jones and Reynolds 2006), hedonic and

utilitarian needs or motivations (Babin, Dardin and Griffin 1994; Bardhi and Arnould 2005; Carpenter and Fairhurst 2005; Chang 2002; Nichols et al. 2002; Stoel, Wickliffe and Lee 2004), patronage motives and purchase patterns (Yavas 2001), risk (Mitchell and Harris 2005), consumer decision-making styles (Wesley, LeHew and Woodside 2006), personal values (Shim and Easterlick 1998), retail crowding (Eroglu, Machleit and Barr 2005), imagery elaboration (Roy and Tai 2003), social cues (Hu and Jasper 2006), and correlates of mall frequency (Roy 1994). No study however, focuses on how fashion consciousness, price consciousness, comparison shopping (for price), and variety seeking impact the mall shopping experience in the United States.

Ours is the first to examine the fashion conscious shoppers and what are their needs in terms of fashion consciousness, price, and variety. While there have been other studies that have looked at fashion conscious shoppers (Wan, Youn and Fang 2001; Walsh, Mitchell and Henning-Thurau 2001), these studies, with the exception of Goldsmith, Kim, Flynn and Kim 2005) who looked at price sensitivity of Korean fashion innovators, have not addressed in significant detail fashion conscious mall shoppers needs in terms of price. In today's mall retail climate, this is becoming a more critical issue to examine and this paper contributes to the literature by measuring and testing a model of fashion consciousness that examines price consciousness and comparison shopping. Additionally, there is little in the literature that has looked at fashion conscious mall shoppers in terms of their need for variety as the literature has focused on fashion in terms of innovativeness (Stanforth 1995; Goldsmith 2000; Wan et al. 2001; Goldsmith et al. 2005) rather than variety. This paper hopes to address this gap in the literature through a more detailed look at the needs of American fashion conscious mall shoppers specifically.

## **LITERATURE REVIEW**

Mall retailers need to make sure that they attract shoppers, particularly the heavy user.

Goldsmith (2000) finds that buyers who spend the most on new fashions (i.e., the heavy user) are significantly different than the light shopper (or user). The literature suggests that the heavy user of fashionable clothing is found to be more involved with fashion, more innovative and knowledgeable about new fashions, more likely to act as opinion leaders, and less price sensitive, plus they shopped more (Goldsmith 2000, p. 21). Retailers need to better understand today's fashion-conscious shopper to see what they are looking for in their mall shopping experience now. In this literature review, we discuss fashion consciousness; price consciousness; variety seeking; and comparison shopping. We also present the hypotheses to be tested.

### **Fashion Consciousness**

Fashion conscious can be defined as consumers who are sensitive to their physical attractiveness and image (Wan et al. 2001). "Fashion conscious people are highly aware of their appearance, of how they dress and of how the things they possess are the extended forms of their self identity." (Wan et al. 2001, p. 272) Yavas (2001) finds the presence of new fashions to be an important shopping motive. Goldsmith and Stith (1990) find fashion innovators to be younger and to place greater importance on the social values of being respected, excited, and the fun/enjoyment aspect of life than non-innovators. Fashion conscious consumers have also been found to be self-assertive, competitive, venturesome, attention seeking, and self confident (Stanforth 1995).

In terms of shopping behaviors, fashion conscious shoppers tend to shop at high-quality stores and also engage in home shopping activities (Wan et al. 2001). Fashion conscious shoppers concerned with showing individuality, will be more likely to shop online (Wan et al. 2001). Fashion conscious shoppers also tend to spend more money on clothing (Wan et al. 2001). Finally, shoppers who are fashion conscious want to keep their wardrobe up to date with the latest style and gain pleasure from

shopping (Walsh, Mitchell and Henning-Thurau 2001). Thus, we propose that:

**H<sub>1</sub>:** Mall Shoppers who are fashion conscious will have a positive attitude towards shopping.

### Price Consciousness

Price is one of the most important marketplace cues due to the fact that the price cue is present in all purchase situations (Lichtenstein, Ridgway and Netemeyer 1993). Price consciousness is the degree to which the consumer focuses solely on paying low prices (Lichtenstein et al. 1993; Jin and Suh 2005). Yavas (2001) found price competitiveness to be a primary shopping motive. Grewal and Marmorstein (1994, p. 459) found that the “consumers’ willingness to spend time comparing prices is affected by the psychological utility, as well as the economic value of the expected savings.”

Retailers need to recognize that the stereotype of the price conscious consumer as a frugal shopper may not hold, as the pursuit of thrift can be a hedonic experience due to the pursuit of the unexpected (Bardhi and Arnould 2005). Also, as consumers’ need for novelty increases, so does their price sensitivity (Anglin et al. 1994). While Wan, et al. (2001) finds that risk aversion and price consciousness showed weak relationships with fashion consciousness, shoppers in high stress situations though do have higher levels of price sensitivity (Anglin, Stuenkel and Lepisto 1994). Given the stressful economy, we propose that even fashion conscious shoppers are price conscious:

**H<sub>2</sub>:** Mall shoppers who are fashion conscious are price conscious.

### Variety Seeking

Variety-seeking behavior is the tendency of individuals to seek diversity in their choices of services or goods over time (Kahn, Kalwani and Morrison 1986) in order to maintain an optimal level of stimulation (Menon and Kahn 1995). “Consumers have some kind of internal need (due to satiation) or drive (due to thrill-

seeking), or even an intellectual curiosity that causes people to choose variety over time.” (Kahn 1998, p. 46) Shoppers seek variety to satisfy a need for stimulation by bringing something new into their lives, even if they are satisfied with their current brand (Walsh et al. 2001). This need for stimulation may be met by providing variety within a product category or in the choice context (Menon and Kahn 1995). Finally, Yavas (2001) finds that variety of stores and product selection to be primary shopping motives.

In terms of fashion, Stanforth (1995) suggests that fashion innovators have a greater need for experiences (as a subscale of sensation seeking) than fashion followers. Goldsmith, Frieden, and Kilsheimer (1993) offered that fashion leaders in both the U.S.A. and the United Kingdom value excitement more than non-fashion leaders. Finally, Lee and Lee (2007) offer that variety is a critical attribute for consumers who buy fashion products online. Thus, we propose that fashion conscious mall shoppers will also have a need for variety:

**H<sub>3</sub>:** Mall shoppers who are fashion conscious are variety seekers.

### Comparison Shopping

Comparison shopping is seen as a form of information seeking and the need to comparison shop increases as the need for novelty increases (Anglin et al. 1994). Given the considerable inter-store price variations for standardized consumer products (Grewal and Marmorstein 1994) and as department stores have become more competitive with off-price retailers, comparison shopping is becoming more important (Kirby and Dardis 1984). There are costs though associated with comparison shopping including time costs and uncertainty about specific product availability (Kirby and Dardis 1984). For those who enjoy shopping, price comparison shopping may be seen as worth the time (Marmorstein, Grewal and Fishe 1992). Finally, comparison shopping has been found to increase with high stress situations, time pressures, and a high number of life status changes; this may be due to the use of gathering

information as a coping mechanism (Anglin et al. 1994). Thus, as comparison shopping can serve as a means for saving money (Kirby and Dardis 1984), for addressing novelty needs (Anglin et al. 1994), and can be seen as worth the effort (Marmorstein et al. 1992), we propose the following:

**H<sub>4</sub>:** Mall Shoppers who are fashion conscious will engage in comparison shopping.

## METHODOLOGY

This paper addresses the relationship between the variables of fashion consciousness, price consciousness, variety seeking, comparison shopping, and attitude towards shopping. Our model depicting these relationships is presented in Figure 1.

### Sample

The study employed a mall intercept study. Permission was sought from the mall authorities and, with their cooperation, data was collected by three upper level undergraduate marketing students who were trained in data collection procedures and used as interviewers. This approach has been successfully used in previous retailing and services research (e.g., Arnold and Reynolds 2003; Jones and Reynolds 2006). Interviewers were instructed to recruit non-student participants only. All surveys were personally administered by the interviewers. The mall administration was (covertly) sponsoring the study and they provided interview areas inside the mall. The study was conducted in a southeastern U.S. city. Thus, the sample is a regional convenience sample.

A total of 210 respondents participated in the study. The descriptive information for the sample is presented in Table 1. All scales used to test the proposed model can be found in Table 2. A three-item comparison shopping scale was developed following standard scale development procedures (i.e., Churchill, 1979; Gerbing and Anderson, 1988; Nunnally and Bernstein, 1994) utilizing depth-interviews and pretesting. All scales were measured on a five

point Likert scale (1 = strongly disagree to 5 = strongly agree).

As Table 1 illustrates, we had a strong representation of both men and women. Our sample was diverse in terms of age and income. It needs to be noted that the county in which the mall was located had a younger population with lower incomes compared to the state and the USA in general (Census 2006). For example, the median household income was \$32,672 for the county and \$42,421 for the state compared to \$43,318 for the country; the percent of the population below the poverty level was 17.7 percent for the county and 13.3 percent of the state compared to 12.5 percent for the country (Census 2006). As education and income have not been shown to be significant predictors of fashion consciousness by others in the literature (Goldsmith et al. 1993; Wan et al. 2001), we do not feel that the median income of our sample was an issue. Finally, we measured occupation, mall frequency, and why the respondents visited the mall. These results suggest that people visit the mall for a variety of reasons.

Each scale was first investigated using exploratory factor analysis and the results supported a single dimension for each scale. Additionally, item-total correlations were higher (greater than 0.50) for each construct. Descriptive statistics for each scale as well as correlations between all constructs are presented in Table 3. A measurement model using LISREL with maximum likelihood estimation was then conducted, consistent with Anderson and Gerbing's (1988) two-step approach. The results indicated an acceptable measurement model fit ( $\chi^2_{(80)} = 175.75$ ,  $p < 0.01$ ; RMSEA = 0.07, CFI = 0.97; IFI = 0.97; NNFI = 0.97). The results supported the internal consistency of all scales as the composite reliability was greater than 0.76 for all scales (see Table 2). Variance extracted for all scales was greater than the generally acceptable value of 0.50 (see Table 2), indicating a high level of shared variance between the indicators of cognitive age. The completely itemized standardized loading for all measurement items are in Table 2.

**FIGURE 1:  
Proposed Model**

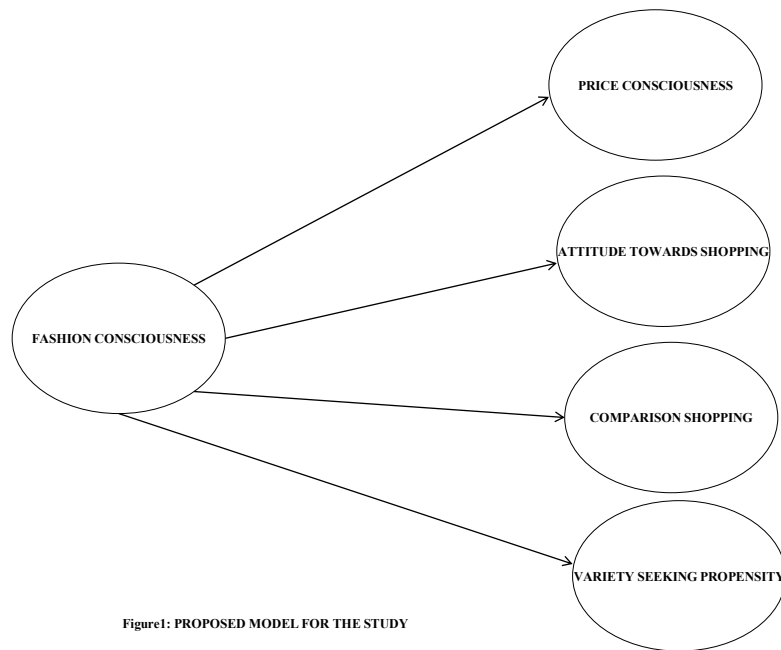


Figure1: PROPOSED MODEL FOR THE STUDY

The results also support the convergent and discriminant validity of all of the scales. The items of each scale loaded highly on its respective construct (t-values ranging from 7.81 to 14.99), providing evidence of convergent validity (Anderson and Gerbing 1988). As evidence of discriminant validity, none of the confidence intervals of the phi matrix included 1.00 (Anderson and Gerbing 1988). Discriminant validity was also tested by comparing variance extracted estimates with the squared phi estimates (Fornell and Larcker 1981). The variance extracted estimates were greater than the squared phi estimates for all sets of constructs, supporting discriminant validity.

The structural model (see Figure 1) using LISREL was then estimated to test the proposed relationships. The fit statistics indicated an acceptable model fit ( $\chi^2_{(86)} = 197.39$ ,  $p < 0.01$ ; RMSEA = 0.08, IFI = 0.96; CFI = 0.96; NNFI = 0.95) (Hair, Black, Babin, Anderson and Tatham 2006) and the results can be found in Table 4.

## RESULTS

Hypothesis 1 was supported in that mall shoppers who are fashion conscious will have a positive attitude towards shopping ( $t=11.74$ ). Hypothesis 2 was supported in that mall shoppers who are fashion conscious will be price conscious ( $t=2.55$ ). Hypothesis 3 was supported in that mall shoppers who are fashion conscious will exhibit variety seeking behavior ( $t=9.85$ ). Finally, mall shoppers who are fashion conscious will engage in comparison shopping ( $t=3.84$ ). Thus, hypothesis 4 was supported.

### Fashion Consciousness

In this study we found significant support for our hypotheses dealing with the relationships between fashion consciousness and other attitudinal and behavioral variables. H1 (that shoppers who are fashion conscious have a positive attitude towards shopping) was supported. This suggests that shoppers who are fashion conscious like to shop. Per Goldsmith (2000), the heavy user of fashionable clothing

**TABLE 1**  
**Descriptive Information on Sample**

<b>Items</b>	
<b>Gender:</b>	
Male	53%
Female	47%
<b>Age:</b>	
21-30	43%
31-40	23%
41-50	17%
51-60	8%
61-70	5%
Above 70	4%
<b>Income:</b>	
0-10k	21%
10,001-30k	34%
30,001-50k	23%
50,001-70k	13%
Above 70k	8%
<b>Occupation:</b>	
Homemaker/Not Employed	22%
Self-Employed	16%
Educator	6%
Professional	7%
Work for Company/Business	41%
Other	8%
<b>How often do you frequent the mall?:</b>	
Daily	6%
Weekly	35%
Monthly	25%
Less than once a month	24%
Once or twice a year	10%
<b>Why do you visit the mall?:</b>	
Shopping/Gathering Product Information	69%
Window Shopping	28%
Food/Eat	26%
Check out what is on sale	17%
Entertainment	12%
Walk/Exercise	10%
Meet Friends	8%
Other	6%

**TABLE 2**  
**Measurement Items**

Scale/Items <sup>a</sup>	Standardized	Loading Source/Adapted From
<b>Attitude towards Shopping (CR=0.85, VE=0.65)</b>		Donthu and Gilliland (2002)
Shopping is fun.	0.88	
I get a real high from shopping.	0.80	
Buying things makes me happy.	0.74	
<b>Comparison Shopping (CR=0.78, VE=0.54)</b>		New
I print coupons from the Internet and use them to buy products at the mall.	0.68	
I normally return products back to the stores from where I bought the product when I find a better deal on the Internet.	0.81	
I often bring "price check-sheets" or "comparison prices" when shopping for specific items in the mall.	0.71	
<b>Fashion Consciousness (CR=0.85, VE=0.66)</b>		Wells and Tiggert (1971)
It is important to me that my clothes be of the latest style.	0.77	Lumpkin and Darden (1982)
I usually have one or more outfits that are of the very latest style.	0.87	Wilkes (1992)
When I choose between the two, I usually dress for fashion, not for comfort.	0.79	
<b>Price Consciousness (CR=0.76, VE=0.52)</b>		Lichtenstein, Ridgway and Netemeyer (1993)
I usually purchase the cheapest item.	0.71	
I usually purchase items on sale only.	0.86	Donthu and Gilliland (2002)
I often find myself checking prices.	0.57	Donthu (2000)
<b>Variety Seeking Propensity (CR=0.86, VE=0.71)</b>		Donthu and Gilliland (2002)
I like to try different things.	0.82	Donthu (2000)
I like a great deal of variety.	0.85	
I like new and different styles.	0.86	

**TABLE 3**  
**Construct Correlations, Means, Standard Deviations and Coefficient Alphas**

Construct	Mean	Standard Deviation	Coefficient Alpha	1	2	3	4	5
1. Price Consciousness	3.08	0.97	0.83	1				
2. Variety Seeking	3.39	1.02	0.92	0.322**	1			
3. Fashion Consciousness	3.06	1.07	0.89	0.207**	0.636**	1		
4. Attitude towards Shopping	3.22	1.09	0.85	0.349**	0.589**	0.598**	1	
5. Comparison Shopping	1.94	0.99	0.83	0.207**	0.041	0.049	0.091	1

\* correlation significant at  $p < 0.05$

\*\* correlation significant at  $p < 0.01$

**TABLE 4**  
**LISREL Results for the Hypothesized Model**

Hypothesis	Path	estimate	Standardized	t-value	Result
H <sub>1</sub>	Fashion Consciousness—Attitude towards Shopping	0.84		11.74	Supported
H <sub>2</sub>	Fashion Consciousness—Price Consciousness	0.22		2.55	Supported
H <sub>3</sub>	Fashion Consciousness—Variety Seekers	0.76		9.85	Supported
H <sub>4</sub>	Fashion Consciousness—Comparison Shopping	0.34		3.84	Supported

was found to be more involved with fashion, more innovative and knowledgeable about new fashions and shopped more.

### **Price Consciousness**

Our results revealed that the fashion conscious shopper was also price conscious. Thus, H2 was supported. While the fashion conscious shopper is looking for the newest fashion, with a limited budget and current economic conditions, it is becoming more difficult for the fashion conscious consumer to be extravagant in his/her spending. Although, they have an eye for good fashion and want to be accepted among their peer groups, they are becoming more prudent in their spending and looking for value.

### **Variety Seeking**

Shoppers who are fashion conscious want to keep up with the changes in fashion and adopt the latest styles and trends. Thus, H3 (that shoppers who are fashion conscious are variety seekers) was supported. According to Menon and Kahn (1995), consumers' need for variety can be addressed through either brand switching or from variation across product categories or choice situations. This would suggest that for retailers to keep fashion conscious shopper loyal to their store, they will need to provide a variety of brands and styles to satisfy them.

Wakefield and Baker (1998) found that mall tenant variety can lead to higher levels of excitement about the mall as well as increased desire to stay at the mall. Retailers can address the need for variety though offering a high variety product line or by changing the store atmospherics (Kahn 1998). Firms need to make sure that this variety is truly distinctive and enjoyable and avoid redundancy that makes the decision process more difficult (Kahn 1998) and confusing for shoppers (Walsh et al. 2001). Retailers need to ensure that the customer is equipped to handle the variety, particularly with greater assortments (Huffman and Kahn, 1998). For shoppers who are familiar with a product

category, such as the fashion, if the products are organized in the store in a manner congruent with the shopper's internal schema, shoppers will have a higher perception of variety and greater satisfaction (Morales et al. 2005).

### **Comparison Shopping**

Given our findings that fashion conscious shoppers are more price conscious and are more prone to variety seeking, it makes sense that we would also find these shoppers to do more comparison shopping (supporting H4). Additionally, fashion conscious shoppers have a more positive attitude towards shopping, suggesting that they like to shop and are willing to put in the time to get the best deal. Our findings suggest that fashion conscious consumers like the latest style, but are prudent in what they will spend to get the latest style through taking the time to search for the best price.

## **IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH**

Laroche et al. (2005) noted that the higher the levels of pleasure consumers felt with mall shopping, the higher the perceptions of service quality they had; with higher levels of service quality, there was a higher intention of purchase. Terblanche and Boshoff (2006) find that satisfaction with the in-store shopping experience determines consumers' attitude loyalty toward the retailer which over time influences behavioral loyalty in terms of actual sales. The literature clearly illustrates that satisfaction with a retailer leads to store loyalty and positive word of mouth (Carpenter and Fairhurst 2005; Jones and Reynolds 2006) as well as repatronage intentions, looking forward to going to the retailer again, wanting to learn more about a retailer, and retailer interest (Jones and Reynolds 2006), and time spent in the mall (Stoel et al. 2004). Finally, Pappu and Quester (2006) find a positive relationship between customer satisfaction and retailer equity. Thus, as satisfied shoppers can mean enhanced sales and profits for retailers and that the fashion conscious shopper is a key segment



for mall retailers to reach, retail managers need to understand how they can best serve the fashion conscious shopper.

In terms of the findings of our study specifically, we recommend that mall retailers need to actively pursue the fashion conscious shopper as they will shop more often, but to recognize that while these fashion conscious like shopping and want variety, they are also price sensitive and will comparison shop to get fashion at the best price. Our results suggest that for mall retailers to be successful, they will have to recognize that fashion conscious consumers may no longer be price insensitive as suggested by earlier research, but that fashion shoppers are demanding more from retailers in today's economy. Additionally, as shown in Table 1, shoppers visit the mall to meet a variety of needs that mall retailers will need to recognize and address.

Kahn (1998) suggests that the firm with most varied lines and the most varied store atmospherics will be most likely to capture the fashion conscious consumer, but care needs to be taken to not confuse the consumer (Huffman and Kahn 1998). Given that fashion conscious consumers spend more (Wan et al. 2001) and satisfied consumers will be more loyal and spread positive word of mouth (Carpenter and Fairhurst 2005), retailers need to ensure that they truly offer distinctive variety to attract fashion shoppers.

This research though is subject to several limitations. Firstly, this study was done in a southeastern city in the U.S. which was home to a regional shopping mall. Therefore, additional studies, done in different areas of the USA are needed to enhance our findings. Second, as this study surveyed only consumers in a regional mall, additional research is needed to replicate this study with other retail formats (such as discount stores or online shopping) to help increase the generalizability of our findings about the fashion shopper.

In addition to replicating this study in other regions as well as other types of shopping

centers, there are other areas of future research. In terms of price comparison, future research needs to determine what the fashion conscious considers to be a good value; is it everyday low prices or is it getting discounts on designer items. For comparison shopping, future research needs to examine how mall shoppers utilize this (i.e., do fashion shoppers first look online and then go to the mall). Thus, this paper hopes to encourage research on the fashion shopper and what are they looking for in shopping.

## REFERENCES

- Anderson, James. C. and David W. Gerbing. (1988), "Structural equation modeling practice: A review and recommended two-step approach." *Psychological Bulletin*, 103, pp. 411-423.
- Anglin, Linda K., J. Kathleen Stuenkel and Lawrence R. Lepisto (1994), "The Effects of Stress on Price Sensitivity and Comparison Shopping." *Advances in Consumer Research* p. 21.
- Arnold, Mark J. and Kristy E. Reynolds (2003), "Hedonic Shopping Motivations." *Journal of Retailing*, 108 (2), pp. 1-20.
- Babin, Barry J., William R. Darden and Mitch Griffin (1994), "Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value." *Journal of Consumer Research* 20, pp. 644-656.
- Balabanis, George and Stefanos Vassileiou (1999), "Some attitudinal predictors of home-shopping through the Internet." *Journal of Marketing Management*, 15, pp. 361-385.
- Bardhi, Fleura and Eric J. Arnould (2005), "Thrift Shopping: Combining Utilitarian Thrift and Hedonic Treat Benefits." *Journal of Consumer Behaviour* 4, 4, pp. 223-233.
- Barnes, Nora Ganim (2005), "The Fall of the Shopping Mall." *Business Forum*, 27 (1), pp. 4-7.
- Berry, Jon (1996), "American Affection for the Mall Hits a Wall," *Brandweek* (January 8), p. 15.

- Carpenter, Jason M. and Ann Fairhurst (2005), "Consumer Shopping Value, Satisfaction, and Loyalty for Retail Apparel Brands," *Journal of Fashion Marketing and Management* 9 (3), pp. 256-269.
- Census (2006), "U.S. Census Bureau State and County Quick Facts," found at <http://quickfacts.census.gov/qfd/states/13/1378800.html> on September 19th.
- Chang, Eunyoung (2002), "The Mediating Role of Hedonic Shopping Value in Apparel Shopping Satisfaction," dissertation defended at *Oregon State University* (April).
- Churchill, Gilbert A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (February), pp. 64-73.
- Dawson, Scott, Peter H. Bloch and Nancy M. Ridgway (1990), "Shopping Motives, Emotional States, and Retail Outcomes," *Journal of Retailing*, 66 (Winter), pp. 408-427.
- Donthu, Naveen and Gilliland, D. I. (2002), "The Single Consumer," *Journal of Advertising Research*, November, pp. 77-84.
- Eroglu, Sevin, Karen Machleit and Terri Feldman Barr (2005), "Perceived Retail Crowding and Shopping Satisfaction: The Role of Shopping Values," *Journal of Business Research* 58, pp. 1146-1153.
- Feinberg, Richard A. and Jennifer Meoli (1991), "A Brief History of the Mall." In *Advances in Consumer Research*, 18, Rebecca Holman and Michael Solomon, (eds). Provo, UT: Association for Consumer Research.
- Fornell, Claes and David F. Larcker. (1981), "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, 18, pp. 39-50.
- Gerbing, David W. and James C. Anderson (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessment," *Journal of Marketing Research*, 25 (May), pp. 186-192.
- Goldsmith, Ronald E. (2000), "Characteristics of the Heavy User of Fashionable Clothing," *Journal of Marketing Theory and Practice* (Fall), pp. 21-28.
- Goldsmith, Ronald E., Jon B. Frieden and Jacqueline C. Kilsheimer (1993), "Social Values and Female Fashion Leadership: A Cross-Cultural Study," *Psychology & Marketing* 10 (5) September/October, pp. 399-412.
- Goldsmith, Ronald E., Daekwan Kim, Leisa R. Flynn and Wan-Min Kim (2005), "Price Sensitivity and Innovativeness for Fashion Among Korean Consumers," *The Journal of Social Psychology* 145 (5), pp. 501-508.
- Goldsmith, Ronald E. and Melvin T. Stith (1990), "The Social Values of Fashion Innovators," *Journal of Applied Business* 9, pp. 10-15.
- Grewal, Dhruv and Howard Marmorstein (1994). "Market Price Variation, Perceived Price Variation, and Consumers' Price Search Decisions for Durable Goods," *Journal of Consumer Research* 21 (December), pp. 453-460.
- Groover, Joel (2006), "Know Thy Shopper," *Shopping Centers Today*, (February), found at [www.iscs.org/srch/sct/sct0206/feat\\_mall\\_shopper.php](http://www.iscs.org/srch/sct/sct0206/feat_mall_shopper.php).
- Hair, Joseph F., Jr., William C. Black, Barry J. Babin, Rolph E. Anderson, and Ronald L. Tatham (2006), *Multivariate Data Analysis*, 6<sup>th</sup> ed., New Jersey: Pearson Prentice Hall.
- Hu, Haiyan and Cynthia R. Jasper (2006), "Social Cues in the Store Environment and Their Impact on Store Image," *International Journal of Retail & Distribution Management* 34 (1), pp. 25-48.
- Huffman, Cynthia and Barbara E. Kahn (1998), "Variety for Sale: Mass Customization or Mass Confusion?" *Journal of Retailing* 74 (4), pp. 491-513.
- International Council of Shopping Centers (2006), "The Bottom Line," *Shopping Centers Today* (June), found at [www.icsc.org/srch/sct/sct0606/bottom\\_line.php](http://www.icsc.org/srch/sct/sct0606/bottom_line.php).

- Jin, Byoung-ho and Yong Gu Suh (2005), "Integrating Effect of Consumer Perception Factors in Predicting Private Brand Purchase in a Korean Discount Store Context," *The Journal of Consumer Marketing* 22 (2/3), pp. 62-71.
- Jones, Michael A. and Kristy E. Reynolds (2006), "The role of retailer interest on shopping behavior," *Journal of Retailing*, 82 (2), pp. 115-126.
- Kahn, Barbara E. (1998), "Dynamic Relationships With Customers: High-Variety Strategies," *Journal of the Academy of Marketing Science* 26, 1, pp. 45-53.
- Kahn, Barbara E., Manohar U. Kalwani and Donald G. Morrison (1986), "Measuring Variety-Seeking and Reinforcement Behaviors Using Panel Data," *Journal of Marketing Research* 23 (May), pp. 89-100.
- Kirby, Gail Hutchinson and Rachel Dardis (1984), "Research Note: A Pricing Study of Women's Apparel in Off-Price and Department Stores," *Journal of Retailing* 62, 3 (Fall), pp. 321-330.
- Laroche, Michel, Lefa Teng, Richard Michon and Jean-Charles Chebat (2005), "Incorporating Service Quality Into Consumer Mall Shopping Decision Making: A Comparison Between English and French Canadian Consumers," *The Journal of Services Marketing* 19, 3, pp. 157-163.
- Lee, Jihyun and Yuri Lee (2007), "Exploring How the Effect of Attributes Varies With Fashion Product E-Tailer Types: Based on Korea Context," *Journal of Fashion Marketing & Management* 11 (4), pp. 462-476.
- Lichtenstein, Donald R., Nancy M. Ridgway and Richard G. Netemeyer (1993), "Price Perceptions and Consumer Shopping Behavior: A Field Study," *Journal of Marketing Research* 30, 2 (May), pp. 234-245.
- Marmorstein, Howard, Dhruv Grewal and Raymond P.H. Fishe (1992), "The Value of Time Spent in Price-Comparison Shopping: Survey and Experimental Evidence," *Journal of Consumer Research* 19 (June), pp. 52-61.
- Menon, Satya and Barbara E. Kahn (1995), "The Impact of Context on Variety Seeking in Product Choices," *Journal of Consumer Research* 22 (December), pp. 285-295.
- Mitchell, Vincent-Wayne and Greg Harris (2005), "The Importance of Consumers' Perceived Risk in Retail Strategy," *European Journal of Marketing* 39 (7/8), pp. 821-837.
- Morales, Andrea, Barbara Kahn, Leigh McAlister and Susan Broniarczyk (2005), "Perceptions of Assortment Variety: The Effects of Congruency Between Consumers' Internal and Retailers' External Organization," *Journal of Retailing* 81 (2), pp. 159-169.
- Nichols, J.A.F., Li Fuan, Carol J. Kranedonk, and Sydney Roslow (2002), "The Seven Year Itch? Mall Shoppers Across Time," *The Journal of Consumer Marketing* 19, 2/3, pp. 149-165.
- Nunnally, Jum C. and Ira H. Bernstein. (1994), *Psychometric Theory*. New York: McGraw Hill. 3<sup>rd</sup> edition.
- Pappu, Ravi and Pascale Quester (2006), "Does Customer Satisfaction Lead to Improved Brand Equity? An Empirical Examination of Two Categories of Retail Brands," *Journal of Product & Brand Management* 15 (1), pp. 4-14.
- Rohm, Andrew J. and Vanitha Swaminathan (2004), "A Typology of Online Shoppers Based on Shopping Motivations," *Journal of Business Research* 57, pp. 748-757.
- Roy, Abhik (1994), "Correlates of Mall Frequency," *Journal of Retailing*, 70 (2), pp. 139-161.
- Roy, Abhik and Susan T. C. Tai (2003), "Store Environment and Shopping Behavior: The role of Imagery Elaboration and Shopping Orientation," *Journal of International Consumer Marketing*, 15 (3), pp. 71-99.
- Shim, Soyeon and Mary Ann Eastlick (1998), "The Hierarchical Influence of Personal Values on Mall Shopping Attitude and Behavior," *Journal of Retailing* 74 (1), pp. 139-160.

- Stanforth, Nancy (1995), "Fashion Innovators, Sensation Seeking, and Clothing Individualists," *Perceptual and Motor Skills* 81, pp. 1203-1210.
- Stoel, Leslie, Vanessa Wickliffe and Kyu Hye Lee (2004), "Attribute Beliefs and Spending As Antecedents to Shopping Values," *Journal of Business Research* 57, pp. 1067-1073.
- Terblanche, N.S. and C. Boshoff (2006), "The Relationship Between a Satisfactory In-Store Shopping Experience and Retailer Loyalty," *South African Journal of Business Management* 37 (2), pp. 33-43.
- Underwood, Elaine (1994), "Mall Busters, Like Crime, A Boon For Home Shopping," *Brandweek* 35, 3 (January 17), p. 18.
- Wakefield, Kirk L., and Julie Baker (1998), "Excitement at the Mall: Determinants and Effects on Shopping Response," *Journal of Retailing*, 74 (4), pp. 515-539.
- Walsh, Gianfranco, Vincent-Wayne Mitchell and Thorsten Henning-Thurau (2001), "German Consumer Decision-Making Styles," *The Journal of Consumer Affairs* 35, 1 (Summer), pp. 73-95.
- Wan, Fang, Seounmi Youn and Tammy Fang (2001), "Passionate Surfers in Image-Driven Consumer Culture: Fashion-Conscious, Appearance-Savvy People and Their Way of Life," *Advances in Consumer Research* 28, pp. 266-274.
- Wesley, Scarlett, Melody LeHew and Arch G. Woodside (2006), "Consumer Decision-Making Styles and Mall Shopping Behavior: Building Theory Using Exploratory Data Analysis and the Comparative Method," *Journal of Business Research* 59 (5), pp. 535-548.
- Yavas, Ugur (2001), "Patronage Motives and Product Purchase Patterns: A Correspondence Analysis," *Marketing Intelligence & Planning* 19 (2), p. 97.

# CAN MATERIALISM BE GOOD FOR LOCAL RETAILERS? AN EMPIRICAL STUDY OF TRAIT ANTECEDENTS TO LOCAL LOYALTY BEHAVIOR

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*Increasing materialism is a cause of concern among sociologists and policy-makers, who are particularly concerned with increasing materialism among young people. Marketers also are highly interested in the attitudes and behaviors of young people, as their purchasing habits may not have hardened. This paper reports results of a study of college students in two countries and their self-reported materialism, buying impulsiveness, and local loyalty behaviors. For retailers concerned with keeping shoppers at home, the results suggest that materialistic consumers may possibly be corralled by appealing to their buying impulsiveness.*

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## INTRODUCTION

Inshopping versus outshopping is an issue of concern to all retailers. Determining factors leading to outshopping or, preferably, leading to inshopping can help retailers plan effective marketing strategies. Outshopping is defined as shopping done outside of the home community (Berman and Evans 2007). Research linking outshopping to consumer psychographic variables such as tastes and lifestyles (e.g., Reynolds and Darden 1972) suggests that certain consumer groups may be more or, as is our interest, less prone to outshopping versus inshopping.

Materialism and buying impulsiveness are consumer traits that seem likely to be related to inshopping or outshopping behavior. Materialistic attitude is the orientation of a person toward possessions and money and their importance with regard to happiness (Moschis and Churchill 1978). Rook and Fisher (1995) define buying impulsiveness as a tendency of a consumer to buy spontaneously, immediately, and without thinking. The problem is that

information on psychographic variables such as attitudes and behaviors can be difficult and expensive to obtain. On the other hand, information regarding demographic characteristics of populations is readily and inexpensively available through government sources. Thus linking psychographic and demographic variables, and relating them in turn, to local shopping loyalty will assist retailers in selecting target markets, developing effective advertising, and improving marketing offerings. The purpose of the present study is to contribute to this area of knowledge by clarifying the relationship among demographics, materialistic attitudes, buying impulsiveness, and local shopping loyalty.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Outshopping

A number of studies examined the question of where consumers would shop (e.g., Thompson 1971; Lillis and Hawkins 1974; Lumpkin, Hawes and Darden 1986; Dmitrovic and Vida 2007). Papadopoulos (1980) noted that revenue loss from outshopping is not necessarily apparent, because of the volume of inshopping. Hermann and Beik (1968) found a relationship

between price and outshopping, and several authors have examined whether outshopping is product specific. Lau and Yau (1985) found outshopping to be product specific and influenced by product form and price level of the product as well. Lau and Yau found consumers were willing to out shop more for “shopping products,” such as apparel and gifts. Alternatively, Papadopoulos (1980) did not find outshopping to be product specific as much as price-level specific (c.f. Hermann and Beik 1968) and service-level specific. That is, consumers do not outshop for expensive items that may require after-sale service. A similar conclusion by Anderson and Kaminsky (1985), though describing the inverse situation, was that outshopping offers no comparative shopping advantage for convenience items such as food, fuel, or personal care items.

In 1985 Hozier and Stem developed a behavioral scale to measure the strength of retail patronage loyalty, that is, the extent to which respondents shop locally. This measure outperformed retailer attribute ratings in predicting percentage of respondents purchasing locally and dollar amount of outshopping purchases. This measure provides a positive measure of inshopping. Compared to outshopping, consumer inshopping is the behavior preferred by most retailers who locate their stores to be convenient to their target customers. For this reason, Hozier and Stem’s (1985) local loyalty scale will be a useful measure of the desired behavior and dependent variable in this study, inshopping.

### **Consumer Traits and Outshopping**

Several studies have examined psychographic traits of consumers with regard to outshopping behavior (Clow and Rohling 1994; Jarratt and Polonsky 1993). For example, Darden and Perreault (1976) showed that outshoppers tend to be fashion conscious, weight conscious, and self-confident. Jarratt (1998) concluded that different consumer segments had different reasons for outshopping. Therefore, understanding trait antecedents of outshopping, and thus alternatively to inshopping and local

retail patronage loyalty, is critical in understanding target markets. The present study contributes to this literature by examining the relationship between local shopping loyalty, demographics, and two potential psychographic antecedents of local shopping loyalty: materialistic attitude and buying impulsiveness.

### **Materialistic Attitude**

One important aspect of the American culture is material possessions and the acquisition of them. The different media to which consumers are exposed depict the image that the possession of material goods, high income, and wealth are the key to happiness and quality of life. Therefore, the modern culture has developed the perception that “happiness can be purchased at the mall” (Kasser 2002). As a part of life, consumers face daily decision-making about spending money and balancing purchase necessities with desired items. However, when the acquisition of goods become the primary goal of consumers, materialism is the driving force influencing this behavior (Fitzmaurice and Comegys 2006; Richins and Dawson 1992).

For materialistic persons, possessions are not only goods, but also acquire social and status meanings such as power, wealth, and prestige (Eastman, Goldsmith and Flynn 1999). As a result, the consumer derives more pleasure from the acquisition than from the possession utility of the product. Research has shown that materialists tend to spend more time shopping and more money during each shopping trip than other consumers (Fitzmaurice and Comegys 2006). In addition, materialism often acts as a symbol of the consumers’ membership in some aspirational reference groups (Hoyer and MacInnis 2007). On the other hand, materialism is often associated with negative measures of well-being (Christopher and Schlenker 2004; Kasser 2002; Kaser and Ahuvia 2002; Chang and Arkin 2002). Materialistic people seem to use shopping to eliminate self-doubts and make themselves feel better (Chang and Arkin 2002). Unhappiness at home and with family seems to produce materialism in adolescents

(Rindfleisch, Burroughs and Denton 1997; Roberts, Manolis and Tanner 2003, 2006) that may show up later in life (Steinberg 2002). Age was also found to be antecedent to materialism by Lerman and Maxwell (2006) and Cleveland, Laroche, and Papadopoulos (2009) and did not find significant results for gender or education.

### **Buying Impulsiveness**

Buying impulsiveness is unplanned purchasing (Rook and Gardner, 1993; Virvilaite, Saaladiene and Bagdonaite 2009). This phenomenon is of considerable interest to marketers and it is related to both personal variables (Dittmar and Beattie 1995; Verplanken and Herabadi 2001; Kacen and Lee 2002; Lin and Chuang 2005; Silvera, Lavack, and Kropp 2008; Virvilaite, Saaladiene and Bagdonaite 2009) such as materialism (Richins and Dawson 1992) and situational variables such as mood (Rook 1987). Age is expected to be a predictor, and young people are expected to be more impulsive (Bellenger et al. 1978; Parboteeah 2005), although some studies suggest that the relationship may not be linear (Wood 1998). Likewise, gender is expected to be related, with women being more impulsive than men (Dittmar et al. 1995; McInikas and Smaliukiene 2007). In addition, Richins and Dawson (1992) indicated that higher materialism will result in greater impulsiveness. Combined with other factors such as time pressure or convenience orientation, buying impulsiveness does affect store selection (Skallerud, Korneliussen and Olsen 2008), which suggests that there could be a relationship with local loyalty (store selection) behaviors.

### **HYPOTHESIS DEVELOPMENT**

With regard to local loyalty, it is true that reflective decisions are influenced by impulsive processes (Strack, Werth and Deutsch 2006) through varying availability of concepts based on impulsive responses, through motivational orientation—such as materialistic attitudes—and deprivation or felt need. In other words, the

need to buy can be motivated by materialistic attitudes.

From a retailer's point of view, local patronage loyalty is a desired outcome. While it could be argued that loyalty is a value, Hozier and Stem's (1985) behavioral scale includes predominantly behavioral items. Therefore, we model loyalty as the desired dependent behavior in the study. As discussed earlier, trait antecedents should be important in predicting local loyalty and thus inshopping.

We view buying impulsiveness as a behavioral trait antecedent to local loyalty. It could be argued that that the compulsion to purchase where ever and when ever will be at cross purposes with loyalty behavior, resulting in a negative association. On the other hand, impulsiveness could lead to local patronage, as it should lead to increased patronage where ever one happened to be. Because one is "home" (inshopping) more than elsewhere (outshopping), we expect to find that impulsive buying is predictive of local loyalty. This leads us to Hypothesis 1.

**H<sub>1</sub>:** Buying impulsiveness is a positive predictor of local loyalty.

Materialistic attitude could be considered a set of values. As defined in this study, it represents a statement on the importance of material goods in a consumer's life, the status that material possessions convey, and the happiness that comes from owning material goods (Moschis and Churchill 1978; Richins and Dawson 1992). Materialism is also thought to include possessiveness, nongenerosity and envy (Belk 1985). As a value, materialism could be assumed to motivate a number of other attitudes or behaviors. Cleveland, LaRoche and Papadopolous (2009) found that materialism predicts both local hedonistic and and global hedonistic shopping. However, because of materialism's association with self-centeredness (Richins and Dawson 1992) and with fashion innovativeness (Darden and Perrault 1976; O'Cass 2004), we anticipate that local loyalty will fall victim to the need to have the latest fashion and that the latest fashion will

be perceived to be found elsewhere. In addition, Park, Burns and Rabolt (2007) found that, if sufficiently internet innovative, materialism and fashion innovativeness lead to internet outshopping. Thus, we anticipate in Hypothesis Two that materialistic attitude is problematic for local retailers and negatively related to local loyalty.

**H<sub>2</sub>:** Materialistic attitude is negatively related to local loyalty.

A third consideration is that a number of authors have examined materialism linked with buying impulsiveness in various ways (e.g., Dittmar and Beattie 1995; Troisi, Christopher and Marek 2006). If a person has a materialistic attitude, then one assumes that buying and owning material things makes this person happy and secure. For the materialistic person, the act of buying is “comfort food,” that is, something they do to make themselves feel better. Since materialism is also associated with greater levels of anxiety and unhappiness (Christopher and Schlenker 2004; Kasser 2002; Kasser and Ahuvia 2002; Chang and Arkin 2002), the need for the comfort of acquiring things can be expected to be greater for materialistic persons. Hypothesis 3 reflects the expected positive relationship between materialism and buying impulsiveness.

**H<sub>3</sub>:** Materialistic attitude positively predicts buying impulsiveness.

In fact, we expect a positive relationship between materialism and buying impulsiveness, and a positive relationship between buying impulsiveness and local loyalty. In other words, if materialistic consumers are difficult targets for local retailers, the appeal to their “built-in” buying impulsiveness may be the critical factor in keeping their shopping local.

## METHOD

### Measures

In 1985 Hozier and Stem developed a scale to measure the strength of retail patronage loyalty. This ten item measure outperformed retailer attribute ratings in predicting percentage of

respondents purchasing locally and dollar amount of outshopping purchases. The response choices were 1-never, 2-occasionally, 3-frequently, and 4-always.

Buying impulsiveness is measured with Rook and Fisher’s (1995) scale of nine items scored on a five point Likert scale. The authors reported Cronbach’s alpha of 0.82 and good evidence of unidimensionality, reliability and validity using confirmatory factor analysis and other predictive validity tests.

Materialistic attitude was measured using Moschis and Churchill’s (1978) six item scale, and a five point response choice. Although the Cronbach’s alpha of 0.60 is somewhat low, the authors reported several predictive validity tests, and judging by the items, the reliability results may be caused by the broad nature of the scale content.

The demographic variables of age, gender, and GPA (as a proxy for education) were included in the model, because information regarding these variables is much more inexpensively available than information regarding psychographic or behavioral variables. Improving the understanding of the relationship between the demographic variables and materialism, buying impulsiveness, and local loyalty may provide an additional contribution to both the literature and to retail management.

### The Study

Paper and pencil questionnaires in English were used to collect data from both graduate and undergraduate students in various classes at a French university and at a mid-south university in the U.S. Although student samples are often criticized, college students are an important population to study with regard to materialism and local shopping loyalty for several reasons. First, young people are thought to be increasingly materialistic (Roberts 2000) and more buying impulsive (Bellenger et al. 1978), and there is some evidence that materialism declines with age (Lerman and Maxwell 2006). Thus, this sample may include a higher



incidence rate of the attitudes and behaviors of interest. Second, as young people practice increasing autonomy with their increasing income, their consumption habits are more open to change versus older consumers whose habits have become more set with age. This combination of reasons makes this sample representative of a population of interest to retailers. The procedure resulted in 607 responses, further described in Table 1 below.

## RESULTS

Table 1 shows the descriptive statistics of the sample by country. The male/female composition percentage is marginally significantly different ( $\chi^2 = 3.44$ ,  $p = 0.064$ ). Average age is significantly different ( $t = 3.64$ ,  $df=592$ ,  $p = 0.000$ ), but GPA is not ( $t = -1.286$ ,  $df=450$ ,  $p = 0.199$ ). Although there are no significant differences in buying impulsiveness, there are significant differences in both average materialism ( $t = 1.96$ ,  $df = 598$ ,  $p=0.05$ ) and average local loyalty ( $t = 4.80$ ,  $df = 602$ ,  $p=0.000$ ).

Exploratory factor analysis with Varimax rotation was performed on the measures. Using eigen values greater than one, seven factors were extracted. The first factor was buying impulsiveness with all nine items loading greater than .618 on that factor. This scale produced a Cronbach's alpha of 0.89. The second factor included four items loading

greater than .500 from the local loyalty scale. These items included the following items that were used in the final scale for this study:

- #3 I shop at local stores because it is important to help my community. (.866)
- #5 I shop locally to support the local merchants and business district. (.868)
- #6 Shopping at local stores is an enjoyable experience (.576)
- #10 I am loyal to my local shopping area (.721)

These four items produced a Cronbach's alpha of .79. Item #7 loaded on an its own factor, and items #8 and #9 both loaded on a different factor. These items were therefore dropped. No other items loaded higher than .500.

The materialism scale produced the third and fourth factor, with three items each loading on separate factors. The first factor seems to represent individual values; the second factor seems to represent social judgment. Although this suggests the scale may not be unidimensional, all six items were used, as it was felt that both factors represented important content and should not be dropped. The resulting alpha, 0.64, probably reflects the multidimensionality of the scale rather than a true lack of reliability. This alpha is slightly higher than Moschis and Churchill's reported reliability.

**TABLE 1:**  
**Descriptive Statistics of the Sample**

	Gender						
	Male	Female	Ave. Age	Ave. GPA	Ave. Loyalty	Ave. Impulse	Ave. Mat'ism
U.S.	253 51.5%	238 48.5%	23.76	3.06	2.41	2.97	3.16
French	45 41.7%	63 58.3%	21.80	3.70	2.15	3.06	3.02

Together these four factors explained 45.6 percent of the 61.7 percent of the variance accounted for by the factor analysis. Table 2, below, provides means, standard deviations, and simple correlations of the variables of interest.

In general these statistics look reasonable, although the non-significant correlation between materialism and local loyalty does not bode well for Hypothesis 2. Likewise, GPA does not appear to be correlated with other variables of interest.

### Hypotheses Tests

Hypothesis 1 states that buying impulsiveness is a positive predictor of local loyalty behavior due to the convenience of local merchants. Hypothesis 2 suggests that materialism will be a negative predictor of local loyalty. Equation 1 describes the linear regression model used.

$$\text{Loyalty} = a + b_1 \text{Age} + b_2 \text{Gender} + b_3 \text{GPA} + b_4 \text{Mat'lism} + b_5 \text{Impulse} + e$$

Where:

*Loyalty* = Average of local loyalty scale

*Age* = Chronological age in years

*Gender* = 1, male; 2, female

*GPA* = Self-reported GPA, proxy for education

*Mat'lism* = Average of 6 items in materialistic attitudes Scale

*Impulse* = Average of 9 items in buying impulsiveness Scale

*e* = Random error.

A significant regression resulted (  $p = 0.002$ ). Table 3 below summarizes the standardized  $\beta$ 's from the regression.

Hypothesis 1 is supported, but Hypothesis 2 is not. Impulsiveness is a significant, positive predictor of local loyalty behaviors, but materialism is not a negative significant predictor. Hypothesis 3 states that materialism is a significant predictor of buying impulsiveness. Linear regression supported this hypothesis with a significant ANOVA ( $p = 0.007$ ,  $0.000$ ) and a significant standardized  $\beta$

of 0.280, even with age ( $\beta = -.070$ ,  $p = .127$ ) and gender ( $\beta = 0.189$ ,  $p = .000$ ) in the model. GPA was again non-significant. Hypothesis 3 was supported.

### DISCUSSION AND FURTHER ANALYSIS

The present study is motivated by the difficulty of local retailers trying to establish loyalty in the face of increasingly materialistic customers. Our study did not find materialistic attitudes negatively related to local loyalty as hypothesized. Instead, we found, like Cleveland, LaRoche and Papadopolous (2009), that materialism was equally likely to predict outshopping or inshopping. Never-the-less, the relationship of materialism to buying impulsiveness does suggest that retailers should focus on stimulating impulsive buying in order to benefit from materialistic consumers. Further analysis also suggests that continued marketing and communications emphasis on younger consumers may be beneficial. Table 4 shows subsequent analysis showing that buying impulsiveness is not a predictor of local loyalty for consumers older than 22. While there are significant differences in all three variables of interest between men and women, neither buying impulsiveness nor age is a significant predictor of local loyalty for women. Instead, the significant predictor is GPA ( $\beta = .148$ ,  $p = 0.035$ ), our proxy for education. In fact, buying impulsiveness is the significant predictor for men. This suggests that retailers need to focus on designing stimuli to capture the buying impulsiveness of men, versus continued focus on tantalizing women.

In addition, the present study examined the effects of differences in age groups and gender and found that gender is a significant predictor of materialism, buying impulsiveness, and local loyalty (regression results confirmed these effects). Age is a marginally significant predictor of buying impulsiveness ( $p = 0.078$ ) and a significant predictor of local loyalty ( $p = 0.012$ ). Age did not predict materialism. Individual analysis of the U.S. and French samples produced similar results.

**TABLE 2:**  
**Means, Standard Deviations, Simple Correlations, Cronbach's Alphas**

	Means	Std. Dev.	Local Loyalty	Mat'listic Attitude	Buying Impulse	Age	Gender	GPA
Local Loyalty	2.36	0.63	0.79**					
Mat'list Attitude	3.14	0.63	-.039	0.64**				
Buying Impulse	2.98	0.79	.082*	.229*	0.89**			
Age	23.40	5.08	.133*	-.078	-.088*			
Gender	1.50	.50	.098*	-.183*	.110*	.003		
GPA	3.06	.493	.029	-.032	-.055	-.111*	.032	
*Significant at p<.05      **Cronbach's alphas on the diagonal								

**TABLE 3:**  
**Standardized Betas, T-values,**  
**and Significance Levels of Predictors of Local Loyalty**

	Std. Beta	T	Significance Level
Constant		5.139	.000
Age	.129	2.736	.006*
Gender	.079	1.636	.103
GPA	-.013	-.267	.789
Mat'lism	.024	2.622	.631
Impulse	.129	.480	.009*

**TABLE 4:**  
**Standardized  $\beta$ 's of Predictors of Local Loyalty for Age and Gender Groups**

	F, p-value		n	Impulse	p-value	Mat'lism	p-value
Age		>22	241	.128	.106	-.047	.557
		<= 22	352	.124	.053	.048	.455
Gender	2.22, 0.068	M	296	.161	.016	-.018	.783
		F	298	.115	.117	.052	.477

### CONCLUSION, LIMITATIONS, SUGGESTIONS FOR FUTURE RESEARCH

This study contributes to the retailing literature by examining the effects of two consumer traits on local loyalty (inshopping) versus outshopping. While materialistic attitudes were not found to be negatively predictive of local loyalty, buying impulsiveness was a significant positive predictor. Considering that impulsive buying accounts for nearly 80 percent of all purchases in certain product categories (Abrahams 1997; Smith 1996), marketers need to focus efforts on stimulating purchase while customers are in the store or on their computers. Added conveniences, such as easy ordering and quick delivery or online advertising, may be the crucial stimuli that result in impulse purchasing. Strack, Werth, and Deutch (2006) model impulse purchasing as a response to a stimulus, modified by personal traits, situations, cognitive processes and more. Point of purchase displays and package design are two tools used by marketers to persuade consumers to engage in a sudden and spontaneous act of buying impulsiveness (Jones et al. 2003).

This study has limitations. Although the student sample is a desirable market segment with a high incidence of the variables of interest, generalization is questionable, and the study should be replicated using non-student populations. It is also true that statistical prediction does not equal causation. In this and most correlation studies, there is no way to eliminate questions of temporal precedence. In fact, it is entirely possible that local loyalty is an excuse for individual impulsiveness, rather than impulsiveness causing loyalty.

Consumer behavior is a complex phenomenon, and there are numerous other variables that could probably be included in future research. It is also possible, as suggested by Wood (1998), that the effects of some of the variables are non-linear. Threshold and curvilinear effects should be investigated. However, the study does suggest that despite increasing

materialism, local loyalty is still possible in a young population. Many interesting questions remain, particularly with regard to stimuli that will motivate those impulse purchases.

### REFERENCES

- Abrahams, B. (1997), "It's All in the Mind," *Marketing*, 27, 31-33.
- Anderson, C. H. and M. Kaminsky, (1985), "The Outshopper Problem: A Group Approach for Small Business Retailers," *American Journal of Small Business*, 9 (4), 34-78.
- Belk, R. W. (1985), "Materialism: Trait Aspects of Living in the Material World," *Journal of Consumer Research*, 12 (3), 265-280.
- Bellenger, D. N., D. H. Robertson and E. C. Hirschman (1978), "Impulse Buying Varies by Product," *Journal of Advertising Research*, 18 (1), 15-18.
- Berman, B. and J.R. Evans (2007), *Retail Management: A Strategic Approach*, 10<sup>th</sup> ed. Upper Saddle River, N.J.: Pearson Prentice Hall.
- Chang, L. C. and R. M. Arkin (2002), "Materialism as an Attempt to Cope with Uncertainty," *Psychology and Marketing*, 19 (5), 389-406.
- Christopher, A. N. and B. Schlenker (2004), "Materialism and Affect: The Role of Self-Presentational Concerns," *Journal of Social and Clinical Psychology*, 23 (2), 260-272.
- Cleveland, Mark, Michel Laroche and Nicolas Papadopoulos (2009), "Cosmopolitanism, Consumer Ethnocentrism, and Materialism: An Eight-Country Study of Antecedents and Outcomes," *Journal of International Marketing*, 17 (1), 116-146.
- Clow, K. and B. Rohling (1994), "Can Specialty Stores Survive in Rural America?" *Proceedings of the Eleventh Annual Southwest Business Symposium*, 365-374.
- Darden, W. R. and W. D. Perreault, Jr. (1976), "Identifying Interurban Shoppers: Multiproduct Purchase Patterns and Segmentation Profiles," *Journal of Marketing Research*, 13, 51-60.

- Dittmar, H., J. Beattie and S. Friese (1995), "Gender Identity and Material Symbols: Objects and Decision Considerations in Impulse Purchase," *Journal of Economic Psychology*, 1 (3), 491-511.
- Dmitrovic, Tanja and Irena Vida (2007), "An Examination of Cross-Border Shopping Behaviour in South-East Europe," *European Journal of Marketing* 41 (3/4), 382-395.
- Eastman, J. K., R. E. Goldsmith and L. R. Flynn (1999), "Status Consumption in Consumer Behavior: Scale Development and Validation," *Journal of Marketing Theory and Practice*, 7 (3), 41-51.
- Fitzmaurice, J. and C. Comegys (2006), "Materialism and Social Consumption," *Journal of Marketing Theory and Practice*, 14 (4), 287-299.
- Herrmann, R. D. and L. L. Beik (1968), "Shoppers' Movement Outside their Local Retail Area," *Journal of Marketing*, 32, 45-51.
- Hozier, Jr., G. and D. Stem, Jr., (1985), "General Retail Patronage Loyalty as a Determinant of Consumer Outshopping Behavior," *Journal of the Academy of Marketing Science*, 13 (1), 32-46.
- Hoyer, W. D. and D. J. MacInnis (2007), *Consumer Behavior*, 4<sup>th</sup> ed. Boston: Houghton Mifflin.
- Jarratt, D. G. (1998), "Modeling Outshopping Behavior: A Non-Metropolitan Perspective," *The International Review of Retailing, Distribution and Consumer Research*, 8 (3), 319-350.
- Jarratt, D. G. and M. Polonsky (1993), "Causal Linkages between Psychographic and Demographic Determinants of Outshopping Behavior," *International Review of Retail, Distribution and Consumer Research*, 3(3), 17.
- Jones, M. A., K. E. Reynolds, S. Weun and S. E. Beatty (2003), "The Product Specific Nature of Impulse Buying Tendency," *Journal of Business Research*, 56(7), 505-511.
- Kacen, J. J. and J. A. Lee (2002), "The Influence of Culture on Consumer Impulsive Buying Behavior," *Journal of Consumer Psychology*, 12(2), 163-176.
- Kasser, T. (2002), *The High Price of Materialism*, Cambridge, MA: MIT Press.
- Kasser, T. and A. Ahuvia (2002), "Materialistic Values and Well-Being in Business Students," *European Journal of Social Psychology*, 32, 137-146.
- Lau, H.-F., and Oliver H.-M. Yau (1985), "Consumer Outshopping Behavior and its Implications for Channel Strategy: A Study of the Camera Patronage Pattern in Hong Kong," *European Journal of Marketing*, 19 (6), 12-23.
- Lerman, Dawn, and Sarah Maxwell (2006), "Joining a Consumer Society: Russian Immigrant versus American Materialism," *Journal of Consumer Behaviour*, 5 (6), 479-490.
- Lillis, C. M. and D. I. Hawkins (1974), "Retail Expenditure Flows in Contiguous Trade Areas," *Journal of Retailing*, 50(2), 14.
- Lin, C. and S. Chuang (2005), "The Effect of Individual Differences on Adolescents' Impulsive Buying Behavior," *Adolescence*, 40 (159), 551-558.
- Lumpkin, James R., Jon M. Hawes and William R. Darden (1986), "Shopping Patterns of the Rural Consumer: Exploring the Relationship between Shopping Orientations and Outshopping," *Journal of Business Research*, 14 (1), 63-81.
- McNikas, B. and R. Smaliukiene (2007), "Consumer Vulnerability in Pharmaceutical Market: Case of Baltic Countries," *Journal of Business Economics and Management*, 8 (1), 51-62.
- Moschis, G. P. and G. A. Churchill, Jr. (1978), "Consumer Socialization: A Theoretical and Empirical Analysis," *Journal of Marketing Research*, 15, 599-609.
- O'Cass, Aron (2004), "Fashion Clothing Consumption: Antecedents and Consequences of Fashion Clothing Involvement," *European Journal of Marketing*, 38 (7), 869-882.
- Papadopoulos, N. G. (1980), "Consumer Outshopping Research: Review and Extension," *Journal of Retailing*, 56 (4), 41-58.

- Parboteeah, D. V. (2005), *A Model of Online Impulse Buying: An Empirical Study*, Doctoral dissertation: Washington State University.
- Park, Hye-Jung, Leslie Davis Burns and Nancy J. Rabolt (2007), "Fashion Innovativeness, Materialism, and Attitude toward Purchasing Foreign Fashion Goods Online across National Borders: The Moderating Effect of Internet Innovativeness," *Journal of Fashion Marketing and Management*, 11 (2), 201-214.
- Reynolds, F. D. and W. R. Darden (1972), "Intermarket Patronage: A Psychographic Study of Consumer Outshoppers," *Journal of Marketing*, 36, 50-54.
- Richins, M. L. and S. Dawson (1992), "A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation," *Journal of Consumer Research*, 19 (3), 303-316.
- Rindfleisch, A., J. Burroughs and F. Denton (1997), "Family Structure, Materialism, and Compulsive Consumption," *Journal of Consumer Research*, 19, 312-325.
- Roberts, J. A., C. Manolis and J. F. Tanner, Jr. (2003), "Family Structure, Materialism, and Compulsive Buying: A Re-Inquiry of Rindfleisch et al. (1997)," *Journal of the Academy of Marketing Science*, 31 (3), 300-311.
- Roberts, J. A., C. Manolis, and J. F. Tanner, Jr. (2006), "Adolescent Autonomy and the Impact of Family Structure on Materialism and Compulsive Buying," *Journal of Marketing Theory and Practice*, 14 (4), 301-314.
- Roberts, James (2000), "Consuming in a Consumer Culture: College Students, Materialism, Status Consumption and Compulsive Buying," *Marketing Management Journal*, 10 (2), 76-91.
- Rook, D. W. (1987), "The Buying Impulse," *Journal of Consumer Research*, 14 (2), 189-199.
- Rook, D. W. and M. Gardner (1993), "In the Mood: Impulse Buying's Affective Antecedents," *Research in Consumer Research*, 12, 23-27.
- Rook, D. W. and R. Fisher (1995), "Normative Influences on Impulsive Buying Behavior," *Journal of Consumer Research*, 22, 305-313.
- Silvera, David H., Anne M. Lavack and Fredric Kropp (2008), "Impulse Buying: The Role of Affect, Social Influence, and Subjective Well-being," *Journal of Consumer Marketing*, 25 (1), 23-33.
- Skallerud, Kåre, Tor Korneliussen and Svein Ottar Olsen (2009), "An Examination of Consumers' Cross-Shopping Behavior," *Journal of Retailing and Consumer Services*, 16 (3), 181-189.
- Smith, D. (1996), "The Joy of Candy," *National Petroleum News Supplement*, S2.
- Steinberg, L. (2002), *Adolescence*, 6<sup>th</sup> ed. Boston: McGraw-Hill.
- Strack, Fritz, Lioba Werth and Roland Deutsch (2006), "Reflective and Impulsive Determinants of Consumer Behavior," *Journal of Consumer Psychology*, 16 (3), 205-216.
- Thompson, John R. (1971), "Characteristics and Behavior of Outshopping Consumers," *Journal of Retailing*, 47 (1), 70-81.
- Troisi, Jordan D., Andrew N. Christopher and Pam Marek (2006), "Materialism and Money Spending Disposition as Predictors of Economic and Personality Variables," *North American Journal of Psychology*, 8 (3), 421-436.
- Verplanken, B. and A. Herabadi (2001), "Individual Differences in Impulsive Buying Tendency: Feeling and No Thinking," *European Journal of Personality*, 15, 71-83.
- Virvilaite, Regina, Violeta Saladiene and Rita Bagdonaite (2009), "Peculiarities of Impulsive Purchasing in the Market of Consumer Goods," *Inzinerine Ekonomika-Engineering Economics*, (2) 101-108.

## CREDIT CARDS AND COLLEGE STUDENTS: EFFECT OF MATERIALISM AND RISK ATTITUDE ON MISUSE

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*The topic of credit card misuse among college students has become a significant concern as our nation reexamines financial discipline in the current economic downturn. This study explores students' current credit card usage status and evaluates credit card misuse among college students in relation to their attitude towards risk and materialism. Other areas examined include marketing strategies implemented by credit card vendors and how they affect usage behavior. Based on prior research, proven and reliable theoretical scales were employed to survey a random sample of 335 college students across 16 states. Results indicated that significant relationships exist between a student's credit card misuse, their materialistic values, and their risk attitude. Our research makes academic contributions in refining, integrating, and using theoretical scales in an empirical context. In practical terms, the findings of this study have implications not just for students in college, college administrators, and credit card marketers, but also for those engaged at the crosscurrents of marketing, social responsibility, and public policy.*

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### INTRODUCTION

Although the introduction of the credit card has provided consumers, college students in particular, with more financial flexibility it still has had its drawbacks. With the current state of the economy, the credit card industry has come under scrutiny regarding its credit issuing behavior. Due to high unemployment fluctuation, analysts estimate that the amount of loans being unpaid by consumers are now between 6 percent and 7 percent (Stempel 2008).

With unemployment comes an interruption of income, which makes it extremely difficult for consumers to make large fixed payments. For example, the rate of late payments on indirect auto loans rose to 3.25 percent in the third quarter of 2008 from 3.07 percent in the second quarter, while late payments rose to 2.63 percent from 2.56 percent on home equity loans, to 1.63 percent from 1.49 percent on property improvement loans, and to 2.69 percent from 2.67 percent on personal loans.

Poirier and Stempel (2009) state falling gas prices may bring some relief, but doubt it comes close to balancing out the impact of greater job losses. As a result of these economic realities, credit card companies are exhibiting cautious behavior in extending credit, in contrast to their past behavior. Stempel (2008) also claims issuers are now being extra careful when they extend a line of credit.

Many experts also believe that the health of the credit card industry is closely related to the status of the nation's unemployment rate. In December 2009, unemployment in the United States was 10 percent, with roughly 15.3 million Americans being out of work. As a result, analysts estimate that around 6 percent of loans won't be repaid, which is twice as high as it was in the first quarter of 2006. Stempel (2008) predicts that this could cause credit card companies to realize losses between 8 percent and 10 percent. Unemployment rates have certainly put a scare in college students who are seeing the job market deteriorate. However, it appears that students are still utilizing their credit cards in record numbers. The changing credit environment provides an opportunity for marketers to address the critical issues of credit card misuse among college students and the

role of marketing strategies targeted at this segment.

Our research attempts to uncover elements contributing toward the growing credit card debt among college students and hopes to provide colleges, universities and public policy makers with insight on what attributes need to be monitored attentively. The rest of this paper is structured as follows. First, we present a historical background concerning credit cards followed by secondary data relating to credit card usage by college students, financial literacy and the marketing tactics being aimed at students. Second, we introduce our literature review on materialism and risk attitude based on our integrated approach, which provides the conceptual foundations for our hypotheses. We then discuss our methods for data compilation and provide sample characteristics alongside usage trends. The trends explored focus on an overall analysis of credit card usage along with the behaviors exhibited by credit card vendors.

We then introduce our findings on credit card usage and present our results on each hypothesis tested regarding areas of materialism, risk attitude, and certain aspects of vendor influence on credit card misuse. In the subsequent section we provide further discussion and conclusions on our findings. Finally, we explain the limitations of this study, suggest possible future research avenues, and provide some concluding remarks.

### **Historical Background**

According to Douglas Mudd (2007), the origin of the credit card can be traced to Egypt, Babylon and Assyria approximately 3,000 years ago. By the 18<sup>th</sup> century a form of consumer credit was made accessible through a tallyman, who was an individual who sold clothes in return for small weekly payments. The name “tallyman” was ascribed because they would maintain a tally of what individuals purchased on a wooden stick and tracked the amount of debt and payments received on the stick.

It wasn't until the beginning of World War I that credit cards began to evolve in the United States. Concurrently, one of the first concepts of buying on credit was seen with the introduction of a credit card to be used exclusively for gasoline and with the amount of traveling by the average individual on the rise, consumers gained more flexibility. As a result, the attractiveness of credit cards soon gained momentum.

The concept of credit cards went mainstream in 1950, when an operator of a small loan company in New York City, Francis McNamara, introduced the Diners Club. The Diners Club was intended to be utilized at restaurants and McNamara intended to charge users an annual fee of \$5 to participate. The first Diners Club card was issued to 200 consumers and could be used only in 27 restaurants in New York (Mudd 2007). Each member received a credit card, which was constructed from cardboard with their name and account number on the front and a list of the 27 accepting restaurants on the back. By 1952, the Diners Club was accepted in Canada, Mexico and Cuba, becoming the first international card.

More companies began offering credit cards through the 1960s but positioned them as a timesaving device instead of a form of credit. Companies began to act aggressively, by sending consumers credit cards in the mail that were already activated for them to utilize. This led to massive credit card fraud and a need for government regulation (Mudd 2007). It wasn't until the mid-1970s that the government began regulating the industry by banning companies from mailing active cards to people who had not requested them.

### **Credit Card Usage Among College Students**

Undergraduate college students possess a record number of credit cards. According to a study conducted in 2009 by Sallie Mae, an organization which provides federal and private student loans for undergraduate students, 84 percent of undergraduates had at least one credit card. Some experts estimate the average



credit card debt of a college student to be near \$3,000, with Sallie Mae finding 21 percent of students carrying balances between \$3,000 and \$7,000. As a result, some students even open up new cards to pay off existing debt. The increasing amount of outstanding balances among college students is significant and there appears to be an abundance of causes.

Research indicates that students tend to carry an inordinate amount of credit card debt as they progress through college. One study conducted by Qvisory, a nonprofit online advocacy and service organization, found that students are becoming further concerned about their financial standing. Results from their 2008 study showed that financial concerns top the list of troubles facing students in their lives today. Out of their sample, 55 percent of respondents claimed this to be their most relevant concern, a 10 percent increase from their 2007 study (Greenberg 2008).

Qvisory's study demonstrated that young people experience a significant amount of stress and worry towards their financial status, with 48 percent of respondents saying they frequently worry about having enough funds to pay their bills (Greenberg 2008). With the rise in debt and financial concern, students with higher consumer debt usually work more, resulting in poorer grades. Research shows that these students often suffer from depression and occasionally even have to withdraw from their studies (Manning 2000; Miller 2000; Roberts and Jones 2001).

In relation to Sallie Mae's study, Qvisory's study showed that two thirds of its participants surveyed reported having a credit card, and over half said that they have credit card debt. In addition, the study's projections showed that 41 percent of young adults with credit cards are more likely to have accumulated debt in the last year than those who do not have a credit card (Greenberg 2008).

## Marketing Strategies and Their Impact

With the credit card market being highly saturated, college students are seen as profitable prospects. Companies know that if they can attract young people early and build loyalty that the propensity to capture a lifetime customer increases (Singletary 2007). Essentially, creditors are attempting to establish brand followers, which are essentially individuals who unite around a brand and become long time users (Acosta and Devasagayam 2009). Obtaining a brand follower starts right on campus, as lenders have constructed tables on college campuses offering free goods and services to entice students into signing up for credit cards. These goods range from t-shirts and food to more expensive items such as electronics. However, this raises an ethical question considering the marketing strategies being directed towards students are leading to increased credit card use, and perhaps misuse, among students.

However, colleges may have to share some responsibility for this as well. "Many schools have signed lucrative deals with credit card companies in which they provide contact lists of students or allow sidewalk marketing by the credit pushers" (Singletary 2007). In a sense, the relationship contradicts many colleges' core values, considering colleges try to project themselves as caring for their students. Such actions could be putting their students at potential financial risk. College representatives justify the tactic by arguing that the schools get needed funds which flow back into campus affairs. To further bolster their stance, administrators posit that these credit cards help students build a credit history -- which may be accurate, but often the history being built may not be a healthy one.

The University of Iowa alumni association sent a credit card mailer to students in 2007 advertising "outstanding financial benefits for students," which stated a 4.9 percent interest rate (Silver-Greenberg and Elgin 2007). The mailer went on to inform students not to miss this "unique opportunity" and to show their

school pride. Students who participated certainly received the 4.9 percent interest rate, but only for the first six months after which it skyrocketed to 18.24 percent. The card issuer, MBNA, paid the alumni group \$1 million a year for implementing the marketing program. After negative press coverage, the college stopped providing the company with the students' contact information. However, many colleges across the country may still be continuing this practice.

With many schools not monitoring vendor behavior, the states themselves have taken action. Approximately fifteen states nationwide have restricted/banned credit-card marketers from their campuses (Silver-Greenberg 2007). Many colleges in these states are marketing a new message about credit cards. With assistance from the Ford Foundation, U.S. PIRG has begun staging a national campaign against credit card marketing. Instead of a credit card application, students will be handed literature warning them about the fees and terms of certain credit cards to help them avoid credit card misuse. In this instance, the students still receive a free gift; lollipops that say, "Don't be a sucker" (Singletary 2007). To combat such negative trends, credit-card companies are going above and beyond by seeking out partnerships with third-party marketers to acquire student customers.

### **Financial Education**

Most credit card companies argue that college students are competent individuals and can make responsible decisions. However, this argument doesn't support the true accuracy of a student's knowledge about financial management. Throughout 2008, high school seniors across the nation completed a survey to test their financial literacy. The 31-question survey dealt with everything from credit cards to taxes, with student's having no experience with half of the topics covered (McGuire 2008). The survey resulted in a national average of only 48 percent of questions being answered correctly.

In light of survey results such as this, many lawmakers and financial gurus feel that financial education should be a requirement in schools. Stephen Epstein, an advocate for financial education, started the DollarCamp Financial Survival System, which is a system to provide financial education to students by working through print materials, and completing assignments. The students can collaborate and the site also provides parents with a way to communicate with one another about the way their children handle money. Although it is ultimately up to the student to be responsible, having parents teach them about financial management doesn't appear to be a top priority. Qvisory's study showed that parents are more focused on their children's long term future and happiness than their immediate financial obstacles (Greenberg 2008). Only 20 percent of parents in the study mentioned finances as the top concern for their kids.

Our research builds upon this information and further explores the marketing strategies used by credit card companies toward college students in terms of vendor offerings. This topic underscores ethical and social concerns regarding marketing strategies employed by credit card companies in reaching their targeted college student segment.

### **THEORETICAL FOUNDATIONS**

A cursory review of the financial landscape demonstrates that credit card use among college students has become a topic of escalating concern. With the current state of the economy, it has become more evident that our financial obligations must be prudent and closely monitored to prevent future reoccurrences. With students struggling to pay their credit card expenses, they essentially cut off revenue streams in other markets and put the nation's economy at risk (Pirog and Roberts 2007). We start by exploring the theoretical underpinnings of past research that explore some salient constructs that have been shown to have a bearing on irresponsible consumer decision-

making and purchase behavior: materialism and risk attitudes.

### Materialism

Dictionaries define materialism as the emphasis on material objects, comforts, and considerations, with a disinterest in spiritual, intellectual, or cultural values. Originally, materialism was referred to as the philosophic belief that nothing exists except for matter and its movement (Ponchio and Aranha 2008). Richins and Dawson (1992) defined materialism as the significance one places on the possession and pursuit of material goods in hopes of achieving desired states. In pursuit of reaching these states, materialistic consumers fill the void in different ways of possession acquisition and consumption.

Belk (1984) claims that at the most intense levels of materialism, possessions assume a significant role in a person's life and are believed to provide the greatest satisfactions and displeasures in one's life. Bredemeier and Toby (1960) parallel the concept of materialism with religion, where the worship and pursuit of things provides structure to peoples' lives. Religions build on the fundamental aspects of a person's soul and essentially set up a system of values which one will live their life by. Research shows that for many materialists, possessions and their acquisition are the most relevant value and personal goal that influence one's lifestyle (Richins and Dawson 1992).

Keeping in mind that materialists believe that possession and the acquisition of goods is the root to happiness and that it serves as a way of life, materialism can certainly be considered a value. (Webster defines value as the relative worth, utility, or importance that one places on an object or idea). "Defining materialism as a value is consistent with the notion that materialism reflects the importance a person places on possessions and their acquisition as a necessary or desirable form of conduct to reach desired end states, including happiness" (Richins and Dawson 1992). More often than

not, a person who values materialism experiences the "happiness" they seek less frequently than they realize.

Virtually every modern day religion views materialism as a barrier to reaching spiritual fulfillment (Belk 1983). Scientifically, a significant amount of empirical research has suggested that materialism has harmful effects on individuals and society as a whole (Kasser 2002). Schroeder and Dugal (1995), claim that materialists tend to experience high levels of social anxiety and it has been seen that there is an inverse relationship between materialism and happiness and a positive relation in terms of materialism and one's anxiety level (Kasser and Ahuvia 2002).

When viewing materialism at the individual level, research has shown that one's self esteem, well-being, and quality of life are negatively affected by the cycle the individual goes through in trying to bring themselves a sense of fulfillment (Richins and Dawson 1992; Sirgy 1998; Kasser 2002). This can be attributed to the fact that one can never actually reach the desired level of happiness because the pursuit and possession of goods is a continuous cycle. Sirgy (1998) claims that because materialists set such unrealistic standard-of-living goals, they experience more dissatisfaction than a person who is a non-materialist.

As a result, the dissatisfaction carries over to a feeling of disappointment with one's life in general. Society is uniquely shaped because those who place a high value on material possessions will behave much differently from those who place a lower value on things (Richins and Dawson 1992). Because of this, research suggests that materialism negatively shapes society and leads to less charitable donations, less community involvement, and less time spent in the family setting (Droge and Mackoy 1995; Kasser 2002; Diener and Robinson 2004).

In relation to society, one of the key concerns for an individual is one's public self-image.

Tunnell (1984) expresses that each member of society has a public self-image, an image of himself or herself that is projected to others. College students are often publicly self-conscious and try to portray an image that is acceptable to their peers. Those high in public self-consciousness are especially concerned about their social identities and constantly strive for approval and avoiding disapproval (Doherty and Schlenker 1991). Materialism can often be a result of one's public self-consciousness (Xu 2008). Individuals high in public self-consciousness are viewed as having low self-esteem and a strong desire for social recognition (Tunnell 1984). Public self-conscious people, much like materialistic people, often judge themselves and others on how much they own and on financial success.

### **Risk Attitude**

Risk is defined as the possibility of loss or injury. Risk assessment is the overall process of using available information to predict the likelihood of hazards or specified events occurring along with the magnitude of their consequences. This "possibility of loss or injury" is analyzed differently from person to person based on their perceived risk of the situation. When it comes to actually assessing these perceived risks, researchers have utilized four methods. One method researchers use is surveys, to uncover people's feelings and attitudes towards certain risks (Slovic, Fischhoff, and Lichtenstein 1979). The second is the use of experimental gambles between an assortment of choices. In the third method, researchers ask respondents how much they are willing to pay to avoid specific risks. The fourth and final method consists of researchers inferring peoples' attitudes towards risks through the observation of the choices they make in particular situations (Hammitt and Graham 1999).

Hogarth (2007) argues that although each methodology is unique, the conclusion derived from each of them is that the perception of risk and its assessment is not easily generalizable. Interpretations regarding the meaning of risk

are particularly subjective from one individual to another. This is also directly related to one's decision making process and what they ultimately decide to do.

Lin, Yen and Chuang (2006) claim that the decision making process, which can be an emotional one, can have an impact on one's decision about taking on risk. Studies have shown that mood states can play a significant role in a consumer's behavior and certain aspects of consumer marketing have been shaped by this ideal (Belk 1975; Lutz and Kakkar 1975; Westbrook 1980; Weinberg and Gottwald 1982; Gardner and Vandersteel 1984). Researchers have expanded on this concept and are suggesting that the motive to take on risk is affected by their current mood in that particular situation (Isen and Patrick 1983; Mittal and Ross 1998; Kuvaas and Kaufmann 2004).

However, the influence of one's mood may be more relevant in everyday decision making rather than for major, high involvement choices (Hockey et al. 2000). The amount of time for one to assess the risk in routine decisions is much shorter than for a prolonged decision. Lin, Yen, and Chuang, (2006) present a scenario where a college student purchasing a pair of dress pants for a classroom presentation may face economic, social, and performance risks. In this example, the student is forced to select one of the alternatives, because the product is either needed urgently or one of the options may not be accessible in the future. The prevailing current mood of the decision maker now becomes critical. The researchers state that if the decision maker begins the process with no clear preference, making a choice may be a difficult task because the attractiveness of the available options may be perceived to be too similar. Evaluating the alternatives involves a certain level of risk because the decision maker's final choice could result in regret (a form of loss or injury) if the chosen alternative is a failure.

For the purposes of our study, we are suggesting that this "current mood" is affected

by one's materialistic values. The mood becomes "current" once the person is placed into a position to make a decision at that point in time. This "current" mood of materialism takes over and as a result, one's ability to perceive the risk of their decision could be hindered.

### AN INTEGRATED APPROACH

Acquisitions and the process of acquiring possessions is valued most highly by people ranked high on a materialism scale and lowest by those who report lower materialism scores (Richins and Dawson 1992). Materialists even value these actions and attributes more than their relationships with others. In an attempt to assess these attributes, Richins and Dawson (1992) developed a materialism scale. This scale was a compilation of items from other materialism scales developed over three decades by scholars such as Crowne and Marlow (1960), Rosenberg (1965), Andrews and Whitney (1976), Belk (1984), and Kahle (1986). Each portion of the compilation was used to test one's view of three dimensions: what makes one's life successful, the importance of acquisitions, and how much one's perception of happiness and satisfaction comes from possessions. Tokunga (1993) found that individuals who view money as a sense of power were more likely to engage in credit card misuse. Based on this research stream, Roberts and Jones (2007) developed a scale to assess one's credit card misuse.

We argue that one's materialistic behavior impacts their attitude toward risk. Essentially, the more materialistic a consumer is, the harder it becomes for them to perceive the risk of using their credit card and the financial consequences it entails. Gene Calvert (1993) developed a risk attitude scale for the purpose of evaluating one's attitude toward risk. His scale was designed as a general tool to stimulate reflection and thought about one's risk-taking style and beliefs. Figure 1 summarizes the theoretical scales that we adapt for this study:

Based on our integration of prior research and preceding discussion, we propose the following hypotheses:

- H<sub>1</sub>:** A positive and significant relationship exists between credit card misuse and:
  - a. materialistic values
  - b. risk attitude
- H<sub>2</sub>:** A positive and significant relationship exists between materialistic values and risk attitude.
- H<sub>3</sub>:** A positive and significant relationship exists between credit card misuse and the influence of credit card vendors.

### Data Collection

A 31 question survey was pretested and refined prior to being administered nationally. We asked an assortment of students to participate in a test survey of the final version and through collaboration, we fixed specific aspects of the survey that they either didn't understand or needed more clarification on. A second wave of pretesting was done with an edited and modified questionnaire based on the results of the first pretest. We made every attempt to ensure that the final survey was manageable and efficient in terms of ease of response. We then proceeded to reformat the survey with aesthetics and the logical flow of content in mind. The final version was segmented into four specific sections and was crafted to provide us with information regarding our four main areas of interest.

Our first section was designed to gather information on students' behavior with credit cards and their current status. Section two was added to evaluate students' feelings toward credit card vendors on campus along with the vendors' impact on influencing a student's decision in obtaining a credit card. These two sections were inspired by questions from Sallie Mae's survey of students conducted in 2009. Theoretical Scales rounded out our third section where we presented three scales: Richins and Dawson (1992) materialism scale, Roberts and

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**FIGURE 1**
**Roberts and Jones 2001 Credit Card Misuse Scale**

- a. I am less concerned with the price of a product when using my credit cards
- b. I am more impulsive when I shop with credit cards
- c. I worry how I will pay off my credit card debt
- d. I spend more when I use a credit card
- e. I am seldom delinquent in making payments on my credit cards
- f. I rarely go over my available credit limit
- g. I seldom take cash advances on my credit cards

**Richins and Dawson 1992 Materialism Scale**

- a. I admire people who own expensive homes, cars and clothes
- b. I like to own things that impress people
- c. I don't pay attention to material objects that others own
- d. The things I own say a lot to others in terms of how my life is
- e. I usually only buy things I need (Reverse Scaled)
- f. Buying things gives me a lot of pleasure
- g. I enjoy spending money on things that aren't practical
- h. It sometimes bothers me that I can't afford to buy things I like

**Gene Calvert 1993 Risk Scale**

- a. Taking risks makes good sense only in the absence of acceptable alternatives
  - b. I generally prefer stimulation over security
  - c. I have confidence in my ability to recover mistakes, no matter how big
  - d. I would take safety over achievement
  - e. It is better to ask for permission, than to beg for forgiveness
  - f. Avoiding negative outcomes of risks is as much a matter of luck as ability
  - g. I can handle big losses and disappointments with little difficulty
  - h. I would rather feel intense disappointment than intense regret
  - i. When facing a decision with uncertain consequences, my potential losses are my greatest concern
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Jones (2001) scale regarding credit card misuse and Gene Calvert's (1992) risk assessment scale to assess each respondent's mindset on their attitude towards risk. We asked participants to rank their responses using a modified Likert scale with 1 being "strongly disagree" and 5 being "strongly agree". Our fourth and final section presented a set of demographic questions.

The survey was administered online, respondents were made aware that the research was for academic purposes and that responses were confidential. To generate responses, advertisements were placed on the popular student site Facebook and were distributed

through e-mail on specific college networks. Facebook allowed us to target 18-24 year olds in the United States at a nominal cost. Further we contacted marketing faculty in various educational institutions and sought their cooperation in administering surveys to their students.

Our efforts yielded an effective sample size of 350 students, of which 335 were usable after cleaning the data of respondents who failed to answer a substantial number of questions. It should also be noted that out of the sample of 335 there were still some questions omitted by students, resulting in summary statistics being computed on a question to question basis.

### Sample Profile and Usage Behavior

Our sample includes students across 16 states from California to Connecticut, and from Florida to Montana. The majority of our students were from the Northeast, which is not surprising given the location of the researching institution. Out of the usable sample of 335 students, approximately 45 percent (127) were in the age range of 18-20 with our most frequent age being 21, comprising about 30 percent (85) of our sample. The remaining 25 percent was comprised of students 22 years and older (81). In relation to this, we had a fair representation of each class level with juniors, seniors and graduate students being our most frequent participants, representing approximately 75 percent of our sample. The remaining one-fourth was comprised of freshmen and sophomore students. Sample included students from business, humanities, and natural sciences.

Our sample was divided about 69 percent to 31 percent in favor of females. Some respondents did not specify their gender when responding and some failed to answer all of the demographic questions as we noted earlier. Overwhelmingly, about 80 percent of our sample reported having a GPA between 3.1-4.0 with the remaining 20 percent claiming a GPA between 2.1 and 3.0. As we investigated further, we found that approximately 25 percent of our sample worked between 1-10 hours a week and 23 percent worked between 11-20 hours per week. Approximately 12 percent of respondents worked 21-30 hours with around 25 percent working over 30 hours. Interestingly, approximately 28 percent of respondents reported not working at all. Further, we found that 33 percent of our sample made between \$1-\$500 per month and 17 percent actually did not have an income. Taking into consideration that 21 percent of respondents were graduate students, we weren't surprised that 10 percent reported making over \$2,000 per month with around 11 percent reporting between \$1,001-\$1,500 and 8.3 percent claiming between \$1,501 and \$2,000.

### Credit Card Debt Status Analysis

Out of the 335 participants in our survey, approximately 26 percent of the respondents had 5 or more cards with the remaining having two to four cards. Considering credit card companies' willingness to give students credit cards in hopes of acquiring a lifetime customer, we were surprised to see that approximately 5 percent reported that the reason for not having a card was being unable to get approved.

The majority of card holders (approximately 80 percent) either acquired them before entering college or as college freshmen, with approximately 55 percent getting assistance from their parents in making the decision. However, 33 percent of our participants reported making their decision based on a direct mailer sent from the vendor themselves. In relation to this, approximately 73 percent acquired their first card when they were 18 years old, which makes sense considering most college freshmen are of this age. Out of these students who obtained a card, approximately 35 percent reported having at least one card for three or four years.

More importantly, we saw a split in terms of credit balances the students were carrying, both showing positive and negative outlooks. Approximately 43 percent of students reported having a current balance between \$0-\$200, which is respectable. However, 22 percent of students had a current balance of over \$1,000 with almost 40 percent of respondents having carried a balance of over \$1,000 at some point in time. Although this information is interesting, yet another aspect to consider is the debt payment behavior of these student card holders.

Approximately 56 percent of our sample reported paying off their credit card balances in full each month which is most likely pertaining to those with lower balances, considering 53 percent of our sample had a balance below \$400. Slightly over 20 percent said that they make more than the minimum payment but

always carry a balance, which is in tune with the Sallie Mae findings.

When we saw these large balances occurring we shifted our focus to what the students were actually buying. Around 44 percent of students reported spending between \$500-\$1,500 on educational related expenses in the past year with textbooks and school supplies being the primary purchases. What was more interesting was the amount of money students were spending on non-education related items. Over half of our sample reported gasoline, clothing and dining as their main purchases with approximately 40 percent charging travel expenses, music/movies, and food. Approximately 30 percent reported spending between \$500-\$1,500 on non-education related items with 19 percent charging over \$3,000 in the past year.

### Credit Card Vendors

As mentioned earlier, credit card vendors have been playing an active part in influencing students to sign up for credit cards. Out of our sample of 335 students, approximately 70 percent of respondents reported being approached by a credit card vendor with about half of respondents being approached about once a month. When we asked students to assess their sentiment on the appropriateness of vendors giving free gifts, nearly 25 percent felt

offering free gifts was inappropriate with around 30 percent stating that they were indifferent about the situation, leaving the remaining 45 percent viewing it as appropriate. Out of the variety of offerings credit card vendors offer to entice students, we found promotional rates to be the most frequent offering. It was surprising to see that money was being offered to students; especially with 12.8 percent of our sample making this claim.

### FINDINGS AND DISCUSSION

Before exploring each hypothesis, we computed correlation coefficients to assess the relationship among the three scales. We were exploring for p-values less than or equal to 0.05. However, we were not just interested in the significance levels (0.05 or lower) but also the direction of the relationship. These correlations are presented below in Figure 2.

Results indicated that both risk attitude and materialism had a positive and significant impact on a student's credit card misuse. As a student's materialistic attitude increased so did their credit card misuse. Similarly we note that as the propensity to assume risk increased so does the student's credit card misuse.

The credit card misuse scale was then regressed upon the risk attitude scale and the degree of materialism. The overall model was found to be

FIGURE 2

		Credit Card Misuse Scale	
Materialism Scale	Pearson Correlation	.184**	
	Sig. (2-tailed)	.007	
	N	217	
Risk Attitude Scale	Pearson Correlation	.201**	Materialism Scale
	Sig. (2-tailed)	.003	.009
	N	219	293
**. Correlation is significant at the 0.01 level (2-tailed).			



significant at the 0.05 level ( $F=5.297$ ;  $p=0.022$ ). All regression coefficients were found to be significant at the 0.05 level with risk having a  $t$ -value of 2.566 ( $p=0.010$ ) and materialism having a  $t$ -value of 2.302 ( $p=0.022$ ). As hypothesized, risk attitude and materialism had a positive and significant impact on credit card misuse.

### **Attitude and Behavior towards Materialism**

We then shifted our attention toward examining the relationships between scale items for materialism. Results indicated that students who admire people with expensive homes and luxury items tend to misuse their credit card ( $p=0.010$ ,  $F: 1.790$ ). Moreover, we observed that students like to own things that impress people ( $p=0.056$ ,  $F: 1.492$ ) and that a student's perception of how others perceive them is based on what they own ( $p=0.058$ ,  $F: 1.487$ ). This suggests that they are concerned about how others will perceive them and want to become someone whom others admire for owning expensive goods. As a result, they rely on their credit cards to achieve the desired perception. Many times these purchases are on goods that are impractical and above the students' means. This finding is significant, considering students are placing more emphasis on achieving a materialistic status than on what the product is actually costing them.

In relation to this, results indicated that students who felt their lives would be bettered by owning things they didn't already have, had a higher propensity to misuse their credit card ( $p=0.018$ ,  $F: 1.697$ ). Many students with this mindset were sometimes bothered by not being able to afford things that they like, resulting in their reliance on credit cards to fill the void ( $p=0.038$ ,  $F: 1.563$ ).

These two results reflect the root causes of credit card misuse in terms of materialism. As previously mentioned, Schroeder and Dugal (1995) found that materialists tend to experience high levels of social anxiety. With this in mind, Kasser and Ahuvia (2002) discovered an inverse relationship between

materialism and happiness and a positive relation in terms of materialism and one's anxiety level. Our results lend support to the notion that level of happiness is greatly affected by materialistic values, in turn causing students to abuse their credit cards. This abuse stems from the notion that they view their credit card as a quick way to purchase things they desire, yet can't afford. The problem intensifies when they overspend to narrow the gap between their actual and ideal selves, which results in high debt collection.

Often, this behavior of using credit cards to acquire goods you desire and can't afford is influenced by one's perception of their public self-image. As Doherty and Schlenker (1999) attest, materialism can often be a result of one's public self-image and those who are highly self-conscious in public are especially concerned about their social identities. Individuals fitting this criterion are highly self-conscious and are viewed with having low self-esteem and a strong desire for social recognition. Public self-consciousness driven people, much like materialistic people, often judge themselves and others on how much they own and on financial success. Sirgy (1998) claims that with materialists setting such unrealistic standard of living goals, they often never reach their desired level of happiness and fulfillment because the pursuit of goods becomes a continuous cycle. With this in mind, it was no surprise that we found a relationship between students abusing their credit cards and items on our materialism scale.

### **Risk Attitude of Students**

As theoretically posited, a positive and significant relationship was found for all three areas of the risk scale. Among risk seeking individuals we found a positive and significant relationship at the 0.004 level of significance ( $F: 1.959$ ) for students who have the mindset that taking risks makes sense when no acceptable alternatives are present being more likely to misuse their credit cards. Risk neutral respondents showed a positive and significant relationship ( $p=0.053$ ,  $F: 1.503$ ) that they

would be more likely to abuse their credit card. Further, findings suggested that there was a positive and significant relationship between materialistic values and risk attitude ( $p=0.010$ ). This would support the notion that a student who ranks high on materialism would have a greater propensity to assume and take on risk.

Past research has stated that our ability to perceive and assess risk can be influenced by our current mood in a particular purchase situation (Lin, Yen, and Chuang 2006). This relationship supports our argument and past research that one's "current mood" is affected by one's materialistic behavior, resulting in one's inability to perceive the risk of their decision at that moment in time. Our findings support the idea that the more materialistic one is, the harder it becomes for them to perceive the risk of using their credit card and consequently respondents take on more risk.

To investigate the impact of vendor strategies and promotions we performed an ANOVA of credit card misuse and approaches used by credit card vendors. Results indicated no significant impact between a student's credit card misuse and if there was credit card vendor contact. However, we ran a similar test using a student's ranking of the appropriateness that vendors give free gifts and if the student was influenced to sign up for a credit card based on the offering of a free gift. Results indicated at the .0001 level of significance ( $F:19.733$ ) that students who felt it was appropriate for credit card vendors to offer free gifts were more likely to be influenced by the offering of the gift to sign up for the credit card. This finding clearly indicates why credit card companies continue to offer promotional gifts to students- they are effective in converting prospects to customers.

#### **LIMITATIONS AND FUTURE RESEARCH**

Although our study expands marketing knowledge of the impact materialism, risk attitude and credit card vendors have on a student's credit card misuse, there are certainly cautions associated with our findings. First, our sample size is relatively small at 335 and may

not be generalizable across the country, although we do have 16 states represented in the sample. Also, our findings are in tune with the national Sallie Mae Studies (2009), which lend credibility to the robustness of our sampling.

This smaller sample may have resulted because we sent out surveys toward the end of August. We felt sending them out during this time frame would be ideal considering students would be arriving back at school. We failed to take into consideration that students would have a decreased amount of free time because of school work and interactions with friends they have been apart from since May.

The reader is cautioned that although our sample was relatively diverse with a variety of students from different states participating, one should still be cautious in generalizing our findings to all students at the national level. When we say diverse, we are speaking of the particular characteristics and backgrounds of each student. We cannot claim total diversity considering two-thirds of our sample was made up of females. We also must be aware of participants having the tendency to boast about themselves and providing us with inaccurate data. For example, almost 80 percent our sample reported having a GPA between 3.1 and 4.0. Although this could be entirely possible, it could well be an inflated response. This also relates to a participant's honesty in their credit card behavior and tendency to downplay a problem.

Future research should consider exploring the public self-consciousness aspect of materialism and how it relates to one's attitude toward risk. It would be interesting to explore if one's perception of their public image would result in them being risk seeking or risk averse. As discussed earlier, individuals who are highly concerned with their public image are viewed as having a low self-esteem and a strong desire for social recognition. These types of people, much like materialistic people, often judge themselves and others on how much they own and on financial success. Viewing this concept

at the collegiate level could help explain some of the risky behaviors college students take not just with credit cards but with life in general, in hopes of achieving their ideal selves.

In addition, it would be interesting to explore the effects of the new credit card regulation implemented in early 2009 via a longitudinal study. Comparing our current study to this new study would be beneficial to policy makers in identifying the effectiveness of the regulation while uncovering new tactics being taken by marketers to combat the regulation. As a precursor to our future research, we provide a brief description on how the new regulation affects college students and credit marketers.

President Obama signed the Credit Card Accountability Responsibility and Disclosure (Credit CARD) Act of 2009 with provisions that are expected to alleviate some of the main issues college students face with credit cards. Under the new Credit CARD Act, there are now specific criteria that an individual under the age of twenty one must meet to obtain a credit card. The regulation states that no individual under the age of twenty one will be allowed to obtain a credit card unless the individual submits an official application to the card issuer that contains specific information (Prater 2010). This application must include the signature of a co-signer age twenty one or older. The co-signer can be a parent, legal guardian, spouse, or anyone that has a means to repay the debt incurred by the primary cardholder. The co-signer will indicate joint liability for the debts by signing the application. If the application does not contain a co-signers signature, it must contain information indicating an independent means of repaying any credit extended (Prater 2010).

From a marketing perspective, no credit card issuer will be allowed to conduct pre-screened credit card offers to individuals under twenty one unless those individuals have consented to receive such offers. Second, credit card issuers are not allowed to present tangible gifts to individuals under 21 in exchange for filling out a credit application. These rules will

significantly impact the involvement and interaction between card issuers and young individuals under the age of twenty one (Hillebrand 2010).

In addition, the Credit CARD Act now regulates marketing contracts between colleges and credit card issuers. Colleges, universities, and alumni associations will now have to disclose any contracts that they sign with credit card issuers and include all details of the contracts. In conjunction, credit card companies will be required to file annual reports with the Federal Reserve Board that include all details and terms of promotional deals with colleges and universities. Congress is trying to limit the number of campus locations where credit card marketing takes place (Hillebrand 2010; Prater 2010). Creditors are not allowed to provide incentives to students on or near campus at all. In fact, creditors can't be within one thousand feet of a student campus if their marketing involves a tangible item giveaway.

### **CONCLUDING REMARKS**

Our study can have a significant impact on college students as well as on credit card companies to reevaluate their standards. In doing so, students will be able to see the core of the problems and be more aware of what is causing their financial debt to rise. Furthermore, our research can assist policy makers and school officials in assisting college students with this issue. Our study may influence legislative opinion on financial education in public schools, much like Epstein's DollarCamp Financial Survival System (Anonymous 2008).

Our research gives students a better perspective on how serious the issue is. It is imperative that students realize the severity of poor credit card management now so they can avoid hardships in the future. With the current financial crisis and instability of the economy, it is extremely important that our nation's youth exhibit responsible behavior with their credit cards. With new regulations being implemented to deter irresponsible behavior, our future research

should provide additional insight on the status of credit cards while assessing the effectiveness of the new credit card regulations.

Regardless of the new regulations, our study has shown that irresponsible behavior is influenced by the level of materialism students' exhibit as well as their attitude towards risk. Students need to learn how to become more responsible for their credit cards and evaluate themselves in terms of how materialistic they are and if their attitude toward risk influences their decisions to a large degree. This is not to say that these two factors are the only driving factors causing credit card misuse, but they certainly appear to be significant. With everyone in society feeling pressured to achieve a certain social status, it is likely that most people have some sort of materialistic value in which their actions are influenced by their assessment of risk. The essential concept, however, is that they learn to be accountable for their financial behavior and realize the implications of abusing their credit to fill a void that cannot truly be filled with material possessions.

## REFERENCES

- Acosta, Paul and R. Devasagayam (2009), "The Impact of Consumer Conformity on Brand Following: Preliminary Findings", Marketing Management Association Spring Conference, *Proceedings* (ed. Don Roy), March 2009, 292-297.
- Anonymous (2008), "The Student Money Expert Launches the DollarCamp Financial Survival System, the First-Ever Program to Teach High School and College Kids About Budgeting, Credit Cards and Credit Scores", *Business Wire*, June 10.
- Bdzola L, P.G. Clough, G.R.J. Hockey and A.J. Maule (2000), "Effects of Negative Mood States on Risk in Everyday Decision Making", *Cognition and Emotion*, 14, 823-855.
- Belk, Russell (1975), "Situational Variables and Consumer Behavior", *Journal of Consumer Research*, 157-174.
- Belk, Russell (1975), "Three Scales to Measure Constructs Related to Materialism: Reliability, Validity, and Relationships to Measures of Happiness", *Advances in Consumer Research*, 11, 291-297.
- Belk, Russell (1983), "Wordly Possessions: Issues and Criticisms", *Advances in Consumer Research*, 10, 514-519.
- Bredemeier, Harry C. and Toby Jackson (1960), *Social Problems in America: Costs and Casualties in an Acquisitive Society*, New York, Wiley.
- Calvert, Gene (1993), *Highwire Management*, Jossey-Bass, 41-46.
- Dorhety, K. and B.R. Schlenker (1991), "Self-Consciousness and Strategic Self-Presentation", *Journal of Personality*, 59, 1-18.
- Droge C. and R.D. Mackoy (1995), "The Consumption Culture Versus Environmentalism: Bridging Value Systems with Environmental Marketing", Edited by P. Kaufma P. Schildereller, *Marketing and Public Policy Conference*, Atlanta, GA, 227-232.
- Hammit, J.K. and J.D. Graham (1999), "Willingness to Pay for Health Protection: Inadequate Sensitivity to Probability", *Journal of Risk and Uncertainty*, 18(1), 33-62.
- Hillebrand, Gail (2010), "New Consumer Credit Card Protections", Consumers Union, [http://www.defendyourdollars.org/CC%20summary\\_1.25.2010.pdf](http://www.defendyourdollars.org/CC%20summary_1.25.2010.pdf) (accessed April 2, 2010).
- Hogarth, R.M. (2006), "Is Confidence in Decisions Related to Feedback? Evidence and Lack of Evidence from Random Samples of Real World Behavior", In K. Fiedler and P. Justin (Eds.), *In the Beginning There is a Sample: Information Sampling as a Key to Understand Adaptive Cognition*, Cambridge, UK, Cambridge University Press, 456-484.
- Greenburg, Anna (2008), "Young Americans: Living on the Financial Edge", <http://www.gqrr.com/index.php?ID=2217> (accessed August 4, 2008).

- Isen, A. M. and R. Patrick (1983), "The Effects of Positive Affect on Risk-Taking: When the Chips Are Down", *Organizational Behavior and Human Decision Processes*, 31, 194-202.
- Kasser, T. (2002), "The High Price of Materialism: Materialistic Values and Well-Being in Business Students", (MIT Press, Cambridge, Massachusetts), *European Journal of Social Psychology*, 32, 137-146.
- Kuvaas, B. and G. Kaufmann (2004) "Impact of Mood, Framing, and Need for Cognition and Decision Makers' Recall and Confidence", *Journal of Behavioral Decision Making*, 17, 59-74.
- Lutz, R.J. and P. Kakkar, "Toward a Taxonomy of Consumption Situations", In Edward M. Mazze (Ed.), *Marketing in Turbulent Times*, Chicago, IL, American Marketing Association, 206-210.
- M.P. Gardner and M. Vandersteel (1984), "The Consumer's Mood: An Important Situational Variable", *Advances in Consumer Research*, 525-529.
- Mae, Sallie (2009), "How Undergraduate Students Use Credit Cards: Sallie Mae's National Study of Usage Rates and Trends", <http://www.salliemae.com/NR/rdonlyres/0BD600F1-9377-46EA-AB1F-6061FC763246/10744/SLMCreditCardUsageStudy41309FINAL2.pdf> (accessed May 10, 2010).
- Manning, Robert D. (2000), *Credit Card Nation*, New York, Basic Books.
- Mateus Ponchio and Aranha Francisco (2008), "Materialism as a Predictor Variable of Low Income Consumer Behavior When Entering Into Installment Plan Agreements", *Journal of Consumer Behavior*, 7, 1, 21.
- McGuire, Kara (2008), "Pay Dirt: Don't Know Much About Finance; A New Survey Shows Minnesota's High School Seniors Are As Financially Illiterate as the Rest of the Nation's Teens. The Question is What We're Going To Do About It", *Star Tribune*, D.3.
- Miller, Kay (2000), "Credit Conundrum", *Minneapolis Star and Tribune* (August 9), E1, E7.
- Mittal, V and W.T.G Ross (1998), "The Impact of Positive and Negative Affect and Issue Framing on Issue Interpretation and Risk Taking", *Organizational Behavior and Human Decision Processes*, 76, 298-324.
- Mudd, Douglas A. (2007), "Plastic Cash: A History of Money and the Credit Card in America", *Credit Control*, 28(3), 48-49, 51-53.
- Pirog III, Stephen F. and James A. Roberts (2007), "Personality and Credit Card Misuse Among College Students: The Mediating Role of Impulsiveness", *Journal of Marketing Theory and Practice*, Winter 2007, 65-73.
- Poirier, John, and Jonathon Stempel (2009), "Consumer Loan Late Payments at 28-Year High", *Reuters.com*, <http://www.reuters.com/article/topNews/idUSTRE5064FF20090107>, (accessed June 27, 2009).
- Prater, Connie (2010), "What the New Credit Laws Mean for You", <http://www.creditcards.com/credit-card-news/help/what-the-new-credit-card-rules-mean-6000.php> (accessed April 3, 2010).
- Richins, Marsha L. and Scott Dawson (1992), "A Consumer Values Orientation for Materialism and its Measurement: Scale and Development and Validation", *Journal of Consumer Research*, Dec 1992, 303-314.
- Samuelson, Johnathon (2008), "A Darker Future For US", *Newsweek.com*, <http://www.newsweek.com/id166821/page/1> (accessed November 25, 2008).
- Schroeder, J. E. and S.S Dugal (1995), "Psychological Correlates of the Materialism Construct", *Journal of Social Behavior and Personality*, W, 243-253.
- Shin-Chieh Chuang, Chien-Huang and Rebeca HsiuJu Yen (2006), "The Effects of Emotion and Need for Cognition on Consumer Choice Involving Risk", *Marketing Letters* 17, 1, 47-60.
- Silver-Greenberg, Jessica and Ben Elgin (2009), "The College Credit-Card Hustle", *Business Week*, July 29, 38-42.
- Singletary, Michelle (2007), "Colleges Are in Cahoots with Credit Card Companies on Campus", *Boston Globe*, C.4.

- Sirgy, J.M. (1998), "Materialism and Quality of Life", *Social Indicators Research.*, 43, 227-260.
- Slovic, P., B. Fischhoff and S. Lichtenstein (1979), *Rating the Risk Environment*, 21(3), 14-20.
- Solberg, E. G., E. Diener and M.D. Robinson (2004), "Why Are Materialists Less Satisfied?" In T. Kasser and A. D. Kanner (Eds.), *Psychology and Consumer Culture: The Struggle for a Good Life in a Materialistic World*, Washington, DC, American Psychological Association, 29-48.
- Stempel, Jonathon (2008), "Credit Card Weakness a Vicious Cycle for Lenders," *Reuters.com*, <http://www.reuters.com/article/reutersEdge/idUSTRE4AI5YG20081119?pageNumber=1&virtualBrandChannel=0> (accessed November 25, 2008).
- Tokunga, Howard (1993), "The Use and Abuse of Consumer Credit: Applications of Psychological Theory and Research", *Journal of Economic Psychology*, 14 June, 285-316.
- Tunnell, G. (1984), "The Discrepancy Between Private and Public Selves: Public Self-Consciousness and its Correlates", *Journal of Personality Assessment*, 48 No.5, 549-555.
- Weinberg, P., and W. Gottwald (1982), "Impulsive Consumer Buying as a Result of Emotion", *Journal of Business Research*, 10, 43-57.
- Weiss, Michael J. (2003), "To Be About to Be", *American Demographics*, 25 (7), 28-36.
- Westbrook, R. A. (1980), "Intrapersonal Affective Influences Upon Consumer Satisfaction with Products", *Journal of Consumer Research*, 7, 49-54.
- Xu, Yingjiao (2008), "The Influence of Public Self-Consciousness and Materialism on Young Consumers Compulsive Buying", *Young Consumers*, 9(1), 37-48.

## WHY CUSTOMERS DO NOT COMPLETE ONLINE TRANSACTIONS: THE MISSING LINK

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*The purpose of this study is to investigate the stages of online business that motivate customers to complete online transactions. By using the Technology Acceptance theory, the online business-transaction model is proposed and tested. The results of our survey of Canadian firms validate the four-stage causal model—Perception, Interpretation, Value Assessment, and Transaction stages. Given the international scope of online business, identification of the stages is important for both scholars and managers, because relatively few customers who visit websites complete transactions, suggesting that at some stage the customer abandons the website. By assessing the stages of their online businesses, managers can determine which stage is most worthy of attention in order to encourage customers to complete online transactions. Managers who understand the stages can attract new customers and serve existing customers more effectively.*

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### ONLINE CUSTOMER

In the past, aspects of international business in an online environment such as the comparison and growth of e-business among countries (Fey, Koning and Delios 2006; Zhao 2002), ordering (Boyer and Hult 2005), buying or browsing (Brown et al. 2003), retailing (Mukherjee and Nath 2007), consumer ethics (Chatzidakis and Mitussis 2007), teens' online behaviour (Moskowitz, Itty and Jeffrey 2003), and the globalization and localization of online contents (Tixier 2005) have been examined extensively. Although these studies have provided international managers with insight into the predictors of consumer behaviour, research has not yet focused on what motivates customers to complete online transactions. One of the reasons for not completing online transactions is the ability of customers to switch to another website and abandon their e-carts. This may suggest that at some stage during their shopping experience, customers seek more information from other sources. To identify these stages, research is needed to illustrate a more accurate representation of how customers go through the stages before they complete

transactions. This is important, because any online business, by default, is an international business. Further, we need to examine online business from the firm's perspective, as only the businesses have an accurate assessment of customers' termination of purchases and their departure from the websites. In order to fill in the gaps, the objectives of this study are to (1) identify the key variables of online business and transaction from a theoretical background, (2) determine the stages of online business, (3) discover the variables that differentiate the stages from one another, (4) determine the causal links associated with the stages leading up to transactions, and finally (5) validate the proposed model.

Theoretically, past research indicates that several factors can contribute to achieving the aforementioned objectives (Burke 2002; Davis 1989). However, our conceptualisation of the identification of the stages of online business is based on the technology acceptance model (TAM) (Davis 1989), which has been replicated (Adams, Nelson and Todd 1992) and found to be valid (Davis 1993). The TAM is represented by two factors—*perceived ease of use* and *perceived usefulness*. Consistent with the model and taking the perspective of the firm, we define *perceived ease of use* as the firm's ability to provide user-friendly websites,

whereas *perceived usefulness* is the firm's ability to create the usefulness of online purchases. We explain the factors in detail in the subsequent sections.

This study makes two contributions to business literature. First, theoretically, we identify the key underlying variables and test them empirically to discover the underlying stages of online business. Second, methodologically, we test the applicability of the TAM from the firm's perspective. By assessing the stages of online business, managers can determine which stage is most worthy of attention in order to encourage customers to complete online transactions. Managers who understand these stages can attract new customers and serve existing customers more effectively. For example, once they discover the stage beyond which customers have problems proceeding, managers can direct customers at that point to sales associates for live assistance.

First, we provide a brief synthesis of the behavioural theory. Second, we report the results of factor analysis designed to assess the stages of online business. Third, we discuss the findings. Finally, we present recommendations for managers, followed by our conclusions and the contribution, limitations, and directions for future research.

## THEORETICAL BACKGROUND

### The Theory of Planned Behaviour (TPB) Versus the Technology Acceptance Model (TAM)—The Competing Models

A review of the literature reveals diverse relationships to online business. For example, some studies have focused on the adoption of technology in general by firms (Porra 2000) and on the diffusion of technology across companies (Norton and Bass 1992), whereas others have tested the impact of the Internet on business-to-business marketing (Avionities and Karayanni 2000) and on conversion efficiency (Berthon et al. 1996). However, within the literature on technology use, the theory of reasoned action (TRA) (Fishbien and Ajzen

1975) has been used successfully to identify key elements of consumer decision-making (Taylor and Todd 1995) and to explain virtually any human behaviour (Ajzen and Fishbien 1980) across a number of disciplines. The TRA posits that behaviour is determined by an individual's intention to perform the behaviour and that the intention is influenced by attitudes and subjective norms (Ajzen and Fishbien 1980). Following the success of this theory, it has been further refined to enhance its predictive nature about behaviour. Two such related but competing theories are the theory of planned behaviour (TPB) and the technology acceptance model. The TPB predicts an individual's behaviour across many social and psychological settings and can be applied to Internet shopping (Brown and Venkatesh 2005; Chau and Hu 2002; Chau and Hu 2001; Venkatesh and Brown 2001), whereas the TAM predicts an individual's intention to use an information system and can be modified to predict a consumer's intention to use Internet technology for product purchasing (Davis 1989; 1993). We draw on the TAM (Davis 1989) to market products or services in an online environment. This model is particularly applicable in explaining behaviour by identifying a small number of fundamental variables and by modelling the theoretical relationship among these variables (Davis 1989). Researchers have replicated the model (Adams, Nelson and Todd 1992) and extended it to examine users' acceptance (Moore and Benbasat 1991; Taylor and Todd 1995). However, in this study, we not only extend the applicability of the model by examining consumers' acceptance of it, but also use managers of firms as respondents. This model has received significant support in the literature and has two broad factors: *perceived ease of use* and *perceived usefulness*.

### Application of the Technology Acceptance Model (TAM)

To achieve the objectives of this study, we utilized the above-mentioned factors to generate twelve key variables within the TAM framework (Davis 1989, p. 331), as they are



likely predictors of the stages of online business. The Ease of Use (E) factor has six variables: Easy to learn (E1), Controllable (E2), Clear and understandable (E3), Flexible (E4), Easy to become skilful (E5), and Easy to use (E6). The Usefulness (U) factor also has six variables: Work more quickly (U1), Job performance (U2), Increase productivity (U3), Effectiveness (U4), Makes job easier (U5), and Usefulness (U6). Although these variables were derived from the theory, they had to be refined. To do so, we followed the guidelines developed by Churchill (1979) and (DeVellis 1991) and asked the managers (more details in the Methodology section) to (1) comment on the variables for their relevance, clarity, and conciseness and (2) relate the variables to the operation of their websites that could tap into the domain of online business. As a result of this process, we generated twelve modified variables that corresponded to the original twelve variables taken from the TAM theory: E1—be able to do transaction and feel comfortable with the process, i.e., easy to learn; E2—customisation of order, i.e., controllable; E3—clear understanding of the security features of websites, i.e., clear and understandable; E4—flexible return policy and warranty, i.e., flexible; E5—easy to become skilful at navigating websites, i.e., easy to become skilful; E6—easy to trust websites and thus easy to use, i.e., easy to use; U1—quick loading websites, i.e., work more quickly; U2—seamless transaction performance, i.e., job performance; U3—tracking orders for increased productivity, i.e., increase productivity; U4—effective interactivity, i.e., effectiveness; U5—comparative marketing strategy for making transaction easier, i.e., makes job easier; and U6—useful value-added opportunities, i.e., usefulness. In the next section, we define the variables.

(1/E1) *Transaction* relates to the buyer's intention to engage in online exchange relationships with the community of sellers (Gefen, Karahanna and Detmar 2003). (2/E2) *Customisation of order* refers to the firm's ability to develop, manage, and deliver value-added products. (3/E3) *Security features* relate

to the firm's ability to make customers understand the security features of their websites. (4/E4) *Return policies and warranty* refer to the extent to which the firms are flexible in their return policies and warranties, such as a full refund or replacement. (5/E5) *Website navigation* relates to the firm's ability to provide websites that are easy to navigate and that deliver the desired information. (6/E6) *Easy to trust website* refers to the firm's ability to create trustworthy websites. (7/U1) *Quick loading website* refers to the firm's ability to use speed optimization techniques for the quick loading of websites, without having customers wait excessively for the desired information. (8/U2) *Seamless transaction performance* refers to the extent to which firms seamlessly use third-party structures to facilitate transactions and to foster trust. (9/U3) *Tracking orders for increased productivity* refers to the extent to which the firms are able to integrate a management information system with order entry applications, real time inventory databases, and shipping systems. (10/U4) *Effective interactivity* refers to the amount and quality of two-way communication between two parties. (11/U5) *Comparative marketing strategy making transaction easier* refers to the firm's ability to present comparisons of products based upon certain criteria. (12/U6) *Useful value-added opportunities* refer to the firm's ability to create value by informing the customers of the benefits of the online purchases.

## METHODOLOGY

### Questionnaire Development

These modified twelve variables formed the basis for the questionnaire development. To ensure clarity and content validity, as suggested by Churchill (1979), these variables were pre-tested on 30 international business managers (15 each from manufacturing and service sectors) who were engaged in online business. Their feedback was incorporated into the statements presented in the e-questionnaire (Appendix). Managers were the unit of analysis, as they had intimate knowledge about

both the online consumer behaviour and the acceptance of the technology in the context of online business. This knowledge is useful for the managers as they have access to real time information about customers' activities such as how long they stayed on the website, where they came from, and how often they did not complete transactions. Clearly, managers can use this information to predict consumer behaviour and to adjust their business strategy. The relationship between consumer behaviour and online business exists and thus is extensively used (e.g., airline industry, hotel industry) for adjusting price in response to demand.

### Data Collection

To collect data, a link to the e-questionnaire (Appendix) containing the twelve items was sent via e-mail to 4,000 managers selected randomly from the bluebook database of Canadian firms. Access to the online forms was password restricted in an attempt to ensure that only appropriate individuals answered the questions. To increase the response rate, we kept the questionnaire as short as possible. Managers responded to the questionnaire by selecting a number on a seven-point scale (1=strongly disagree, 7=strongly agree). Subjective measures of performance are frequently used in marketing research and have been found to be both reliable and valid (Dess and Robinson 1984).

To ensure anonymity, details such as contact information and Internet Protocol (IP) addresses were not kept. Dillman's (1999) principles of a tailored design method for survey data collection were followed; that is, initial contact with follow-up reminders, a small incentive for completing the survey (we promised a copy of results of the survey if they gave us contact information), and the promise of anonymity in survey responses. A second wave of e-mails was sent two weeks later. Of the 4,000 firms contacted, 324 firms declined to participate in the survey, as they did not have the time to complete the questionnaires, and

217 e-mails were undelivered, leaving an effective sampling frame of 3,459 firms.

### Response Rate and Non-response Bias

A total of 892 questionnaires were obtained, of which 131 were incomplete, and 49 had outliers, leaving an effective sample size of 712. The overall usable response rates from first and second e-mails were 13 percent (450/3459) and 9 percent (262/3459) respectively, the total response rate being about 21 percent (712/3459). The high response rate indicates the timeliness and relevance of the study. To assess non-response bias, the last-wave method was used (Filion 1975). This method projects the trend in responses across the two waves and assumes that the non-respondents are like the last respondents in the second wave. A Chi-square test indicated no significant differences between the first- and second-wave respondents ( $\chi^2=0.84$ ,  $p>.05$ ) across firm size or turnover of firms, suggesting a non-significant non-response bias.

### Sample Characteristics

One limitation of survey-based data is whether or not it represents the population. However, the distribution of firms in the sample—which broadly corresponds to the database's population on such parameters as firm size, number of employees, and turnover of firms—suggests that it is representative of the population. The sample broadly consisted of 36 percent of firms that manufacture products, 48 percent of firms that provide services, and 16 percent "other". Firms having a turnover of less than \$100 million, between \$100 million and \$200 million, and more than \$200 million provided 38 percent, 41 percent, and 21 percent of the sample, respectively. Firms with less than 100 employees, between 100 and 500 employees, and more than 500 employees represented 41 percent, 46 percent, and 13 percent of the sample, respectively. Questionnaires completed by senior, middle, and lower marketing management were 22 percent, 71 percent, and 7 percent, respectively.

## ANALYSES AND RESULTS

## Factor Analysis

Following procedures recommended by Churchill (1979), we divided the sample into two parts, namely, training and validation sample. Thus, to achieve the second and third objectives of the study, an exploratory factor analysis was used. The KMO (Kaiser-Meyer-Olkin) test indicated a score of .71, suggesting the suitability of the data for the analysis. The analysis extracted four factors. Table 1 reports statistical details of the factor analysis. To cross-validate the stages, we ran a confirmatory factor analysis on the four factors that arose from exploratory factor analysis on the validation sample. The CFA resulted in good fit, with GFI, AGFI, and CFI above the recommended 0.90 level (Hair et al., 2006), thus confirming the four factor structure proffered in this study.

Further, CFA was also performed on training sample. The chi-square difference test was employed to examine difference between factor

structure obtained with training and validation sample. The results of chi-square difference test indicated no significant differences between both sets of data ( $\chi^2=0.85$ ,  $p>0.05$ ) across the factors, suggesting the stability and validity of the data. Also, we did not find any significant difference between manufacturing and service sectors across the stages (Chi-square  $\chi^2=0.79$ ,  $p>0.05$ ). Overall, four factor structure was cross-validation and we labelled the four factors as the Perception, Interpretation, Value Assessment, and Transaction Stages of online business.

## Perception Stage

The Perception stage relates to the firm's ability to create a positive perception by providing *security features*, *trustworthy websites*, and *effective interactivity*. One way to create a positive perception is by outlining security features and providing privacy policies: for example, the display of the VeriSign client software that establishes a secure link with the VeriSign processing server using an SSL connection to transmit encrypted transaction

TABLE 1  
Factor Analysis: Extended TAM Model (Davis 1989)

Factor Matrix, Varimax Rotation (For clarity, factor loadings less than .4 have not been reported.)

Item no.	Mean/s.d.	Perception	Interpretation	Value-assessment	Transaction
3 Security features	5.2/.87	<b>.76</b>			
6 Easy to trust websites	6.1/.91	<b>.71</b>			
10 Effective interactivity	5.3/.87	<b>.65</b>			
5 Easy to navigate websites	5.9/.97		<b>.81</b>		
11 Comparative marketing	5.2/1.01		<b>.79</b>		
4 Flexible return policies	4.3/.86		<b>.74</b>		
12 Value-added opportunities	5.5/.65			<b>.73</b>	
7 Quick-loading website	5.2/.87			<b>.71</b>	
2 Customisation of orders	4.7/.78			<b>.65</b>	
1 Easy transactions	5.2/.65				<b>.77</b>
8 Seamless transaction	5.1/.94				<b>.69</b>
9 Ability to track orders	4.6/1.01				<b>.64</b>
Eigen value	6.08	5.60	4.67	4.13	
Variance percent	13.45	12.38	10.31	9.13	
Cronbach's a	.73	.77	.74	.71	
Standard a	.71	.74	.71	.70	
No of items	3	3	3	3	

NB: The variables were measured on a seven-point scale (1=strongly disagree, 7=strongly agree).

requests. Further, displaying the privacy seals provided by TRUSTe and BBBOnline establishes the perception that the firm collects information according to the stated privacy policy. Operators of the third-party seal programs advocate a set of standards that concern customers, such as privacy, security, and reliability (Cook and Wenhong 2003). When firms follow these standards, the seal—a visible fixture on the website—appears to foster trust. Although the display of privacy seals is common, it can be misleading to some customers. A majority of consumers inaccurately perceive a website's privacy policy as an indication that the website does not collect or share their personal information (Rifon, LaRose and Choi 2005).

### **Interpretation Stage**

The Interpretation stage is about the firm's ability to persuade customers to interpret the contents of websites correctly by providing easy-to-navigate websites, benchmarks for product comparisons, and flexible return policies and warranties. To be interpreted correctly, it is important that the website displays error-free text, images, pictures, and easy-to-navigate tools. Customers may interpret professional-looking websites as being the equivalent of neat and clean physical stores, and thus may perceive such websites as being able to provide exceptional services. On the contrary, poor spelling, grammar, and syntax create doubts about the firm's identity and thus impede trust (Koehn 2003). Because the customers cannot look for sales associates, size up the physical space of a store, or touch the products, they have to rely on images and promises (Gefen and Detmar 2004). If customers do not trust the firm's images and promises, they will shop elsewhere (Reichheld and Schefter 2000). In fact, trustworthiness promotes both intention to buy and actual financial risk taking (Büttner and Göritz 2008).

### **Value Assessment Stage**

The Value Assessment stage refers to the firm's ability to add value to products, create quick-

downloading websites, and customize orders. Adding value to products through the concept of value-based pricing seems most appropriate for this stage. This concept sets a target price based on a customer's perceptions of the product value and its quality. Because consumers seek appropriate and optimal information to aid their consumption process, increased ability of the quick loading website that adapts to consumer's interest, searches, and past purchases can augment overall value of consumption (Pollard, Chuo and Lee 2008). Quite accurately, Jack Welch (1999), the CEO of General Electric said: "The value decade is upon us. If you cannot sell a top-quality product at the world's best price, you are going to be out of the game.... The best way to hold your customers is to constantly figure out how to give them more for less." Clearly, this stage assists customers with maximizing the value of their purchases.

### **Transaction Stage**

The Transaction stage relates to the firm's ability to let customers become skilful at transactions, provide seamless transaction performance, and track orders for increased productivity. Of particular note is the importance of saving the order in case the customer decides to return to it later; this back-and-forth mechanism should be seamless. For time-constrained and confident customers, express transactions (where firms keep personal information on a secure database) are particularly important. Furthermore, reminding customers about privacy protection and Internet security reinforces their confidence in conducting online transactions. Finally, being able to track the progress of orders and the rapid delivery of goods is likely to maximize the value of purchases (e.g., amazon.com and fedex.com).

### **Common Method Bias, Reliability, and Validity**

We employed a statistical check for common-method bias using the Harman's one-factor method (Podsakoff and Dennis 1986). The fact

that the variance (45.27 percent) explained in the four factors is relatively balanced (with 13.45 percent, 12.38 percent, 10.31 percent, and 9.13 percent, respectively) suggests that common method bias was not a serious problem. To test for the reliability of the factors, an internal consistency analysis was performed (Churchill and Peter 1984). Table 1 reports the scores of  $\alpha$  and standard  $\alpha$  for the *Perception* (.73/.71), *Interpretation* (.77/.74), *Value Assessment* (.74/.71), and *Transaction* (.71/.70) factors. That the values of standard  $\alpha$  are close to  $\alpha$  lends further credence to the reliability of the research. The Cronbach's  $\alpha$  coefficient scores for the stages are above the recommendation (.70) for the scale to be reliable (Nunnally 1964).

### Theoretical Background for the Causality Between the Stages

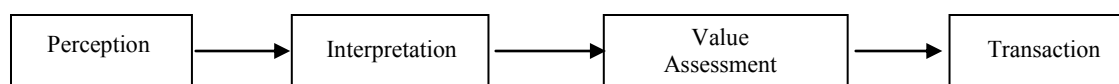
To achieve the fourth objective, we offer the following theory. Consistent with the Quelch and Klein (1996) model of evolutionary paths of a website—from information to transaction—for multinational corporations, we conceptualised (Figure 1) the following causality between the four factors—*Perception*, *Interpretation*, *Value Assessment*, and *Transaction*, and regarded each factor as a stage of marketing. Because we adapted the variables from the TAM (Davis 1989) to make them compatible with firm's perspective, it contributed to the stages. For the purpose of the study, we define a stage as a specific, identifiable position through a combination of variables in a continuum of online business. Clearly, the aforementioned stages are more relevant in online business than in offline business, because of the lack of physical

presence of the products and, thus, their actual performance. As a result, firms and their products need to be perceived, interpreted, and correctly assessed before transactions can take place. Although there is a risk of oversimplification in using such stages, using them serves the conventional purpose of highlighting distinct aspects of different factors and facilitates the discussion of results. Further, making linkages between these stages provides a systematic approach to identifying variables that differ between the stages and provides opportunities for managerial action.

### Tests for the Reliability and Validity of the Stages

Using the procedure suggested by Anderson and Gerbing (1988), the unidimensionality, convergent validity, and discriminant validity of the stages were assessed. The composite reliability coefficients for all the stages were supported, as they were well above the usual guidelines of .60 (Bagozzi and Yi 1988). Further, the structural parameter estimates varied little when the method factor was incorporated into the analysis, suggesting reliability of the stages. The good model fit and the significant high factor loadings in Table 2 support the unidimensionality and convergent validity of the stages (Anderson and Gerbing 1988). Table 3 suggests the discriminant validity of the stages as all the correlations were significantly below one ( $p < .001$ ) (Anderson and Gerbing 1988). Further, discriminant validity was found for the pairs of stages by comparing the average variance extracted for each stage to the square of the correlation between each pair of stages (Fornell and Larcker 1981).

**FIGURE 1:**  
**Causal Link Between the Stages**



## Results

After establishing the reliability and validity of the stages, the purified stages were estimated simultaneously in a multifactor model using AMOS 4.0. Each item was restricted to load on its priori factor, and the factors themselves were allowed to correlate (Anderson and Gerbing 1988). The overall model fit ( $c^2(143) = 231.56$  ( $p < .05$ ), GFI=.97, AGFI=.95, NFI=.96, RMSEA=.03, NNFI=.95, TLI=.97) suggests that measurement relationships are consistent with data (Table 2). Next, having determined the latent stages, the full structural model shown in Figure 1 was estimated and evaluated. Overall and component fit measures were used to judge the simultaneous fit of the measurement and structural model to the data collected for the study.

To check if the hypothesized model fits better than other competing models, we conceptualised an alternative model and estimated its parameters. This competing model specifies the reverse causal direction between perception and interpretation, because it could be argued that interpretation leads to perception. The fit of the model ( $c^2(15) = 14.21$  ( $p < .05$ ), Goodness of Fit Index (GFI) = .67, Adjusted Goodness of Fit Index (AGFI) = .66, Normed Fit Index (NFI) = .61, Root mean square of error of approximation (RMSEA) = .07, Non-normed Fit Index (NNFI) = .54, and the Tucker Lewis Index (TLI) = .763) are significantly weaker than our hypothesized theoretical model. Given that the two models have the same degree of freedom, a direct comparison in  $c^2$  statistics reveals that the competing model is 60 percent weaker than the theoretical model.

**TABLE 2**  
**Confirmatory Factor Analysis**

Variables (mean/s.d.)		Factor loading (std.)	t-value	Correlations		
<b>Perception</b> (Composite ratio = .92, Variance = 13.45 percent, $\alpha = .73$ , standard $\alpha = .71$ )				X1	X2	X3
3	Security features (5.2/.87) (X1)	.73	10.43	1.00		
4	Easy to trust websites (6.1/.91) (X2)	.78	12.21	.34	1.00	
1	10 Effective interactivity (5.3/.87) (X3)	.71	11.36	.28	.31	1.00
<b>Interpretation</b> (Composite ratio = .82, Variance = 12.38 percent, $\alpha = .77$ , standard $\alpha = .74$ )				Y1	Y2	Y3
5	Easy to navigate websites (5.9/.97) (Y1)	.79	11.34	1.00		
11	Comparative marketing (5.2/1.01) (Y2)	.83	13.86	.27	1.00	
4	Flexible return policies (4.3/.86) (Y3)	.77	10.73	.29	.27	1.00
<b>Value-assessment</b> (Composite ratio = .83, Variance = 10.31 percent, $\alpha = .74$ , standard $\alpha = .71$ )				Y4	Y5	Y6
12	Value-added opportunities (5.5/.65) (Y4)	.73	10.41	1.00		
13	7 Quick-loading website (5.2/.87) (Y5)	.76	11.56	.32	1.00	
2	Customisation of orders (4.7/.78) (Y6)	.85	14.25	.26	.24	1.00
<b>Transaction</b> (Composite ratio = .91, Variance = 9.13 percent, $\alpha = .71$ , standard $\alpha = .70$ )				Y7	Y8	Y9
1	Easy transactions (5.2/.65) (Y7)	.78	11.32	1.00		
8	Seamless transaction (5.1/.94) (Y8)	.83	14.56	.23	1.00	
9	Ability to track orders (4.6/1.01) (Y9)	.79	13.25	.32	.27	1.00

### Model Fit Indices

$c^2(143) = 231.56$  ( $p < .05$ ), GFI=.97, AGFI=.95, NFI=.96, RMSEA=.03, NNFI=.95, TLI=.97

Note: All the correlations are significant at .05 level.

**TABLE 3**  
**Correlations and Descriptive Statistics of Variables**

Variables	PER	INT	VAL	TXN
Perception (PER)	1.00			
Interpretation (INT)	.24*	1.00		
Value assessment (VAL)	.32*	.28*	1.00	
Transaction (TXN)	.26*	.31*	.24*	1.00
Factor mean	5.53	5.13	5.14	4.96
Standard Deviation	1.03	.98	1.01	1.08

\*  $p < .05$

**TABLE 4**  
**Main Effects**

Variables	Unstandardized Structural Coefficients (Standard errors)	
PER $\rightarrow$ INT	.36(.06) **	R <sup>2</sup> =.54
INT $\rightarrow$ VAL	.29 (.05) *	R <sup>2</sup> =.38
VAL $\rightarrow$ TXN	.34 (.08) **	R <sup>2</sup> =.32

#### Model Fit Indices

$\chi^2$  (115)=135.21 ( $p < .05$ ), GFI=.97, AGFI=.96, NFI=.95, RMSEA=.04, NNFI=.96, TLI=.97

GFI=Goodness of Fit Index, AGFI=Adjusted Goodness of Fit Index, NFI=Normed Fit Index, RMSEA=Root mean square of error of approximation, NNFI= Non-normed Fit Index, TLI=Tucker Lewis Index

\*  $p < .05$ , \*\*  $p < .001$

Table 4 reports the standardized structural coefficients and goodness of fit statistics ( $\chi^2$  (115)=135.21 ( $p < .05$ ), GFI=.97, AGFI=.96, NFI=.95, RMSEA=.04, NNFI=.96, TLI=.97) for the theoretical model and suggests that perception is significantly positively ( $b=.36$ ,  $p < .01$ ) related to interpretation, that interpretation is significantly positively ( $b=.29$ ,  $p < .05$ ) related to value assessment, and that value assessment is significantly positively ( $b=.34$ ,  $p < .01$ ) related to transactions. Though it is parsimonious in terms of the number of predictors, the model explains 54 percent, 38 percent, and 32 percent of the variances in interpretation, value assessment, and transaction, respectively. The proposed causality in Figure 1 is supported.

#### THEORETICAL AND MANAGERIAL CONTRIBUTION

The purpose of the study was to identify the key variables of online business and determine the stages that contribute to the completion of online transactions. Overall, the study makes two contributions to the extant literature. From the theoretical viewpoint, the first contribution is the identification of the stages of online consumption process. In other words, following Churchill (1979) scale development procedure, we have proffered psychometrically purified measures for four stages in online consumption process. Items generated for measurement of four stages were guided by strong theoretical framework (i.e., TAMS) and further the items were submitted to a rigorous refinement processes. Four stages that were

conceptualized, theorized, and empirically validated in this study are—Perception (which relates to security features, trust, and interactivity), Interpretation (easy to navigate websites, benchmarks for product comparisons, and flexible return policies and warranties), Value Assessment (value addition, quick-downloading websites, customization of orders), and Transaction (ease of transactions, seamless transactions, and tracking of orders). The results of this study concur with model proposed by Quelch and Klein (1996) and extend the technology acceptance model promulgated by Davis (1989).

The second theoretical contribution is the operationalization of the variables of the technology acceptance model from the perspective of the firm. The advantage of this perspective is that managers can use the variables to determine their present stage and audit the variables that need attention. To do so, a target can be set to achieve a higher score within a certain timeframe on those variables that need improvement. The target is essentially a benchmark, which can be set by listening to focus groups within the firm with members drawn from various departments. Drawing members from various departments gives rise to market orientation, an approach that leads to superior business performance (Kohli and Jaworski 1990; Narver and Slater 1990). The differences between the scores on the variables in question and the scores on the benchmarked variables will determine the extent to which firms are successful in online business. Figure 2 graphically shows the relationship between online business and online transaction. Given the importance of the Internet and an international scope, the four-stage model for online business is useful for both scholars and managers.

### Implications

We recommend that managers ensure that customers understand what the privacy seal represents and what it entails, so that they do not feel betrayed if the seal is misinterpreted. To do so, managers can create a short legal

document written in plain language as a point-form version of these policies. This allows customers to have peace of mind, trust the website, and have a positive shopping experience. To enhance the experience and to receive complaints or comments, the managers should create opportunities for customers to interact with the staff via e-mail, live chat, and toll-free customer service telephone lines. The inclusion of a virtual salesperson makes the customers feel like they are shopping at a physical store, particularly if they are being assisted in the decision-making process. In fact, site design and interactivity were found to be important factors for apparel and clothing accessories websites (Kim and Kim 2004).

Perception leads to interpretation. To help customers interpret, we recommend that managers draw comparisons among similar products on several product specifications (price, size, etc.) while creating a benchmark, such as an average of the specifications among the top-selling brands. These comparisons assist customers in making correct interpretations of the product features. Thus, customers can apply their own evaluative rules in order to minimize the anxiety of post-purchase doubts and maximize the value of their purchases. In order to minimize such doubts, managers can also develop a flexible return policy and warranty, as this strategy not only reduces the perceived risk associated with purchases, but also serves as a strong indicator of product quality. Clearly, after-delivery satisfaction has a strong influence on overall customer satisfaction (Jiang and Rosenbloom 2005).

Satisfaction is related to the value offered by the products. To create value, we recommend that managers offer just the right combination of quality service with a good product at a fair price. For example, Wal-Mart has every-day-low-price products on its e-commerce site; and expedia.com has special offers in terms of holiday package and low price fares; and amazon.com has special offers on price and shipments for its customers. Further, to add value, firms must shift from the old world of mass production—where standardized products,



homogeneous markets, and long product lifecycles were the rule—to the new business world, where variety and customisation of products and services have become the norm. Customization allows customers to obtain somewhat unique products and services; thus gratifying their need for uniqueness and, in turn augmenting the perceive value of consumption (Tian, Beardon and Hunter 2001). The objective of customisation can be achieved through the improved efficiencies offered by technology. For instance, Dell Computers has become a market leader by exercising the build-to-order capability, thus differentiating itself from its competitors in the computer manufacturing industry. Furthermore, Apple allows customers to not only customize products but offer customer with an option of laser inscribing their purchases with names, slogans, etc. Clearly, if customers see the value in online purchases, they will proceed to the transaction stage.

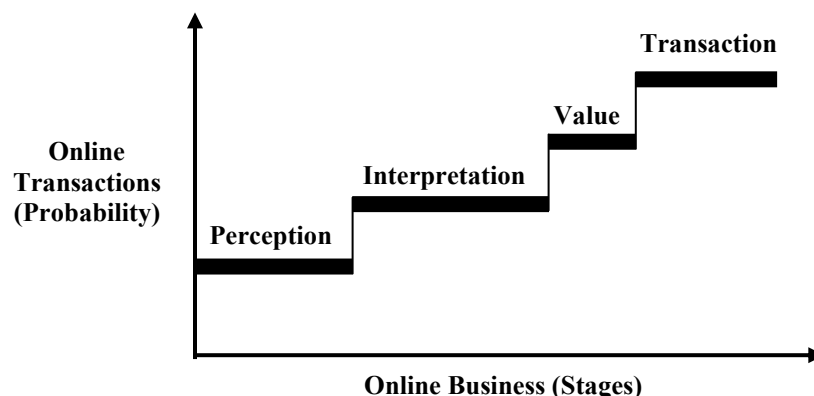
Finally, managers should be cognizant of the fact that this stage involves a post-purchase evaluation of the online shopping experience through the quality of goods or services received. If the item was received as described, a relationship can be established through the formation of trust. This trust, in turn, leads to future transactions. For example, *eBay* capitalizes on the method of buyer feedback. A seller who continually provides bad customer

service will soon get a low feedback score and will subsequently no longer have the trust of any *eBay* shoppers (Koehn 2003). Furthermore, word-of-mouth communication spreads quickly in an online community because of the feedback mechanisms and externally linked websites. Therefore, the transaction stage is crucial, as it has direct impact on the firm's financial performance.

### LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The four-stage model is validated using a Canadian sample. It is therefore recommended that, in future studies, scholars use different samples from different countries to test the universality of the model. Although we expect the model to be theoretically robust universally, culture may impact online consumer behaviour. Second, future studies may attempt to parcel the impact of each stage on business performance. Third, this study examined the model from the perspective of the firm only, whereas prior studies have mainly examined it from the perspective of the consumer. Another logical line of investigation would be to use a dyadic approach to test the model using both perspectives. Finally, future research may examine the intervening effect of branding on the online consumption behaviour across four stages promulgated in this study.

**FIGURE 2**  
**The Causal Relationship Between Online Business and Online Transactions**



## REFERENCES

- Adams, Dennis A., R. Ryan Nelson and Peter A. Todd (1992), "Perceived Usefulness, Ease of Use, and Usages of Information Technology: A replication", *MIS Quarterly*, Vol. 16, 2, pp. 227-247.
- Ajzen, Icek (1991), "The Theory of Planned Behaviour", *Organizational Behaviour and Human Decision Processes*, Vol. 50, 2, pp. 179-211.
- Ajzen, Icek. and Martin Fishbein (1980), *Understanding Attitudes and Predicting Behaviour*, New Jersey, Prentice Hall.
- Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modelling in Practice: A Review and Recommended Two-step Approach", *Psychological Bulletin*, Vol. 103, 3, pp. 411-423.
- Avionities, George J. and Despina A. Karayanni (2000), "The Impact of Internet Use on Business-to-Business Marketing", *Industrial Marketing Management*, Vol. 29, 5, pp. 441-459.
- Bagozzi, Richard P. and Youjae Yi (1988), "On the Evaluation of Structural Equation Models", *Journal of the Academy of Marketing Science*, Vol. 16, 1, pp. 74-94.
- Berthon, Pierre, Leyland F. Pitt, and Richard T. Watson (1996), "The Worldwide Web as an Advertising Medium: Toward an Understanding of Conversion Efficiency", *Journal of Advertising Research*, Vol. 36, 1, pp. 43-65.
- Boyer, Kenneth K., and G. Tomas M. Hult (2005), "Customer Behaviour in an Online Ordering Application: A Decision Scoring Model", *Decision Science*, Vol. 36, 4, pp. 569-597.
- Brown, Mark, Nigel Pope and Kevin Voges (2003), "Buying or Browsing? An Exploration of Shopping Orientations and Online Purchase Intention", *European Journal of Marketing*, Vol. 37, 11/12, pp. 1666-1684.
- Brown, Susan A. and Vishwanath Venkatesh (2005), "Model of Adoption of Technology in Households: A Baseline Model Test and Extension Incorporating Household Life Cycle", *MIS Quarterly*, Vol. 29, 3, pp. 399-426.
- Burke Raymond R. (2002), "Technology and the Customer Interface: What Consumers Want the Physical and Virtual Store", *Journal of the Academy of Marketing*, Vol. 30, 4, pp. 411-432.
- Büttner, Oliver B. and Anja S. Göritz (2008), "Perceived Trustworthiness of Online Shops", *Journal of Consumer Behaviour*, Vol. 7, 1, pp. 35-50.
- Chatzidakis, Andreas and Darryn Mitussis (2007), "Computer Ethics and Consumer Ethics: The Impact of the Internet on Consumers' Ethical Decision-making Process", *Journal of Consumer Behaviour*, Vol. 6, 5, pp. 305-320.
- Chau, Patrick Y. K. and Paul Jen-Hwa Hu (2001), "Information Technology Acceptance by Individual Professionals: A Model Comparison Approach", *Decision Sciences*, Vol. 32, 4, pp. 699-719.
- Chau, Patrick Y. K. and Paul Jen-Hwa Hu (2002), "Investigating Healthcare Professionals' Decisions to Accept Telemedicine Technology: An Empirical Test of Competing Theories", *Information and Management*, Vol. 39, 4, pp. 297-311.
- Churchill, Gilbert A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs", *Journal of Marketing Research*, Vol. 16, 1, pp. 64-73.
- Churchill, Gilbert A. and J. Paul Peter (1984), "Research Design Effects on the Reliability of Rating Scales: A meta analysis", *Journal of Marketing Research*, Vol. 21, 4, pp. 360-375.
- Cook, David and Luo Wenhong (2003), "The Role of Third-party Seals in Building Trust Online", *e-Service Journal*, Vol. 2, 3, pp. 71-84.
- Davis, Fred D. (1989), "Perceived Usefulness, Perceived Ease, and User Acceptance of Information Technology", *MIS Quarterly*, Vol. 13, 3, pp. 319-340.

- Davis, Fred D. (1993), "User Acceptance of Information Technology: System Characteristics, User Perceptions and Behavioural Impacts", *International Journal of Man-mach Study*, Vol. 38, 3, pp. 457–487.
- Dess, Gregory G. and Richard B. Robinson Jr. (1984), "Measuring Organizational Performance in the Absence of Objective Measure: The Case of the Privately Held Firm and Conglomerate Business Unit", *Strategic Management Journal*, Vol. 5, 3, pp. 265–273.
- DeVellis, Robert F. (1991), *Scale Development: Theory and Applications*, Applied Social Research Methods Series, California, Sage Publications.
- Dillman, Don A. (1999), *Mail and Internet Mail: The Tailored Design Method*, New York, John Wiley and Sons.
- Fey, Carl F., Alice De Koning and Andrew Delios (2006), "How Similar is the World in the Internet Era? A Comparison of E-Business in China, Russia and Sweden", *Thunderbird International Business Review*, Vol. 48, 5, pp. 727–747.
- Filion, F.L. (1975), "Estimating Bias Due to Nonresponse in Mail Surveys", *Public Opinion Quarterly*, Vol. 39, 4, pp. 482–492.
- Fishbien, Martin and Icek Ajzen (1975), *Beliefs, Attitude, Intention and Behaviour*, Massachusetts, Addison-Wesley Publication Co.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error", *Journal of Marketing Research*, Vol. 18, 1, pp. 39–50.
- Gefen, David and Detmar W. Straub (2004), "Consumer Trust in B2C e-Commerce and the Importance of Social Presence: Experiments in e-Products and e-Services", *Omega*, Vol. 32, 6, pp. 407–424.
- Gefen, David, Elena Karahanna and Detmar W. Straub (2003), "Trust and TAM in Online Shopping: An Integrated Model", *MIS Quarterly*, Vol. 27, 1, pp. 51–90.
- Hair, Joseph F., William C. Black, Barry J. Babin, Rolph E. Anderson, Ronald L. Tatham (2006), *Multivariate Data Analysis, 6th ed.*, New Jersey, Prentice-Hall.
- Jiang, Pingjun and Bert Rosenbloom (2005), "Customer Intention to Return Online: Price Perception Attribution-level Performance, and Satisfaction Unfolding Over Time", *European Journal of Marketing*, Vol. 39, 1/2, pp. 150–174.
- Kim, Eun Young and Youn-Kyung Kim (2004), "Predicting Online Purchase Intentions for Clothing Products", *European Journal of Marketing*, Vol. 38, 7, pp. 883–897.
- Koehn, Daryl (2003), "The Nature of and Conditions for Online Trust", *Journal of Business Ethics*, Vol. 43, 1, pp. 3–19.
- Kohli, Ajay K. and Bernard J. Jaworski (1990), "Marketing Orientation: The Construct, Research Proposition and Managerial Implication", *Journal of Marketing*, Vol. 54, 2, pp. 1–18.
- Moore, Gary C. and Izak Benbasat (1991), "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation", *Innovation System Research*, Vol. 2, 3, pp. 192–222.
- Moskowitz, Howard, Barbara Itty and Ewald Jeffrey (2003), "Teens on the Internet: Commercial Application of a Deconstructive Analysis of 'Teen Zine' Features", *Journal of Consumer Behaviour*, Vol. 2, 3, pp. 296–310.
- Mukherjee, Avinandan and Prithwiraj Nath (2007), "Role of Electronic Trust in Online Retailing", *European Journal of Marketing*, Vol. 41, 9/10, pp. 1173–1202.
- Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability", *Journal of Marketing*, Vol. 54, 4, pp. 20–35.
- Norton, John A. and Frank M. Bass (1992), "Evolution of Technological Generations: The Law of Capture", *Sloan Management Review*, Vol. 33, 2, pp. 66–77.
- Nunnally, J.C. (1964), *Educational Measurement and Evolution*, New York, McGraw Hill.
- Podsakoff, Philip M. and Dennis W. Organ (1986), "Self-reports in Organizational Research: Problems and Prospects", *Journal of Management*, Vol. 12, 4, pp. 531–544.

- Pollard, Dennis, Shirley Chuo and Brian Lee (2008), "Strategies for Mass Customization", *Journal of Business and Economics Research*, Vol. 6, 7, pp. 77-86.
- Porra, Jaana (2000), "Electronic Commerce internet strategies and business models-a survey", *Information Systems Frontiers*, Vol. 1, 4, pp. 389-399.
- Quelch, John A. and Lisa R. Klein (1996), "The Internet and International Marketing", *Sloan Management Review*, Vol. 37, 3, pp. 60-75.
- Reichheld, Frederick F. and Phil Scheffer (2000), "E-loyalty: Your Secret Weapon on the Web", *Harvard Business Review*, Vol. 78, 4, pp. 105-114.
- Rifon, Nora J., Robert LaRose and Sejung Marina Choi (2005), "Your Privacy is Sealed: Effects of Web Privacy Seals on Trust and Personal Disclosures", *Journal of Consumer Affairs*, Vol. 39, 2, pp. 339-362.
- Taylor, Shirley and Peter Todd (1995), "Decomposition and Crossover Effects in the Theory of Planned Behaviour: A Study of Consumer Adoption Intentions", *International Journal of Research in Marketing*, Vol. 12, 2, pp. 137-155.
- Tian, Kelley Tepper, William O. Bearden and Garyl L. Hunter (2001), "Consumers' Need for Uniqueness: Scale Development and Validation", *Journal of Consumer Research*, Vol. 28, 1, pp. 50-66.
- Tixier, Maud (2005), "Globalisation and Localisation of Contents: Evolution of Major Internet Sites Across Sectors of Industry", *Thunderbird International Business Review*, Vol. 47, 1, pp. 15-48.
- Venkatesh, Viswanath and Susan A. Brown (2001), "A Longitudinal Investigation of Personal Computers in Homes: Adoption Determinants and Emerging Challenges", *MIS Quarterly*, Vol. 25, 1, pp. 71-102.
- Welch, Jack (1999), *Kotler on Marketing*, New York, Free Press
- Zhao, HongXin (2002), "Rapid Internet Development in China: A Discussion of Opportunities and Constraints on Future Growth", *Thunderbird International Business Review*, Vol. 44, 1, pp. 119-138.

## AN EXAMINATION OF THRIFT STORE SHOPPERS

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*An increasing number of service organizations are developing thrift stores to raise resources to support their mission-directed activities. Such stores seek donated merchandise . . . sell it . . . and use the proceeds to support their altruistic efforts. The purpose of this study is to examine the processes by which thrift store shoppers: (a) decide to buy pre-owned merchandise, (b) get information about competing shopping outlets, and (c) select which organization(s) are appropriate for their particular purchase decision. A web survey was administered to assess these processes. The results will allow organizations to evaluate their existing thrift store practices against shopper preferences in the interest of fulfilling their service missions*

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### INTRODUCTION

Thrift stores (or, second hand stores, charity shops) actively seek donated merchandise to be sold in their retail outlets. The proceeds of such sales are then used for mission-specific benevolences (i.e., helping those unable to help themselves). As such, achieving a better understanding of buyer behavior can enhance the performance of the thrift store which will, in turn, provide greater resources for the organization. These expanding resources will then flow back into mission-driven activities such as building homes (Habitat for Humanity), youth development (Salvation Army), worker training (Goodwill stores), and other valued initiatives.

Thrift shopping, as defined by Bardhi (2003), is "shopping that takes place in second-hand settings, such as garage sales and thrift shops." Parsons (2002) defines UK charity shops as "a shop which sells donated goods where the profit is used for charitable purposes." The terms charity shop and thrift shop will be used interchangeably in this manuscript. The United States two largest charitable resale organizations are the Salvation Army and Goodwill Industries International (MSNBC 2008). Storeowners generally get gently used merchandise from people or retailers who go

out of business or are liquidating their stock (Glover 1992).

Thrift shops perform several functions in addition to their primary role of charitable fundraising. First, such stores raise awareness for their charity. A thrift store sponsored by a CASA (Citizens Against Spousal Abuse) raises awareness of this important cause. In the UK many charity shops perform this function as the "face on high street." Second, charity shops provide merchandise for low income shoppers. According to Williams and Paddock (2003), the poor shop at thrift stores out of necessity, "It is their first option, but second choice." Third, they provide a social function for staff and customers who come in for a chat or support for personal problems such as comforting a widow who is bringing in her husband's clothing. Fourth, they provide employment, training, and rehabilitation for the community's labor force. For example, over 1.5 million people received job training and other career services from Goodwill Industries in 2008 (see [www.goodwill.org](http://www.goodwill.org)). Fifth, charity shops provide recycling to the community. Merchandise that is in good shape is resold. Merchandise in poor quality is recycled for other uses. For example, the two Computer Works Stores that Goodwill Industries operate in Orange County California, had \$655,000 in computer sales in 2003 while recycling 80 percent of the donated computers (Messmer 2004). This recycling function is particularly important amongst the younger generations and

should be featured in any communications targeting them.

The purpose of this manuscript is to outline an empirical study examining the processes by which individuals purchase from thrift stores. The results should help nonprofit organizations improve their retail performance which will provide more resources to carry out their benevolent service missions.

Three central research questions will guide this inquiry.

1. Why do shoppers buy from thrift stores?
2. Where do thrift store shoppers get their information about their purchase options?
3. What criteria do thrift store shoppers use to select among competing organizations seeking their patronage?

First, the thrift shopping literature is discussed to provide context for this study. Second, the application of the Consumer Decision-Making Model to thrift store purchases is provided. Third, the study methodology, including processes used to create the on-line questionnaire used for data collection, is presented. Fourth, the results and implications for thrift store operators are offered.

## REVIEW OF RELEVANT LITERATURE

### Consumer Behavior

Alexander, Cryer, and Wood (2008) identified three charity shop consumer segments: *Moderate Means*, *Comfortably Off*, and *Urban Prosperity*. The buying motive for *Moderate Means* is thrift. *Comfortably Off* and *Urban Prosperity* (i.e., middle- and upper-income thrift shoppers) experience hedonic benefits including fun, leisure, haggling, social interaction, and realization of consumer fantasy that results from the search for the unexpected (Williams and Paddock 2003). Bardhi and Arnould (2005) found that consumers get both thrift and hedonic benefits from thrift shopping. Furthermore, they found that the pursuit or practice of thrift itself (as an outcome) provided hedonic benefits.

Christiansen and Snepenger (2005) discovered the existence of a *Thrift Maven* – someone who can and does transmit information about the thrift market to other individuals. Mavens have lower incomes and are motivated by frugality. Mavens are both purchasers and donors to thrift stores, maybe as a means of collecting information to disseminate. Mavens benefit from helping others. Because thrift stores spend little money on promotion, managing *Thrift Mavens* and word-of-mouth communications can enhance store performance.

Charity shops are increasingly targeting consumer niche markets by focusing their merchandise strategy to a specific audience. Computers, books, bikes, furniture, music, flowers by post, insurance, savings and other financial services, telephone cards, funeral plans, and adventure holidays are a few of the niche marketers in the charity sector.

Many charity shops are turning to “bought-in goods” (i.e., new merchandise) to target new consumer segments that want to support the charity but are not interested in second-hand merchandise. Bought in goods include crafts, stationary, pottery, jewelry, and household goods (Parsons 2002). Bought-in merchandise also overcomes the problem of quantity and quality of donated merchandise. Supply is more regular as is product quality.

### Store Image

The old perception of thrift stores is that they are unorganized, dark, smelly, and dirty (Bardhi 2003). However, in recent years charity shops have become less stigmatized as shops try to reach a broad range of consumers. This can be seen on many high streets in the UK where up-scale charity shops are mixed in with traditional retailers. Moreover, a poll by Harris Interactive and Ebay found that 70 percent of adults said buying used merchandise is more socially acceptable than it was 5 to 10 years ago (Petrecca 2008). A study by Klouda (2007) in a word association with charity shops found: 66

percent chose “cheap”; 53 percent “friendly”; 36 percent “old-fashion”; and 15 percent “fun.”

Darley and Lim (1993) found no significant linkage between a favorable store image and store patronage. Darley and Lim (1999) found that the more favorable one's store image and one's quality-availability perception the more frequently an individual will shop at a second-hand store. However, a favorable general attitude toward second hand stores had no impact on shopping frequency.

A study by Bennett and Gabriel (2000) found that charities that have an image of being honest, trustworthy, well-managed, and operationally efficient, had higher favorability ratings for new unconventional products such as package holidays or household insurance. This study also found that high favorability ratings for current products are related to high favorability ratings for new unconventional products. An image of compassion, kindness, idealism, or progressive had no impact on the opinion of new unconventional products to be offered through the store.

### **Branding**

In recent years many second hand stores have attempted to manage their brand. Branding simplifies recognition and store selection, promotes values and attributes, differentiates their competitive offering, influences consumer behavior, and builds loyalty (Stride 2006). The Salvation Army uses brand differentiation and positioning strategies to create a competitive advantage (Jenkinson, Sain and Bishop 2005). The non-negotiability of charitable values are what separates thrift retailing from for profit retailing. Charities should align organizational values with the values of consumers and donors alike. Consumers who associate with a brand personality experience emotional and self expressive benefits (Haigh and Gilbert 2005). Clearly, the management of charitable brands has its rewards. Haigh and Gilbert (2005) valued PDSA (a UK charity that cares for the pets of needy people) at 144 million pounds (approximately \$200 million US dollars).

### **Increased Professionalism**

A recent trend in thrift retailing is increased level of professionalism within the sector. This can be seen in the paying of management and staff, better locations, standardized merchandise displays, higher quality store fixtures, pricing strategies, and promotional strategies (Croft 2003). This increased professionalism has led to a better image for thrift retailers (Horne and Broadbridge 1995). However, this increasing professionalism in the sector has had some negative side-effects. The need for higher wages, better locations, nicer fixtures, vans for rotating stock between outlets, new technology and shrinkage have dramatically increased the cost of running a charity shop. Additionally, a push for increased efficiency leaves employees with less time, and possibly fewer bargains ... which can squash entrepreneurial spirit and give the charity a “commercial image” (Broadbridge and Parsons 2003).

### **Thrift Store Competition**

Thrift stores experience competition for customers from other charity shops, for-profit second hand retailers, and traditional retailers. For profit charity shops such as Value Village compete for both shoppers and donors. Frequently, people are not aware that they are patronizing a for profit company (Milke 1997).

Being located near other charity shops provides a cumulative pull which increases store traffic and increases competition and comparison shopping. This is especially true for up-market shops that feature designer clothing (Alexander, Cryer and Wood 2008). This increased cost, coupled with saturation in the charity retail sector, can be detrimental to financial performance (Parsons 2002). However, the tax-exempt status of non-profit organizations can be a strategic advantage. Interestingly, traditional retailers in the UK sought relief by encouraging government to restrict the number of charity shops in a marketplace (Horne 1998). Finally, one website (thethriftshopper.com) gives users access to a directory of over 9,000 thrift stores in the United States.

### Location

According to Alexander, Cryer and Wood (2008), charity shop location is determined by customers, competition, supply chain, volunteers, costs, foot traffic, level of saturation, and availability. Volunteers often live within walking distance of the shop. Appealing to their sense of neighborhood may be a good recruiting tool. Because the value of merchandise is often low, the cost of moving the merchandise is cost prohibitive. Therefore, charity shops need to be located close to their donors (Mitchell, Montgomery and Rauch 2009).

Charity shops have traded up in recent years by acquiring better merchandise and moving into better locations in an attempt to bring in more up-scale consumers. According to Tim Alvis president of America's Thrift Stores, "Wealthy people will shop in thrift stores in wealthy areas but will not go into lower income areas. Lower income people will shop at both (Facenda 2006)."

### Economy

The early 1990's recession produced a more value-conscious consumer. In 1991 many people were selling rather than donating used merchandise (Glover 1992). The current economy is ripe for thrift store sales. Consumers cannot control the cost of energy and healthcare or the performance of the stock market. They do have some control over the cost of clothing and household merchandise by haggling at thrift stores. The National Association of Resale and Thrift Shops report that 2008 September - October sales were up 35 percent compared to the prior (Petrecca 2008). Similarly, Hein and Miller (2008) found that thrift shops saw an 85 percent increase in the number of customers from January to August 2008. Even teens are turning to thrift stores as summer jobs dry up and their parents struggle in tough economic times (D'Innocenzio 2008). It's even becoming cool to be frugal and environmentally conscious ... two things thrift stores offer. The downside to the bad economy

for thrift retailers is a decline in donations which, in turn, affects their merchandise available for resale.

## THEORETICAL FOUNDATIONS FOR THIS STUDY

The Model of Consumer Decision-Making is used to organize this research study. Here, we model the consumer as a rational problem solver ... seeking information ... and making decisions (see Engel, Blackwell and Miniard 1994). Consumers move through a series of sequential steps in order to make consumer choices. For this study, the application of the model to our work is as follows:

- **Problem Recognition** – Why do people buy?
- **Information Search** – Where do people get information about possible purchase?
- **Evaluation of Alternatives** – What criteria are important when selecting a place to shop?
- **Choice** – Which market segment description best describes each shopper?
- **Post-Choice Evaluation** – How important are prior experiences as a buyer when selecting where to buy?

## METHODOLOGY

### Questionnaire Development

The study was conducted using a disguised purpose format; that is, respondents were asked to discuss their donating and shopping behavior for all thrift stores or second hand stores. This was done to limit the possible influence on response by asking for an assessment of only one such store. Focus group research was used to identify:

1. the reasons shoppers seek to interact with thrift stores or second hand stores
2. the variables commonly used to assess shopping options
3. the information sources for shoppers
4. market segments for thrift store or second hand store shoppers



The questionnaire was refined following a number of pre-tests. The finalized questionnaire was then posted to a unique Internet address for data collection.

### Data Collection

The population of analysis for this study consisted of citizens of two mid-sized US cities; one in the southeast and one in the Midwest. The data was collected using a non-random process: each student enrolled in the Principles of Marketing class assumed responsibility for sending the questionnaire to a pre-determined number of email addresses from members of their social network. The students have access to a wide cross section of the general population as family, friends, co-workers, and so on. The following letter was used for data collection:

*As you know, I am a student at the Univ. of \_\_\_\_\_. In my Principles of Marketing class, we are conducting research to help a community partner improve their organization. Specifically, we've created a survey to study the process of DONATING and BUYING from thrift stores or second hand stores (such as Goodwill, Salvation Army, etc.). The link to the survey is provided below.*

<http://www.xxx.com>

*I ask that you go to the link and complete the survey. (You may have to paste the link into the address line of your browser.) Your doing so will help us successfully complete our work and help a worthwhile organization in our community. I thank you in advance for your time and cooperation.*

The software used (VOVICI) provides information on information requests and questionnaire receipts. A total of 1,754 email addresses (i.e., possible respondents) received the questionnaire. A total of 1,193 usable responses were collected (n=1,193, and a 68 percent response rate). The aggregated profile of respondents is presented in **Table One**.

## PRESENTATION OF RESEARCH RESULTS

### Problem Recognition

Respondents were asked to report the reasons they have made purchases of pre-owned items in the past. Specifically, the following question was posed to respondents:

*Many of us PURCHASE used clothing, furniture, and other items from thrift stores or second Hand stores. Below is a list of reasons making such PURCHASES likely. Please report why you've SHOPPED at Thrift Stores or Second Hand Stores in the past (please select all that apply).*

**TABLE 1**  
**A Profile of All Respondents (n=1,193)**

Item	Responses
Gender	Male = 450 (38%) Female = 729 (62%)
Age	17 and Under = 13 (1%) 18-34 = 763 (64%) 35-54 = 311 (26%) 55 and Older = 96 (8%)
Education	High school graduate or less = 237 (20%)
Marital Status	Married = 540 (45%)
Employment Status	Employed full-time (35 or more hours per week) = 647 (54%)

The responses to this question are provided in **Table Two**.

When asked to report the top three reasons for purchasing in the past, the most frequently cited items (in order) were:

1. Value Seeker ... I saved money.
2. Special Purpose ... I needed a unique item for a themed event.
3. Eccentric ... I looked for unusual items. Such stores have them.

ANOVA was used to determine whether differences in the three main reasons for past purchases were based on personal characteristics such as age, gender, marital status, education, and employment status. The results appear in **Table Three**.

The results indicate that women are significantly more likely to shop for value seeking and special purposes than men. This may be explained by the fact that women are more likely to shop than men in general. There were no gender differences for shopping for an unusual item. Younger respondents were significantly more likely to shop for special items and unusual items than older respondents. There were no age differences when it came to value seeking behavior. With respect to marital status, the only significant difference occurs with regard to buying unusual items. Married respondents are significantly more motivated to purchase unusual items than singles. Marital status had no significant impact on any of the top three reasons for past purchases.

Education had a significant impact on value seeking, special purpose buying, and looking for unusual items. Specifically, four-year college grads were significantly less likely to engage in value seeking behavior than any other educational status. High school grads or less were significantly more likely to seek out unusual items than respondents who had some college or were four-year graduates. Additionally, high school grads or less were significantly more likely to purchase items for a special purpose than respondents who had some college or studied at the post graduate level.

### Information Search

Respondents were asked to report the relative importance of information sources when looking for a place to purchase used items. A five-point scale was provided:

- 5 = Extremely Important
- 4 = Somewhat Important
- 3 = Neutral / Indifferent
- 2 = Not Very Important
- 1 = Not Important At All
- n/a = Not Applicable

To assess sources of information for buyers, the following question was posed to respondents:

*Assuming you needed to find a thrift store or second hand store for a current PURCHASE, how important would the following information sources be to help you identify those organizations SELLING such items.*

The responses to this question are provided in **Table Four**.

ANOVA was used to determine whether differences in uses of information sources were based on personal characteristics such as age, gender, marital status, education, and employment status. The results appear in **Table Five**.

The results indicate that women are significantly more likely than men to rate visibility of location, past experiences, word-of-mouth, and their minister as important. This may be explained by the fact that women are more likely to shop than men in general. The only significant difference in importance of information source by age is for word-of-mouth. Specifically, respondents 17 and under were significantly less likely to rate word-of-mouth important than any other age group. This finding is counter-intuitive. Generally, at this young age you are more likely to be influenced by others than are older adults. This finding could be explained by perception rather than reality. That is, maybe those 17 and under think that they are not as influenced by others;

**TABLE 2**  
**Reasons for Past Purchases**

<b>Reason for Purchase</b>	<b>Frequency of Reporting by Respondents</b>
Value Seeker ... I saved money.	684 (58%)
Special Purpose ... I needed a unique item for a themed event.	568 (48%)
Eccentric ... I looked for unusual items. Such stores have them.	365 (31%)
Pragmatic ... I found a used product fit my needs.	322 (27%)
Collector ... I looked for unique items for my collections.	252 (21%)
Supporter ... I believed in their cause. I found things to show my support.	225 (19%)
Other	95 (8%)

**TABLE 3**  
**ANOVAs for Past Purchases**

<b>Dependent Variable</b>	<b>Independent Variable</b>	<b>F-Value</b>	<b>P-Value</b>
Value Seeking	Gender	4.540	.033*
Value Seeking	Age	.679	.565
Value Seeking	Marital Status	.270	.847
Value Seeking	Education	2.956	.032*
Value Seeking	Employment Status	2.021	.133
Special Purpose	Gender	14.227	.000*
Special Purpose	Age	10.026	.000*
Special Purpose	Marital Status	.506	.678
Special Purpose	Education	6.321	.000*
Special Purpose	Employment Status	1.460	.233
Unusual Item	Gender	.144	.704
Unusual Item	Age	7.292	.000*
Unusual Item	Marital Status	3.076	.027*
Unusual Item	Education	3.020	.029
Unusual Item	Employment Status	.368	.692

\* Indicates significant at the .05 level.

**TABLE 4**  
**Relative Importance of Information Sources for Purchases**

Information Source	Frequency of Respondents who Reported Extremely Important or Somewhat Important
Visibility of Stores.	950 (85%)
Past Experiences as a Shopper.	915 (83%)
Recommendations from Family and Friends.	915 (82%)
Ministers and Community Leaders	466 (43%)
News Media (television, Radio, Newspaper, etc).	409 (37%)
Yellow Pages.	347 (32%)
Internet.	321 (29%)

**TABLE 5**  
**ANOVAS for Information Sources**

Dependent Variable	Independent Variable	F-Value	P-Value
Visibility of Location	Gender	17.300	.000*
Visibility of Location	Age	1.916	.125
Visibility of Location	Marital Status	.629	.596
Visibility of Location	Education	2.114	.097
Visibility of Location	Employment Status	.505	.604
Past Experience	Gender	4.775	.029*
Past Experience	Age	1.123	.339
Past Experience	Marital Status	.732	.533
Past Experience	Education	5.099	.002*
Past Experience	Employment Status	.076	.927
Word of Mouth	Gender	17.365	.000*
Word of Mouth	Age	4.212	.006*
Word of Mouth	Marital Status	1.009	.388
Word of Mouth	Education	4.696	.003*
Word of Mouth	Employment Status	.149	.861
Minister	Gender	17.593	.000*
Minister	Age	1.909	.126
Minister	Marital Status	.336	.800
Minister	Education	1.557	.198
Minister	Employment Status	8.291	.000

Indicates significant at the .05 level.

while the reality may be that they are influenced by others more than older adults.

The only significant difference in the importance of information source by education is for past experiences. Specifically, the more educated the respondent the more important past experiences are as an information source. There are no significant differences in the importance of information sources by marital status. Regarding employment status and the importance of information sources, those employed part-time are more likely than full-time employees to rate their minister as an important information source.

### Evaluation of Alternatives

To assess store selection criteria important to buyers, the following question was posed to respondents:

*Here's a list of variables to evaluate the attractiveness of a thrift store or second hand store for a SHOPPER. Please rate the relative importance of each variable on your willingness to SHOP in such a store using the scale provided.*

The responses to this question are provided in **Table Six**.

When asked to report the top three reasons for selecting a thrift stores or second hand store in the past, the most frequently cited items (in order) were:

1. Cleanliness of store and surroundings
2. Quality of merchandise
3. Well-organized displays of merchandise

ANOVA was used to determine whether differences in store selection criteria were based on personal characteristics such as age, gender, marital status, education, and employment status. The results appear in **Table Seven**.

The results indicate that women were significantly more likely than men to rate all of the selection criteria as more important. Regarding age and store selection criteria, respondents in the 35-54 age category were

significantly more likely to rate well-organized merchandise and friendliness of staff as important than are respondents in the 18-34 age group. Single respondents were significantly more likely than married respondents to rate value, convenience, and friendliness of staff as important.

Respondents who studied at the post graduate level rated value as significantly more important than respondents who have one to three years college experience. A possible explanation for this finding is that many of the respondents with less than three years of college experience were still in college on their parent's dime. It is likely that those who have studied at the post graduate level are more financially independent and thus place higher value on their money. Lastly, employed respondents rated friendly staff as more important than unemployed respondents.

## ANALYSIS AND INTERPRETATION

### Sample Characteristics

A convenience sample was drawn from the general population of two medium-sized U.S. cities using email communication for data collection. The data was collected using a non-random process: each student enrolled in the Principles of Marketing class assumed responsibility for sending the questionnaire to a pre-determined number of email addresses from members of their social network. As such, only those with access to email would be contacted. And, only those with some sort of relationship with a student enrolled in the class could participate. Compared to the general population of the US, the following discrepancies are noted:

- Sample includes disproportionately more women than men (62 percent versus 38 percent). But, this number is closer to shopper practices (i.e., more women shopping in such stores).
- Sample tends to be younger than overall population – 60 percent of respondents age 35 and under (40

**TABLE 6**  
**Relative Attractiveness of a Store for Purchases**

<b>Criteria</b>	<b>Frequency of Respondents who Reported Extremely Important or Somewhat Important</b>
Cleanliness of store and surroundings.	1,016 (89%)
Quality of merchandise.	1,011 (89%)
Well-organized displays of merchandise.	1,001 (88%)
Value (cost / benefit) of merchandise.	992 (88%)
Convenience of store location.	951 (84%)
Friendly store staff.	904 (80%)
Uniqueness of merchandise	758 (68%)
Store staff attentive to my needs	724 (64%)
Quality of brand names present.	666 (59%)

percent above 35 years). Younger people are more likely thrift shoppers whereas older respondents are more likely thrift donors.

Sample tends to be better educated than the overall population – 80 percent had some college experience. This is a function of the social class of the students and their social networks (a better educated group).

### **Problem Recognition**

Buyers frequent thrift stores or second hand stores for a variety of reasons. However, two buyer motives seemed to jump out from the others; namely,

1. Value Seeker ... I saved money.
2. Special Purpose ... I needed a unique item for a themed event.

Some buyers must shop a second hand stores to extend their purchasing power. Others shop at such stores to fulfill special purpose needs. Luckily, these two groups are compatible and can be served simultaneously. Women held stronger attitudes than men towards buying motives, importance of information sources, and store selection criteria. It should be noted

men also agreed in big majorities and constitute a valuable thrift store segment. Lastly, young respondents were significantly more likely to shop for unique or unusual items. Promotions touting the benefit of unique or for a special occasion targeted toward young respondents should be effective.

### **Information Search**

Today's shopper has many options. As such, it is important to identify where prospective shoppers look for information. Assuming buyers had a need for thrift and second hand store merchandise, the following information sources are most important to them:

1. Visibility of Stores.
2. Past Experiences as a Shopper.
3. Recommendations from Family and Friends.

It is important to maintain a very visible presence in the community for shoppers. This is often difficult for more visible locations are often more expensive. Relationship marketing and word-of-mouth communications of satisfied buyers are again shown to be very important. Store personnel must be taught the importance of their interaction with all buyers

**TABLE 7**  
**ANOVAs for Store Selection Criteria**

<b>Dependent Variable</b>	<b>Independent Variable</b>	<b>F-Value</b>	<b>P-Value</b>
Cleanliness	Gender	78.966	.000*
Cleanliness	Age	.483	.694
Cleanliness	Marital Status	2.134	.094
Cleanliness	Education	.755	.519
Cleanliness	Employment Status	2.242	.107
Quality Merchandise	Gender	26.686	.000*
Quality Merchandise	Age	2.004	.112
Quality Merchandise	Marital Status	.040	.989
Quality Merchandise	Education	1.519	.190
Quality Merchandise	Employment Status	1.212	.298
Well-organized	Gender	25.088	.000*
Well-organized	Age	2.729	.043*
Well-organized	Marital Status	.659	.577
Well-organized	Education	2.400	.066
Well-organized	Employment Status	1.309	.270
Value	Gender	4.043	.045*
Value	Age	1.161	.324
Value	Marital Status	4.899	.002*
Value	Education	3.487	.015*
Value	Employment Status	2.552	.078
Convenience	Gender	7.312	.007*
Convenience	Age	.653	.581
Convenience	Marital Status	2.758	.041
Convenience	Education	.516	.672
Convenience	Employment Status	2.776	.063
Friendliness	Gender	55.424	.000*
Friendliness	Age	3.315	.019*
Friendliness	Marital Status	3.337	.019*
Friendliness	Education	.684	.562
Friendliness	Employment Status	3.725	.024

for the long-term benefit of the organization. Additionally, thrift store operators can actively target “thrift mavens” as a disseminator of word-of-mouth communications.

### **Evaluation of Alternatives**

As noted earlier, shoppers have many options. And, unsatisfied shoppers will likely look elsewhere when future needs arise. When evaluating a thrift store or second hand store, the most important items to prospective buyers are:

1. Cleanliness of store and surroundings.
2. Quality of merchandise.
3. Well-organized displays of merchandise.
4. Value (cost / benefit) of merchandise.
5. Convenience of store location.
6. Friendly store staff.

Buyers expect excellence from all retailers, not just “first-run” sellers. Stores (and surrounding property) must be clean and well-organized. Merchandise must be perceived as offering a value (cost / benefit assessment). Store personnel must be attentive to the wishes of their customers. Otherwise, buyers will find other options. Employee training in retail atmospherics, product presentation, client interaction, and other matters are important to all retailers, including thrift stores and/or second hand stores. Single individuals rate value, convenience, and friendliness of staff as more important than married people. This may indicate stronger attitudes towards thrift shopping.

### **CONCLUSIONS**

People have high expectations when selecting a thrift store to support with their purchases. Visibility of facilities is important to buyers. This visibility includes existing brick-and-mortar facilities but could also be the presence of mobile collection vehicles or kiosks that are highly visible as well.

Thrift stores shoppers are seeking value. They wish to extend their purchasing power by

realizing the savings possible from pre-owned merchandise. Buyers are often looking for items for themed events (i.e., a hat for a horse racing party, a black overcoat for a Blue’s Brothers party, or an outfit for Retro fest). Anticipation of such themed events (such as Kentucky Derby Parties in early May) will allow the store to highlight merchandise at the appropriate time. And, again it is important to attain top-of-mind awareness so buyers will begin visiting the store in anticipation of such events. Promotions targeted at young adults should focus on being unique.

Today’s effective nonprofit marketer seeks to create long-term mutually beneficial relationships with buyers. It is less expensive to keep existing buyers involved with the organization than to constantly seek new relationships. Respondents were very clear on this matter ... past experiences as buyers matter! And, positive word-of-mouth communication is an effective source of information for prospective buyers. Such communication is free to the organization and has more credibility to recipients. The organization must encourage positive word-of-mouth communications.

Additionally, today’s thrift store shopper expects much of what they see at the mall or chain store in their thrift Store: a clean store, quality merchandise, well-organized displays, value for their money, convenience, and a friendly and attentive staff. This will require employee training in customer interaction. Store leadership must recognize that while shoppers are seeking to support your organization, they are comparing your store to the for-profit shopping options available to them. While this may be an unfair comparison to make ... it is one that is, in fact, being made.

The purpose of this baseline study is to provide a better understanding of the processes by which people purchase from thrift stores and/or second hand stores. The results will allow store management and organizational leaders to critically evaluate their existing thrift store practices against buyer preferences in the



interest of continuous improvement. Achieving a better understanding of buyer behavior will allow thrift stores to improve their operational effectiveness. That is, they can increase the positive impact their organization has on the community by helping more of its citizens.

### AREAS FOR FUTURE RESEARCH

One area for investigation is looking at the differences between thrift store donors and thrift store shoppers. An understanding of similarities may lead to standardized marketing strategies while an understanding of differences may lead to customized marketing strategies. Second, research needs to be conducted on strength of attitudes towards thrift shopping. Specifically, a profile of high involvement and low involvement consumers will aid strategy development. Finally, research on thrift shopping in emerging markets and differences in their buying processes should be fruitful. As new retailing patterns are introduced into emerging markets, it will be interesting to see if the number and types of thrift stores or charity shops expands as well.

### REFERENCES

- Alexander, Andrew, David Cryer and Steve Wood (2008), "Location Planning in Charity Retailing", *International Journal of Retail & Distribution Management*, Vol. 36, (7), pp. 536-550.
- Bardhi, Fleura (2003), "Thrill of the Hunt: Thrift Shopping for Pleasure", *Advances in Consumer Research*, Vol. 30, pp. 375-376.
- Bardhi, Fleura and Eric Arnould (2005), "Thrift Shopping: Combining Utilitarian Thrift and Hedonic Treat Benefits", *Journal of Consumer Behaviour*, Vol. 4, (4), pp. 223-233.
- Bennett, Roger and Helene Gabriel (2000), "Charity Affiliation as a Determinant of Product Purchase Decisions", *Journal of Product and Brand Management*, Vol. 9, (4), pp. 255-270.
- Broadbridge, Adelina and Elizabeth Parsons (2003), "Still Serving the Community? The Professionalization of the UK Charity Retail Sector", *International Journal of Retail & Distribution Management*, Vol. 31, (8), pp. 418-427.
- Christiansen, Tim and David Snepenger (2005), "Information Sources for Thrift Shopping: Is There a Thrift Maven?", *Journal of Consumer Marketing*, Vol. 22, (6), pp. 323-331.
- Croft, Nick (2003), "Product Quality Strategy in Charity Retail: A Case Study", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 8, (1), pp. 89-98.
- Darley, William and Jeen-Su Lim (1993), "Store-Choice Behavior for Pre-Owned Merchandise", *Journal of Business Research*, Vol. 27, pp. 17-31.
- Darley, William and Jeen-Su Lim (1999), "Effects of Store Image and Attitude toward Secondhand Stores on Shopping Frequency and Distance Traveled," *International Journal of Retail & Distribution Management*, Vol. 27, (8), pp. 311-318.
- D'Innocenzio, Ann (2008), "Teens Turn to Thrift as Jobs Vanish and Prices Rise", *USA TODAY*. April 19.
- Engel, James, Roger Blackwell and Paul Miniard (1994), *Consumer Behavior (8<sup>th</sup> Ed)*, Fort Worth, TX: Dryden.
- Facenda, Vanessa (2006), "The Atypical Thrift Store", *Retail Merchandise*, September 24.
- Glover, Kara (1992), "It's Resellers' Market as Recession Hikes Allure of Quality Used Garb", *Los Angeles Business Journal*, March 9.
- Goodwill Industries website: [www.goodwill.org](http://www.goodwill.org).
- Haigh, David and Stephen Gilbert (2005), "Valuing Not-for-Profit and Charity Brands – Real Insight or Just Smoke and Mirrors?", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 10, pp. 107-119.
- Hein, Kenneth and Steve Miller (2008), "Why Some Brands Cheer Sour Economy", *Brandweek*, Vol. 49, (36), p. 5.

- Horne, Suzanne and Adelinda Broadbridge (1995), "Charity Shops: A Classification by Merchandise Mix", *International Journal of Retail & Distribution Management*, Vol. 23, (7), pp. 17-23.
- Horne, Suzanne (1998), "Charity Shops in the UK", *International Journal of Retail & Distribution Management*, Vol. 26, (4), pp. 155-161.
- Jenkinson, Angus, Branko Sain and Kevin Bishop (2005), "Optimising Communications for Charity Brand Management", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 10, pp. 79-92.
- Klouda, Lekha (2007), "Charity Retailing: The Future of Sustainable Shopping?", *European Retail Digest*, Vol. 56, (Winter), pp. 16-20.
- Messmer, Ellen (2004), "One Man's Trash is Another's Cheap PC", *Network World*, Vol. 21, (47), pp. 8-16.
- Milke, Mark (1997), "Cutthroat Charity", *Newsmagazine*, Vol. 24, (19), p. 30.
- Mitchell, Mark, Robert Montgomery and Dennis Rauch (2009), "Toward an Understanding of Thrift Store Donors", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 14, (3), pp. 255-269.
- MSNBC.com (2008), While Economy Dives, Thrift Shops Thrive, October 7: <http://www.msnbc.msn.com/id/27070237>
- Petrecca, Laura (2008), "Secondhand Stores Reap Benefits of Recession", *USA TODAY*, December 12.
- Parsons, Elizabeth (2002), "Charity Retail: Past, Present and Future", *International Journal of Retail & Distribution Management*, Vol. 30, (12), pp. 586-594.
- Stride, Helen (2006), "An Investigation into the Values Dimensions of Branding: Implications for the Charity Sector", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 11, pp. 15-124.
- Williams, Colin and Christopher Paddock (2003), "The Meanings of Informal and Second-Hand Retail Channels: Some Evidence from Leicester", *International Review of Retail, Distribution, and Consumer Research*, Vol. 13, (3), pp. 317-336.
- [www.thriftstoresshopper.com](http://www.thriftstoresshopper.com) –website providing a directory of thrift stores.

## DEMOGRAPHIC ANTECEDENTS TO THE PRACTICE OF ADAPTIVE SELLING

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*In an empirical study of the role of gender, age, sales experience, and education in the practice of adaptive selling, Levy and Sharma (1994) concluded that gender and education interact with age to affect the degree to which salespeople practice adaptive selling. In addition, as salespeople get older and more experienced, they demonstrate plateauing with regard to the practice of adaptive selling. The current study replicated and extended Levy and Sharma's work on a national random sample of industrial salespeople. Results did not find support for plateauing by salespeople, and the interactions among demographic factors were unrelated to adaptive selling. Managerial implications of the findings are discussed.*

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### INTRODUCTION

Adaptive selling has been a widely studied subject matter in personal selling and sales management for over two decades (e.g., Weitz 1981; Weitz, Sujan and Sujan 1986; Spiro and Weitz 1990; Levy and Sharma 1994; Marks, Vorhies and Badovick 1996; Robinson, Jr., Marshall, Moncrief and Lassk 2002; Giacobbe, Jackson, Jr., Crosby and Bridges 2006; Pelham and Kravitz 2008; Jaramillo, Grisaffe, Chonko and Roberts 2009). Defined as the "altering of sales behaviors during and across customer interactions based on perceived information about the nature of the selling situation" (Weitz, Sujan and Sujan 1986, p. 175), adaptive selling captures the unique advantage of personal selling as a means of communication with the target market. Salespeople adept in practicing adaptive selling can tailor the sales message to fit the unique needs of the customer and the selling situation. Consequently, adaptive selling is expected to improve salesforce productivity (Spiro and Weitz 1990).

Given the importance of adaptive selling to the performance of sales organizations, sales managers should be interested in knowing if

demographic factors, such as, gender, age, experience, and education can be used to predict the degree to which salespersons will successfully practice adaptive selling. Although initial and on-going training and performance feedback can be used to develop the adaptive selling skills of salespeople, the relationship between demographic factors and adaptive selling in salespeople can be used to trim the candidate pool for initial appointments and promotion decisions. The purpose of this study was to examine the relationship between demographic factors and adaptive selling in industrial salespeople by replicating and extending a similar study by Levy and Sharma (1994).

Levy and Sharma (1994) examined gender, age, sales experience, and education as antecedents of adaptive selling in a sample of retail salespeople. Based on an extensive literature review, the authors hypothesized that there will be no gender differences in the practice of adaptive selling, and there will be an inverted u-shaped relationship between age, sales experience, education and the practice of adaptive selling. Although the hypothesis regarding gender was supported, the authors found an s-shaped relationship between age, sales experience and the practice of adaptive selling. Further, age and sales experience interacted with gender and education to affect

the practice of adaptive selling. Based on these results, Levy and Sharma (1994) concluded that the practice of adaptive selling by salespeople plateaus, and called for additional research in other contexts, such as, industrial sales. To the best of our knowledge, additional research on the role of gender, age, sales experience, and education in the practice of adaptive selling has not been reported.

The purpose of this study is to replicate and extend the findings of Levy and Sharma (1994). The replication involves examining the role of gender, age, sales experience, and education in the practice of adaptive selling in a national random sample of industrial salespeople. The extension of Levy and Sharma's (1994) work incorporates recent advances in the measurement of adaptive selling, and uses additional measures of experience as recommended by Levy and Sharma (1994).

### CONCEPTUAL FRAMEWORK AND HYPOTHESES

If demographic factors, such as gender, age, sales experience, and education are related to salesperson behaviors and performance, they can be useful in salesperson selection, training, and promotion. However, empirical research on demographic antecedents to sales performance has largely been inconclusive. Based on an extensive review of the sales literature, Weitz (1981, p. 88) concluded that "even variables that can be assessed with high accuracy and reliability, such as age, education, and sales experience, are related to performance in some studies and unrelated in others." Since adaptive selling is a significant predictor of sales performance, demographic antecedents to the practice of adaptive selling should be of great interest to academicians and practitioners.

#### Gender

Levy and Sharma (1994) theorized that there will be no gender differences in the practice of adaptive selling. The authors cited the similarity of customers' perceptions of men and women (Lambert, Marmorstein and Sharma

1990) and successful saleswomen's adoption of psychological traits associated with men (Goolsby, Lagace and Boorum 1992) as reasons for a lack of gender differences in adaptive selling. In a sample of retail salespeople, Levy and Sharma (1994) found no support for gender differences in the practice of adaptive selling. Empirical studies on gender differences in industrial salespeople (Busch and Bush 1978) and consumer products salespeople (Schul and Wren 1992) have generally supported that there are few differences between male and female salespeople. Thus, the following replication hypothesis is advanced:

**Hypothesis 1:** There are no differences between men and women in the practice of adaptive selling.

#### Age

Levy and Sharma (1994) used self selection, a reduction in information processing capabilities, and career stages to hypothesize that there will be an inverted u-shaped relationship between age and the practice of adaptive selling. Salespeople who practice adaptive selling will perform better than average and will be promoted to managerial positions over time. The remaining salespeople, who were unable or unwilling to practice adaptive selling will lower the average adaptive selling scores of the sales team, as they get older. Thus, self-selection will yield an inverted u-shaped relationship between age and the practice of adaptive selling.

The decline in information processing capabilities with age (Phillips and Sternthal 1977) is expected to reduce the adaptive selling by older salespeople. Further, based upon career stages of salespeople (Cron 1984; Cron, Dubinsky and Michaels 1988), Levy and Sharma (1994) proposed that salespeople will learn to practice adaptive selling during the exploration career stage and increasingly adapt to the selling situations during the establishment and maintenance career stages. However, the decreased work motivation during the disengagement stage will gradually lower the practice of adaptive selling. Taken

together, the changes in information processing capabilities and career stages will yield an inverted u-shaped relationship between age and the practice of adaptive selling. Levy and Sharma (1994) concluded that the practice of adaptive selling plateaus.

The review of the literature on career plateaus, age differences in information processing, and career stages can also support a u-shaped relationship between age and the practice of adaptive selling. Ference, Stoner and Warren (1977) identified "solid citizens" (effective plateauees) as the largest group of individuals in most organizations. Due to personal preferences or situational constraints, high performing salespeople may not accept additional responsibilities involved in promotions to higher ranks (Feldman and Weitz 1988), thereby negating the effect of self-selection on the age-adaptive selling relationship. In their empirical study on retail salespeople, Levy and Sharma (1994) did not observe a decline in the practice of adaptive selling with increasing age or sales experience.

Although information processing capabilities naturally decline with age, Phillips and Sternthal (1977, p. 447) concluded that "if the elderly are given the time needed to process information, their ability to learn will not be undermined by their diminished processing speed." Experienced salespeople are expected to acquire adaptive selling skills to a greater degree than their younger counterparts. Thus, the adaptive selling skills of older salespeople might compensate for the reduction in speed of processing information. When faced with an unconstrained task, no age differences have been found in search intensity, search outcome, and satisficing behavior (Cole and Balasubramanian 1993). Consequently, with age, salespeople may actually practice adaptive selling to a greater degree.

Empirical studies on the career stages of salespeople also support the potential for a u-shaped relationship between age and the practice of adaptive selling. Younger salespeople who just started their sales career

are most likely in the exploration stage of their career (Cron 1984). In this stage, salespeople are not sure if they have chosen the appropriate occupational field, and they are learning the skills required to be successful as a salesperson. Presumably, they are learning adaptive selling. Since they have not developed an extensive knowledge of customer categories and have not perfected their information acquisition skills, they may find it difficult to practice adaptive selling. Thus, adaptive selling may initially decline as salespeople gain experience in doing market research on each customer and develop a maximally effective sales presentation for that customer (Weitz, Sujaan and Sujaan 1986). While exploring the sales career, these salespeople may not be motivated by the challenge of successfully adapting to customers, when needed.

In an empirical study of the influence of career stages on salespeople's job attitudes, work perceptions, and performance, Cron and Slocum, Jr. (1986) concluded that sales performance was lower for salespeople in the exploration stage than for those in other career stages. Further, salespeople in the exploration stage "were less involved in their jobs, did not feel that their job was challenging, and did not feel as successful as salespeople in other career stages" (Cron and Slocum, Jr. 1986, p. 125). As salespeople get older and reach the establishment and maintenance stages of their careers, they become more skillful in practicing adaptive selling and use their skills to produce results and advance in their organization (Cron 1984). Consequently, the following hypothesis is proposed:

**Hypothesis 2:** There is a u-shaped relationship between age and the practice of adaptive selling.

## Experience

Salespeople's age and experience are expected to be highly correlated and Levy and Sharma (1994) hypothesized that, as with age, sales experience will also have an inverted u-shaped relationship with the practice of adaptive selling. However, the authors found an s-

shaped relationship between experience and adaptive selling suggesting a plateauing effect, and recommended that “multiple indicators of sales experience should be used when evaluating prospective salespeople (Levy and Sharma 1994, p. 45). Accordingly, in the current study, total sales experience and total work experience of salespeople were considered.

Although age and experience will be highly correlated, their effects on adaptive selling may not be similar. As salespeople gain experience, they develop an elaborate knowledge structure which enriches their procedural knowledge (Leigh and McGraw 1989) and facilitates their adaptive selling behaviors (Weitz, Sujan and Sujan 1986). Note that salespeople may have work experience prior to working in sales for their current employer. Their entire work experience contributes to their declarative and procedural knowledge of situations, even if it does not involve their current customers. Even for salespeople in their exploration career stage, tenure was significantly related to sales performance, although, sales performance itself was lower than that of other career stages (Hafer 1986). Consequently, experience is expected to be positively related to adaptive selling. Empirical support exists for a positive relationship between sales experience and adaptive selling (Robinson, Jr., Marshall, Moncrief and Lassk 2002; Giacobbe, Jacson, Jr., Crosby and Bridges 2006). Thus, the following hypothesis is advanced:

**Hypothesis 3:** There is a positive relationship between experience and the practice of adaptive selling.

### Education

Education helps individuals to critically evaluate situations, draw logical conclusions, and make informed decisions. Naturally, formal education is expected to facilitate adaptive selling by salespeople. However, Lambert, Marmorstein and Sharma (1990) found an inverse relationship between education and salespeople's accuracy of customer perceptions. Levy and Sharma (1994)

hypothesized an inverted u-shaped relationship between education and the practice of adaptive selling since highly educated salespeople are expected to get frustrated with the repetitive selling tasks and eventually become disengaged. However, this hypothesis was not supported in their sample of retail salespeople. It is possible that highly educated salespeople who are frustrated with the repetitive selling tasks will quit their jobs, rather than remain disengaged and perform poorly. Since education is expected to facilitate information acquisition and interpretation, salespeople will benefit from higher education by better analysis of customer information, which in turn will facilitate adaptive selling. Education has been found to lower perceived obsolescence among salespeople (Jones, Chonko and Roberts 2004). Empirical evidence exists for the positive effect of education on sales performance (Cotham III 1969; Weaver 1969). Therefore, the following hypothesis is proposed:

**Hypothesis 4:** There is a positive relationship between education and the practice of adaptive selling.

## METHOD

### Sample

The sample consisted of a national random sample of industrial sales professionals purchased from Dun and Bradstreet. These salespersons were employed at firms which fall within the Standard Industrial Codes (SIC) 20 through 39 representing industrial firms. Questionnaires were mailed to 3909 salespersons at their places of work. Along with the survey, a cover letter on University letterhead was included explaining the purpose of the study, requesting cooperation, and promising confidentiality. Four weeks after the original mailing, a postcard was mailed to all the salespersons urging them to respond to the survey if they hadn't already. The mailing yielded 241 usable responses. After accounting for undeliverable envelopes, partially or uncompleted questionnaires, and ineligible responses, the response rate was 10.39 percent (Churchill 1991).

Approximately 92 percent of the respondents were male, and on average they completed 15.78 years of formal schooling. The average age of the respondents was 46.46 years, and their average total sales experience and average total work experience were 18.91 years and 26 years, respectively. Thus, the subjects were educated, experienced, and predominantly male. This demographic profile differs from the retail salespeople surveyed by Levy and Sharma (1994). Seventy-five percent of their respondents were female. On average, they completed 13.57 years of formal schooling, were 38.8 years old, and had 9.25 years of total sales experience. Thus, Levy and Sharma's (1994) retail salespeople were predominantly female, younger, and relatively less experienced compared to the industrial salespeople of the current study.

Nonresponse bias was assessed by comparing early and late respondents on adaptive selling, sales performance, and the demographic variables (Armstrong and Overton 1977). Early respondents differed from late respondents in total work experience ( $p < 0.05$ ). However, cell means indicated that early respondents have worked 2.95 years longer. Although statistically significant, a three-year difference in total work experience between early and late respondents is unlikely to invalidate the conclusions of this study. Early and late respondents did not differ with regard to age, education, total sales experience, adaptive selling, and sales performance.

## Measures

The variables in the current study were measured from the salesperson's perspective using a self-report mail questionnaire as part of a larger study. Adaptive selling was measured using the 5-item ADAPTS-SV developed by Robinson et al. (2002). A 9-point (1 = very strongly disagree .....9 = very strongly agree) likert-type scale was used. Although Levy and Sharma (1994) used the 16-item ADAPTS scale developed by Spiro and Weitz (1990), the measurement properties of that scale has been questioned in subsequent research. Spiro and

Weitz (1990, p. 65) cautioned that "the 16-item scale is not unidimensional on the basis of statistical tests using confirmatory factor analysis." Marks, Vorhies and Badovick (1996) identified two dimensions underlying a subset of the 16-item scale, adaptive selling beliefs and adaptive selling behaviors. After a comprehensive set of confirmatory factor analyses, Robinson et al. (2002, p. 118) concluded that "researchers attempting to use ADAPTS as a single unidimensional construct by taking all 16 items and summing them in the traditional manner are, in effect, confounding their findings." Robinson et al. (2002) recommended the 5-item ADAPTS-SV scale to measure adaptive selling. In subsequent research, Chakrabarty et al. (2004) also found support for ADAPTS-SV as a better measure of adaptive selling compared to the 16-item ADAPTS scale. Consequently, in the current study, the 5-item ADAPTS-SV was used to measure adaptive selling.

Sales performance was measured using the 31-item performance scale developed by Behrman and Perreault, Jr. (1982). A 9-point (1 = your performance is very low compared to an average salesperson.....9 = your performance is very high compared to an average salesperson) Likert-type scale was used. Of these 31 items, the 7-item "sales objectives" dimension captures the overall performance of salespeople. Respondents also reported their age, gender, total work experience, total sales experience, and their level of education. Age and experience was measured in years. Education was measured in categories, but these categories were converted into number of years of schooling prior to data analysis (high school graduate = 12 years, college degree = 16 years, graduate degree = 18 years, etc.).

## RESULTS

Confirmatory factor analysis was used to assess the psychometric properties of ADAPTS-SV and sales performance measures. A covariance matrix of ADAPTS-SV was input in LISREL 8.72 and a measurement model was estimated where each item reflected adaptive selling. The

measurement model fit the data very well ( $\chi^2 = 2.35$ ,  $p = 0.79$ , RMSEA = 0.00, NFI = 0.99, CFI = 1.00, GFI = 0.99, AGFI = 0.98, Standardized RMR = 0.01). Similarly, a covariance matrix of the 7-item "sales objectives" dimension of the sales performance scale was input in LISREL 8.72 and a measurement model was estimated where each item reflected sales performance. Two items were deleted based on modification indices and standardized residuals. The respecified measurement model fit the data very well ( $\chi^2 = 3.34$ ,  $p = 0.64$ , RMSEA = 0.00, NFI = 0.99, CFI = 1.00, GFI = 0.99, AGFI = 0.98, Standardized RMR = 0.01). As expected, there was a significant positive correlation ( $r = 0.33$ ) between ADAPTS-SV and sales performance.

Table 1 displays the path estimates of the measurement models.

Convergent validity of ADAPTS-SV was assessed by examining the significance of the path estimates. All of the t-values were significant, thereby establishing convergent validity (Anderson and Gerbing 1988). The average variance extracted exceeded 0.50 and the composite reliability was 0.85 (see Table 1). Thus, ADAPTS-SV was a reliable and valid measure of adaptive selling. The sales performance measure also demonstrated convergent validity and the composite reliability and average variance extracted exceeded the recommended minimum.

**TABLE 1**  
**Estimates of the measurement models**

Construct	Items	Path Estimate (t-value)	$\rho^1$	AVE <sup>2</sup>
Adaptive Selling	When I feel that my sales approach is not working, I can easily change to another approach.	0.82 (14.76)	0.85	0.55
	I like to experiment with different sales approaches.	0.71 (11.97)		
	I am very flexible in the selling approach I use.	0.86 (15.71)		
	I can easily use a wide variety of selling approaches.	0.82 (14.61)		
	I try to understand how one customer differs from another.	0.42 (6.42)		
Sales Performance	Producing a high market share for your company in your territory.	0.88 (16.47)	0.85	0.54
	Making sales of those products with the highest profit margins.	0.47 (7.38)		
	Generating a high level of dollar sales.	0.92 (17.91)		
	Identifying and selling major accounts in your territory.	0.58 (9.51)		
	Exceeding all sales targets and objectives for your territory during the year.	0.74 (13.01)		

<sup>1</sup> Composite Reliability



The research hypotheses were tested using an OLS regression. All variables were entered in deviation form to avoid potential multicollinearity (Aiken and West 1991). Scores on adaptive selling were regressed on gender (dummy variable), age, a quadratic term of age, total sales experience, a quadratic term of total sales experience, total work experience, education, and a quadratic term of education. The quadratic terms of total sales experience and education were introduced in the model to examine whether Levy and Sharma's (1994) findings are replicated. In addition, since supervisors often accompany industrial salespeople on sales calls, a dummy variable representing whether the sales manager goes on sales calls with the respondent was also included in the model. Table 2 displays the regression results.

The regression model was significant ( $F_{9,179} = 3.014$ ,  $p < 0.01$ ) and explained 9 percent of the variance in adaptive selling. The largest VIF value was 6.277. Thus, multicollinearity was unlikely to bias the findings. As Table 2

indicates, the regression coefficient of gender was not significant ( $\beta = 0.064$ ,  $t = 0.786$ ). Thus, hypothesis 1 was supported and our results concur with those of Levy and Sharma (1994). Male and female salespersons do not differ in the degree to which they practice adaptive selling.

The standardized regression coefficient of age was negative and significant ( $\beta = -0.455$ ,  $t = -2.566$ ,  $p < 0.05$ ) and the standardized regression coefficient of age<sup>2</sup> was positive and significant ( $\beta = 0.224$ ,  $t = 2.242$ ,  $p < 0.05$ ). Consequently, there was a u-shaped relationship between age and the practice of adaptive selling, and hypothesis 2 was supported. This finding differs from that of Levy and Sharma (1994). The finding that industrial salespeople practice adaptive selling to a greater degree as they grow older has important managerial implications.

Hypothesis 3 was partially supported since total work experience had a significantly positive effect ( $\beta = 0.622$ ,  $t = 3.484$ ,  $p < 0.01$ ) on

**TABLE 2**  
**OLS regression results**

Dependent Variable	Independent Variables	Standardized Coefficients	t-value
Adaptive Selling	Gender	0.064	0.786
	Age	-0.455	-2.566 <sup>b</sup>
	Age <sup>2</sup>	0.224	2.242 <sup>b</sup>
	Education	0.152	1.921 <sup>c</sup>
	Education <sup>2</sup>	0.089	1.186
	Total Sales Experience	0.015	0.124
	Total Sales Experience <sup>2</sup>	-0.177	-1.599
	Total Work Experience	0.622	3.484 <sup>a</sup>
	Supervisor with Salesperson	0.248	3.318 <sup>a</sup>

<sup>a</sup>  $p < .01$

<sup>b</sup>  $p < .05$

<sup>c</sup>  $p < .10$

adaptive selling. However, the standardized coefficients of total sales experience were not significant. Thus, total sales experience was unrelated to adaptive selling, and this study fails to support the s-shaped relationship reported by Levy and Sharma (1994).

Finally, the standardized regression coefficient of education was significantly positive ( $\beta = 0.152$ ,  $t = 1.921$ ,  $p < 0.10$ ), thereby providing support for hypothesis 4. Highly educated salespeople practice adaptive selling to a greater degree than their less educated counterparts. This finding differs from that of Levy and Sharma (1994) who did not find support for the main effect of education on adaptive selling. However, their linear contrasts provided support for the positive effect of education in older salespeople.

It was noteworthy that whether the sales manager accompanies the salesperson on sales calls was highly significant ( $\beta = 0.248$ ,  $t = 3.318$ ,  $p < 0.01$ ) in predicting the degree to which salespeople engaged in adaptive selling. Apparently, sales managers acted as good role models for the respondents of this study. Recent studies have confirmed the role of sales managers in promoting salesperson adaptive selling behaviors (e.g., Paparoidamis and Guenzi 2009).

Following Levy and Sharma (1994), adaptive selling scores were regressed on interactions among age, gender, education, and experience. None of the interactions were significant and the model did not explain any variance in adaptive selling ( $F_{6, 195} = 0.584$ ,  $\text{sig.} = 0.743$ ). Thus, in the current study, interactions among demographic factors were unrelated to the practice of adaptive selling.

## DISCUSSION

In the current study, industrial salespeople became more adaptive as they grew older and gained more experience. If sales managers believe that salespeople plateau as they get older, these highly experienced salespeople may be passed over for promotion.

Consequently, managers should ensure that older salespeople have actually disengaged from their jobs, before making any decisions regarding their future. Even if there are no opportunities for promotion, older and experienced salespeople may be more adept in handling additional responsibilities, such as, training new recruits, handling key accounts, etc. By lowering the likelihood of assigning additional responsibilities to these salespeople, managers may actually induce career plateau (Feldman and Weitz 1988). One of the major contributions of this study is there should be no stereotypes regarding the effectiveness of older, mature salespeople, in practicing adaptive selling.

A notable finding of this study is that the presence of supervisors during sales calls had a significantly positive effect on the practice of adaptive selling by industrial salespeople. Approximately 78 percent of the respondents indicated that their sales managers actually go on calls with them. By observing sales calls, sales managers have the opportunity to provide behavioral feedback (Jaworski and Kohli 1991), demonstrate proper selling techniques, and improve the learning and performance orientation of salespeople (Kohli, Shervani and Challagalla 1998). According to Spiro, Stanton, and Rich (2003, p. 309), "perhaps the most important way in which managers can serve as role models is to personally demonstrate proper selling techniques so that salespeople see how sales calls should be handled." Further, by reminding salespeople of the business strategies pursued by the selling firms, sales managers can help plateaued salespeople to become more productive (Slocum, Hansen and Rawlings 1985).

The effect of experience on the practice of adaptive selling provided an interesting contrast. Although total work experience facilitated adaptive selling, total sales experience did not. Since the total work experience includes the sales experience of respondents, this apparent contradiction on the role of experience in adaptive selling requires further research. It is possible that experienced

salespeople react differently to supervisory behaviors than novices. Salespeople's selling experience has been found to moderate the effects of supervisory behaviors on salespeople's responses (Kohli 1989), and the effects of supervisory orientations on salespeople's goal orientations (Kohli, Shervani and Challagalla 1998). Thus, during sales calls, the behaviors and activities of supervisors may have interacted with the selling experience of salespeople. Kohli (1989, p. 47) recommended that sales supervisors should engage in "adaptive supervision" by adapting their behaviors to the "needs and expectations of individual salespeople."

The results also underscore the importance of education in the practice of adaptive selling. Recruiters of industrial salespeople should continue to use education as a selection criterion. Education was significantly positively related to the practice of adaptive selling, and recruiters of industrial salespeople should not assume that highly educated job applicants are overqualified and are likely to be frustrated with the repetitive tasks of the sales job.

Finally, there were no gender differences in the practice of adaptive selling. The common notion that due to socialization women are more nurturing and obliging than men (Gilligan 1982) was not reflected in the practice of adaptive selling in this study. With regard to selection, training, promotion, and assignment of responsibilities, organizations need not differentiate between male and female salespersons on the assumption that there are inherent gender-specific traits that require men and women to be treated differently. The results of this study confirm earlier findings regarding the lack gender differences in salespeople (Busch and Bush 1978; Levy and Sharma 1994; Schul and Wren 1992).

#### **LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

The respondents of this study were predominantly male, older, educated and highly

experienced. Although that is typical of industrial salespeople, the results of this study should be interpreted with caution. Replications of this study are needed in other contexts to confirm the role of demographic factors in predicting adaptive selling. Results of the current study were remarkably different from that of Levy and Sharma (1994).

Future research should also explore the relational determinants of adaptive selling in conjunction with demographic factors. For example, Weitz (1981, p. 94) proposed that the relationship between adaptive selling and sales effectiveness is contingent upon customer-salesperson relationships that are "characterized by a low level of conflict and the salesperson anticipates future relationships with the customer." The industrial salespeople of the current study might have anticipated future relationships with their customers to a greater degree compared to the retail salespeople surveyed by Levy and Sharma (1994). In that case, salespeople in the two studies might have engaged in different degrees of adaptive selling, regardless of their gender, age, experience, and education. Giacobbe et al. (2006) reported that in "adaptive" situations, adaptive selling behaviors explained nearly one-third of the variance in sales performance.

Finally, future research should also examine the degree to which the lack of unidimensionality of the 16-item ADAPTS scale might have affected research findings. The differences in the role of demographic factors in predicting adaptive selling in retail and industrial salespeople may be attributed to the measurement of adaptive selling. Replications using the 5-item ADAPTS-SV are needed to resolve this issue.

#### **REFERENCES**

- Aiken Leona S. and Stephen G. West (1991), *Multiple Regression: Testing and Interpreting Interactions*, London: Sage Publications.

- Anderson James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103 (May), 411-423.
- Armstrong J. Scott and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, 14 (August), 396-402.
- Behrman, Douglas N. and William D. Perreault, Jr. (1982), "Measuring the Performance of Industrial Salespersons," *Journal of Business Research*, 10 (September), 355-370.
- Busch P. and Ronald F. Bush (1978), "Women Contrasted to Men in the Industrial Salesforce: Job Satisfaction, Values, Role Clarity, Performance, and Propensity to Leave," *Journal of Marketing Research*, 15 (August), 438-448.
- Chakrabarty, Subhra, Gene Brown, Robert E. Widing II and Ronald D. Taylor (2004), "Analysis and Recommendations for the Alternative Measures of Adaptive Selling," *Journal of Personal Selling and Sales Management*, 24 (Spring), 125-133.
- Cole, Catherine A. and Siva K. Balasubramanian (1993), "Age Differences in Consumers' Search for Information: Public Policy Implications," *Journal of Consumer Research*, 20 (June), 157-169.
- Cotham III, James C. (1969), "Using Personal History Information in Retail Salesman Selection," *Journal of Retailing*, 45 (Summer), 31-38.
- Cron, William L. (1984), "Industrial Salesperson Development: A Career Stages Perspective," *Journal of Marketing*, 48 (Fall), 41-52.
- Cron, William L. and John W. Slocum, Jr. (1986), "The Influence of Career Stages on Salespeople's Job Attitude, Work Perceptions, and Performance," *Journal of Marketing Research*, 23 (May), 119-129.
- Cron, Willam L., Alan J. Dubinsky and Ronald E. Michaels (1988), "The Influence of Career Stages on Components of Salesperson Motivation," *Journal of Marketing*, 52 (January), 78-92.
- Churchill, Gilbert A. Jr. (1991) *Marketing Research: Methodological Foundations*; fifth edition. Chicago: The Dryden Press.
- Feldman, Daniel C. and Barton A. Weitz (1988), "Career Plateaus in the Salesforce: Understanding and Removing Blockages to Employee Growth," *Journal of Personal Selling and Sales Management*, 8 (November), 23-32.
- Ference, Thomas P., James A. F. Stoner and E. Kirby Warren (1977), "Managing the Career Plateau," *Academy of Management Review*, 2 (October), 602-612.
- Giacobbe, Ralph W., Donald W. Jackson, Jr., Lawrence A. Crosby and Claudia M. Bridges (2006), "A Contingency Approach to Adaptive Selling Behavior and Sales Performance: Selling Situations and Salesperson Characteristics," *Journal of Personal Selling and Sales Management*, 26 (Spring), 115-142.
- Gilligan, Carol (1982). *In a Different Voice: Psychological Theory and Women's Development*, Cambridge: Harvard University Press.
- Goolsby, Jerry R., Rosemary R. Lagace and Michael L. Boorum (1992), "Psychological Adaptiveness and Sales Performance," *Journal of Personal Selling and Sales Management*, 12 (Spring), 51-66.
- Hafer, John C. (1986), "An Empirical Investigation of the Salesperson's Career Stage Perspective," *Journal of Personal Selling and Sales Management*, 6 (November), 1-7.
- Jaramillo, Fernando, Douglas B. Grisaffe, Lawrence B. Chonko and James A. Roberts (2009), "Examining the Impact of Servant Leadership on Sales Force Performance," *Journal of Personal Selling and Sales Management*, 29 (Summer), 257-275.
- Jaworski, Bernard J. and Ajay K. Kohli (1991), "Supervisory Feedback: Alternative Types and Their Impact on Salespeople's Performance and Satisfaction," *Journal of Marketing Research*, 28 (May), 190-201.

- Jones, Eli, Lawrence B. Chonko and James A. Roberts (2004), "Sales Force Obsolescence: Perceptions from Sales and Marketing Executives of Individual, Organizational, and Environmental Factors," *Industrial Marketing Management*, 33 (July), 439-456.
- Kohli, Ajay K. (1989), "Effects of Supervisory Behavior: The Role of Individual Differences among Salespeople," *Journal of Marketing*, 53 (October), 40-50.
- Kohli, Ajay K., Tasadduq A. Shervani and Goutam N. Challagalla (1998), "Learning and Performance Orientation of Salespeople: The Role of Supervisors," *Journal of Marketing Research*, 35 (May), 263-274.
- Lambert, Douglas M., Howard Marmorstein and Arun Sharma (1990), "The Accuracy of Salesperson's Perceptions of their Customers: Conceptual Examination and Empirical Study," *Journal of Personal Selling and Sales Management*, 10, (Winter), 1-9.
- Leigh, Thomas W. and Patrick F. McGraw (1989), "Mapping the Procedural Knowledge of Industrial Sales Personnel: A Script-Theoretic Investigation," *Journal of Marketing*, 53 (January), 16-34.
- Levy, Michael and Arun Sharma (1994), "Adaptive Selling: The Role of Gender, Age, Sales Experience, and Education," *Journal of Business Research*, 31, (September/October), 39-47.
- Marks, Ronald, Douglas W. Vorhies and Gordon J. Badovick (1996), "A Psychometric Evaluation of the ADAPTS Scale: A Critique and Recommendations," *Journal of Personal Selling and Sales Management*, 16 (Fall), 53-65.
- Paparoidamis, Nicolas G. and Paolo Guenzi (2009), "An Empirical Investigation Into the Impact of Relationship Selling and LMX on Salespeople's Behaviours and Sales Effectiveness," *European Journal of Marketing*, 43 (7/8), 1053-1075.
- Pelham, Alfred M. and Pamela Kravitz (2008), "An Exploratory Study of the Influence of Sales Training Content and Salesperson Evaluation on Salesperson Adaptive Selling, Customer Orientation, Listening, and Consulting Behaviors," *Journal of Strategic Marketing*, 16 (5), 413-435.
- Phillips, Lynn W. and Brian Sternthal (1977), "Age Differences in Information Processing: A Perspective on the Aged Consumer," *Journal of Marketing Research*, 14 (November), 444-457.
- Robinson Jr. Leroy, Greg W. Marshall, William C. Moncrief and Felicia G. Lassk (2002), "Toward a Shortened Measure of Adaptive Selling," *Journal of Personal Selling and Sales Management*, 22 (Spring), 111-118.
- Schul, Patrick L. and Brent M. Wren (1992), "The Emerging Role of Women in Industrial Selling: A Decade of Change," *Journal of Marketing*, 56 (July), 38-54.
- Slocum, Jr., John W., William L. Cron, Ricahrd W. Hansen and Sallie Rawlings (1985), "Business Strategy and the Management of Plateaued Employees," *Academy of Management Journal*, 28 (March), 133-154.
- Spiro, Rosann L., William J. Stanton and Gregory A. Rich (2003), *Management of a Sales Force*, 11<sup>th</sup> edition. New York: McGraw-Hill-Irwin.
- Spiro, Rosann L. and Barton A. Weitz (1990), "Adaptive Selling: Conceptualization, Measurement, and Nomological Validity," *Journal of Marketing Research*, 27, (February), 61-69.
- Weaver, Charles N. (1969), "An Empirical Study to Aid the Selection of Retail Salesclerks," *Journal of Retailing*, 45 (Fall), 22-26.
- Weitz, Barton A. (1981), "Effectiveness in Sales Interactions: A Contingency Framework," *Journal of Marketing*, 45 (Winter), 85-103.
- Weitz Barton A, Harish Sujana and Mita Sujana (1986), "Knowledge, Motivation and Adaptive Behavior: A Framework for Improving Selling Effectiveness," *Journal of Marketing*, 50 (October), 174-191.

# THE INTERRELATIONSHIPS OF EMPATHY, TRUST AND CONFLICT AND THEIR IMPACT ON SALES PERFORMANCE: AN EXPLORATORY STUDY

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*There is a great deal of evidence in the general interpersonal behavior literature that an individual's perceptions of another person's trust, empathy and conflict impacts behaviors toward that individual. This has also been found to be true in the business-to-business sales literature. Moreover, it has been found that these perceptions affect various aspects of the organizational buying process. Consequently, knowledge of the relative importance of these perceptions on organizational choice processes needs to be taken into consideration in decisions on hiring, training, and even sales strategy. However, while these factors have been studied, their relative importance has not. This paper develops a model of these constructs and then tests that model empirically in a specific business-to-business selling context. The results demonstrate the primacy of trust and empathy as predictors of sales success while suggesting that social conflict plays a relatively insignificant but interesting role.*

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## INTRODUCTION

The purpose of this paper is to report on an exploratory study that examined the interrelationships between empathy, trust and conflict and their relationship to sales performance. As such, the research makes a number of unique contributions. To begin with, it is the first attempt at measuring all three of the above variables in a sales performance context. And while all three variables have been examined in the social sciences, this is the first study to offer consistent theoretical and operational definitions for all three variables that are grounded by the perceptions of other significant parties. It also presents two dependent variables – choice of vendors and relative salesperson performance.

The paper begins with a very brief review of the relevant conflict, empathy, trust, and sales effectiveness/performance literature that serves as the basis for the model. The rationale for that is simply conflict, trust, and empathy have been extensively studied and there is a

significant literature that has been reviewed in each area (e.g., Anonymous 2008; Comer and Drollinger 1999; Nair 2008; Seppanen, Blomqvist and Sundqvist 2007; and Swan, Bowers and Richardson 1999). In addition, most major empirical works have substantially reviewed the constructs as well, and in the general social sciences literature there are numerous reviews. Hence only the research in sales for each variable is examined and then research in other contexts which have addressed these conflicts together is addressed. The model is then tested first using path analysis, then logistic regression. The resultant findings and limitations of the research are discussed along with future research opportunities and managerial implications. As will be demonstrated, the findings suggest strong linkages between the variables and a strong linkage to buyer choice.

## LITERATURE REVIEW

Sales performance on the part of individual salespeople is a broad topic. Many constructs have been proposed and tested which have purported to impact performance. Much of this research can be subsumed under a model developed by Walker, Churchill and Ford

(1977) from the industrial and organizational psychology literature on work performance.

As noted above, each construct reviewed below has a long history of research, both conceptual and empirical, and each has been applied to personal selling. There is, however, very little research that examines the interrelationships of all three variables and none has been done in the sales or marketing literature. The research that has been done has taken many paths with very different theoretical and operational definitions of the constructs.

### Conflict in Sales Research

The very nature of sales facilitates interpersonal conflict. From a sales management perspective, for example, interpersonal conflicts arise between sales managers and salespeople. From a selling process perspective, conflict takes the form of role conflict or it may arise from sales interactions between the salesperson and the buyer and thus would represent interpersonal conflict. Empirical research on conflict in the sales management domain, however, has been almost exclusively focused on role conflict (Walker, Churchill and Ford 1975). And while organizational buying behavior research, such as Day, Michaels, and Perdue (1988), has examined how buyers handle conflict with suppliers' representatives, there has only been limited research examining the nature of interpersonal conflict between the buyer and the salesperson (e.g. Reid et al. 2004; Newell and Plank 2007).

Various authors (Weitz and Bradford 1999; Bradford and Weitz 2009; and Bobot 2010) note that conflict is inherent in buyer-seller relationships. The challenge from a salesperson's perspective obviously then is to recognize when a conflict situation exists and to manage it accordingly. Unfortunately, sales research has shed little light on the nature of conflict in sales interactions or normative advice on how to deal with it. As selling increasingly focuses on relationship management and building long-term customer relationships, the on-going management of

conflict in the sales process becomes increasingly more important. This interpersonal level conflict is referred to as perceived sales interaction conflict by Reid et al. (2004). They define it as the perception of conflict generated during sales interactions between a salesperson and a buyer.

But perhaps the biggest driver of conflict and what makes it critical to understand is the notion of adaptation at the organizational level. Significant research has focused on organizational adaptation (Brennan, Turnbull and Wilson 2003) and has documented the nature of conflict involved in organizational adaptation activities both at the organizational and individual level within those organizations. While organizations adapt some aspect of their businesses as they continually interact with various network actors, the actual adaptation by the organization is as a result of the actors, driven by their organization roles, and how they deal with conflict among themselves.

Research examining conflict in organizations has demonstrated that it is important to recognize the different dimensions of conflict that may be present in a given situation (Jehn 1997). Given the nature of the sales process and drawing on existing conflict literature, sales interaction conflict can be seen as consisting of two types of conflict: relationship conflict and task conflict. These can be defined in a sales context as follows:

**Relationship conflict** refers to the existence of interpersonal incompatibilities between a salesperson and a buyer. These interpersonal incompatibilities may include tension, animosity, or annoyance.

**Task conflict** refers to disagreements between a salesperson and a buyer about the content of tasks being performed. These disagreements could relate to differences in viewpoints, ideas, and opinions.

These definitions mirror those developed by Jehn (1995) and utilized by Simons and Peterson (2000), Amason (1996), and others.

In essence, relationship conflict has its basis in the people involved, while task conflict has its basis in the issues involved. The interpersonal nature of personal selling, we argue, calls for an examination of interpersonal conflict and both dimensions are important.

### **Empathy in Sales Research**

In the sales literature the most frequently taken perspective of empathy is that of a trait personality construct, following the work of Greenberg and Mayer (1964), which is linked to sales performance. Such a view is useful and has been recently updated by Comer, Drollinger and Ding (1999). These authors note that as a trait, empathy is modified by the situation and impacts on the process. However, virtually all of the studies in the sales literature have examined some form of empathy and related it directly to sales (e.g., Dawson, Soper and Pettijohn 1992).

To test the impact of empathy on sales performance in a business-to-business context we employed the measure developed by Plank, Minton and Reid (1996) that defines empathy as an individual's perception that another person demonstrates that s/he both feels and understands the other individual's situation.

### **Trust in Sales Research**

According to Dwyer and Lagace (1986), definitions of trust can be conceptualized in one of three ways. The first views trust as a personality trait or generalized expectancy (e.g., Rotter 1967). The second treats it as a predisposition toward another or belief that another will behave in a manner beneficial to the other party (e.g., Driscoll 1978). The third views it from the standpoint of risking behaviors (e.g., Schurr and Ozanne 1985), which reflects a willingness on the part of the buyer to accept the possibility of vulnerability on his/her part in the transaction.

A number of authors (e.g., Schurr and Ozanne 1985; Swan, Trawick, Rink and Roberts 1988; Pappas and Flaherty 2008) have examined

some aspect of trust within the buyer/seller dyad. This research has generally suggested a linkage between a set of trust earning components, trust, and success in sales. Research in trust building in sales has offered sets of components for trust building. Swan, Trawick and Silva (1987) for example, suggested that being dependable/reliable, honest/candid, competent, customer-oriented, and likable/friendly were all likely to lead to trust of the salesperson by the buyer. This logically suggests that some behaviors that salespeople execute lead to trust on the part of the buyer.

Sales research also indicates that sellers who develop a trusting perception on the part of their buyers are more likely to be successful than those who do not. It is widely accepted that trust and the development of a trusting perception in selling contexts is a necessary ingredient for long term sales success (e.g., Hawes 1994). Also, when queried, organizational buyers rank trustworthiness as one of the most important characteristics of a seller (Hayes and Hartley 1989).

The sales literature is fairly consistent on the definition of trust. For the most part, interpersonal trust relates to a belief on the part of the trusting person that obligations will be fulfilled. The Swan and Nolan (1985) definition reflects this. Specifically, they define trust as the situation where "the industrial buyer believes and feels that he can rely on what the salesperson says or promises to do in a situation where the buyer is dependent upon the salesperson's honesty and reliability (Swan and Nolan 1985, p. 40)." As defined, this reflects Dwyer and Lagace's (1986) notion of trust as a predisposition rather than personality or risking behaviors.

To date, however, the sales literature has viewed trust from a global perspective as an overall impression of the salesperson. However, the notion of global versus situation-specific trust is one that needs to be considered. As noted by Butler (1991), there is a tremendous amount of literature that supports the



importance of specific measures of trust performing much better in prediction and explanation.

In the buyer-seller literature, the specific object of trust has been limited. Specifically, research has concentrated purely on interpersonal trust, or trust of another person. However, when a buyer does business with a seller, trust of the salesperson is only one aspect of obligation; s/he also needs to consider the obligations or expected functions associated with the product/service itself and the company that stands behind the product/service. Therefore, the measure developed for this study is based on the idea that trust is based on multiple objects in buyer-seller relations. While these different dimensions of trust are likely to be correlated, they are unique dimensions and need to be captured. It is also suggested that certain behaviors that salespeople do are more likely to affect one or the other of the dimensions (Plank and Reid, 1994). In this study, the Plank, Reid and Pullins' (1999) definition is employed in a slightly modified form. We define trust as a global perception on the part of the buyer that the salesperson, product and company will fulfill their obligations as understood by the buyer. Individual components of trust are defined as follows:

**Salesperson trust** is the perception by the buyer that the salesperson will fulfill his/her obligations as understood by the buyer.

**Product trust** is the perception by the buyer that the product /service will fulfill its functions as understood by the buyer.

**Company trust** is the perception by the buyer that the company will fulfill all its obligations as understood by the buyer.

### Studies of Constructs Jointly

Not surprisingly, there is little work that has examined all three constructs at the same time. A conceptual paper by Denton (1988) argues that managers having empathy and building trust would have an easier time of resolving

conflicts and by developing these attributes would experience less conflict, but he provides no empirical justification. Feldman (1980) also models the three concepts in examining marital discord. He suggests therapeutic solutions to build empathy and trust thereby reducing conflict and making conflict resolution easier. However, no test of this conceptualization was provided. There have been a number of empirical tests of various facets of the relationships between these three concepts (e.g., Langlois 1998; Newman 1997; Ward, McCormack and Hudson 1997; Williams 2002). Langlois measures the constructs based on the Plank and Reid (1994) model and their subsequent measures, but does not examine the interrelationships. Other research uses somewhat different theoretical definitions for their constructs. In Newman (1997), for example, the three constructs are confounded within the assessment of interpersonal relations measure which measures all three constructs and a number of others. None of the other studies mentioned above were useful for the purposes of the current study, primarily because the theoretical and operational definitions of the constructs are different across all of them. In summary, the various studies have either not offered empirical evidence as to the interrelationships of all variables or have made the evaluation difficult.

A number of studies have, however, examined the relationships between the variables of conflict and trust. But once again, all have either one or both of the constructs conceptually and/or operationalized differently. Kauser and Shaw (2001) found that trust was a good predictor of international strategic alliance success, but that higher degrees of conflict hindered success. LaBahn and Kohli (1997) found similar findings in ad agency/client relationships as did Zaheer, McEvily and Perrone (1998) in buyer seller relationships and Moore (1998) in logistical alliances. An earlier study by Young and Wilkerson (1988) within a marketing channels context clearly found that the level of trust was lower when conflict was present. In summary, the empirical evidence suggests a negative relationship between trust

and conflict. In general, when one is higher the other is lower.

Much less work has been done linking empathy and conflict. Harvey (1998) in a management context suggests that most conflict is caused by different viewpoints and that being empathetic will reduce that conflict, but does not offer data to support that conjecture. In the psychological literature, Baron (1993), Bissonnette, Rusbult and Kilpatrick (1997), and Richardson et al. (1994) link empathy to conflict and suggest the higher the empathy, the lower the conflict. This research appears to be very consistent, we have a negative relationship between empathy and conflict, but again none of it is causal suggesting a direction for the relationship.

Trust and empathy have been examined extensively in a number of contexts. However, the theoretical and operational definitions varied greatly across studies. Simons and Peterson (2000) found that trust moderated the relationship between task and relationship conflict and inferred that trust is a key to gaining benefits of task conflict without suffering the costs of relationship conflict. Thus, higher levels of trust would moderate any negative role of conflict in general and in this case they suggest that relationship conflict will not occur. DeRuyter and Wentzels (2000) found that trust and empathy were empirically discrete concepts but correlated. While Johnson (1971) showed how trust and empathy were related from a developmental perspective. With respect to the relationship between trust and empathy in different settings, Northouse (1977) demonstrated the relationship in a business setting, while Schneider (1984) did so in a counselor setting, and Semmes (1991) along with Redfern, Dancey and Dryden (1993) did likewise in health care settings.

In summary, this literature generally supports the notion that empathy and trust are positively related. Summarizing the literature on interrelationships of the three constructs there is general support for their interrelatedness. In general, trust and empathy are seen as being positively related. However, conflict is a more

complex situation. One could easily agree that conflict is negatively related to both trust and empathy. However, the social conflict research suggests that social conflict is composed of two related types of conflict – task and relationship conflict. The relationship between these two constructs and other constructs is not as clear.

### **Sales Performance**

The notion of sales performance is not as obvious as it might first seem. Walker, Churchill and Ford (1979) first differentiated performance from effectiveness. They define performance as the evaluation of behaviors in terms of contributions to the goals of the organization. What many people define as sales performance, such as meeting/exceeding quotas, achieving a certain level of sales, and the like is what they refer to as effectiveness. These are summary measures or indices for outcomes for which the individual is at least partly responsible. The literature on behavior-based versus outcome-based sales force control systems has its roots in this dilemma (e.g., Anderson and Oliver 1987). There are literally dozens of effectiveness measures, but the behaviorally-based measures are much less developed. Churchill, Ford and Walker (1994) note the potential advantages of developing behaviorally-anchored rating scales (BARS) and while there is an extensive academic literature on these (e.g., Rarick and Baxter 1986) actual usage has been minimal with Bush et al. (1990) being the one example.

There are, of course, other ways of examining performance. One can use non-BARS scales to examine performance. The most extensively used scale to date has been that of Behrman and Perreault (1982). This scale has multiple items and was designed to be used by sales managers to evaluate the performance of their salespeople. Another way of measuring is by designing it into the actual research design. For example, in a study by Reid and Plank (1997), a single item measure of sales performance was used (i.e., whether the salesperson received the order or not). Half the sample reported on a

salesperson that received the order and the other half reported on salesperson who did not.

Figure 1 represents a testable research model derived from the extant research. Based on the empirical evidence discussed in the literature review and the proposed research model, we empirically examine from the buyer's perspective the five general research questions stated below:

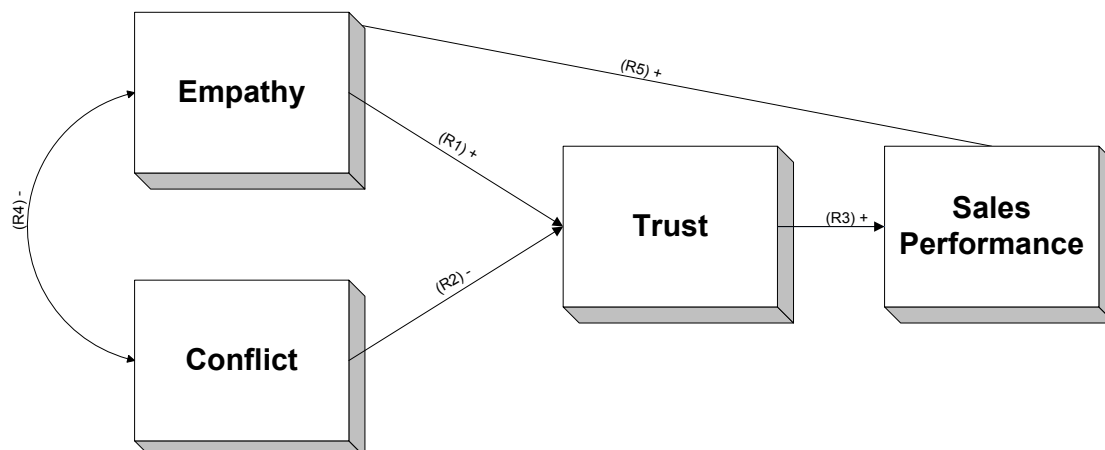
- RQ<sub>1</sub>:** There is a positive relationship between the level of empathy a buyer perceives and the level of trust of the salesperson.
- RQ<sub>2</sub>:** There is a negative relationship between the level of conflict and the level of trust of the salesperson.
- RQ<sub>3</sub>:** There is a positive relationship between trust and the level of salesperson effectiveness.
- RQ<sub>4</sub>:** There is a negative relationship between conflict and the level of empathy.
- RQ<sub>5</sub>:** There is a positive relationship between empathy of the salesperson and the level of salesperson effectiveness.

As research by Simonds and Peterson (2000) and LaBahn and Kohli (1997) would suggest, empathy and conflict are related to perceptions of trust. Research (e.g., Lewicki and Wiethoff 2000) also suggests that trust is the dominant variable and empathy and conflict serve as antecedents to trust. Thus, we posit that empathy and conflict are linked and drive trust, and that trust is a key driver of performance. Empathy, in addition to being an antecedent of trust, as research by Baron (1993) suggests, also has a direct relationship to performance. In other words, empathy works both through trust and by itself (RQ<sub>5</sub>). Research by Plank, Reid and Pullins (1999) demonstrated that trust is connected to sales effectiveness (RQ<sub>3</sub>) while research by Richardson et al. (1994) has demonstrated a relationship between conflict and empathy (RQ<sub>4</sub>).

### MEASUREMENT AND RESEARCH DESIGN

In this study, conflict is theoretically defined following Jehn (1995). The measure used is one developed by Amason (1996), which is based on Jehn's (1995) work. Amason's measure has been used repeatedly (e.g.,

**Figure 1: Theoretical Model of the Impact on Empathy, Conflict, and Trust in Sales Performance**



Pearson, Ensley and Amason 2002) and has a demonstrated history of robust reliability and validity.

Empathy was measured using a scale developed by Plank, Minton and Reid (1996). This eight-item scale produces a single factor measurement model and has been used in a similar context with demonstrated reliability and validity. It incorporates both affective and cognitive indicators.

Trust was measured using the scale developed by Plank, Reid and Pullins (1999). This scale was also shown to have good validity and reliability in its initial use.

Performance was measured in two ways. The first was a single item scale developed for this study and is a perceptual measure. For this first measure, respondents were simply asked to compare the salesperson they were reporting on to other salespeople they do business with via an overall summary measure. While other self-report measures could have been used (such as Behrman and Perreault 1982), those measures were designed for sales management respondents. The current study's respondents are purchasing agents who are not capable of answering many of the specific questions utilized in other self-report measures. Thus, a single question was used that asked respondents to compare the effectiveness of the salesperson they were reporting on against others with whom they do business.

The second measure of performance was designed directly into the study. The sample was randomly split in half. Half the respondents were asked to respond to the questionnaire vis á vis a salesperson who they had recently given an order. The other half were asked to respond to the questionnaire vis á vis a salesperson to whom they did not give an order. Respondents were asked to respond to the questions in the questionnaire in the context of a choice situation where they had the option and ability to choose from one or more suppliers. This methodology has a number of advantages. For instance, while buyers are

responding directly to the independent variables (e.g., trust, conflict, and empathy), they are not responding directly to the dependent variable (e.g., effectiveness) thus limiting the possibility of common method bias. Secondly, the nature of the design randomly assigns each respondent to one or the other scenarios (purchase vs. no purchase), thereby eliminating choice bias and the built in differences that frequently occur when you ask a respondent to compare both cases at the same time. This represents a more conservative design so that any differences observed are likely to be more realistic.

Demographic and situational variables of various types were also measured to provide a profile of the sample relative to the population from which it was drawn. These variables also provide additional data on buyer center variables.

The study's measures of conflict, empathy, and trust performance are contained in the appendix.

### **The Study**

A list of 5000 randomly selected names was obtained from the Institute for Supply Management. This list was cleaned of all individuals not currently employed by a firm; this resulted in the deletion of students and retired persons who would not be in a position to answer the questionnaire. From this cleaned list 1800 names were randomly selected and mailed the questionnaire. Given the study's limited budget, a single wave mailing with no pre-notification or reminder was used. Of the total mailings, only 12 were undeliverable, making the list 99.5 percent deliverable. Of those 1788 actual deliveries, a total of 481 completed usable questionnaires were received for a response rate of 26.8 percent. Of the 481 responses, 251 responses were for situations where the salesperson received an order and 230 where the salesperson did not.

In order to explore possible non-response bias a comparison was made of early (first quartile) and late (last quartile) respondents in terms of

their demographic profile and responses to the behavioral items, in this case mean conflict scores (Armstrong and Overton 1977). The resulting Chi-square and ANOVA tests showed no significant differences, which suggest a lack of non-response bias.

The single item measure of performance asked respondents to rate the salesperson using a seven-point scale (where 1 was strongly disagree and 7 was strongly agree) in terms of the following statement: "This salesperson is among the best salespeople who have called on me."

The mean for this item was 5.09 (SD 1.51) for salespeople that received an order and 2.91 (SD 1.75) for those that did not.

### Demographics

Demographic variables collected included the gender of the respondent, type of business, number of employees, and the respondent's years of purchasing experience. The sample consisted of 66.5 percent male and 33.5 percent female respondents. Manufacturing (56.3 percent) dominated the industries represented in

**TABLE 1:**  
**First Order Confirmatory Factor Analysis Of Conflict Scale**

Item	Mean	Standard Deviation	Parameter Estimate
Affective Conflict			
Affcon2	1.63	.997	.8240
Affcon3	1.72	.995	.9387
Affcon4	1.65	1.000	.7900
Composite Reliability	.902		
Variance Extracted	.758		
Cognitive Conflict			
Cogcon1	2.30	1.023	.7702
Cogcon2	2.38	1.025	.8159
Cogcon3	2.44	.991	.8072
Composite Reliability	.840		
Variance Extracted	.637		

All Estimates Significant  $p < .01$  AGFI = .9591; CFI = .9975; NNFI = .9953; RMR = .031; Chi-Square = 9.611; Df= 8;  $p < .293$

### Correlation Matrix:

	Aff1	Aff2	Aff3	Cog1	Cog2	Cog3
Aff2	1.0	.776	.624	.461	.424	.434
Aff3		1.0	.747	.477	.410	.433
Aff4			1.0	.446	.392	.399
Cog1				1.0	.624	.605
Cog 2					1.0	.675
Cog 3						1.0

### Summed Scales Statistics\*

Scale	Mean	Standard Deviation	Range
Affective Conflict	1.666	.898	1-5
Cognitive Conflict	2.376	.881	1-5
Total Conflict	4.04	1.566	2-10

\*lower numbers indicate lower conflict

the sample. In terms of company size, 76 percent of the firms represented had more than 100 employees. Respondents had an average of 14 years of purchase experience with a standard deviation of 8 years. Demographics of the sample were compared to published ISM demographics for sex and work experience (<http://www.ism.ws/ISMMembership/files/MemDemReport.pdf>). The sample appears to be a reasonable representation of the ISM membership from which the sample was drawn.

### Measurement Validation

In this section, each of the individual variables is reported separately prior to reporting on the full measurement model.

**Conflict.** Using Proc Calis in SAS as a structural equation modeling program and following Anderson and Gerbing (1988), a confirmatory analysis was conducted on the items after cleaning each of the variables. One affective conflict indicator was removed as indicated in the Appendix (affcon4). The confirmatory factor analysis shown in Table 1 provides evidence of a solid and reliable measure of affective and cognitive conflict. In this analysis and all other cases the sample size was limited to 200 regardless of the actual larger sample size to provide a more meaningful comparison of the Chi-Square statistics (Hair, Anderson, Tatham and Black 1999).

The AGFI was .9591, with an RMR of .03, a Chi-square of 9.61  $Pr > \chi^2$  of .293, a CFI of .9975, and a NNFI of .9953. There were no residuals over 2.58. This suggests a very strong fit for a six-item model of conflict. Three item scales were created for both sub-constructs by adding the scores of the indicator and dividing by the number of indicators, which in each case was three. The resulting statistics are provided in Table 1. These indicate that both measures are skewed to the low side with affective conflict being reported lower than cognitive conflict.

Next, a second order confirmatory factor analysis was run with the two constructs

modeled as a single construct of social conflict. The resulting statistics, AGFI .9532, with an RMR of .03, a Chi-square of 9.61  $Pr > \chi^2$  of .212, a CFI of .9960 and an NNFI of .9914 provide evidence of a solid and reliable measure which indicates the two sub-constructs of conflict can be subsumed under the overall construct of social conflict. A six-item scale of social conflict was created by summing the indicators and dividing by the number of indicators, which was six in this instance. The resulting statistics are provided in Table 1. As was expected, total conflict is also skewed to the low side of the scale, but again the entire range is utilized by respondents. The results of these analyses are similar to those found by Pearson, Ensley and Amason (2002).

**Empathy.** Following the same procedure as above, Proc Calis was used to structurally model the single factor empathy measure. Following cleaning, a confirmatory model on six indicators was run as preliminary analysis suggested items 5 and 8 would not fit the model. As reported in Table 2, the AGFI of .9326, with an RMR of .032, a Chi-square of 16.96  $Pr > \chi^2$  of .0493, a CFI of .9893, and a NNFI of .9821 with no residuals over 2.58, which again suggests a solid model fit. A six-item scale of empathy was created by summing the indicators and dividing by the number of indicators, which in this case were six. The resulting statistics are provided in Table 2.

In general, empathy is slightly skewed (less than one standard deviation). Buyers reported slightly higher empathy.

**Trust.** The same procedure as above was followed for the trust measure. Following data cleaning both a first and second order confirmatory factor analysis was conducted in the same manner as that used by Plank, Reid and Pullins (1999), who created the measure. Preliminary analysis suggested an 11-item measure that included three items for salesperson trust, four items for product trust, and four items for company trust. As reported in Table 3, the resulting AGFI of .9298, with an RMR of .038, a Chi-square of 51.92  $Pr > \chi^2$

**TABLE 2:**  
**Confirmatory Factor Analysis Empathy Scale**

Item	Mean	Standard Deviation	Parameter Estimate
Empathy 1	2.17	1.126	.8031
Empathy 2	1.86	1.269	.7612
Empathy 3	2.42	1.146	.8443
Empathy 4	2.53	1.191	.8500
Empathy 6	2.67	1.170	.7302
Empathy 7	2.38	1.069	.8024

All Estimates Significant  $p < .01$  AGFI = .9326; CFI = .9893; NNFI = .9821; RMR = .032; Chi-Square = 16.96; Df= 9;  $p < .0493$

Correlation Matrix:

	Emp1	Emp2	Emp3	Emp4	Emp6	Emp7
Emp1	1.0	.622	.663	.656	.612	.610
Emp2		1.0	.629	.693	.697	.542
Emp3			1.0	.741	.707	.601
Emp4				1.0	.706	.590
Emp6					1.0	.528
Emp7						1.0

All Estimates Significant  $p < .01$  AGFI = .9326; CFI = .9893; NNFI = .9821; RMR = .032; Chi-Square = 16.96; Df= 9;  $p < .0493$

Summed Scale Statistics\*

Item	Mean	Standard Deviation	Range
Empathy	2.679	1.047	1.17-5.83

\* lower numbers indicate higher empathy

square of .1181, a CFI of .9906, and a NNFI of .9874 with one residual over 2.58. These results again suggest a solid model fit. The resulting statistics are provided in Table 3.

The second order confirmatory factor analysis, also clearly indicated that the three sub-constructs of trust could be subsumed under a single construct of trust with a similar result to that reported by Plank, Reid and Pullins (1999). They found that only ten indicators loaded, however, in the current study eleven indicators loaded. The summed scale consists of eleven indicators summed and divided by the number of indicators, in this case eleven. Statistics are reported in Table 3. The trust indicators are also slightly skewed, by less than one standard deviation. In the case of salesperson trust, it is

lower, in the case of product and company trust it is slightly higher.

**Full Measurement Model.** Using Proc Calis in SAS, the analysis contains the 23 variables from the individual analysis presented above. The analysis provides a moderate fit. With an AGFI of .8727 and a Chi-square significance of .0499 (250.236, DF = 215) the model does not fit as well as expected. However, the CFI is .9874 and the NNFI is .9852, both are acceptable, as is the RMSR at .0461 and the RMSEA at .0287. The independence model with a Chi-square of 3058.70, DF=253, is a much poorer fit. An analysis of the residuals indicates 10 residuals over 2.58 out of 275, which is below the five percent threshold (Hair et al. 1998, p. 625).

**TABLE 3:**  
**First Order Confirmatory Factor Analysis Trust Scale**

Item	Mean	Standard Deviation	Parameter Estimate
SPTrust1	2.45	1.254	.829
SPTrust4	2.41	1.187	.857
SPTrust10	3.25	1.182	.577
PRTrust5	1.70	0.898	.613
PRTrust8	2.11	1.083	.702
PRTrust12	2.24	1.055	.796
PRTrust15	2.08	1.017	.853
COTrust3	1.93	1.012	.837
COTrust6	2.03	1.030	.834
COTrust9	2.03	1.01	.748
COTrust13	2.22	1.108	.797

II Estimates Significant AGFI = .9298; CFI = .9906; NNFI = .9874; RMR = .039; Chi-Square = 51.91; Df= 41; p< .1181  
Correlation Matrix:

SP1	SP4	SP10	PR5	PR8	PR12	PR15	CO3	CO6	CO9	CO13	
SP1	1	.710	.449	.303	.319	.362	.356	.612	.551	.475	.615
SP4		1	.517	.304	.340	.361	.358	.597	.577	.527	.562
SP10			1	.163	.251	.270	.247	.387	.360	.383	.443
PR5				1	.450	.424	.526	.416	.431	.512	.370
PR8					1	.564	.587	.432	.398	.478	.383
PR12						1	.698	.456	.470	.463	.478
PR15							1	.488	.469	.501	.483
CO3								1	.711	.642	.630
CO6									1	.617	.698
CO9										1	.551
CO13											1
Summed Scale Statistics*											
Scale			Mean	Standard Deviation		Range					
Salesperson Trust			2.70	1.014		1-5					
Product/Service Trust			2.03	0.862		1-5					
Company Trust			2.05	0.888		1-5					
Overall Trust			6.77	2.341		3-15					

\*Lower numbers indicate higher trust

## Research Questions

In order to examine the five research questions three different analyses were done. The first utilized Proc Calis in SAS. The single item performance measure was used as the dependent variable. All variables were treated as manifest and path analysis using maximum likelihood was the methodology employed. Given the second order factor analysis of both conflict and trust this was appropriate. We examined the multivariate normality of the variable set and individual values for kurtosis and skewness. While the data was not multivariate normal, the individual skewness

data (-.224 to +.930) and kurtosis (-1.201 to +.643) indicate relatively minor deviations from normality, as was previously noted. This suggests minimal impact on the results as various fit statistics can lead to false conclusions of fit (Hu and Bentler, 1995) under extreme conditions of non-multivariate normality. Conflict as a variable was the most severely skewed variable, as was noted previously. Figure 2 provides the results of this analysis. An alternative model was also run, in this case, the direct impacts of empathy on performance were not modeled, instead, conflict and empathy were linked only to trust. This model was not significant as indicated in



Figure 2: Hypothesis Testing of the Theoretical Model

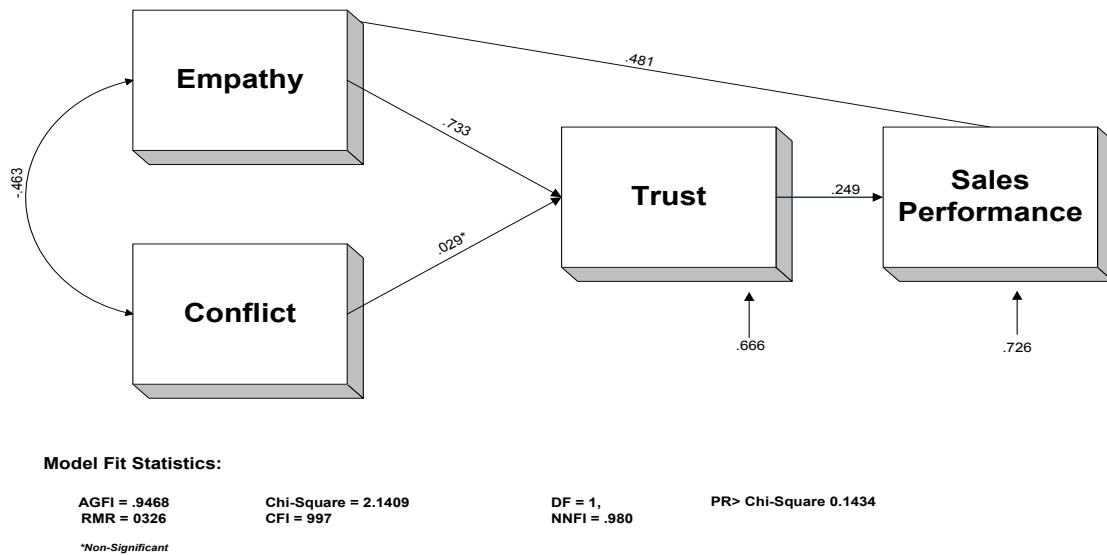


Figure 2. This provides some evidence that the modeling of empathy as directly influencing performance is accurate.

The second analysis, also utilized Proc Calis. In this case, we divided the sample by those respondents reporting on salespeople who had received the order and those reporting on salespeople who did not. We ran the analysis separately on each sample. Figures 3 and 4 provide the results of the analysis. It should be noted that we re-analyzed the data to model fits for the sample reporting on those salespeople who received and those who did not separately using the same methodology as reported above. The data addressing salespeople who received an order represented a good fit of the data to the measurement model. However, the data on salespeople who did not receive an order did not fit the measurement model as well and caution needs to be exercised in interpretation. This is noted again in the limitations section.

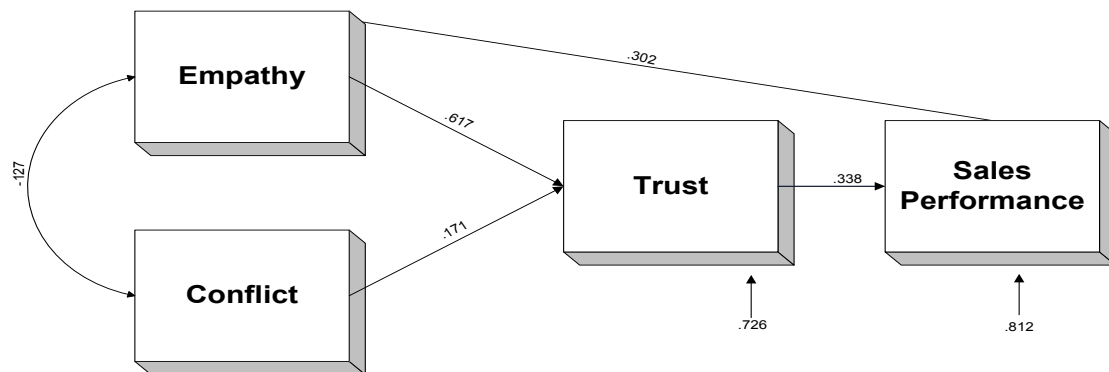
The third analysis utilized logistic regression. In this case, the dependent variable was the

performance measure of whether or not the salesperson received the order or not. Again, the summed scales were used for the independent variables of conflict, trust, and empathy. Using this methodology does not allow for path analysis, but allows the researcher to estimate the relative direct effects of each variable on the dependent variable. Thus, this is a very different model than those tested above, not only is the dependent variable different, but the actual model is also. Table 4 provides the results.

## DISCUSSION

Overall, the study's findings are interesting from a number of perspectives. The initial model tested (Figure 2) suggests that empathy is the biggest driver of sales performance. It has a higher direct association with sales performance than trust and has a very strong association with trust directly. Conflict has no association with trust. However, conflict does have a high negative correlation with empathy.

**Figure 3: Hypothesis Testing of the Theoretical Model  
Successful Sales People**



**Model Fit Statistics:**

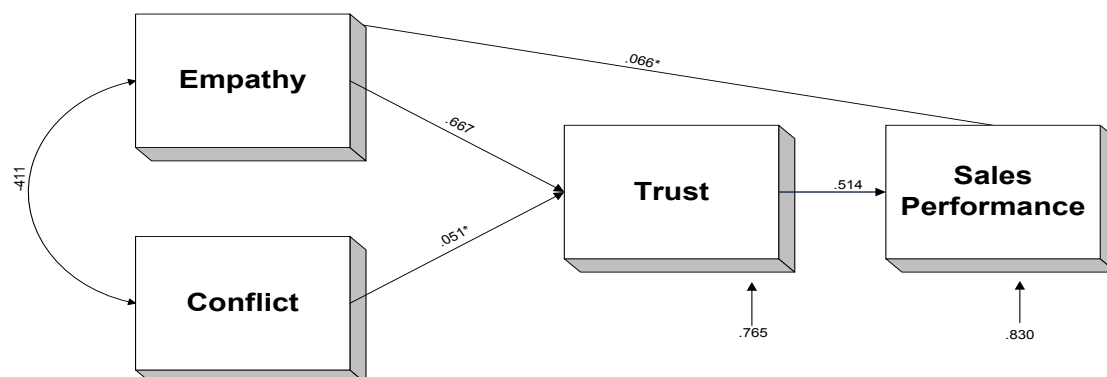
AGFI = .9994  
RMR = .0028

Chi-Square = 0.242  
CFI = 1.000

DF = 1,  
NNFI = 1.026

PR> Chi-Square 0.8763

**Figure 4: Hypothesis Testing of the Theoretical Model  
Unsuccessful Sales People**



**Model Fit Statistics:**

AGFI = .8793  
RMR = .0533

Chi-Square = 4.9248  
CFI = .983

DF = 1,  
NNFI = .979

PR> Chi-Square 0.0265

\*Non-Significant

**TABLE 4:**  
**Logistic Regression Model**

-2 log likelihood 465.585

Variables in the Equation

Variable	Beta	Significance
Constant	-4.831	.000
Total Trust	.533	.000
Empathy	.482	.018
Total Conflict	-.021	.801

Classification Table

Observed	Predicted		Percentage Correct
	Received Order 1	No Order 2	
Received Order 1	201	41	83.1%
No Order 2	61	159	72.3%
Overall Percentage			77.9%

The second analysis (Figures 3 and 4) provides an interesting addendum to the initial findings. The model based on those salespeople who received the order is very strong in terms of fit. The findings are similar to the overall model with somewhat more balance between the explanatory power of trust and empathy. In this case empathy is still very strongly associated with trust, but the direct association of empathy to sales performance is slightly smaller than for trust. Also interesting is the positive and significant association of conflict with trust. In the general model it is positive, but non-significant. However, the levels of conflict were generally low as noted previously. While the model based on the salespeople who did not receive an order is not as strong a fit, the findings provide some interesting insights. In looking at the results, an argument could easily be made that empathy played a key role in those people not receiving the order. There was no direct association with sales performance, whereas the direct association with trust was only slightly greater than the model for those salespeople receiving the order.

The logistic regression, while interesting did not add any additional insight into the model. In that analysis, trust was the strongest direct driver and empathy was just slightly less related. Conflict was clearly not related. The overall prediction rate of 77.9 percent is high. However, this model provides a comparison of only the direct impacts of the three major

variables and does not include direct and indirect effects of empathy as shown in Figures 2, 3 and 4.

We can summarize the results for the research questions as follows:

**RQ<sub>1</sub>:** In this study, it is clear that empathy is related to trust. It is a strong relationship for both salespeople who received the order and those who did not. Moreover, it is positive as expected from previous empirical research in other contexts.

**RQ<sub>2</sub>:** The relationship of conflict to trust is mixed. When the relationship between conflict and empathy was low, as it was for situations where the salespeople received an order, conflict was positively related to trust. No relationship was found between trust and conflict, when the relationship between conflict and empathy was high, as was the case in situations where salespeople who did not receive an order.

**RQ<sub>3</sub>:** The relationship between trust and effectiveness was significant and positive in all cases, but was much stronger for the cases involving salespeople who did not receive an order. In those

cases, the relationship between empathy and performance (RQ5) was not significant.

**RQ4:** The correlation between empathy and conflict was generally as expected, positive and significant. However, for the sample where the salespeople received an order that correlation was very low, whereas it was quite high for the sample where they did not.

**RQ5:** The relationship between empathy and performance was mixed. For the sample in which salespeople were successful and received an order it was positively related to sales performance, but not so for those instances where the salespeople failed to get an order. This suggests that perhaps the reason the salespeople who were not successful in getting an order was because they were not empathetic.

The results are suggestive. Trust and empathy are clearly important, but the role of conflict is not clear. Given the skewed nature of the conflict distribution, it is useful to examine only those respondents (buyers) who rated sellers as high either on affective or cognitive conflict or on both. In order to do this, we looked at the high scores for affective conflict and cognitive conflict which we defined as those scoring over 3 on the 1-5 scale for each of the respective variables. This resulted in 55 cases of high affective conflict and 88 cases of high cognitive conflict. Respondents reporting on salespeople who did not get the order accounted for 40 (73 percent) of the instances of high affective conflict and 49 (56 percent) of the instances of high cognitive conflict. Further analysis examined those who were high in both. It was found that only 35 of those respondents were high in both. Of those high in both types of conflict, 26 of 35 (74 percent) were from respondents where the salesperson did not receive the order. Of the remaining 20 (55 -35)

who were high in affective conflict, only 6 (30 percent) were from respondents where the salesperson received the order. Of the remaining high cognitive conflict responses, 23 (44 percent) of the 53 (88 high cognitive conflict – 35 high in both types of conflict) were from respondents where the salesperson got the order.

The results are suggestive. First salespeople having high scores on both affective conflict and total conflict are much more apt to have failed to get an order. Conversely, those with only high cognitive conflict scores were much more apt to have secured an order. The differences in the sizes of both samples indicate that some of those who are high in cognitive conflict are lower in affective conflict, so much so that they don't appear in the high total conflict list. This perhaps provides an explanation for the significant finding among salespeople receiving an order, namely that cognitive conflict has a positive impact on buyers' perceptions.

### MANAGERIAL IMPLICATIONS

The results of this study have a variety of implications for managers with respect to hiring and training. Of the three variables (empathy, conflict, and trust) examined in this study, empathy clearly plays the most important role in building trust. Consequently, it would seem that identifying salespeople or potential salespeople who have naturally high levels of empathy and/or are able to develop the necessary skills to be empathetic is essential. Conflict appears to be much less important and while training in conflict resolution/management might be worthwhile, it probably would not yield as a return on investment as helping salespeople improved their empathetic abilities.

The findings with respect to the possible curvilinearity of cognitive conflict and outcomes suggest that cognitive conflict can be good for all parties when it leads to some type of improvement in the decision making process, e.g., the buyer receiving greater value. It would

seem that being able to manage cognitive conflict so as to keep it from turning to affective conflict, which negatively impacts a relationship, is also important.

Overall this research confirms the findings of other studies that trust and empathy are important drivers of sales success. Both are critical and both lead to not only successfully closing, but also perceptions of effectiveness on the part of buyers. In addition, the presence of cognitive conflict may in fact be very productive if managed well.

### LIMITATIONS

As with any study, this study is not without its limitations. This study has the usual limitations of data collection that relies on respondent recall. The data was collected from a single respondent at each firm. And as with any empirical piece, the measures while solid and demonstrated through their usage in other studies are not without some error. In addition, as a cross-sectional design without any experimental control, no causal inferences could be made.

Finally, an additional issue, which is not always discussed in these kinds of studies, is the notion of common method bias or variance. Common method variance is the idea that since all measures were collected from a single source and that multiple sources and methods were not used in the data collection, the result is due to the use of a common methods or respondent bias and does not represent real differences (Cote and Buckley 1987). There are several ways to deal with this issue. In this case, the decision was made to utilize a very broad cross-section of buyers. As noted by McLaughlin (1999) and Lindell and Whitney (2001) effects are most prevalent in self-report studies (Organ and Ryan 1995). This study used other rating forms; the buyers rated the salespeople, not themselves, which has been shown to minimize method effects. In addition, McLaughlin argues that procedures used in questionnaire design can minimize these effects and these suggestions were followed. In addition, work

by Paglis and Williams (1996) as reported in Kline, Sulsky and Rever-Moriyama (2000) found that common method variance would have to be approximately 18-20 percent between observed relationships before it would be a plausible alternative to the more parsimonious explanation that the two variables are indeed correlated. Such high common method variance seems unlikely in light of efforts made. Finally, the Harmon one factor test was used and the results indicated multiple factors, thus supporting this study's contention of limited common method variance (Podsakoff and Organ 1986).

### FUTURE RESEARCH

There are multiple areas for possible future research on what makes for successful selling. One element is the predispositions of the buyers. For example, it is possible that some buyers are more trusting in general than others and respond to empathetic activities on the part of the salesperson more quickly. These kinds of buyers are likely to be easier to develop trust in than others who are not as predisposed. More importantly they may also perceive that the salesperson is empathetic, understands their problems, and is working with them to solve them. The same issue is true with conflict, some people react to conflict very negatively, while others have a higher tolerance for it. Since this was not measured and controlled for in this study, no inferences can be made.

This study focused on choice situations, even though the dependent variable was a performance variable, the study was grounded in a choice situation. In the past 20 years, there has been much more emphasis on having single supplier versus multiple suppliers and keeping that single supplier for a long time by working closely with them. This context, while not free of choice by the buyer, since switching can always occur, is still a different situation and may well require different levels of building empathy and different levels of conflict. For example, once a close relationship is developed, individuals might be more likely to tolerate more conflict, especially cognitive conflict. Of

course, maintaining the perception of trust is different than trying to build it during initial encounters with a person.

Another important issue is the relationship of personal versus task behaviors. This study focused only on relationship behaviors, indirectly, and not on the task behaviors that go along with the job. Research by Wathne, Biong and Heide (2001) also found support for both task and personal behaviors, with the task relationship being the more prominent. Two important research issues include the following: 1) under what conditions are task issues more important and 2) what conditions drive personal relationships between buyer and seller. Task and relationship behaviors need to be directly linked to trust, empathy, conflict, and performance to understand this issue.

Given the strong role of empathy in this model, more work needs to be done in the context of buyer-seller relations on the actual process of empathetic communication. As has been noted in the literature review of this paper, process models of empathy do exist, but not in buyer-seller contexts, so better understanding of the actual process of developing empathy is warranted based on this study's findings and the previous research.

Finally, a very important and much neglected issue is the role of the process as a frame for understanding the importance of perceptions on choice processes in general. We would argue that sales performance research has to take into account that at different stages of the process, different factors emerge as important. For example, the argument can be made that empathy and getting the buyer to perceive the salesperson as empathetic has more impact on the early stages of the process and that, if it is not formed early, the possibility exists that it may never be formed. Experimental research needs to determine if that is the case.

### CONCLUSION

This research has provided the first examination of the interrelationship of trust, empathy and

conflict in a business-to-business buyer-seller relationship. Prior to this study, the extant research had suggested that all might be important. This research clearly supports trust and empathy as being more important than conflict. However, it appears that cognitive conflict can have a positive impact on decision making, but it is likely to be curvilinear in its effects. Too much cognitive conflict could be negative whereas the right amount and on the right issues may be very valuable to both parties.

### REFERENCES

- Amason, A. C. (1996), "Distinguishing the Effects of Functional and Dysfunctional Conflict on Strategic Decision Making: Resolving a Paradox for Top Management Teams," *Academy of Management Journal*, 39(1), 123-148.
- Anderson, E. and R. L. Oliver (1987), "Perspectives on Behavior-based Versus Outcome-based Salesforce Control Systems," *Journal of Marketing*, 51(4), 76-93.
- Anderson, J. C. and D.W. Gerbing, (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103, 411-423.
- Anonymous (2008), "A Review of the Literature on the Empathy Construct Using Cluster Analysis," *Communications of the Association for Information Systems*, 22(3), 3-22.
- Armstrong, J. S. and T. S. Overton (1977), "Estimating NonResponse Bias in Mail Surveys," *Journal of Marketing Research*, 14(3), 396-402.
- Baron, R. A. (1993), "Reducing Aggression and Conflict: The Incompatible Response Approach or, Why People Who Feel Good Usually Won't be Bad," in G. G. Brannigan and M.R. Merrens (Eds), *The Undaunted Psychologist: Adventures in Research*, Temple University Press, Philadelphia, PA. 203-217.

- Behrman, D. N. and W. D. Perreault (1982), "Measuring the Performance of Industrial Salespersons," *Journal of Business Research*, 10(3) 355-370.
- Bissonnette, V. L., C. E. Rusbult and S. D. Kilpatrick (1997), "Empathic Accuracy and Marital Conflict Resolution," in W.J. Ickes (ed.), *Empathic Accuracy*, New York: Guilford Press, 251-28.
- Bobot, L. (2010), "Conflict Management in Buyer-Seller Relationships," *Conflict Resolution Quarterly*, 27(3), 291-319.
- Bradford, K. D. and B. A. Weitz (2009), "Salespersons' Management of Conflict in Buyer-Seller Relationships," *Journal of Personal Selling & Sales Management*, 29(1), 25-42.
- Brennan, D. R., P. Turnbull and D. T. Wilson (2003), "Dyadic Adaptation in Business-to-Business Markets," *European Journal of Marketing*, 37(11/12) 1636-67.
- Bush, R. P., D. J. Ortinau, A. J. Bush and J. F. Hair (1990), "Developing a Behavior Based Scale to Assess Retail Salesperson Performance," *Journal of Retailing*, (66)1, 119-136.
- Butler, J. K. (1991), "Toward Understanding and Measuring Conditions of Trust: Evolution of a Conditions of Trust Inventory," *Journal of Management*, 17(3), 643-663.
- Churchill, G. A., N. Ford and O. C. Walker (1994), *Sales Force Management, Fourth Edition*, Homewood, IL: Richard D. Irwin, 758-782.
- Comer, L. and T. Drollinger (1999), "Active Empathetic Listening and Selling Success: A Conceptual Framework," *Journal of Personal Selling and Sales Management*, 19(1), 15-29.
- \_\_\_\_\_, \_\_\_\_\_ and J. Ding (1999), "Three Faces of Empathy: A New Look at an Old Conundrum," in M. A. Humphreys, ed. *Proceeding of the National Conference in Sales Management*, Normal IL: Illinois State University, 105-116.
- Cote, J. A. and M. R. Buckley (1987), "Estimating Trait, Method and Error Variance: Generalizing Across 70 Construct Validation Studies," *Journal of Marketing Research*, 24 (3), 315-318.
- Dawson, L. E., B. Soper and C. E. Pettijohn (1992), "The Effects of Empathy on Salesperson Effectiveness," *Psychology and Marketing*, 9(4), 297-310.
- Day, R. L., R. E. Michaels and B. C. Perdue (1988), "How Buyers Handle Conflicts," *Industrial Marketing Management*, 17( 2), 153-160.
- Denton, K. D. (1988), "Attitudes that Solve Conflicts," *Manage*, 39(4), 23-25.
- DeRuyter, K. and M. Wentzels (2000), "Determinants of Relational Exchange Orientation in the Marketing-Manufacturing Interface: An Empirical Investigation," *Journal of Management Studies*, 37(2), 257-276.
- Driscoll, J. W. (1978), "Trust and Participation in Organizational Decision Making as Predictors of Satisfaction," *Academy of Management Journal*, 21(1), 44-56.
- Dwyer, F. and R. Lagace (1986), "On the Nature and Role of Buyer-Seller Trust," in T. Shimp and A. Sharma (Eds.), *AMA Educators Conference Proceedings*, Chicago: American Marketing Association, 40-45.
- Feldman, L. (1980), "Marital Conflict and Marital Intimacy: An Integrative Psychodynamic Behavioral-systemic Model," *Advances in Family Psychiatry*, 2, 19-33.
- Greenberg, H. and D. Mayer (1964), "A New Approach to the Scientific Selection of Successful Salesmen," *Journal of Psychology*, 57, 113-123.
- Hair, J. F., R. E. Anderson, R. L. Tatham and W. C. Black (1998), *Multivariate Analysis, 5<sup>th</sup> ed.*, Upper Saddle River, NJ: Prentice Hall.
- Harvey, E. (1998), "Management by Switching Shoes," *Executive Excellence*, 15(8), 11.
- Hawes, J. (1994), "To Know Me is to Trust Me," *Industrial Marketing Management*, 23(3), 215-219.
- Hayes, M. H. and S. W. Hartley (1989), "How Buyers View Industrial Salespeople," *Industrial Marketing Management*, 18(2), 73-80.
- Jehn, K. A. (1995), "A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict," *Administrative Science Quarterly*, 40(2) 256-282.

- \_\_\_\_\_. (1997), "Qualitative Analysis of Conflict Types and Dimensions in Organizational Groups," *Administrative Science Quarterly*, 42(3), 530-557.
- Johnson, R. J. (1971), *An Explanation of Relationships Between and Among Empathy, Trust, and Ego Stage Development in the Adult Learner*, Dissertation Abstracts International, 31, 11A, 5748-9.
- Kauser, S. and V. Shaw (2001), "International Strategic Alliances: The Impact of Behavioral Characteristics on Success," *Journal of Euro-Marketing*, 10(1), 71-84.
- LaBahn, D. W. and C. Kohli (1997), "Maintaining Client Commitment in Advertising Agency-Client Relationships," *Industrial Marketing Management*, 26(6), 497-508.
- Langlois, E. (1998), *The Impact of Trust Between Buyer and Seller on the Purchase Decision*, Doctoral Dissertation, Ft. Lauderdale, FL: Nova Southeastern University.
- Lewicki, R. J., S. E. Weiss and D. Lewin (2000), "Models of Conflict, Negotiation, and Third Party Intervention: A Review and Synthesis," *Journal of Organizational Behavior*, 13(3), 209-252.
- Lindell, M. K. and D. J. Whitney (2001), "Accounting for Common Method Variance in Cross-Sectional Research Designs," *Journal of Applied Psychology*, 86(1), 114-21.
- McLaughlin, M. E. (1999), "Controlling Method Effects in Self-Report Instruments," *Research Methods Forum*, Academy of Management Research Methods Division, 4(Summer) from [www.aom.pace.edu/rmd/1999\\_RMD\\_Forum\\_Method\\_Effects\\_in\\_Self-Reports.htm](http://www.aom.pace.edu/rmd/1999_RMD_Forum_Method_Effects_in_Self-Reports.htm).
- Moore, K. R. (1998), "Trust and Relationship Commitment in Logistic Alliances: A Buyer Perspective," *International Journal of Purchasing and Materials Management*, 34(1), 24-37.
- Nair, N. (2008), "Towards Understanding the Role of Emotion in Conflict: A Review and Future Directions," *International Journal of Conflict Management*, 19(4), 359-374.
- Newman, V. L. (1997), *An Investigation of Interpersonal Relationships Among Runaway and NonRunaway Adolescents*, Dissertation Abstracts International Section A: Humanities and Social Sciences, 57(9-A), 3829.
- Northouse, P. G. (1977), "Predictors of Empathic Ability in an Organizational Setting," *Human Communication Research*, 3(2), 176-178.
- Organ, D.W. and K. Ryan (1995), "Meta-Analytic Review of Attitudinal and Dispositional Predictors of Organizational Citizenship Behavior," *Personnel Psychology*, 48(4), 775-802.
- Paglis, L. L. and L. J. Williams (1996, April), "Common Method Bias: When Does It Bias OB Results?" Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Pappas, J. M. and K. E. Flaherty (2008), "The Effect of Trust on Customer Contact Personnel Strategic Behavior and Sales Performance in a Service Environment," *Journal of Business Research*, 61(9), 894-902.
- Pearson, A. W., M. D. Ensley and A. Amason (2002), "An Assessment and Refinement of Jehn's Intragroup Conflict Scale," *International Journal of Conflict Management*, 13(2), 110-116.
- Plank, R. E. and D. A. Reid (1994), "The Mediating Role of Sales Behaviors: An Alternate Perspective on Sales Performance and Effectiveness," *Journal of Personal Selling and Sales Management*, 14(3), 43-56.
- \_\_\_\_\_, A. P. Minton and D. A. Reid (1996), "A Short Measure of Perceived Empathy," *Psychological Reports*, 79, 1219-1226.
- \_\_\_\_\_, D. A. Reid and E. B. Pullins (1999), "Perceived Trust in Business-to-Business Sales: A New Measure," *Journal of Personal Selling and Sales Management*, 14(3), 61-72.
- Rarick, C. A. and G. Baxter (1986), "Behaviorally Anchored Rating Scales: An Effective Performance Appraisal Approach," *SAM Advanced Management Journal*, 51(1), 36-39.



- Redfern, S., C. P. Dancy and W. Dryden (1993), "Empathy: Its Effect on How Counselors are Perceived," *British Journal of Guidance and Counseling*, 21(3), 300-309.
- \_\_\_\_\_, and R. E. Plank (1997), "The Moderating Role of Purchasing Situation on the Behavior-Performance Relationship: A Replication and Extension," in M. Williams (Ed.), *Proceedings of the National Conference in Sales Management*, 163-170.
- \_\_\_\_\_, E. B. Pullins, R. E. Plank and R. Buehrer (2004), "Measuring Buyers' Perceptions of Conflict in Business-to-Business Sales Interactions," *Journal of Business and Industrial Marketing*, 19(4), 236-249.
- Richardson, D. R., G. S. Hammock, S. M. Smith and W. Gardner (1994), "Empathy as a Cognitive Inhibitor of Interpersonal Aggression," *Aggressive Behavior*, 20(4), 275-289.
- Rotter, J. (1967), "New Scale for the Measurement of Interpersonal Trust," *Journal of Personality*, 35(4), 651-665.
- Schneider, M. E. (1984), *The Relationship Among Primary Representational Systems, and Counselor Empathy, Trustworthiness, Attractiveness, Expertness, and Subject Preference*, Dissertation Abstracts International, 45-(2A), p. 418.
- Schurr, P. H. and J. L. Ozanne (1985), "Influences on Exchange Partners Processes: Buyers' Preconceptions of a Seller's Trustworthiness and Bargaining Toughness," *Journal of Consumer Research*, 11(4), 939-953.
- Semmes, C.E. (1991), "Developing Trust: Patient Practitioner Encounters in Natural Health Care," *Journal of Contemporary Ethnography*, 19(4), 450-470.
- Sepanen, R., K. Blomqvist and S. Sundqvist (2007), "Measuring Inter-Organizational Trust- A Critical Review of the Empirical Research in 1990-2003," *Industrial Marketing Management*, 36( 2), 249-262.
- Simons, T. L. and R. S. Peterson (2000), "Task Conflict and Relationship Conflict in Top Management Teams: The Pivotal Role of Intragroup Trust," *Journal of Applied Psychology*, 85(1), 102-111.
- Swan J. E., M. R. Bowers and L. D. Richardson (1999), "Customer Trust in the Salesperson: An Integrative Review and Meta-analysis of the Empirical Literature," *Journal of Business Research*, 44(2), 93-107.
- \_\_\_\_\_, and J.J. Nolan (1985), "Gaining Customer Trust: A Conceptual Guide for the Salesperson," *Journal of Personal Selling and Sales Management*, 5(2), 39-48.
- \_\_\_\_\_, I. F. Trawick and D. W. Silva (1987), "How Industrial Salespeople Gain Customer Trust," *Industrial Marketing Management*, 14(3), 203-211.
- \_\_\_\_\_, \_\_\_\_\_, Rink, D. R. and J. J. Roberts (1988), "Measuring Dimensions of Purchaser Trust of Industrial Salespeople," *Journal of Personal Selling and Sales Management*, 8(2), 1-9.
- Walker, O. C., Jr., G. A. Churchill, Jr. and N. M. Ford (1975), "Organizational Determinants of the Role Conflict and Ambiguity Experienced by Industrial Salesmen," *Journal of Marketing*, 39(1), 32-39.
- \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ (1977), "Motivation and Performance in Industrial Selling - Present Knowledge and Needed Research," *Journal of Marketing Research*, 14(2), 156-168.
- \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ (1979), "Where Do We Go From Here? Selected Conceptual and Empirical Issues Concerning the Motivation and Performance of the Industrial Salesforce," in G. Albaumb and G. A. Churchill (Eds.), *Critical Issues in Sales Management: State of-the-Art and Future Research Needs* G. Eugene OR: University of Oregon, 10-75.
- Ward, T., J. McCormack and S. M. Hudson (1997), "Sexual Offenders' Perceptions of Their Intimate Relationships," *Sexual Abuse: Journal of Research and Treatment*, 9(1), 57-74.
- Wathne, K. H., H. Biong and J. B. Heide (2001), "Choice of Supplier in Embedded Markets: Relationship and Marketing Program Effects," *Journal of Marketing*, 65(2), 54-66.

- Weitz, B. and K. D. Bradford (1999), "Personal Selling and Sales Management: A Relationship Marketing Perspective," *Journal of the Academy of Marketing Science*, 27(2), 241-254.
- Williams, M. (2002), *Seeing Through the Client's Eyes: Building Interpersonal Trust, Cooperation, and Performance Across Organizational Boundaries*, Doctoral Dissertation, Ann Arbor, MI: University of Michigan.
- Young, L. C. and I. Wilkinson (1988), "The Role of Trust and Co-Operation in Marketing Channels: A Preliminary Study," *European Journal of Marketing*, 23(2), 109-122.
- Zaheer, A., B. McEvily and V. Perrone (1998), "Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance," *Organizational Science*, 9(2), 141-160.

## APPENDIX

**Conflict** (7 Items) Scaled 1 = None 2 = Almost none 3 = A little 4 = Moderate amount 5 = A great deal

### Affective Conflict (4 Items)

- How much anger was there between you and the salesperson during this negotiation?
- How much personal friction was there between you and the salesperson during the course of the negotiation?\*
- How much of a personality clash was there between you and the salesperson during this negotiation?\*
- How much tension was there between you and the salesperson during this negotiation?\*

### Cognitive Conflict (3 Items)

1. How many disagreements about the content of the decision were there between you and the salesperson during this negotiation?\*
2. How many differences about the content of the decision were there between you and the salesperson during this negotiation?\*
3. How many general differences of opinion were there between you and the salesperson during this negotiation?\*

**Empathy** (8 Items) Scaled 1 = strongly agree, 2 = moderately agree, 3 = neither agree nor disagree, 4 = moderately disagree, 5 = strongly disagree

1. This salesperson understands me as a person and my role in this organization.\*
2. I have good feelings when dealing with this salesperson.\*
3. This salesperson really understood my feelings about this buyer-seller situation.\*

4. I feel as if I am on the same wavelength as this salesperson.\*
5. This salesperson really understands how I think.
6. This salesperson has a lot of knowledge about how I need to make decisions and do my job.\*
7. This salesperson seemed to feel what I needed when we talked about this purchase.\*
8. This salesperson always understood our company needs

**Trust** (15 Items) Scaled 1=strongly agree 2 = moderately agree, 3 = neither agree nor disagree, 4 = moderately disagree, 5 = strongly disagree

1. This salesperson did everything possible for our company.\*
2. The product/service will meet our needs without question.
3. The company this salesperson works for will stand behind us.\*
4. This salesperson will always use good judgment.\*
5. This product/service has the technical attributes necessary to do the job.\*
6. The company can be counted upon to do right with us.\*
7. The salesperson is a real expert.
8. The product/service will give us little trouble in use.\*
9. This salesperson's company has quality people working for them.\*
10. The salesperson is like a good friend.\*
11. The salesperson's company has a good reputation.
12. The product/service will please all those in our company who use it or are responsible for it.\*
13. The company will do what it takes to make us happy.\*
14. When the salesperson tells me something it must be true
15. This product/service will do everything we want it to do.\*

**Sales Effectiveness** (1 item) Scaled 1 = strongly disagree to 7 = strongly agree

1. This salesperson is among the best salespeople who have called on me.\*

\*Items so marked are included in the final scaling used for analysis.

<sup>1</sup>We use the term buyer in all definitions to reflect the general nature of the person who is the object of the efforts of the salesperson. They may have many titles and functional responsibilities given the nature of organizational buying.

## OPTIMIZING CRM: A FRAMEWORK FOR ENHANCING PROFITABILITY AND INCREASING LIFETIME VALUE OF CUSTOMERS

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*A research model is presented which provides a framework for Customer Relationship Management (CRM) wherein the lifetime value (LTV) of customers is increased while enhancing ongoing profitability. Five propositions were developed suggesting how organizations may increase the probability of enhancing profitability and building long-term relationships. The customer centric propositions for enhancing lifetime value address provisions for better service information, tracking and managing the value of customers, having more information about their behavior, and having highly positive experiences with them.*

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### INTRODUCTION

Customer Relationship Management (CRM) is emerging as a core marketing activity. That emergence has been stimulated by studies that have shown that on average businesses spend six times more to acquire new customers than they do to keep them (Reichheld 1996; Gruen 1997). Responding to that type of information, many organizations have begun to pay increased attention to maintaining or even developing enhanced relationships with existing customers (Krasnikov, Jayachandran and Kumar 2009; Jayachandran et al. 2005). At the same time businesses must also try to attract new customers that are or which have the potential to become profitable in days to come (Homberg, Steiner and Totzek 2009; Thakur and Summey 2005). Retaining existing customers and building relationships with new customers can be made possible in today's competitive business environment by providing excellent customer service and care. But, how should that be accomplished?

Business managers probably know intuitively that providing quality customer care is essential if they are to achieve revenue growth, whether it is by attracting new customers or retaining

existing ones. The main idea that this article seeks to add to the initiatives underlying customer relationship management is the concept of using those processes to shape and enhance customers' perceptions of the organization and its products in a controlled and directed manner. That outcome can be achieved through knowledge gained by identifying customers, creating knowledge data bases about those customers, and using that information as a foundation for building committed customer relationships (Thakur and Summey 2005; Ragin and Greco 2003). The goal of customer relationship management then becomes the enhancement of the company's long-term sustainable competitive advantage and the achievement of superior revenue and profit growth through shaping and enhancing customers' perceptions of the benefits of being one's customer (e.g., Kumar and Shah 2009; Jayachandran and Kumar 2009; Fornell et al. 2006; Anderson, Fornell and Mazvancheryl 2004).

Before explaining how customer relationship management provides the basis for determining how to enhance the lifetime value (LTV) of a customer and sustain one's competitive advantage, let us define the two terms customer relationship management and lifetime value. Bolton (1998) defined customer relationship management as, "a strategy used to learn more

about customers' needs and behaviors in order to develop stronger relationships with the customers." The lifetime value of a customer represents the amount the customer will contribute to the bottom line of the organization over the span of the business relationship with them (Kumar and Shah 2009; Shaw 2001). In other words, the lifetime value of a customer is the value of the customer over the lifecycle of the relationship.

Relationship management requires that an organization view customer relationships as a means for learning about customers' needs and wants and how best to create, satisfy, and sustain those while concomitantly helping the organization to meet its revenue objectives and build long-lasting relationships (Thakur, Summey and Balasubramanian 2006; Ragin and Greco 2003; Bauer, Grether and Leach 2002). As a process, it should be geared toward increasing the value of customers over the lifetime of the relationship. Achieving that outcome requires systematic processes for attracting and retaining customers, prospects, business partners, and other constituents. It requires a core business strategy for managing and subsequently optimizing all customer interactions (Sowalskie 2001). If a firm manages its customer relationships better than its competitors, it can not only succeed at retaining existing customers, but also attract new customers as well (Thakur and Summey 2005). Simply stated, Customer Relationship Management is about systematically identifying, acquiring, and retaining profitable as well as potentially profitable customers.

One aspect of this more aggressive approach to customer relationship management is the provision of a more personal interface. An organization can give that personal touch to its customers through knowing their purchase behavior over time and by recognizing when that behavior is changing. The goal of personal touch is simple in concept, i.e., learn and understand what the customer really wants and needs and then insure that in responding, the customer gets the same look, feel, and message across every medium of contact with them. By

observing customers' buying patterns, contact history, and life events, businesses can better understand and extrapolate trends in their behavior (Hollowell and Verma 2002) and subsequently have a higher probability of sustaining a long-term relationship.

Although some researchers have analyzed lifetime behavior in contractual contexts (Allenby et al., 1999; Bolton 1998), research on customer lifetime duration and in particular profitable lifetime duration is scarce (Reinartz and Kumar 2003). None of the research to date has examined or shown how customer relationship management provides a basis for shaping relationships in order to enhance the lifetime value of customers. To fill this gap in the literature the objective of this study is to examine how CRM can provide a basis for determining how to enhance the lifetime value of a customer.

This study is structured as follows. First, existing literature on customer relationship management and how it can provide a basis for creating committed customers and enhancing the lifetime value of a customer is briefly presented. A theoretical model for examining how CRM relates to the lifetime value of the customer is presented with a goal of delimiting the elements contributing to shaping relationships and subsequently enhancing that value. Propositions are developed, and suggestions for future research are presented that are derived from the propositions.

## LITERATURE REVIEW

Ever since the influential study by Reichheld and Sasser (1990) showing the large impact on profitability of small increases in customer retention rates, the marketing community has been more conscious of the need to manage customer relationships in the long-term (Wilson, Daniel and McDonald 2002). The argument has been further strengthened by data on the low cost of better retention as compared with better acquisition (Blattberg and Deighton 1996; Filiatrault and Lapierre 1997), and the increasing profitability of customers the longer

a relationship lasts (Reichheld 1996). Companies that engage in CRM should stress building long-term relationships with their customers by knowing their needs and wants and by keeping them more satisfied than their competitors.

Customer relationship management (CRM), as a business strategy, should aim to understand, anticipate, and manage the needs of an organization's current and potential customers. It is a journey of shifting strategy processes and organizational as well as technical changes whereby a company seeks to better manage its own enterprise around customer behaviors (Lawrence and Francis 2002). It entails acquiring and deploying knowledge about one's customers and using that information across the various touch points to optimize the balance between revenue, profits, and maximum customer satisfaction.

To make the relationship between customers and organizations work, some marketers have adopted customer management orientations that emphasize the importance of customer lifetime analysis and retention, and the understanding the dynamic nature of each person's customer firm relationship over time (Kotler 1994).

The underpinning of CRM is that it helps businesses use technology and human resources to gain insight into the behavior of customers and to enhance the value of those customers. Using CRM processes a business can: (1) provide better customer service, (2) help sales staff close deals faster, (3) cross-sell products more effectively, (4) simplify marketing and sales processes, (5) discover new customers, (6) make call centers more efficient, and (7) increase customer revenues.

CRM involves the management of customer relations at every point of contact between the customer and the company in order to maximize the customer experience. It aims to provide product or service information that has unique value to a customer based on information about that individual customer. It is thus about maximizing customer value for

the firm by creating, building, and lengthening the customer relationship with a view to selling more of what they currently purchase, cross-selling of other products, and keeping customers longer. It is all about building customer bonds by creating dialogs to discover what consumer's needs and wants are and how the firm can be of service.

Reichheld (1996) and Gupta, Lehman and Stuart (2004) found that lifting customer retention rates by 5 percent could increase an organization's profit by 2 percent to 9 percent, a result that was mostly attributable to acquisition cost. In the beginning many customers are unprofitable. Only in later years when volume purchased has increased do some customers become profitable (Lawrence and Francis 2002). Thus, customers should not be viewed from the perspective of a single transaction, but as a potential lifetime income stream (Lawrence and Francis 2002). The customer life cycle definition of CRM often describes CRM as the ability to seamlessly interact with or market to the customer across a full lifetime (Kellen and Stefanczyk 2002).

Declines in growth rates and intensification of competition have motivated businesses to reduce costs and improve their effectiveness including enhanced maintenance of long-term relationships with existing customers. Studies have shown that while manufacturing costs declined from 5 percent to 3 percent and management cost declined from 2 percent to 1 percent, marketing costs increased from 2 percent to 5 percent (Sheth and Parvatiyar 1995). The practice of relationship marketing through CRM has the potential to improve marketing productivity through improved marketing efficiencies and effectiveness (see Sheth and Parvatiyar 1995).

This research proposes a model for enhancing the lifetime value of a customer. Most current models of customer equity, customer retention, and profitability in the marketing discipline have not incorporated the lifetime value of the customer for an organization. While the customer equity model of Lemon, Rust and

Zeithmal (2001) did incorporate a concept they called “life-term” value of the firm, it did not incorporate how the CRM concept enhanced the lifetime value of the customer. For example, Lemon, Rust and Zeithmal (2001) examined the drivers of customer equity in their model and concluded by saying that customer equity was the most important determinant of the long-term value of the firm, but they did not incorporate how the CRM concept enhanced the lifetime value of customers for an organization.

Bolton (1998) examined the effects of satisfaction on customer retention, but he did not incorporate the concept of how to enhance the lifetime value of a customer. Similarly, Rust, Zahorik and Keiningham (1995) examined the effects of service quality and satisfaction on customer retention rates, but they did not incorporate the lifetime value concept. This study seeks to fill this void in the literature.

### A THEORETICAL CRM MODEL

Traditional decision models in the marketing discipline have assumed that both past and present-focused measures (such as overall satisfaction or perceived value) capture all aspects of the customer’s underlying utilities that factor into a decision (Lemon, White and Winer 2002). But none of the models in the marketing discipline has examined how to enhance the lifetime value (LTV) of a customer from the practitioner’s perspective (Thakur and Summey 2003). Research by Lemon et al. (2001) did find that customer equity was the most important determinant of life-time value for firm, but they did not explain how to enhance that lifetime value.

The focus of this article is on the additional explanatory power that the future-oriented factors in the model in Figure 1 contribute to knowledge of how to enhance the lifetime value of the customer for an organization. We do not purport that the model examines all the factors which may be of help in enhancing the lifetime value of a customer. Rather, the model makes

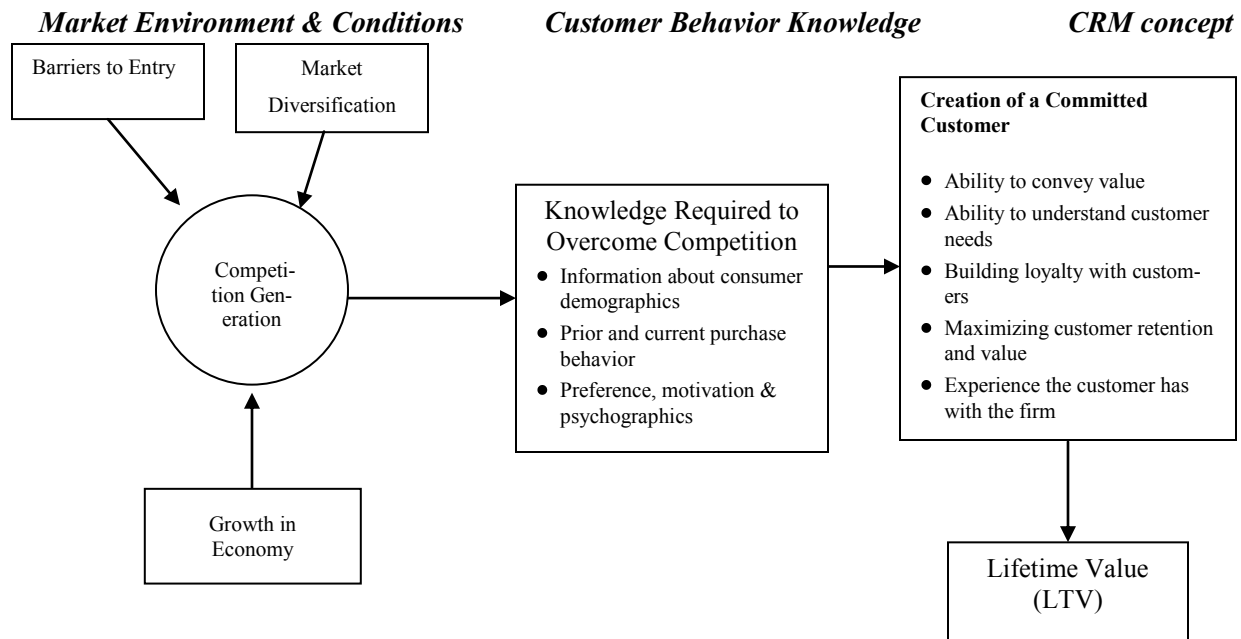
the simplifying assumption that the lifetime value of the customer for an organization can be enhanced on the basis of the following factors over which the firm has some control: (1) the company’s ability to convey value, (2) its ability to understand customer’s needs and wants, (3) loyalty from their customers, (4) maximization of customer retention, (5) the value of the experience the customers have with the firm.

The literature shows that both market environment and conditions can lead to changes in the competitive environment. Organizational ecology research has shown that environmental forces in the market (like market diversification, growth in the economy, etc.) strongly influence organizations’ rates of birth and death (Gresov and Haveman 1993; Haveman 1993). Even the density dependence model of Hannan and Carroll (1992) has shown that market environments and conditions lead to changes in competition. Research has also shown that customers’ lack of knowledge when making purchase decisions is a competitive barrier to market entry (Sawyer 1997).

The concepts in the theoretical CRM model in Figure 1 can be used by a firm as a basis for determining how to create committed customers and enhance the lifetime value (LTV) of a customer. That model is divided into four parts. On the extreme left are the market environment and conditions, followed by customer behavior knowledge. On the extreme right side of the model is the CRM concept. The outcome of the process shown in the model is the LTV of the customer.

The extant literature has shown that the market environment and conditions such as barriers to entry, market diversification, and growth in the economy, result in increasing competition (Gresov and Haveman 1993). In order to overcome that competition, retain the customers, and remain in the market and earn profits, the firm needs to know more about the behavior of its existing customers. The firm can gain insight into the behavior of its existing customers by being informed about their

**FIGURE 1:**  
**A CRM Model for Determining How to Enhance the Lifetime Value of a Customer**



demographics, prior and current purchase behavior, preferences, motivations, and psychographics.

The information on market environment and conditions plus knowledge of customer behavior both help in the creation of committed customers. Committed customers can in turn lead to lifetime relationships with the firm and the subsequent generation of customer lifetime value (LTV) for the firm.

Figure 1 shows that creation of committed customers is possible if the firm addresses the following factors: conveying value to its existing and new customers, understanding the needs and wants of those customers, building loyalty with them so that they make repeat purchases, and maximizing customer retention and value leading to the building of a long-term relationship between the firm and its customers. This outcome has strong potential for increasing both the revenue and profits of the firm.

## RESEARCH PROPOSITIONS

Five research propositions were derived from the model. Each was formulated on the basis of the presumed knowledge about customers' behavior including information about existing consumers' demographics and their prior and current purchase behavior. They show how the performance of the firm can be affected by implementing CRM. Improving customer satisfaction, retention, and long-term profitability can result from a powerful customer relationship management solution synchronized across the entire enterprise (Krasnikov, Jayachandran and Kumar 2009; Thakur and Summey 2005; Ragin and Greco 2003; Day 2003). Such a solution should empower sales channels and customer service organizations with a single, integrated, up-to-date view of prospects, customers, products, and service information.

Relationships are created over time and stem from the principles of sound customer service (Bazadona 2002). Service is the most important means by which customers measure

satisfaction with an organization. A strong foundation of customer service, therefore, is essential for building a strong relationship (Thakur and Summey 2003). Solid brands are built from this reputation (Bazadona 2002) which helps in building a strong image about the organization in the minds of customers and hence building trust in them for the organization (Reichheld 1996). Research has shown that the quality of customer service correlates directly with consumer trust. That in turn affects customers' inclinations to build a long term relationship with an organization (Winters 2002).

The success of a business not only depends on lowering costs, but also providing exceptional customer service, i.e., service better than that of its competitors. Better customer management can in fact result in a reduction in sales and service costs, create higher buyer retention, and subsequently lower customer replacement expenditures (Reichheld 1996) with an attendant increase in profit margin for the firm. Companies that provide a level of service which improves customer satisfaction grow both long-term loyalty and profitability (e.g., Krasnikov, Jayachandran and Kumar 2009; Honebein and Cammarano 2006; Reinartz, Thomas and Kumar 2005; Bolton 1998).

According to Thomas (2002) an organization must be more customer-focused and tailor its entire operation, from products to training, to meet customers' needs and wants. Effective CRM should form the backbone of this process. An organization should try to understand customers' purchase behavior if they want to influence them to make future purchases. Thus it is very important for a competitive organization to keep track of its customer needs and wants as they progress along their customer journey and to understand customer purchase behavior better than its competitors. Competitors who have a sophisticated relationship management strategy with their existing customers' are seizing such opportunities and thus show better financial performance than those organizations which do not keep track of their customers purchase

behavior (Lipsey 2002). A good way to evaluate the CRM investment is to see if it has brought about significant changes in customer acquisition, customer deployment, and customer retention (Kumar and Shah 2009; Gupta, Lehmann and Stuart 2004). This leads us to the following propositions:

**Proposition 1:** The better the quality of service the company provides to its existing customers, the better the lifetime value (LTV) relationship the company would establish with those existing customers, hence the firm can retain its satisfied customers and thus generate higher profits than those firms that do not provide better quality service.

**Proposition 2:** Companies that track/manage the value of each potential customer as they progress along the customer journey are more likely to maintain better relationships with customers for a longer period of time, show better financial performance, and create greater lifetime value (LTV) than those firms or companies that do not keep track of their customers.

CRM is a business approach that integrates people, processes, and technology to maximize the relations of an organization with all types of customers (Krasnikov, Jayachandran and Kumar 2009; Boulding et al. 2005). The true value of CRM is in transforming strategy, operational processes, and business functions in order to retain customers and increase customer loyalty. The goal of customer relationship management (CRM) is to enhance the company's long-term sustainable competitive advantage.

Research shows that the profitability of a firm can be improved through the increased retention and loyalty of customers. A study by the Gartner group found that profits could be raised 100 percent by retaining another 5 percent of customers (Nairn 2002). The Royal Bank of Scotland found that 20 percent of their customer base made 80 percent of their monthly contribution to profits (Nairn 2002).



Study has shown that it takes up to five times more money to acquire a new customer than to get an existing customer to make a purchase (Thomas 2002; Reichheld 1996).

A large body of research, in domains ranging from customer satisfaction (e.g., Fournier and Mick 1999), and relationship marketing (e.g., De Wulf, Odekerken-Schroder and Iacobucci 2001), to, more recently, CRM (e.g., Winer 2001), has tried to understand and delineate how firms, or the “people behind the brands” (McAlexander, Schouten and Koenig 2002, p. 50), can build deeper, more committed relationships with customers and can retain them for a longer period of time by providing value to them.

According to Bhattacharya and Sen (2003) customer intimacy, customer equity, and customer relationship management (CRM) are the marketing mantras of today. In their quest for sustained success in a marketplace characterized by product proliferation, communication clutter, and buyer disenchantment; more and more companies are attempting to build deep, meaningful, long-term relationships with their customers (Bhattacharya & Sen 2003). The deeper the relationship the company is able to build with its customers, the more trust those customers would have in that company and hence the more loyal they will be to the company. If the company is able to build deep, committed, and meaningful relationships with their customers, those customers are likely to identify, or feel a sense of belonging (Mael & Ashforth 1992) with a company, will be more loyal to that company, and will keep a relationship with the company for a longer period of time. The result should be higher LTV of the customer for the company and hence increased profitability. Thus we can say:

**Proposition 3:** The more competent the company is in retaining and giving value to its customers, the higher the customer loyalty and hence the higher the lifetime value (LTV) and the profitability of the customer to the company.

The Pareto Principle suggests that 20 percent of customers provide 80 percent of the value (Juran 1954; Sanders 1987; Thakur and Summey 2005; Kumar and Shah 2009). Thus it is important for the company to determine those customers who will give them the most profit over the longest period. Before any prediction of future value can be made, however, it is essential to have a clear picture of your past as well as your current customers and their previous and present-day worth (Thakur and Summey 2005). From there it is then possible to develop predictions of future value.

Because CRM measurement systems can be used to understand past and future customer behavior, the abilities of companies to convert that knowledge into business results can be a significant form of competitive advantage (Peppers and Rogers 1997). Some of the world’s top brands use marketing tools and techniques to get, keep, and grow customers for a lifetime, and then optimize the return on those investments by understanding their customers well. An organization can understand its customers by keeping an intimate profile and history of each one and providing personalized competent service at every stage in their relationship.

Focusing on behavior, i.e., knowing how your customers react and develop will enable you to pre-empt any defection of customers to the competition, to predict their next purchase and its timing, and to market to them accordingly (Thakur and Summey 2003, 2005). An organization can increase its revenues and profits by understanding customers’ evolving needs and buying trends and by introducing responsive new products and service offerings to serve those needs. Such actions should have a significant impact on developing a long-term relationship with customers. Knowing the purchase behavior of the customers enables and guides the organization in deciding who is worth marketing to and whether they are now or can be converted to long-term customers. Thus we can say:

**Proposition 4:** The higher the ability the firm has for managing and

accounting for LTV contribution of individual customers and the more information the company has about the behavior of its potential customers, the higher the profit of the organization will be.

It is known that consumers' reaction to a firm's errors differs depending on the length of the relationship the customer has with them. Studies have examined the individual's likelihood to forgive in ongoing relationships (Rusbult, Zembrodt and Gunn 1982), as well as the effects of positive and negative experiences on existing customer relationships (Bolton 1998; Boulding et al. 1993). It has been found that those consumers who have prior positive experience with a firm tend to be more "forgiving", whereas newer customers will be less likely to forgive (Greenleaf and Winer 2002). There is empirical evidence in a contractual context that satisfied customers have longer relationships with their service providers (Bolton 1998) and higher usage levels of service usage (Bolton and Lemon 1999). Thus we can say:

**Proposition 5:** The more positive the experiences and relationships an existing customer has with the organization and the better the long-term relationship of the customer with the organization, the higher is the chance that the customer may forgive an organization for its faults. They should still be more willing to maintain a long-term relationship than those customers who have less positive or no previous experience with the organization.

From the above propositions it can be said that the better the quality of service to customers, then the higher is the value of the relationship with the organization in the minds of those customers. More detailed information about its customer's purchase behavior and higher positive experiences with the firm will enable the establishment of more profitable, longer-term relationships between the firm and the customer.

## DISCUSSION

To be effective, a CRM strategy requires that an organization provide customer value that is superior to that of its competitors (Thakur and Summey 2003). Gaining clearer insight and more intimate understanding of customers' buying behaviors will help in building an effective competitive advantage (Ragin and Greco 2003). CRM helps the process of getting in-depth knowledge about customers' habits and what the customers likes and dislikes are and thus can give the organization an edge over its competitors. The information that the organization has about its customers can be used to create an ongoing relationship thus retaining its customers for a longer period of time. It has been shown that businesses have to spend up to six times more to acquire new customers than they do to keep them, so investments in customer retention have high potential returns.

CRM can enhance the creation of committed customers. Companies have started putting more effort into maintaining existing customers than getting new ones. In research conducted among 100 customer service managers from the financial services industry it was discovered that 53 percent of respondents communicated with their existing customers on a daily basis while only 40 percent communicated daily with their prospects (Torcy 2002).

More than simply a repeat purchaser, the committed customer has an emotional attachment to the seller (Lim 1997; Dick and Basu 1994). These emotions can include trust, liking, and believing in the organization's ability to respond effectively and promptly to customer problems (Fournier 1998). Quality products, removal of geographic boundaries, on-time delivery and responsive service are what customers want in the present competitive environment (Ragin and Greco 2003).

Building an effective customer relationship management system should result in generating enhanced lifetime value (LTV) since a trusting or loyal customer will stick with the brand. It

should be difficult for the competitors to switch them unless and until they provide a higher quality product and better service.

### CONCLUSION

Customer Relationship Management is an alluring marketing strategy (Krasnikov, Jayachandran and Kumar 2009; Boulding et al. 2005). It can be a basis for a competitive edge which can sustain growth in a competitive environment. It seeks to build a long-term relationship with its existing customers. Properly implemented Customer Relationship Management (CRM) can help create and maintain a long-term sustainable competitive advantage.

The organization should, of course, continue to try to attract the new customers, but increased emphasis is being placed on retaining existing customers. This may best be accomplished by knowing the purchase behavior of customers over time and using that knowledge as a basis for formulating strategies that glue those existing customers to them.

For an organization to develop a long-term relationship with its customers it should first understand their needs and wants. Secondly, the firm should try to differentiate its more homogenous customers from the larger, heterogeneous, potential market. The organization can then concentrate on those homogenous customers whom they can serve in a better way and then work to retain them for a long period of time thus building a higher lifetime value (LTV). Thus we can say that customer relationship management provides a basis for creating and enhancing the lifetime value of customers.

Two areas which have not been examined in this paper are how the organization responds when it makes a mistake and what form of tangible or intangible amends may be provided to those offended customers in-order to maintain a long-term relationship with them in such a case. Further research should also be carried out to see if attention by the firm to the

lifetime value (LTV) of the relationship leads to the generation of increased competition.

From a practitioner's view point, research could be carried out to learn how to achieve the best return from a CRM/LTV marketing strategy. Research could also be carried out to determine how to know who the customers of the organization are who would be most valuable in the long term and which type of customers the firm should target for long term relationships.

Our proposition inventory and integrative framework represent an effort to build a foundation for the systematic development of a theory of CRM which provides a basis for enhancing the LTV of a customer. The objective of this research was theory construction rather than theory testing. This foundation now provides a basis for efforts to develop a suitable measure of LTV and empirically testing the propositions presented.

### REFERENCES

- Allenby, Greg M., Robert P. Leone and Lichung Jen (1999), "A Dynamic Model of Purchase Timing with Application to Direct Marketing", *Journal of the American Statistical Association*, 94 (446), pp. 365-374.
- Anderson, Eugene W., Claes Fornell and Sanal K. Mazvancheryl (2004), "Customer Satisfaction and Share Holder Value", *Journal of Marketing*, 68 (October), pp. 172-187.
- Bauer, Hans H., Mark Grether and Mark Leach (2002), "Customer Relations through the Internet", *Journal of Relationship Marketing*, 1 (2), pp. 39-55.
- Bazadona, Damian (2002), "Customer Service: Are You Out There?" Available at: [www.clickz.com](http://www.clickz.com).
- Bhattacharya, C. B. and Shanker Sen (2003), "Consumer-Company Identification: A Framework for Understanding Consumers' Relationships with Companies", *Journal of Marketing*, 67 (2), pp. 76-88.

- Blattberg, Robert C. and John Deighton (1996), "Managing Marketing by the Customer Equity Test", *Harvard Business Review*, 74 (4), pp. 136-144.
- [http://web1.epnet.com/citation.asp?tb=1&\\_ug=dbs+0+ln+en%2Dus+sid+E7726E5C%2D6A1D%2D41A4%2D820A%2DA4FCE91BC2D9%40Sessionmgr4%2DSessionmgr3+8167&\\_us=bs+Relationship++Marketing+cst+0%3B1%3B2+ds+Relationship++Marketing+dstb+ES+fh+0+hd+0+hs+%2D1+or+Date+ri+KAACBVA00056721+sl+1+sm+ES+ss+SO+A120&c f=1&f n=11&r n=12-bib7up#bib7up](http://web1.epnet.com/citation.asp?tb=1&_ug=dbs+0+ln+en%2Dus+sid+E7726E5C%2D6A1D%2D41A4%2D820A%2DA4FCE91BC2D9%40Sessionmgr4%2DSessionmgr3+8167&_us=bs+Relationship++Marketing+cst+0%3B1%3B2+ds+Relationship++Marketing+dstb+ES+fh+0+hd+0+hs+%2D1+or+Date+ri+KAACBVA00056721+sl+1+sm+ES+ss+SO+A120&c f=1&f n=11&r n=12-bib7up#bib7up)
- Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction", *Marketing Science*, 17 (1), pp. 45-65.
- Bolton, Ruth N. and Katherine N. Lemon (1999), "A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction", *Journal of Marketing Research*, 36 (2), pp. 171-186.
- Boulding, William, Richard Staelin, Michael Ehret and Wesley Johnston (2005), "A Customer Relationship Management Roadmap: What Is Known, Potential Pitfalls, and Where to Go", *Journal of Marketing*, 69 (October), pp. 155-166.
- Boulding, William, Ajay Kalra, R. Staelin and Valerie Zeithaml (1993), "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions", *Journal of Marketing Research*, 30 (1), p. 7.
- Day, George S. (2003), "Creating a Superior Customer-Relating Capability", *MIT Sloan Management Review*, 44 (3), pp. 77-82.
- De Wulf, Kristof, G. Odekerken-Schroder and Dawn Iacobucci (2001), "Investments in Consumer Relationships: A Cross-Country and Cross Industry Exploration", *Journal of Marketing*, 65 (4), pp. 33-50.
- Dick, Alan S. and Kunal Basu (1994), "Customer Loyalty: Toward An Integrated Conceptual Framework", *Journal of Academy of Marketing Science*, 22 (2), pp. 99-113.
- Filiatrault, Pierre and Jozée Lapierre (1997), "Managing Business-to-Business Marketing Relationships in Consulting Engineering Firms", *Industrial Marketing Management*, 26 (2), pp. 213-222.
- Fournier, Susan (1998), "Consumers and Their Brands", *Journal of Consumer Research*, 24 (4), pp. 343-372.
- \_\_\_\_\_ and David G. Mick (1999), "Rediscovering Satisfaction", *Journal of Marketing*, 63 (4), pp. 5-23.
- Fornell, Claes, Sunil Mithas, Forrest Morgeson and M. S. Krishnan (2006), "Customer Satisfaction and Stock Prices: High Returns, Low Risks", *Journal of Marketing*, 70 (1), pp. 3-14.
- Gupta, Sunil, Donald R. Lehmann and Jennifer Ames Stuart (2004), "Valuing Customers", *Journal of Marketing Research*, 41 (February), pp. 7-18.
- Greenleaf, Eric A. and Russel S. Winer (2002), "Putting the Customer Back Into Customer Relationship Management", *Advances in Consumer Research*, 29 (1), pp. 357-360.
- Gresov, Christopher and Heather A. Haveman (1993), "Organizational Design, Inertia and the Dynamics of Competitive Response", *Organization Science: A Journal of the Institute of Management Sciences*, 4 (2), pp. 181-207.
- Gruen, Thomas W. (1997), "Relationship Marketing: The Route to Marketing Efficiency and Effectiveness", *Business Horizons*, 40 (6), pp. 32-38.
- Haveman, Heather, A. (1993), "Follow the Leader: Mimetic Isomorphism and Entry into New Markets", *Administrative Science Quarterly*, 38 (4), pp. 593-627.
- Hannan, Michael T. and Glenn R. Carroll (1992), *The Dynamic of Organizational Populations*. New York: Oxford University Press.
- Honebein, Peter C. and Roy F. Cammarano (2006), "Customers at Work", *Marketing Management*, 15 (1), pp. 26-31.
- Hollowell, T. and G. Verma (2002), "Customers Want the Personal Touch", *Information Week* (June).

- Homborg, Christian, Viviana V. Steiner and Dirk Totzek (2009), "Managing Dynamics in a Customer Portfolio", *Journal of Marketing*, 73 (September), pp. 70-89.
- Jayachandran, Satish, Subhash Sharma, Peter Kaufman and Pushkala Raman (2005), "The Role of Relational Informational Processes and Technology Use in Customer Relationship Management", *Journal of Marketing*, 69 (October), pp. 177-192.
- Juran, Joseph M. (1954), "Universals in Management Planning and Control", *The Management Review*, 43 (11), pp. 748-761.
- \_\_\_\_ (1989), *Juran on Leadership for Quality: an Executive Handbook*, The Free Press, New York, NY.
- Kellen, Vince and Keith Stefanczyk (2002), "Complexity, Fragmentation, Uncertainty, and Emergence in Customer Relationship Management", *Emergence*, 4 (4), pp. 39-50.
- [http://web1.epnet.com/citation.asp?tb=1&\\_ug=db5+0+ln+en%2Dus+sid+E7726E5C%2D6A1D%2D41A4%2D820A%2DA4FCE91BC2D9%40Sessionmgr4%2DSessionmgr3+8167&\\_us=bs+Relationship++Marketing+cst+0%3B1%3B2+ds+Relationship++Marketing+dstb+ES+fh+0+hd+0+hs+%2D1+or+Date+ri+KAACBVA00056721+sl+1+sm+ES+ss+SO+A120&c f=1&f n=11&r n=12](http://web1.epnet.com/citation.asp?tb=1&_ug=db5+0+ln+en%2Dus+sid+E7726E5C%2D6A1D%2D41A4%2D820A%2DA4FCE91BC2D9%40Sessionmgr4%2DSessionmgr3+8167&_us=bs+Relationship++Marketing+cst+0%3B1%3B2+ds+Relationship++Marketing+dstb+ES+fh+0+hd+0+hs+%2D1+or+Date+ri+KAACBVA00056721+sl+1+sm+ES+ss+SO+A120&c f=1&f n=11&r n=12) - bib41up#bib41up
- Kotler, Philip (1994), *Marketing Management*, Upper Saddle River, NJ: Prentice Hall.
- Krasnikov, Alexander, Satish Jayachandaran and V. Kumar (2009), "The Impact of Customer Relationship Management Implementation on Cost and Profit Efficiencies: Evidence from the U.S. Commercial Banking Industry", *Journal of Marketing*, 73 (November), pp. 61-76.
- Kumar, V. and Denish Shah (2009), "Expanding the Role of Marketing: From Customer Equity to Market Capitalization", *Journal of Marketing*, 73 (November), pp. 119-136.
- Lawrence, Ang and A. Buttle Francis (2002), "ROI on CRM: A Customer-Journey Approach", Available at: [www.crm2day.com](http://www.crm2day.com).
- Lemon, Katherine N., Roland T. Rust and Valarie A. Zeithaml (2001), "What Drives Customer Equity?" *Marketing Management*, 10 (1), pp. 20-25.
- Lemon, Katherine N., Tiffany B. White and Russell S. Winer (2002), "Dynamic Customer Relationship Management: Incorporating Future Considerations into the Service Retention Decision", *Journal of Marketing*, 66 (1), pp. 1-14.
- Lim, Kui S. (1997), "Brand Loyalty and Situational Effects: An Interactionist Perspective", *Journal of International Consumer Marketing*, 9 (4), pp. 95-101.
- Lipsey, John (2002), "Relationship Intelligence: A Strategic Asset", *The CPA Journal*, 72 (11), p. 14.
- Mael, Fred and Blake E. Ashforth (1992), "Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification", *Journal of Organizational Behavior*, 13 (2), pp. 103-123.
- McAlexander, James H., John W. Schouten and Harold F. Koenig (2002), "Building Brand Community", *Journal of Marketing*, 66 (1), pp. 38-54.
- Nairn, A. (2002), "CRM: Helpful or Full of Hype?" *Journal of Database Marketing*, 9 (4), pp. 376-382.
- Peppers, Don and Martha Rogers (1997), *Enterprise One to One*, Currency Doubleday.
- Ragin, Edna J. and Alan J. Greco (2003), "Customer Relationship Management and e-Business: More Than a Software Solution", *Review of Business*, (winter).
- Reichheld, Fraedrick F. (1996), *The Loyalty Effect*, Harvard Business School Press.
- Reichheld, Fraedrick F. and W. Earl Sasser, Jr. (1990), "Zero Defections: Quality Comes to Services", *Harvard Business Review*, 68 (5), pp. 105-111.
- Reinartz, Werner J., Jacqueliyn S. Thomas and V. Kumar (2005), "Balancing Acquisition and Retention Resources to Maximize Customer Profitability", *Journal of Marketing*, 69 (1), pp. 63-79.

- Reinartz, Werner J. and V. Kumar (2003), "The Impact of Customer Relationship Characteristics on Profitable Lifetime Duration", *Journal of Marketing*, 67 (1), pp. 77-99.
- Rusbult, Caryl E., Isabella M. Zembrodt and Lawanna K. Gunn (1982), "Exit, Voice, Loyalty, and Neglect: Responses to Dissatisfaction in Romantic Involvement", *Journal of Personal and Social Psychology*, 43 (6), pp. 1230-1242.
- [http://weblinks1.epnet.com/citation.asp?tb=1&\\_ug=db+2+ln+en%2Dus+sid+29282626%2DF166%2D4647%2DB6E4%2D3B410C2FB5DA%40Sessionmgr2+64D2&\\_uh=btn+N+d+b+buh+idb+buhish+jdb+buhjnh+op+phrase+ss+ID++%22JMK%22+E173&\\_us=bs+%7BJN++%22Journal++of++Marketing%22++and++DT++20020101%7D+ds+%7BJN++%22Journal++of++Marketing%22++and++DT++20020101%7D+dstb+ES+fcl+Aut+ri+KAAA CBZD00065343+sm+ES+19C5&cf=1&fn=1&rn=1](http://weblinks1.epnet.com/citation.asp?tb=1&_ug=db+2+ln+en%2Dus+sid+29282626%2DF166%2D4647%2DB6E4%2D3B410C2FB5DA%40Sessionmgr2+64D2&_uh=btn+N+d+b+buh+idb+buhish+jdb+buhjnh+op+phrase+ss+ID++%22JMK%22+E173&_us=bs+%7BJN++%22Journal++of++Marketing%22++and++DT++20020101%7D+ds+%7BJN++%22Journal++of++Marketing%22++and++DT++20020101%7D+dstb+ES+fcl+Aut+ri+KAAA CBZD00065343+sm+ES+19C5&cf=1&fn=1&rn=1) - bib43up#bib43upRust, Roland, Anthony Zahorik and Timothy L. Keiningham (1995), "Return on Quality (ROQ): Making Service Quality Financially Accountable", *Journal of Marketing*, 59 (2), pp. 58-71.
- Sanders, Robert (1987), "The Pareto Principle: Its Use and Abuse", *Journal of Services Marketing*, 1 (2), pp. 37-40.
- Sawyer, Deborah C. (1997), "When Customers' Lack of Knowledge Is Your Biggest Threat", *Competitive Intelligence Review*, 8 (4), pp. 78.
- Sheth, Jagdish N. and Atul Parvatiyar (1995), "Relationship Marketing in Consumer Markets: Antecedents and Consequences", *Journal of Academy of Marketing Science*, 23 (4), pp. 255-171.
- Shaw, Mark (2001), "Lifetime Value and Valuing Customers – Who are You Kidding?" *Journal of Targeting, Measurement & Analysis for Marketing*, 10 (2), p. 101.
- Sowalskie, R. (2001), "The Five CRM Essentials for Insurance", *National Underwriter*, pp. 24-25.
- Thakur, Ramendra, John H. Summey and Siva K. Balasubramanian (2006), "CRM as Strategy: Avoiding the Pitfall of Tactics", *Marketing Management Journal*, 16 (2), pp. 147-154.
- \_\_\_\_\_ and \_\_\_\_\_ (2005), "Filtering Profitable from Not-so-Profitable Customers Using Customer Relationship Management (CRM) Technology", *Marketing Management Journal*, 15 (2), pp. 43-54.
- \_\_\_\_\_ and \_\_\_\_\_ (2003), "Lifetime Value Enhancement Using CRM to Create Committed Customers", in *Advances in Marketing: Pedagogy, Philosophy and Processes*, William J. Kehoe and Linda K. Whitten (eds.), Society for Marketing Advances, Charlottesville, VA, pp. 47-48.
- Thomas, Daniel (2002), "CRM is Key to Winning Customers", *Computer Weekly*.
- Torcy, G. De (2002), "A New Wave in Creating Customer Satisfaction", *Journal of Database Marketing*, 9 (4), pp. 366-370.
- Wilson, Hugh, Elizabeth Daniel and Malcolm McDonald (2002), "Factors for Success in Customer Relationship Management (CRM) Systems", *Journal of Marketing Management*, 18 (½), pp. 193-219.
- Winer, Russell S. (2001), "A Framework for Customer Relationship Management", *California Management Review*, 43 (4), pp. 89-105.
- Winters, B. (2002), "Quality of Customer Service Correlates Directly with Consumer Trust", Available at: [www.serverworldmagazine.com](http://www.serverworldmagazine.com).

## A SOCIAL NETWORKS APPROACH TO MARKET ORIENTATION

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*By emphasizing the importance of understanding and responding to customer needs as a guiding force behind activities of the firm, perhaps no concept is more fundamental to the marketing discipline than market orientation. Although previous research has implicitly included social relationships as central to the market orientation construct, few researchers have considered the explicit link between social network relationships and market-oriented behaviors. In response to this situation, this conceptual paper sets out to re-examine structural implications of the market orientation construct using a social networks approach. An attempt is made to draw parallels between Kohli and Jaworski's (1990) conceptualization of market orientation and the strength of ties perspective advanced by Granovetter (1973; 1982). A series of testable propositions are derived that link prior research in social networks to each of the three behavioral components of market orientation. The paper concludes with a discussion of managerial and research implications.*

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### INTRODUCTION

By emphasizing the importance of understanding and responding to customer needs as a guiding force behind activities of the firm, perhaps no concept is more fundamental to the marketing discipline than market orientation. In their seminal work, Kohli and Jaworski (1990) conceptualized market orientation as composed of three sets of firm activities: (1) organization-wide generation of market intelligence, (2) dissemination of intelligence across functional departments, and (3) organization-wide responsiveness to gathered intelligence. Subsequent empirical studies have demonstrated that a firm's market orientation is positively related to employee attitudes (Jaworski and Kohli 1993), customer orientation among salespeople (Pelham 2009), trust in channel relationships (Siguaw, Simpson, and Baker 1998), product-service innovation (Grinstein 2008; Morgan and Berthon 2008; Ordanini and Maglio 2009), new product success (Im and Workman 2004), and broad measures of business performance (Narver and Slater 1990; Song and Parry 2009).

The most recent decade has shown an increasing interest in the link between market orientation and interfirm relationships (e.g., Homburg, Grozdanovic, and Klarmann 2007; Ramani and Kumar 2008). For example, Hunt and Lambe (2000) suggest that to the extent that collaboration is important to delivering superior customer value, "a key orientation missing in the present conceptualization of [market orientation] is a firm's partnering orientation" (p. 28). Similarly, Rindfleisch and Moorman (2001) encourage an investigation of the relationship between market orientation and alliance participation. Presumably underlying the call to action is the belief that a firm's network of interfirm relationships may prove beneficial as a source of market intelligence. Thus, continued inquiries on this topic would seem to benefit from a perspective that permits examination of the nature, characteristics, and structure of the relationships that define a firm's position in the marketplace.

One such approach that satisfies this need is the research tradition known as social networks analysis. In general, social networks analysis provides a framework and set of methodological tools for the assessment of how the structure of social relationships correlates with the flow of resources contained within the

network. For instance, Rindfleisch and Moorman (2001) found that relational embeddedness among alliance partnerships is positively linked to acquisition of product information in the context of new product development. Given that a chief concern of market orientation is the acquisition of market information, the use of social networks analysis may allow for a broader understanding of how the firm's interfirm relationships affects its ability to do so. Furthermore, social networks analysis allows for an assessment of relationships among social actors within the firm, thus lending insight into how information is transferred within the firm. In sum, viewing market orientation from a social networks perspective may provide key theoretical and managerial insights into how a firm's set of relationships may be structured so as to develop an appropriate market orientation.

The purpose of this paper is to offer a conceptual exploration of relationships that may exist between a firm's market orientation and its concurrent structure of social relationships. An empirical relationship is ultimately expected given that market orientation is broadly concerned with the extraction of market information and its subsequent transfer towards a market response, while social networks analysis helps us to understand the structural pathways and constraints on such activities. A series of proposed linkages between the two research streams are organized by examining the relationship of each of the three behavioral components of market orientation proposed by Kohli and Jaworski (1990). And while numerous social network variables might be examined, this paper restricts its scope to perhaps the most commonly addressed variable, tie strength (Granovetter 1973). This paper follows efforts to examine the impact of the firm's relational embeddedness within its interfirm environment (e.g., Gulati 1995; Uzzi 1997; Palmatier 2008) as well as prior efforts to examine the role of intrafirm ties on interfunctional coordination (Hansen 1999; Nelson 1989).

In order to place market-oriented behavior in its proper context, the paper begins with a brief background on the use of social networks analysis in organizational research. This is followed with a review of the market orientation literature. Particular emphasis is placed upon Kohli and Jaworski's (1990) conceptualization of market orientation as three distinct behavioral components. Next, a series of testable propositions are derived that link prior research in social networks to each of the three behavioral components of market orientation. The paper concludes with a discussion of managerial and research implications, including suggestions for future research.

### SOCIAL NETWORKS ANALYSIS

Social networks analysis is a methodological perspective that places the relationship between two or more social actors (e.g., individual, group, organization) as the focal unit of analysis (Scott 2000). Researchers then proceed to examine the pattern of relationships that exist (or do not exist) between or among these actors. A basic premise of all social networks research is that the structure of a network is correlated with the flow of resources contained within and accessible to the network. Typical resources of interest within organizational literature include information, power, and financial resources. From a purely structural perspective of these relationships (Mayhew 1980), researchers expect the pattern of relationships to have a profound impact on the behavior of those entities within the network. The more relaxed view that is adopted here and one that is more common to organization research allows for entities (e.g., individuals, organizations) to both influence and be influenced by the pattern of network linkages (e.g., Kilduff and Krackhardt 1994).

A key benefit of a social networks approach stems from its methodological flexibility. One may examine the pattern of relationships that exist among individuals, groups, organizations, or even groups of organizations. In addition, social networks analysis allows the researcher



to explore either the network as a whole or the network centered on a focal actor, also known as an ego-centered network (Scott 2000). The flexibility of this approach when applied to organizational research provides an opportunity to examine both the relational ties within the organization and the relational ties that span from actors in a focal organization to actors in another organization.

Within the social networks literature, one of the most useful approaches to study the flow of information is the *strength of ties* perspective (Granovetter 1973; 1982). In addition to a focus on the structure of relationships, the relative strength of any one relationship in the network is considered a key variable for not only the flow of information, but also for the content of the information. The determinants of tie strength are a “combination of the amount of time, the emotional intensity, the intimacy [mutual confiding], and the reciprocal services which characterize the tie” (Granovetter 1973, p. 348). Strong relational ties are beneficial to individuals and organizations because participants tend to be more highly motivated to provide assistance. Granovetter (1973) notes, however, that weak ties are pivotal sources of information because they provide a “bridge” to individuals outside the focal group. Hence, weak ties tend to provide more diversity and less redundancy in the information accessible within one’s network.

Prior research using a strength of ties perspective has examined the flow of information in both intrafirm and interfirm contexts. Hansen (1999), for example, studied the impact of tie strength on the transfer of knowledge among organizational subunits in a new product development setting. His results suggest that while strong ties are important for the transfer of complex knowledge among subunits, weak ties are better suited to the search for and transfer of highly codified knowledge. Taking an interfirm perspective, Uzzi (1997) concluded from field interviews that strong ties among organizations improved the transfer of fine-grained information and promoted joint problem-solving arrangements.

In this paper, both intrafirm and interfirm ties will be considered. Because the market orientation construct is based upon the flow of market information as its primary objective, social networks analysis provides an appropriate perspective. This approach allows for a simultaneous examination of (1) the flow of market intelligence from the market to the firm (i.e., interfirm), (2) the flow of market intelligence between and among functional departments within the firm (i.e., intrafirm), and (3) the coordinated usage of market intelligence in the design and implementation of a timely response (i.e., both interfirm and intrafirm). The paper now turns to a review of the market orientation literature prior to development of testable propositions.

## MARKET ORIENTATION

Although it has only been formalized within the past decade, the market orientation construct can be traced back to prior development of the marketing concept. Felton (1959) first described the marketing concept as the integration of marketing activities across the entire firm for the purpose of maximizing profits. King (1965, p. 85) added that its purpose was to help “consumers solve selected problems in ways compatible with planned enhancement of the profit position of the firm.” McNamara (1972, p. 51) gave perhaps the most comprehensive definition of the marketing concept: “a philosophy of business management, based upon a company-wide acceptance of the need for customer orientation, profit orientation, and recognition of the important role of marketing in communicating the needs of the market to all major corporate departments.”

Even though consensus was slowly forming, researchers voiced concerns about the adequacy of the marketing concept for use in practice. Barksdale and Darden (1971) suggested that a major challenge for the marketing concept was the development of an operational definition. Day and Wensley (1983) further noted that the marketing concept had failed to address the firm’s need take a broader view of its market by

accounting for the impact of competition on the needs of its customers. An additional concern held by some researchers was the inclusion of profitability as a core component of the marketing concept, as opposed to a natural outcome of its implementation (Levitt 1969; Bell and Emory 1971).

In response to these criticisms, a movement began to delineate the specific activities that reflect a firm's implementation of the marketing concept. During this time, researchers began to use the term *market orientation* almost interchangeably with the term *marketing concept*. Shapiro (1988), for example, centered market orientation around the activities of collection and usage of market information. Webster (1988) also clarified that the use of market intelligence rather than marketing intelligence was preferable in that it captures the need to take a broader view of the influences of consumer behavior.

The movement to clarify both the marketing concept and market orientation culminated in the research program of Kohli and Jaworski (1990). In their initial work, the authors set out to specify the domain of market orientation upon an extensive review of the literature as well as conducting a series of in-depth interviews. The first important product of their work was simply to recognize market orientation as the set of firm activities that are antecedent to, and consistent with, an implementation of the marketing concept (Kohli and Jaworski 1990). Another key outcome was to provide a definition of the market orientation construct that specified the set of behaviors that are characteristic of a market-oriented firm.

Market orientation is the organizationwide *generation* of market intelligence pertaining to current and future customer needs, *dissemination* of the intelligence across departments, and organizationwide *responsiveness* to it (Kohli and Jaworski 1990, p. 6, emphasis in original).

Thus, Kohli and Jaworski (1990) highlight three distinct behavioral components that typify the market-oriented firm. The first of these, intelligence generation, is the behavior of the firm that allows it to extract market information necessary to understand and anticipate customer needs. The authors note that the generation of market intelligence requires a diverse set of complementary mechanisms. For example, the firm may rely on customer surveys, test markets, and analysis of sales reports. However, they also suggest that this activity cannot merely rely on information gathered at arm's length. Instead, the market-oriented firm seems to benefit from some level of embeddedness within its market environment. Such activity is likely to include a number of formal and informal means including, for instance, "meetings and discussions with customer and trade partners" (Kohli and Jaworski 1990, p. 4).

Intelligence dissemination is the second behavioral component of market orientation and it entails the set of activities undertaken by a market-oriented firm to efficiently distribute market information across functional departments. Kohli and Jaworski (1990) discuss two primary issues for this component. First, they note the importance of participation across all departments within the organization. Their emphasis on company-wide intelligence dissemination clearly echoes the original notion of the marketing concept. The authors also emphasize the value of informal means of intelligence dissemination; in fact, they report from their field interviews that managers viewed "informal 'hall talk' is an extremely powerful tool for keeping employees tuned to customers and their needs" (Kohli and Jaworski 1990, p. 5).

The third component of market orientation is organizationwide responsiveness to market intelligence. In simple terms, responsiveness entails the set of actions undertaken by the entire firm in reaction to changes in customer needs. Such actions might include, for example, development of new products, modification to existing product lines, and

reaction to competitor pricing. Scale development work by Kohli, Jaworski, and Kumar (1993) further implies that firm responsiveness is reflected in the usage of relevant market intelligence and the timeliness of the firm's market response. In that market response seems to depend in large part on the firm's ability to disseminate market intelligence, responsiveness and intelligence dissemination appear to be closely linked.

### PROPOSITIONS

A series of testable propositions are now derived from the literature of both market orientation and the strength of ties perspective from social networks analysis. Guiding each of these theoretical predictions is the underlying premise that prior work on market orientation and tie strength intersect when market information acquisition and utilization are the focal variables of interest. Propositions are developed in sequence for each of the three behavioral components as conceptualized in the work of Kohli and Jaworski (1990). No attempt is made to propose a causal ordering of the proposed relationships.

#### Intelligence Generation

An implicit assumption in the market orientation literature that underlies intelligence generation is that market intelligence originates from outside the boundaries of the firm. Thus it seems likely that the firm's ability to capture information about its customers, suppliers, competitors, and other environmental forces should rely at least in part on its ability to gain access to each of these sources. Kohli and Jaworski (1990) have suggested that market-oriented firms meet regularly with channel partners (i.e., customers and suppliers) to make sense of emerging trends. Outlining the strength of ties position, Granovetter (1973) argued that as social actors spend more time interacting with one another, such as through meetings and discussion, they are more likely to develop strong ties that allow for increased access and assistance from one another.

Rindfleisch and Moorman (2001) found evidence that relationships between a firm and its channel partners tend to have higher levels of closeness and reciprocity as compared to relationships with competitors. They also found that a higher level of embeddedness was positively related to information acquisition in a new product development context. Similarly, Uzzi (1997) found that information exchange in embedded relationships among entrepreneurial firms was characterized by an increased willingness to share proprietary and strategic information. Based on this evidence, a significant relationship is expected to exist between a firm's ability to generate market intelligence and its propensity to develop strong tie relationships with its channel partners.

**P<sub>1</sub>:** The greater the ability of the firm to generate market intelligence, the more likely the firm is to hold strong tie relationships with its customers and suppliers.

Although the information gathered directly from customers and suppliers may provide the firm with much needed insights into the needs and preferences of its customers, Kohli and Jaworski (1990) warn that such information may be insufficient. They argue that market intelligence includes "an analysis of how [customers] may be affected by exogenous factors such as government regulation, technology, competitors, and other environmental forces" (Kohli and Jaworski 1990, p. 4). This implies that the market-oriented firm must have access to sources capable of providing information that is both unique and original. In the strength of ties literature, this is termed nonredundant information.

Granovetter (1973; 1982) argues that weak ties are the best source for nonredundant information because they provide access to sources of information not otherwise available. Networks of strong ties are characterized by mutual connected actors who tend to interact frequently and thus possess a great deal of similar information. In contrast, weak ties are

exemplified by relationships to others who are otherwise unrelated to actors in the focal actor's immediate network. They instead provide a bridge to new and different social circles and thus provide access to nonredundant information. While much of the evidence in support of the weak ties hypothesis has been developed at an individual level of analysis, support for the strength of weak ties in an organizational setting has begun to emerge. McEvily and Zaheer (1999) found that nonredundancy among interfirm contacts was positively associated with the firm's competitive scanning capabilities.

**P<sub>2</sub>:** The greater the ability of the firm to generate market intelligence, the greater number of weak tie relationships it will hold with competitors and organizations outside of its channels of distribution.

### Intelligence Dissemination

Once market intelligence has been successfully extracted from outside the boundaries of the organization, the market-oriented firm seeks to efficiently distribute the information to the appropriate functional department within the organization. An important assumption that underlies the activities of intelligence dissemination is that the department that acquires the information is not always best suited to utilize the information. To deal with this problem, most firms strive for an organizational structure that is best suited to efficiently transfer information. Yet despite efforts to develop formal mechanisms for information transfer, most organizations are faced with inefficiencies that result from the necessary separation of functions.

Kohli and Jaworski (1990) recognized the need for informal communication in keeping the entire firm in tune with the needs of its customers. Harris (2000) provides empirical evidence that interdepartmental connectedness is positively linked to market orientation. This was also previously demonstrated in greater detail by Jaworski and Kohli (1993) who found

that interdepartmental connectedness was positively associated with intelligence dissemination. More recently, Kirca, Jayachandran, and Bearden (2005) argued that interdepartmental connectedness may also serve to counter the negative impact of highly centralized organizational structure on market orientation "by ensuring contact among employees and fostering information flow" (p. 29). From a strength of ties perspective this implies that those firms who excelled in intelligence dissemination likely benefited from the existence of strong ties among its functional departments. In support of this conclusion, Hansen (1999) found that while weak ties are well suited for information search, strong ties are more favorable to the transfer of complex information between departmental units.

**P<sub>3</sub>:** The greater the ability of the firm to disseminate market intelligence, the more likely the firm is to exhibit strong tie relationships among its functional departments.

In contrast to expected benefits of connectedness, conflict tends to inhibit the transfer of information among interdepartmental functions. Jaworski and Kohli (1993) found that interdepartmental conflict was negatively associated with intelligence dissemination. In the market orientation literature, Harris (2000) successfully replicated this finding. Empirical findings from the social networks analysis literature suggest that conflict within an organization is likely related to the structure of network ties. Nelson (1989) found that low conflict organizations are characterized by a higher degree of strong ties between functional departments as compared to high conflict organizations. Labianca, Brass, and Gray (1998) found evidence that negative relationships with members of other workgroups led to higher perceptions of intergroup conflict. In addition, they found that low cohesiveness among group members contributed to perceptions of increased conflict among their department and other departments in the organization. These findings support the following proposition:

- P<sub>4</sub>:** The greater the ability of the firm to disseminate market intelligence, the less likely the firm is to exhibit high levels of conflict in the relationships among its functional departments.

### Responsiveness

The ability of the firm to respond to market intelligence is largely a function of its ability to develop and implement its response in a timely manner. Kohli and Jaworski (1990) suggest that responsiveness is dependent upon the cooperation of various functional departments within the firm. Consistent with this statement, Jaworski and Kohli (1993) found that interdepartmental conflict was negatively related to firm responsiveness. Prior research indicates however that the existence of strong tie relationships among functional departments should contribute to increased responsiveness by dampening levels of interdepartmental conflict and improving the coordinated use of market intelligence. As previously described, Nelson's (1989) finding predicts that the level of conflict between functional departments should be dampened in the presence of strong tie relationships. In addition, Hansen (1999) found that strong ties were associated with faster completion times of new product development when the project required the use of complex and tacit knowledge.

- P<sub>5</sub>:** The greater the ability of the firm to respond to market intelligence, the more likely the firm is to exhibit strong tie relationships among its functional departments.

In addition to intrafirm factors, a firm's responsiveness to market intelligence is also likely to benefit from the level of cooperation that exists between the firm and its channel partners. Uzzi (1997) notes two distinct benefits from strong tie relationships between the firm and its customers and suppliers. First, he notes that embedded ties "entail problem-solving mechanisms that enable actors to coordinate functions and work out problems 'on the fly'" (Uzzi 1997, p. 47). Second, he found that strong tie

relationships promote economies of time and allow firms to quickly respond to market intelligence. Additional support is provided by Rindfleisch and Moorman (2001) who demonstrated that relational embeddedness is positively related to both new product creativity *and* speed of new product development.

- P<sub>6</sub>:** The greater the ability of the firm to respond to market intelligence, the more likely the firm is to hold strong tie relationships with its customers and suppliers.

### DISCUSSION

The primary purpose of this paper has been to explore the relationships that may exist between a firm's market orientation and its concomitant structure of social relationships. The basic premise of this analysis is that an empirical relationship is likely to exist given the common concern over the flow of information across a series of social actors exhibited independently by the two literature streams. Furthermore, Kohli and Jaworski's (1990) conceptualization of market orientation lends itself quite well to an attempt to draw parallels between market orientation and social networks analysis. The paper now turns to a discussion of both managerial implications and suggestions for future research.

### Managerial Implications

An ongoing discussion within the marketing literature concerns the practical value of market orientation to the firm's day-to-day operations. While previous research has clearly established a positive relationship between market orientation and business performance, the mechanisms that drive the relationship have not always been clear. Pending the results of future empirical examination, support of the abovementioned propositions would suggest that market orientation may be improved through the systematic development of relationships both between the functional departments of the firm and between the firm and its channel partners. For example, the firm

might assess the strength of existing relationships among its functional departments. An alternative focus might center on a drive to increase the firm's interaction with its customers and suppliers. In either case, the prescription for managers is both tangible and accessible to the firm and its employees.

This line of research is also likely to spawn a series of practical, yet unresolved questions about how managers might incorporate social networks logic in the implementation of market orientation. For example, how much organizational learning about customers or competitors must be derived through direct interpersonal contact, as opposed to research conducted at arm's length? Furthermore, which firms in the interfirm market are best to reach for effective intelligence generation? Research in the field of retail purchasing has demonstrated that purchasing agents often seek out the advice of their peers in competing firms (Hirschman and Mazursky 1982; Kline and Wagner 1994). And while the market orientation broadly supports this approach, direct ties may be severely limited in many industry settings. Future research is needed to provide more useful prescription for managers.

### Research Implications

Within the marketing literature, some scholars have questioned the maturity of the market orientation construct. Hunt and Lambe (2000, p. 28) note: "[Market orientation] lacks an underlying theory that could provide an explanatory mechanism for the positive relationship between [market orientation] and business performance." Albeit a simple mechanism, the firm's pattern and quality of network relationships provides a promising explanation for the impact of the firm's market orientation on business performance. One argument that would support this contention stems from Granovetter's (1985) argument for social embeddedness of economic exchange. While classical economics assumes that both firms and individuals engage in strictly discrete market transactions, Granovetter (1985) recognized that much of what we observe in

actual economic behavior includes both discrete one-time exchanges and ongoing exchange based upon trust and the achievement of joint interest. Following similar logic, the acquisition and utilization of market information seems unlikely to occur only at arm's length or from within the safe confines of the firm. Once again, casual observation of actual market behavior suggests that relationships between both firms and individuals provide a critical link between the firm's activities and the success of those activities. Additional theoretical and empirical work is clearly needed to establish network relationships as a principal mechanism behind market orientation.

For the sake of clarity, the current analysis and resulting propositions have been restricted to a narrow set of social networks concepts, principally strength of ties. Future research would benefit from an expanded set of variables. One alternative to the tie strength approach is *structural holes*, which are said to exist when two direct contacts held by an individual are themselves not tied by a direct relationship (Burt 1992). The structural hole is valuable because it enables an individual to reach nonredundant contacts in different social cliques. From a market orientation perspective, structural holes would be particularly useful in intelligence generation activities, such as when boundary spanning individuals develop interpersonal networks to contacts in buying firms, supplier firms, or perhaps alliance partners. Burt (1992) has argued that boundary spanners with networks rich in structural holes tend to access marketplace information that is more accurate and timely.

Another social networks variable that could enhance understanding of market orientation is *network density*, which refers to the proportion of the present dyadic relationships among a set of actors to the maximum number of possible dyadic relationships (Wasserman and Faust 1994). In plain terms, network density is a sociometric measure of "connectedness" within a network, such that a high density network may be characterized by a situation in which

“everyone knows everyone else.” This concept holds promise for the investigation of a firm’s coordination as it relates to both intelligence generation and responsiveness. We might expect, for example, that a high level of density within a firm may reduce interfunctional conflict, thus promoting coordination of information transfer.

Finally, empirical testing of the propositions set forth in this paper poses a number of method-related challenges. First, comparison of network measures between multiple firms is difficult given that network size typically varies greatly among organizations (Scott 2000). Second, the effort required to collect network data typically presents limitations on the size of networks that can be effectively examined. Finally, establishing causal relationships through longitudinal analysis of network relationships is problematic given that network relationships are highly sensitive to the passage of time. In all cases, replication of network studies may hold the key to gaining theoretical consensus.

## CONCLUSION

By positioning an emphasis on understanding and responding to customer needs as a guiding force behind activities of the firm, market orientation is considered to be one of the truly fundamental concepts within the marketing discipline. Although previous research has implicitly included social relationships as core to the market orientation construct, prior analysis has paid almost no attention to the explicit link between social network relationships and market-oriented behaviors. In response to this situation, this paper set out to re-examine the structural implications of the market orientation construct using a social networks approach.

## REFERENCES

- Barksdale, Hiram C. and Bill Darden (1971), “Marketers’ Attitude Toward the Marketing Concept,” *Journal of Marketing*, 35, October, pp. 29-36.
- Bell, Martin L. and C. William Emory (1971), “The Faltering Marketing Concept,” *Business Horizons*, 22, June, pp. 76-83.
- Burt, Ronald S. (1992), *Structural Holes: The Social Structure of Competition*, Cambridge, MA, Harvard University Press.
- Day, George S. and Robin Wensley (1983), “Marketing Theory with a Strategic Orientation,” *Journal of Marketing*, 47, Fall, pp. 79-89.
- Felton, Arthur P. (1959), “Making the Marketing Concept Work,” *Harvard Business Review*, 37, July-August, pp. 55-65.
- Granovetter, Mark S. (1973), “The Strength of Weak Ties,” *American Journal of Sociology*, 78, pp. 1360-1380.
- Granovetter, Mark (1982), “The Strength of Weak Ties: A Network Theory Revisited,” in *Social Structure and Network Analysis*, Peter V. Marsden and Nan Lin (eds.): pp. 105-130, Beverly Hills, CA, Sage Publishing.
- Granovetter, Mark (1985), “Economic Action and Social Structure: The Problem of Embeddedness,” *American Journal of Sociology*, 91, November, pp. 481-510.
- Grinstein, Amir (2008), “The Effect of Market Orientation and Its Components on Innovation Consequences: A Meta-Analysis,” *Journal of the Academy of Marketing Science*, 36, Summer, pp. 166-173.
- Gulati, Ranjay (1995), “Social Structure and Alliance Formation Patterns: A Longitudinal Analysis,” *Administrative Science Quarterly*, 40, December, pp. 619-652.
- Hansen, Morten T. (1999), “The Search-Transfer Problem: The Role of Weak Ties in Sharing Knowledge across Organization Subunits,” *Administrative Science Quarterly*, 44, March, pp. 82-111.
- Harris, Lloyd C. (2000), “The Organizational Barriers to Developing Market Orientation,” *European Journal of Marketing*, 34, 5/6, pp. 598-624.

- Hirschman, Elizabeth C. and David Mazursky (1982), "A Trans-Organizational Investigation of Retail Buyers' Criteria and Information Sources," New York University Institute of Retail Management Working Paper No. 82-8, New York University Graduate School of Business Administration Working Paper No. 82-17.
- Homburg, Christian, Marko Grozdanovic and Martin Klarmann (2007), "Responsiveness to Customers and Competitors: The Role of Affective and Cognitive Organizational Systems," *Journal of Marketing*, 71, July, pp. 18-38.
- Hunt, Shelby D. and C. Jay Lambe (2000), "Marketing's Contribution to Business Strategy: Market Orientation, Relationship Marketing and Resource-Advantage Theory," *International Journal of Management Reviews*, 2, March, pp. 17-43.
- Im, Subin and John P. Workman, Jr. (2004), "Market Orientation, Creativity, and New Product Performance in High-Technology Firms," *Journal of Marketing*, 68, April, pp. 114-132.
- Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *Journal of Marketing*, 57, July, pp. 53-69.
- Kilduff, Martin and David Krackhardt (1994), "Bringing the Individual Back In: A Structural Analysis of the Internal Market for Reputation in Organizations," *Academy of Management Journal*, 37, February, pp. 87-108.
- King, Robert L. (1965), "The Marketing Concept," in *Science in Marketing*, G. Schwartz, ed.: pp. 70-97, New York, John Wiley & Sons.
- Kirca, Ahmet H., Satish Jayachandran and William O. Bearden (2005), "Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance," *Journal of Marketing*, 69, April, pp. 24-41.
- Kline, Barbara and Janet Wagner (1994), "Information Sources and Retail Buying Decision-Making: The Effect of Product-Specific Buying Experience," *Journal of Retailing*, 70, Spring, pp. 75-88.
- Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54, April, pp. 1-18.
- Kohli, Ajay K., Bernard J. Jaworski and Ajith Kumar (1993), "MARKOR: A Measure of Market Orientation," *Journal of Marketing Research*, 30, November, pp. 467-477.
- Labianca, Giuseppe, Daniel J. Brass and Barbara Gray (1998), "Social Networks and Perceptions of Intergroup Conflict: The Role of Negative Relationships and Third Parties," *Academy of Management Journal*, 41, February, pp. 55-67.
- Levitt, Theodore (1969), *The Marketing Mode*, New York, McGraw-Hill Book Company.
- Mayhew, Bruce H. (1980), "Structuralism versus Individualism: Part 1, Shadowboxing in the Dark," *Social Forces*, 59, March, pp. 335-375.
- McEvily, Bill and Akbar Zaheer (1999), "Bridging Ties: A Source of Firm Heterogeneity in Competitive Capabilities," *Strategic Management Journal*, 20, December, pp. 1133-1156.
- McNamara, Carlton P. (1972), "The Present Status of the Marketing Concept," *Journal of Marketing*, 36, January, pp. 50-57.
- Morgan, Robert E. and Pierre Berthon (2008), "Market Orientation, Generative Learning, Innovation Strategy and Business Performance Inter-Relationships in Bioscience Firms," *Journal of Management Studies*, 45, December, pp. 1329-1353.
- Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing*, 54, October, pp. 20-35.
- Nelson, Reed E. (1989), "The Strength of Strong Ties: Social Networks and Intergroup Conflict in Organizations," *Academy of Management Journal*, 32, June, pp. 377-401.
- Ordanini, Andrea and Paul Maglio (2009), "Market Orientation, Internal Process, and External Network: A Qualitative Comparative Analysis of Key Decisional Alternatives in New Service Development," *Decision Sciences*, 40, August, pp. 601-625.



- Palmatier, Robert W. (2008), "Interfirm Relational Drivers of Customer Value," *Journal of Marketing*, 72, July, pp. 76-89.
- Pelham, Alfred M. (2009), "An Exploratory Study of the Influences of Firm Market Orientation on Salesperson Adaptive Selling, Customer Orientation, Interpersonal Listening in Personal Selling and Salesperson Consulting Behaviors," *Journal of Strategic Marketing*, 17, February, pp. 21-39.
- Ramani, Girish and V. Kumar (2008), "Interaction Orientation and Firm Performance," *Journal of Marketing*, 72, January, pp. 27-45.
- Rindfleisch, Aric and Christine Moorman (2001), "The Acquisition and Utilization of Information in New Product Alliances: A Strength-of-Ties Perspective," *Journal of Marketing*, 65, April, pp. 1-18.
- Scott, John (2000), *Social Network Analysis: A Handbook*, London, Sage Publications.
- Shapiro, Benson P. (1988), "What the Hell is 'Market-Oriented'?" *Harvard Business Review*, 66, November-December, pp. 119-125.
- Siguaw, Judy A., Penny M. Simpson and Thomas L. Baker (1998), "Effects of Supplier Market Orientation on Distribution and the Channel Relationship," *Journal of Marketing*, 62, July, pp. 99-111.
- Slater, Stanley F. and John C. Narver (1994), "Does Competitive Environment Moderate the Market Orientation-Performance Relationship?" *Journal of Marketing*, 58, January, pp. 46-55.
- Song, Michael and Mark E. Parry (2009), "The Desired Level of Market Orientation and Business Unit Performance," *Journal of the Academy of Marketing Science*, 37, 2, pp. 144-160.
- Uzzi, Brian (1997), "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness," *Administrative Science Quarterly*, 42, March, pp. 35-67.
- Webster, Frederick E., Jr. (1988), "Rediscovering the Marketing Concept," *Business Horizons*, 31, May-June, pp. 29-39.

# RETURN ON QUALITY—QUALITY'S IMPACT ON CUSTOMER SATISFACTION, REVENUE GROWTH, PROFITABILITY AND COST EFFICIENCY—A CROSS NATIONAL COMPARATIVE ANALYSIS OF JAPANESE AND AMERICAN MANUFACTURERS IN THE AUTO INDUSTRY

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*Product quality has been regarded as a key component in a corporation's marketing strategy, and it is part of the product component (along with the brand name, packaging, etc.) in the marketing mix. Findings from the private corporate sector overwhelmingly support the belief that firms with higher quality have higher customer satisfaction, which in turn leads to better financial performance. However, in marketing, little attention has been given to understanding the impact of quality on the performance of a firm in the manufactured goods sector. Studies in marketing involving quality and satisfaction have mostly been done in the service sector. This study uses data from General Motors, Ford, Chrysler, Toyota, Nissan, and Honda and uses four simple regression equations to test the impact of quality on customer satisfaction, revenue growth, profitability, and cost in the auto industry. The study then tests five hypotheses involving auto companies from Japan and the U.S., and finds that Japanese automakers have higher overall quality than U.S. automakers, which result in higher levels of consumer satisfaction, greater rate of growth in revenue, higher profitability, and an overall lower cost of production.*

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## INTRODUCTION

Marketing executives have always faced the dilemma of how to allocate resources to different marketing activities of say advertising, pricing, loyalty programs, improving service/product quality, and these decisions are typically made by executives based on experience and intuition (Rust, Lemon and Zeithaml 2004). Expenditures in marketing have typically been viewed as short-term costs instead of long term investments, and marketing executives have been accused of being financially unaccountable (Schultz and Gronstedt 1997). We attempt to study one of the ignored marketing initiatives – product quality - and link it to firm performance, in particular, customer satisfaction, rate of revenue growth, profitability, and cost efficiency.

## THEORETICAL BACKGROUND

Firms can achieve competitive advantage by differentiating themselves from competitors, and one of the most commonly used strategies in differentiation is having a superior product quality (Phillips, Chang and Buzzell 1983; Powell 1995; Reed, Lemak and Mero 2000). Product quality also has a positive influence on market share (Jacobson and Aaker 1985, 1987; Tellis, Yin and Niraj 2009). Improving perceptions of quality for both goods and services can increase customer satisfaction (Anderson and Mittal 2000; Anderson and Sullivan 1993; Blanchard and Galloway 1994; Boulding, et al. 1993; Cameran, Moizer and Pettinicchio 2010; Carter 2009; Changsu, Weihong and Kyung 2008; Herrington and Weaven 2009; Heskett et al. 1994; Huff, Fornell and Anderson 1996; Leonard 2008; Lovelock, Magi and Julander 1996; Sanchez-Fernandez and Iniesta-Bonillo 2009; Shamdasani, Mukherjee and Malhotra 2008; Simester, et al. 2000; Slotegraff and Inman

2004; Spreng, Hui Shi and Page 2009; Vazquez-Casielles 2010; and Zeithaml et al. 2000), loyalty (Bennett and Rundle-Thiele 2005; Davis-Sramek, et al. 2009; Helgesen, Ivar and Nettet 2010; Lai, Griffin and Babin 2009), customer retention (Larson and Steinman 2009; Rust, Moorman and Dickson 2002), profitability (Aaker and Jacobson 1994; Al-Hawari 2005; Anderson, Fornell and Mazvancheryl 2004; Cooil, et al. 2007; Guo, Kumar and Jiraporn 2004; Gruca and Rego 2005; Guo and Jiraporn 2005; Haskett et al. 1994; Liang and Wang 2006; Nilsson, Johnson and Gustafsson 2001; Powell 1995; Reichheld and Sasser 1990; Zeithaml 2000; and Zhou et al. 2008), and higher life time value (Anderson, Fornell and Lehmann 1994; Bolton 1998; Hogan et al. 2002; Kumar 1999; and Werner and Kumar 2003), higher cash flow, higher shareholder value and are less costly and easier to deal with in comparison to new customers (Gruca and Rego 2005).

Customers will pay more if they are satisfied with the quality (Homburg, Koschate and Hoyer 2005; Iyer and Kuksov 2010), and will then spread the word through word-of-mouth, which then leads firms to advertise the high quality of its offerings (Rust, Zahorik and Keiningham 1994). Firms should segment customers based on their profitability, and should then spend resources accordingly in order to improve customer satisfaction (Keiningham et al. 2005).

Firms with high customer satisfaction index as measured by the American Customer Satisfaction Index also have a higher market value of equity (Hallowell 1996; Hogan, Lemon and Rust 2002; and Rust et al. 2002, 2004) and stock returns risk (Tuli and Bharadwaj 2009). There are a number of researchers who have studied the implications of satisfied customers due to improved quality, and consequently, its impact on the firm's financial performance (Lakhal and Pasin 2008), profitability (Anderson, Fornell and Lehman 1994; Batty 2008; Bernhardt, Donthu and Kennett 2000; Boulding et al. 1993; Danaher and Rust 1996; Fornell et al. 1996, 2006;

Hallowell 1996; Hegji and Self 2009; Ittner and Larcker 1998; Lee and Hwan 2005; Loveman 1998; Rust, Moorman and Dickson 2002; Rust, Lemon and Zeithaml 2004; Rust, Zeithaml and Lemon 2000). However, Rust, Zahorik and Keiningham (1994, 1995) find that firms that put a lot of effort and expenses into programs to improve quality have seen disappointing financial results. Ball (2006) suggests that companies need to understand the cause-and-effect relationship between quality and financial performance, and the cost of quality should be determined, and only programs that increase profits should be implemented.

Improving quality through Total Quality Management (TQM), also fosters the innovation process, and it benefits firms who pursue it more than firms who do not (Martinez-Costa and Martinez-Lorente 2008). Higher quality leads to a better image for a firm (Homer 2007, Yen-Ku and Kung-Don 2009), and there is a need for quality management focusing on customer satisfaction (Bengt, Bjarne and Rickard 2008). More than 80 percent of CEOs surveyed by Joanna, Lockee and Bass (2008) report that their boards set strategic goals for quality improvements, and track the performance, and take corrective actions if needed.

Improving customers' perceptions of quality changes their behavior (Bolton 1998; Mittal and Kamakura 2001), which leads to customer attraction (Johnson and Gustafsson 2000; Kordupleski, Rust and Zahorik 1993), purchase intention (Chen 2008; Hong and Prybutok 2008; Hueiju and Fang 2009; Narayandas 1998; Tsiotsou 2006), retention (Bennett and Rundle-Thiele 2005; Bolton 1998; Rust, Moorman and Dickson 2002), and increased usage (Bolton and Lemon 1999).

Firms can use Six Sigma methodology to highlight customer satisfaction and continuous improvement (Aggogeri and Gentili 2008), and they can also increase customer satisfaction through the improved capabilities of information technology (Greenberg 2001; and Peppers and Rogers 1999). Japanese

companies have been regarded as customer oriented by Deshpande, Farley and Webster (1993), and they have been achieving customer satisfaction through superior technology and IT capabilities (Song, Nason and Di Benedetto 2008). Gonzalez, Mueller, and Mack (2008) recommend listening to customers before developing and improving service quality systems using Kansei Engineering and Quality Function Deployment similar to what is used in the manufacturing sector.

Consumers use third party evaluation as a product quality signal, and Dean and Lang (2008) recommend that firms should use third party evaluations in their advertising. Improved quality has also been seen to increase word of mouth (Anderson 1998; Danaher and Rust 1996), and increase in wealth and stock prices of firms (Hendricks and Singhal 1997, 2001). However, there may be a lagged effect between changes in objective quality and perceived quality and the subsequent rewards to the firm (Mittra and Golder 2006).

Firms can improve the quality of their offerings by listening to their external customers, competitors' customers, and their own employees (Berry and Parasuraman 1997). In the same vein, Kamakura et al. (2002), suggest a service profit chain framework, and recommend that firms should perform a strategic and operational level analysis linking the operational inputs to perceptions of service quality by its consumer. Management may then be able to identify the most important inputs that have the largest impact on perceptions of quality by the consumer, and allocate resources accordingly (Kamakura et al. 2002; Rust, Lemon and Zeithaml 2004b).

Researchers like Anderson, Fornell and Lehmann (1994), Anderson and Sullivan (1993), Boulding et al. (1993), Ekinci, Dawes and Messey (2008), Fornell (1992), Heskett et al. (1994), Kamakura et al. (2002), Mittal et al. (2005), Rust, Subramanian and Wells (1992), Rust, Zahorik and Keiningham (1994, 1995), and Venkatesan and Kumar (2004), have found a positive relationship between customer

attitudes and perceptions through improved quality (Rust et al. 2004a).

Customers who are satisfied with high quality also have a higher perception of the value of a firm's offerings (Srivastava, Shervani and Fahey 1998), who are then more willing to pay a premium price, give good publicity, buy more, are less costly to service, and are more loyal to the firm for a long period of time (Davis-Sramek et al. 2009; Hogan, Lemon and Rust 2002; Reichheld 1996; Reinartz and Kumar 2000; and Sanyayei, Moeini and Shafiei 2008). Improving quality is usually done more to improve revenue than to reduce costs, especially with improving the service (Rust, Zahorik and Keiningham 1995). However, if a firm simultaneously focuses on increasing revenue and lowering costs, then competitors will have a difficult time attacking it (Flynn, Schroeder and Sakakibara 1995).

Quality can be improved by improving design quality by collaborating with supply chain partners (Yanmei et al. 2009), through technology (Fisher-Vanden and Terry 2009), through inter and intra organizational coordination (Carr, Muthusamy, and Lee 2008), and also through multiple inspections (Chun 2009). Efforts to improve quality always results in reduced costs (Rosenfeld 2009, Scheeres 2010), through higher customer satisfaction, lower prices or increased reliability (Rust, Moorman and Dickson 2002). Profitability can be improved through improving quality, efficiencies and cutting costs and reducing costs through improved quality (Batty 2008; Pande, Neuman and Cavanaugh 2000). Quality improvements lead to lower costs due to increased efficiencies (Phillips, Chang and Buzzell 1983), increased dependability and reliability, which in turn reduces costs through efficiencies in the process and also increase revenue (Rust, Moorman and Dickson 2002). However, if a firm attempts to reduce costs through layoffs, and a reduction or loss of other benefits, then this may reduce employee morale which in turn may result in lower customer service, customer loyalty, and lower sales (Rust, Zeithaml and Lemon 2000).

Firms should have their employees engaged at the highest level to obtain more profits (Minton-Eversole 2007).

Statistical quality control techniques have become commonplace in companies due to advances in computations through sophisticated computers, which have resulted in lowering costs (Rajaram and Zhili 2009; Wheeler and Chambers 1992), and higher profits (Hendricks and Singhal 1997). However, present cost accounting systems are inadequate in addressing costs of quality improvements, and Tsai and Hsu (2010) and Yang (2008), recommend using different models to calculate the total cost of quality. Similarly, Desai (2008) recommends a quality costing approach to calculate future quality costs that could be budgeted with improving quality. Cost reductions can also be achieved by improving standardized and customized quality (Anderson, Fornell and Rust 1997).

U.S. companies have shifted their strategic emphasis from manufacturing to marketing and finance in the last decade (Buffa 1984), but the Japanese are becoming more customer-oriented (Deshpande, Farley and Webster 1993). Japanese companies have been very successful irrespective of the country they have ventured into. The Japanese first target their domestic customers through economies of scale, quality improvement and lower costs, before penetrating foreign markets with quality products that were standardized, but at a lower cost (Abbeglen, Stalk and Kaisha 1985; Doyle, Saunders and Wong 1986, 1992).

The growth of Japanese companies has usually come through innovation and manufacturing excellence (Kotabe 1990; Nonaka 1988), which is the core of their business strategy. Japanese companies also spend far more than their European and American counterparts in R&D activities, and this may explain their superiority over their counterparts in other countries on product quality, product and process innovation (Kotabe 1990).

In the engineering sector, European and Japanese companies are more competitive than American companies in markets where competencies were not product specific (Arora and Gambardella 1997), and Japanese corporations think that strategies relating to product quality are more successful than those employing price, promotion or organizational synergy (Kotabe et al. 1991). Japanese auto makers have been known to raise product quality due to their superior capabilities and lower procurement costs (Lieberman and Dhawan 2005). Japanese companies have also started using relationship marketing in order to increase long-term relationships with consumers and ultimately customer satisfaction and profits (Osaki 2007), which have helped them develop the right marketing strategies (Smothers 1990).

Japanese companies have been known to pursue globally integrated strategies so that they can benefit from cost reductions (Kogut 1985), improved product quality (Yip 1989), and higher customer preference (Levitt 1983) in order to gain competitive advantage (Hout, Porter and Rudden 1982; Hamel and Prahalad 1985). As a group, Japanese firms are much more competitive than their foreign counterparts (Noland 2007).

In the auto industry, Japanese car companies like Toyota, Nissan, and Honda have surpassed their American counterparts by developing cars to meet the unique demands of the U.S. market (Shirouzu 2001). Japanese carmakers have also been among the first to use Quality Function Deployment techniques (Hauser and Clausing 1988) which ensures that product development, manufacturing processes, process planning, and production are all market driven (Griffin 1992). The Japanese also invest in new capacity to support their objective of market domination, and their R&D policy is to constantly upgrade today's existing technology in order to maintain their competitive advantage in the future through improvements in product quality and process innovation (Ito 1995; Ito and Puick 1993), and this may be the reason they have lower profits than their American counterparts

in the short run (Haar 1989; Johansson and Yip 1994).

Economic growth over the very long run requires a process of creative destruction in which new corporate giants continually rise to the top and defeat old behemoths (Fogel et al. 2008). This seems to be consistent with the theory of creative destruction as proposed by Schumpeter (1912), which states that growth entails innovative and creative new firms destroying old stagnant ones.

### RESEARCH OBJECTIVES

Based on the literature review, this study has two objectives. The first objective is to see whether there is a relationship between quality and satisfaction, quality and revenue growth, quality and profitability, and quality and cost in the auto industry, as shown by the model in Figure 1. The second objective is to test the five hypotheses that state that Japanese auto manufacturers will have higher quality ( $H_1$ ), higher customer satisfaction ( $H_2$ ), higher revenue growth ( $H_3$ ), lower costs ( $H_4$ ), and higher profitability ( $H_5$ ) than American auto manufacturers.

The following equations are used to test whether the above relationships hold good in the auto industry also. Equation 1 states that satisfaction has a positive relationship with quality. Equation 2 states that revenue growth is positively related to quality. Equation 3 states that cost is negatively related quality, and finally, equation 4 states that profitability is positively related to quality.

$$S = a_1 + \beta_1 Q + e_1 \dots\dots\dots (1)$$

$$R = a_2 + b_2 Q + e_2 \dots\dots\dots (2)$$

$$C = a_3 - b_3 Q + e_3 \dots\dots\dots (3)$$

$$P = a_4 + b_4 Q + e_4 \dots\dots\dots (4)$$

Where:

S = Satisfaction

Q = Quality

R = Revenue Growth Rate

C = Cost as a percentage of Sales

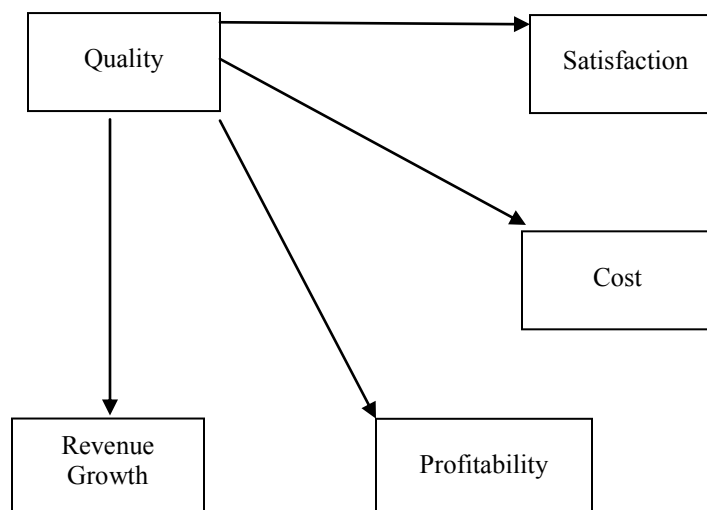
P = Profitability

e = Error term

Next, based on the findings and extension of the literature, the following five hypotheses (that compare Japanese and U.S. auto manufacturers) are proposed and tested:

**H<sub>1</sub>:** Japanese automakers have higher overall quality than U.S. automakers.

**FIGURE 1**  
Quality's Impact on Performance



**H<sub>2</sub>:** Since Japanese automakers have higher overall quality than U.S. automakers, they will have higher satisfaction scores (ACSI) than U.S. automakers.

**H<sub>3</sub>:** Since Japanese automakers have higher overall quality than U.S. automakers, they will have higher revenue growth rate than U.S. automakers.

**H<sub>4</sub>:** Since Japanese automakers have higher overall quality than U.S. automakers, they will have lower costs than U.S. automakers.

**H<sub>5</sub>:** Since Japanese automakers have higher overall quality than U.S. automakers, they will have higher profitability than U.S. automakers.

$$S = 14.026 + 0.401Q \dots\dots\dots (1)$$

$$R = -88.834 + 0.285Q \dots\dots\dots (2)$$

$$C = 139.692 - 0.232Q \dots\dots\dots (3)$$

$$P = 139.693 + 0.421Q \dots\dots\dots (4)$$

The first equation that shows the relationship between satisfaction and quality has a t value of 2.77 and is significant at the 0.05 level. The relationship between revenue growth and quality has a t value of 1.830, and is not significant at the 0.05 level, (but is significant at the 0.10 level). The relationship between cost and quality has a t value of -1.452, and is not significant at the 0.05 level (but is significant at the 0.15 level). The relationship between profits and quality has a t value of 2.934 and is significant at the 0.05 level.

The results of the regression analysis for the four equations show that in the auto industry, quality is positively related to satisfaction with a  $\beta_1$  value of 0.401, positively related to revenue growth with a  $b_2$  value of 0.285 (although this was not as strong a relationship as the others), negatively related to cost with a  $b_3$  value of -0.232 (although not as strong a relationship as others), and positively related to profitability with a  $b_4$  value of 0.421). Thus, these findings from the auto industry are consistent with the findings of studies in other industries involving the impact of quality on satisfaction, revenue growth, cost, and profitability.

Next, the five hypotheses are tested. The first step was to aggregate data for the companies from the two countries. Thus, for each year, the average score for each item was found for each country. ANOVA is used to test for significant differences between companies from the two countries.

Even though the literature is filled with findings that Japanese companies tend to have higher quality than American companies, we decided to confirm that this is also true in the auto industry. Analysis of variance is done on the total quality scores for companies representing the two countries – Japanese and American automakers. Table 1 shows the results of

## RESEARCH DESIGN

Data are collected on General Motors, Ford, and Chrysler, representing the U.S., and Toyota, Honda, and Nissan representing Japan for total quality index, customer satisfaction, revenue growth, hours spent to make a vehicle (used as a surrogate for cost), and profitability for the years 1996-2008. Different sources are used for collecting the relevant data. Data for the Quality Index are collected from Strategic Vision. Data on satisfaction are collected from the American Customer Satisfaction Index, as compiled by the University of Michigan. Data on the financial performances – i.e., revenue growth, profitability, and cost as a percentage of sales, are collected from Yahoo Finance and Strategic Vision.

## DATA ANALYSIS AND FINDINGS

Simple regression analysis is used to test the first four equations. The first equation states that satisfaction is positively related to quality. The second equation states that revenue growth is positively related to quality. The third equation states that cost as a percentage of sales are negatively related to quality. Finally, the fourth equation states that profits are positively related to quality. The results of the four simple regression equations are shown below.

ANOVA for the first hypothesis. The table shows that there is a significant difference at the 0.05 level between the quality scores of Japanese and American auto manufacturers, i.e., the Japanese automakers have higher overall quality than U.S. automakers. This sets the stage to test the next four hypotheses.

Hypothesis two states that because of the higher quality, Japanese automakers will have higher customer satisfaction. Table 2 shows that there is a difference in customer satisfaction scores between the Japanese and American automakers, at the 0.05 level. Thus, hypothesis two is also supported.

The third hypothesis states that since Japanese automakers have higher quality than their American counterparts, they will have higher revenue growth than American automakers. Table 3 shows that there is significant difference at the 0.05 level between the Japanese and the American automakers in their revenue growth. Japanese automakers show much higher revenue growth than their American counterparts. Thus, hypothesis three is also supported.

The fourth hypothesis states that since Japanese automakers have higher quality than their American counterparts, they will have lower costs than the American automakers. Results of

**TABLE 1**  
**Quality Index Differences Between Japanese and U.S. Auto Manufacturers**

<u>Country &amp; Company</u>	<u>Company Mean</u>	<u>Country Mean</u>	<u>F.</u>	<u>Sig.</u>
<b><u>Japan</u></b>		848		
Toyota	849.86			
Honda	848.57			
Nissan	845.43			
<b><u>U.S.</u></b>		837.6		
GM	840.86			
Chrysler	835.57			
Ford	836.29			
			6.148	0.017

**TABLE 2**  
**Customer Satisfaction (ACSI) Differences Between Japanese and U.S. Auto Manufacturers**

<u>Country &amp; Company</u>	<u>Company Mean</u>	<u>Country Mean</u>	<u>F.</u>	<u>Sig.</u>
<b><u>Japan</u></b>		83.29		
Toyota	84.59			
Honda	84.88			
Nissan	80.36			
<b><u>U.S.</u></b>		79.95		
GM	81.53			
Chrysler	79.36			
Ford	78.85			
			33.68	0.00



**TABLE 3**  
**Revenue Growth Rate Difference Between Japanese and U.S. Auto Manufacturers**

<u>Country &amp; Company</u>	<u>Company Mean</u>	<u>Country Mean</u>	<u>F.</u>	<u>Sig.</u>
<b><u>Japan</u></b>		6.95		
Toyota	9.98			
Honda	7.97			
Nissan	2.89			
<b><u>U.S.</u></b>		-1.69		
GM	-1.77			
Chrysler	-1.58			
Ford	-1.67			
			9.305	0.004

**TABLE 4**  
**Cost (as a percentage of sales) Differences Between Japanese and U.S. Auto Manufacturers**

<u>Country &amp; Company</u>	<u>Company Mean</u>	<u>Country Mean</u>	<u>F.</u>	<u>Sig.</u>
<b><u>Japan</u></b>		92.64		
Toyota	91.33			
Honda	92.14			
Nissan	93.89			
<b><u>U.S.</u></b>		94.90		
GM	94.5			
Chrysler	93.2			
Ford	97.22			
			3.975	0.05

**TABLE 5**  
**Net Profit Margin Differences Between Japanese and U.S. Auto Manufacturers**

<u>Country &amp; Company</u>	<u>Company Mean</u>	<u>Country Mean</u>	<u>F.</u>	<u>Sig.</u>
<b><u>Japan</u></b>		4.29		
Toyota	5.43			
Honda	4.64			
Nissan	2.85			
<b><u>U.S.</u></b>		2.17		
GM	-3.50			
Chrysler	2.16			
Ford	1.22			
			7.874	0.007

the analysis of variance in table 4 show that there is a significant difference in the cost (at the 0.05 level) between the Japanese automakers and their American counterparts. Thus, the fourth hypothesis is also supported.

The fifth hypothesis states that because the Japanese automakers have higher quality than the Americans, their overall profitability will also be higher. Results of the analysis of variance in Table 5 show a significant difference at the 0.05 level, thus supporting this hypothesis. The table clearly shows that the Japanese automakers have significantly higher profitability than their American counterparts as measured by their return on investment.

### DISCUSSIONS AND CONCLUSION

In the last few months the media has been awash (and still is) with the problems that Toyota's customers have been having with the sudden acceleration in their cars. This has led Toyota to recall about 8.5 million vehicles globally, leading to congressional hearings with Toyota's CEO. A recent survey of U.S. vehicle owners showed a drop of about 20 percent in the perceived quality of Toyota's vehicles. Toyota's perceived quality score fell from 84 to 67.6 last fall. Ford's Fusion also beat Toyota's Camry in 2009 Consumer Report's coveted reliability survey.

This is further evidence supporting the main hypothesis of this study that quality has a direct impact of customer satisfaction, revenue growth, profitability and cost.

As stated earlier, studies in marketing involving the effect of product quality on a firm's performance are quite lacking, especially since the quality of a firm's product is such an integral part of a firm's offerings. Marketing scholars have done very little in exploring the impact of product (brand) quality on a firm's performance. The reason we think that this is important is because it is undisputed that the brand equity of firm depends heavily on the quality of its product/brand. Similarly, a firm's image also depends on the quality of its

products and brands. Subsequently, a firm can then charge a higher price based on its quality. Unfortunately, marketing scholars have overwhelmingly emphasized service quality, ignoring product (goods) quality. Almost of the research involving antecedents and consequences of product quality have been done by scholars in management, and by default fallen in their domain.

This study had two objectives: (1) to find whether the positive impact of quality on satisfaction, revenue growth and profitability, and negative impact on cost is also seen in the auto industry, (2) whether firms with higher quality have higher levels of customer satisfaction, higher rate of revenue growth, higher profitability, and lower cost.

The findings of the study for the first objective show that two of the four relationships are quite strong and significant, while the other two are not as strong and not significant at the 0.05 level, but they are significant at the 0.10 level. The findings of the study related to the second objective show that all of the five hypotheses proposed by this study are supported by the data. Since Japanese automakers have higher quality than their American counterparts, which leads them to have higher customer satisfaction, higher revenue growth, higher profit margin, and lower cost as a percentage of sales, i.e., quality has a major impact on customer satisfaction, revenue growth, profit margin, and cost as a percentage of sales.

It is the belief of the authors of this study that data involving a much larger time period would have produced more significant results for the first objective. However, given the scope of this study, it was very difficult to get the relevant data for a longer time period since different sources were used to collect data on the desired number of variables.

We think that future studies in the field of business, especially in marketing, should investigate the impact that a firm's product quality has on customer satisfaction and ultimately the financial performance of the

firm. If this series of relationship holds good, then it should be a very simple decision for marketing executives on how to best gain competitive advantage in the marketplace using product quality as an effective tool of its marketing strategy.

## REFERENCES

- Aaker, David A. and Robert Jacobson (1994), "The Financial Information Content of Perceived Quality," *Journal of Marketing Research*, Vol. 31, May, pp. 191-201.
- Abbeglen, J.C. and G. Stalk, Jr. Kaisha (1985), *The Japanese Corporation*, Basic Books, New York.
- Aggogeri, Francesco and Enzo Gentili (2008), "Six Sigma Methodology: An Effective Tool for Quality Management," *International Journal of Manufacturing, Technology & Management*, Vol. 14 (3/4), pp. 1.
- Al-Hawari Mohammed (2005), "The Effect of Automated Service Quality on Bank Financial Performance and the Mediating Role of Customer Retention," *Journal of Financial Services Marketing*, Vol. 10, Iss. 3, pp. 228-243.
- Anderson, Eugene W. (1998), "Customer Satisfaction and Word of Mouth," *Journal of Service Research*, Vol. 1, Iss. 19, pp. 5-17.
- Anderson, Eugene W., Claes Fornell and Donald Lehmann (1994), "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden," *Journal of Marketing*, Vol. 58, July, pp. 53-67.
- Anderson, Eugene W., Claes Fornell and Sanal K. Mazvancheryl (2004), "Customer Satisfaction and Shareholder Value," *Journal of Marketing*, Vol. 68, October, pp. 172-185.
- Anderson, Eugene W. and Vikas Mittal (2000), "Strengthening the Satisfaction Profit Chain," *Journal of Service Research*, Vol. 3, Iss. 2, pp. 107-120.
- Anderson, Eugene W., Claes Fornell and Roland T. Rust (1997), "Customer Satisfaction, Productivity, and Profitability: Differences between Goods and Services," *Marketing Science*, Vol. 16, Iss. 2, pp. 129-145.
- Anderson, Eugene W. and Mary Sullivan (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," *Marketing Science*, Vol. 12, Spring, pp. 125-143.
- Arora, Asish and Alfonso Gamberdella (1997), "Domestic Markets and International Competitiveness: Generic and Product-Specific Competencies in the Engineering Sector," *Strategic Management Journal*, Vol. 18, Summer, pp. 53-74.
- Ball, Steve (2006), "Making the Cost of Quality Practical," *Strategic Finance*, Vol. 88, Iss. 1, pp. 34-41.
- Batty, Ricky (2008), "Maximize Quality Profits," *Quality*, Vol. 46, Iss. 13, pp. 44-47.
- Bengt, Klefsjo, Bergquist Bjarne and Garvare Rickard (2008), "Quality Management and Business Excellence, Customers and Stakeholders: Do We Agree on What We Are Talking About, and does it Matter?" *TQM Magazine*, Vol. 20, Iss. 2, pp. 120-129.
- Bennett, Rebekah and Sharyn Rundle-Thiele (2005), "The Brand Loyalty Life Cycle: Implications for Marketers," *Brand Management*, Vol. 12, Iss. 4, pp. 250-263.
- Bernhardt, Kenneth L., Naveen Donthu and Pamela Kennet (2000), "A Longitudinal Analysis of Satisfaction and Profitability," *Journal of Business Research*, Vol. 47, Iss. 2, pp. 161-171.
- Berry, Leonard L. and A. Parasuraman (1997), "Listening to the Customer – The Concept of a Service-Quality Information System," *Sloan Management Review*, Spring, pp. 65-76.
- Blanchard, R.F. and R.L. Galloway (1994), "Quality in Retail Banking," *International Journal of Service Industry Management*, Vol. 5, Iss. 4, pp. 5-23.
- Bolton, Ruth N. (1998), "The Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction," *Marketing Science*, Vol. 17, Iss. 1, pp. 45-65.

- Bolton, Ruth N. and Katherine N. Lemon (1999), "A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequences of Satisfaction," *Journal of Marketing Research*, Vol. 36, May, pp. 171-186.
- Boulding, William, Ajay Kalra, Richard Staelin and Valarie A. Zeithaml (1993), "A Dynamic Model of Service Quality: From Expectations to Behavioral Intentions," *Journal of Marketing Research*, Vol. 30, February, pp. 7-27.
- Buffa, Elwood S. (1984), "Making American Manufacturing Competitive," *California Management Review*, Vol. 26, Spring, pp. 29-46.
- Cameran, Mara, Peter Moizer and Angela Pettinicchio (2010), "Customer Satisfaction, Corporate Image, and Service Quality in Professional Services," *Service Industries Journal*, Vol. 30, Iss. 3, pp. 421-435.
- Carr, Amelia S., Senthikumar Muthusamy and Peggy D. Lee (2008), "The Relationship Between Intra-Organizational and Inter-Organizational Coordination and its Influence on Product Quality Improvement," *Journal of Applied Business Research*, Vol. 24, Iss. 1, pp. 85-102.
- Carter, Robert E. (2009), "The Impact of Perceived Service Quality on MBA Student Satisfaction and Recommendations: Do Expectations Matter?" *Services Marketing Quarterly*, Vol. 30, Iss. 3, pp. 234-248.
- Changsu, Kim, Zhao Weihong and Yang Hoon Kyung (2008), "An Empirical Study on the Integrated Framework of e-CRM in Online Shopping: Evaluating the Relationship among Perceived Value, Satisfaction, and Trust Based on Customers' Perspectives," *Journal of Electronic Commerce in Organizations*, Vol. 6, Iss. 3, pp. 1-19.
- Chen, Ching-Fu (2008), "Investigating Structural Relationship Between Service Quality, Perceived Value, Satisfaction, and Behavioral Intentions for Air Passengers: Evidence from Taiwan," *Transportation Research Part A: Policy & Practice*, Vol. 42, Iss. 4, pp. 709-717.
- Chun, Young H. (2009), "Improving Product Quality by Multiple Inspections: Prior and Posterior Planning of Serial Inspection Procedures," *IIE Transactions*, Vol. 41, Iss. 9, pp. 831-842.
- Cooil, Bruce, Timothy L. Keiningham, Lerzan Aksoy and Michael Hsu (2007), "A Longitudinal Analysis of Customer Satisfaction and Share of Wallet: Investigating the Moderating Effect of Customer Characteristics," *Journal of Marketing*, Vol. 71, January, pp. 67-83.
- Danaher, Peter J. and Roland T. Rust (1996), "Indirect Financial Benefits from Service Quality," *Quality Management Journal*, Vol. 3, Iss. 2, pp. 63-75.
- Davis-Sramek, Beth, Cornelia Droge, John T. Mentzer and Matthew B. Myers (2009), "Creating Commitment and Loyalty Behavior Among Retailers: What are the Roles of Service Quality and Satisfaction," *Journal of the Academy of Marketing Science*, Winter, Vol. 37, Iss. 4, 440-454.
- Dean, Dwane H. and Jane M. Lang (2008), "Comparing Three Signals of Service Quality," *Journal of Services Marketing*, Vol. 22, Iss. 1, pp. 48-58.
- Desai, Darshak. A. (2008), "Cost of Quality in Small and Medium-Sized Enterprises: Case of an Indian Engineering Company," *Production Planning & Control*, Vol. 19, January, pp. 25-34.
- Deshpande, Rohit, John U. Farley and Frederick E. Webster (1993), "Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrant Analysis," *Journal of Marketing*, Vol. 57, January, pp. 23-37.
- Doyle, P., J. Saunders and V. Wong (1986), "Japanese Marketing Strategies in the UK: A Comparative Study," *Journal of International Business Studies*, Spring, pp. 27-46.
- Doyle, P., J. Saunders and V. Wong (1992), "Competition in Global Markets: A Case Study of American and Japanese Competition in the British Market," *Journal of International Business Studies*, Third quarter, pp. 419-442.

- Ekinci, Yuksel, Philip Dawes and Graham Massey (2008), "An Extended Model of the Antecedents and Consequences of Consumer Satisfaction for Hospitality Services," *European Journal of Marketing*, Vol. 42, Iss. 1/2, pp. 35-68.
- Fisher-Vanden, Karen, and Rebecca Terry (2009), "Is Technology Acquisition Enough to Improve China's Product Quality? Evidence from Firm-Level Panel Data," *Economics of Innovation & New Technology*, Vol. 18, Iss. 1, pp. 21-38.
- Flynn, Barbara B., Roger G. Schroeder and Sadao Sakakibara (1995), "The Impact of Quality Management Practices on Performance and Competitive Advantage," *Decision Sciences*, Vol. 26, Iss. 5, pp. 659-91.
- Fogel, Kathy, Randall Mork and Bernard Yeung (2008), "Big Business Stability and Economic Growth: Is What's Good for General Motors Good for America?" *Journal of Financial Economics*, Vol. 89, Iss. 1, pp. 83-108.
- Fornell, Claes (1992), "A National Customer Satisfaction barometer: The Swedish Experience," *Journal of Marketing*, Vol. 56, January, pp. 6-21.
- Fornell, Claes, Sunil Mithas, Forrest V. Morgeson III and M.S. Krishnan (2006), "Customer Satisfaction and Stock Prices: High Returns, Low Risk," *Journal of Marketing*, Vol. 70, January, pp. 3-14.
- Fornell, Claes, Michael D. Johnson, Eugene W. Anderson, Jaesung Cha and Barbara Eviritt Bryant (1996), "The American Customer Satisfaction Index: Nature, Purpose, and Findings," *Journal of Marketing*, Vol. 60, October, pp. 7-18.
- Gale, Bradley T. and Richard Klavans (1985), "Formulating a Quality Improvement Strategy," *Journal of Business Strategy*, Vol. 5, Winter, pp. 21-32.
- Gonzalez, Marvin E., Renee Dentiste Mueller and Rhonda W. Mack (2008), "An Alternative Approach in Service Quality: An e-Banking Case Study," *Quality Management Journal*, Vol. 15, Iss. 1, pp. 41-58.
- Greenberg, Paul (2001), *CRM at the Speed of Light: Capturing and Keeping Customers in Internet Real Time*, Berkley, CA: Osborne/McGraw-Hill.
- Griffin, Abbie (1992), "Evaluating QFD's Use in U.S. Firms as a Process for Developing Products," *Journal of Product Innovation Management*, Vol. 9, Iss. 3, pp. 171-87.
- Gruca, Thomas S. and Lopo L. Rego (2005), "Customer Satisfaction, Cash Flow, and Shareholder Value," *Journal of Marketing*, Vol. 9, July, pp. 115-130.
- Guo, Chiquan, Anand Kumar and Pornsit Jiraporn (2004), "Customer Satisfaction and Profitability: Is there a Lagged Effect?" *Journal of Strategic Marketing*, Vol. 12, September, pp. 129-144.
- Guo, Chiquan and Pornsit Jiraporn (2005), "Customer Satisfaction, Net Income and Total Assets: An Exploratory Study," *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 13, Iss. 4, pp. 346-353.
- Haar, J. (1989), "A Comparative Analysis of the Profitability Performance of the Largest U.S., European and Japanese Multinational Enterprises," *Management International Review*, Vol. 29, Iss. 3, pp. 5-18.
- Hallowell, Roger (1996), "The Relationship of Customer Satisfaction, Customer Loyalty, and Profitability: An Empirical Study," *International Journal of Service Industry Management*, Vol. 7, Iss 4, pp. 27-42.
- Hamel, G. and C. K. Prahalad (1985), "Do You Really Have a Global Strategy?" *Harvard Business Review*, Vol. 63, Iss. 4, pp. 139-148.
- Hauser, John R. and Don Clausing (1988), "The House of Quality," *Harvard Business Review*, Vol. 6, Iss. 3, pp. 63-73.
- Hegji, Charles E. and Donald R. Self (2009), "The Impact of Hospital Quality on Profits, Volume and Length of Stay," *Health Marketing Quarterly*, Vol. 26, Iss. 3, pp. 209-223.
- Helgesen, Oyvind, Jon Havold Ivar and Erik Nesset (2010), "Impacts of Store and Chain Images on the 'Quality-Satisfaction-Loyalty Process' in Petrol Retailing," *Journal of Retailing & Consumer Services*, Vol. 17, Iss. 2, pp. 109-118.

- Hendricks, Kevin B. and Vinod R. Singhal (1997), "Does Implementing an Effective TQM Program Actually Improve Operating Performance? Empirical Evidence From Firms That Have Won Quality Awards," *Management Science*, Vol. 3, Iss. 9, pp. 1258-74.
- Hendricks, Kevin B. and Vinod R. Singhal (2001), "The Long-Run Stock Price Performance of Firms with Effective TQM Programs," *Management Science*, Vol. 47, Iss. 3, pp. 359-368.
- Herington, Carmel and Scott Weaven (2009), "E-Retailing by Banks: E-Service Quality and its Importance to Customer Satisfaction," *European Journal of Marketing*, Vol. 43, Iss. 9/10, pp. 1220-1231.
- Heskett, James L., Thomas O. Jones, Gary W. Loveman and W. Earl Sasser (1994), "Putting the Service Profit Chain to Work," *Harvard Business Review*, Vol. 72, March-April, pp. 167-74.
- Hogan, John E., Donald R. Lehman, Maria Merion, Rajendra K. Srivastava, Jacquelyn S. Thomas and Peter C. Verhoef (2002), "Linking Customer Assets to Financial Performance," *Journal of Services Research*, Vol. 5, Iss. 1, pp. 26-38.
- Hogan, John E., Katherine N. Lemon and Roland T. Rust (2002), "Customer Equity Management: Charting New Directions for the Future of Marketing," *Journal of Service Research*, Vol. 5, Iss. 1, pp. 4-12.
- Homburg, Christian, Nicole Koschate and Wayne D. Hoyer (2005), "Do Satisfied Customers Really Pay More? A Study of the Relationship Between Customer Satisfaction and Willingness to Pay," *Journal of Marketing*, Vol. 69, April, pp. 84-96.
- Homer, Pamela Miles (2007), "Perceived Quality and Image: When All is Not 'Rosy'," *Journal of Business Research*, Vol. 61, Iss. 7, pp. 715-723.
- Hong, Qin and Victor R. Prybutok (2008), "Determinants of Customer-Perceived Service Quality in Fast-Food Restaurants and Their Relationship to Customer Satisfaction and Behavioral Intentions," *Quality Management Journal*, Vol. 15, Iss. 2, pp. 35-50.
- Hout, T., M. E. Porter and E. Rudden (1982), "How Global Companies Win Out", *Harvard Business Review*, September-October, pp. 98-108.
- Hueiju Yu and Wenchang Fang (2009), "Relative Impacts from Product Quality, Service Quality, and Experience Quality on Customer Perceived Value and Intention to Shop for the Coffee Shop Market", *Total Quality Management & Business Excellence*, Vol. 20, Iss. 11, pp. 1273-1285.
- Huff, L., C. Fornell and E. Anderson (1996), "Quality and Productivity: Contradictory and Complementary," *Quality Management Journal*, Vol. 4, pp. 22-39.
- Ito, Kiyohiko (1995), "Japanese Spinoffs: Unexplored Survival Strategies", *Strategic Management Journal*, Vol. 16, pp. 431-446.
- Ito, Kiyohiko and Vladimir Puick (1993), "R&D Spending, Domestic Competition, and Export Performance of Japanese Manufacturing Firms," *Strategic Management Journal*, Vol. 14, pp. 61-75.
- Ittner, Christopher and David F. Larcker (1998), "Are Non Financial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction," *Journal of Accounting Research*, Vol. 36, Supplemental, pp. 1-35.
- Iyer, Ganesh and Dmitri Kuksov (2010), "Consumer Feelings and Equilibrium Product Quality," *Journal of Economics & Management Strategy*, Vol. 19, Iss. 1, pp. 137-168.
- Jacobson, Robert and David Aaker (1985), "Is Market Share All That It's Cracked Up to Be?" *Journal of Marketing*, Vol. 49, Fall, pp. 11-22.
- Jacobson, Robert and David Aaker (1987), "The Strategic Role of Product Quality," *Journal of Marketing*, Vol. 51, October, pp. 31-44.
- Joanna H. Jiang, Carlin Lockee and Karma Bass (2008), "Board Engagement in Quality: Findings of a Survey of Hospital and System Leaders," *Journal of Healthcare Management*, Vol. 53, Iss. 2, pp. 121-135.

- Johansson, Johny K. and George S. Yip (1994), "Exploiting Globalization Potential: U.S. and Japanese Strategies," *Strategic Management Journal*, Vol. 15, pp. 579-601.
- Johnson, Michael D and Anders Gustaffson (2000), *Improving Customer Satisfaction, Loyalty, and Profit: An Integrated Measurement and Management System*, San Francisco: Jossey-Bass.
- Kamakura, Wagner A., Vikas Mittal, Fernando de Rosa and Jose Alfonso Mazzon (2002), "Assessing the Service Profit Chain," *Marketing Science*, Vol. 21, Iss. 3, pp. 294-317.
- Keiningham, Timothy L., Tiffany Perkins-Munn, Lerzan Aksoy and Demitry Estrin (2005), "Does Customer Satisfaction Lead to Profitability? The Mediating Role of Share-of-Wallet," *Managing Service Quality*, Vol. 15, Iss. 2, pp. 172-181.
- Kogut, B. (1985), "Normative Observations on the Value Added Chain and Strategic Groups," *Journal of International Business Studies*, Fall, pp. 151-167.
- Kordupleski, Raymond, Roland T. Rust and Anthony J Zahorik (1993), "Why Improving Quality Doesn't Improve Quality," *California Management Review*, Vol. 35, Spring, pp. 82-95.
- Kotabe, Masaaki (1990), "Corporate Product Policy and Innovative Behavior of European and Japanese Multinationals: An Empirical Investigation," *Journal of Marketing*, Vol. 54, April, pp. 19-33.
- Kotabe, Masaaki, Dale F. Duhan, David K. Smith and R. Dale Wilson (1991), "The Perceived Veracity of PIMS Strategy Principles in Japan: An Empirical Inquiry," *Journal of Marketing*, Vol. 55, January, pp. 26-41.
- Kumar, Piyush (1999), "The Impact of Long-Term Client Relationships on the Performance of Business Service Firms," *Journal of Service Research*, Vol. 2, Iss. 1, August, pp. 4-18.
- Lai, Fujun, Mitch Griffin and Barry J. Babin (2009), "How Quality, Value, Image and Satisfaction Create Loyalty at a Chinese Telecom," *Journal of Business Research*, Vol. 62, Iss. 10, pp. 980-996.
- Lakhal, Lasaad, and Fredirico Pasin (2008), "The Direct and Indirect Impact of Product Quality on Financial Performance: A Causal Model," *Total Quality Management & Business Excellence*, Vol. 19, Iss. 10, pp. 1087-1099.
- Larson, Brian V. and Ross B. Steinman (2009), "Driving NFL Fan Satisfaction and Return Intentions with Concession Service Quality," *Services Marketing Quarterly*, Vol. 30, Iss. 4, pp. 418-428.
- Lee, Ming Chang and Ing San Hwan (2005), "Relationship Among Service Quality, Customer Satisfaction and Profitability in the Taiwanese Banking Industry," *International Journal of Management*, Vol. 2, Iss. 4, December, pp. 635-648.
- Leonard, Kenneth L. (2008), "Is Patient Satisfaction Sensitive to Changes in the Quality of Care? An Exploitation of the Hawthorne Effect," *Journal of Health Economics*, Vol. 27, Iss. 2, pp. 444-459.
- Levitt, T. (1983), "The Globalization of Markets," *Harvard Business Review*, May-June, pp. 92-102.
- Liang, Chiung-Ju and Wen-Hung Wang (2006), "The Behavioural Sequence of the Financial Service Industry in Taiwan: Service Quality, Relationship Quality and Behavioural Loyalty," *The Service Industries Journal*, Vol. 26, Iss. 2, March, pp. 119-145.
- Lieberman Marvin B. and Rajeev Dhawan (2005), "Assessing the Resource Base of Japanese and U.S. Auto Producers: A Stochastic Frontier Production Function Approach," *Management Science*, Vol. 51, Iss. 7, pp. 1060-1075.
- Lovelock, Christopher H., Anne Magi and Claes-Robert Julander (1996), "Perceived Service Quality and Customer Satisfaction in a Store Performance Framework: An Empirical Study of Swedish Grocery Retailers," *Journal of Retailing and Consumer Services*, Vol. 3, Iss. 1, pp. 33-41.
- Loveman, Gary W. (1998), "Employee Satisfaction, Customer Loyalty, and Financial Performance: An Empirical Examination of the Service Profit Chain in Retail Banking," *Journal of Service Research*, Vol. 1, Iss. 1, pp. 18-31.

- Martinez-Costa, Micaela and Angel Martinez-Lorente (2008), "Does Quality Management Foster or Hinder Innovation? An Empirical Study of Spanish Companies," *Total Quality Management and Business Excellence*, Vol. 19, Iss. 3, pp. 209-221.
- Minton-Eversole, Theresa (2007), "Less Engagement, Less Profit, Research Finds," *HR Magazine*, Vol. 52, Iss. 12, pp. 20-20.
- Mitra, Debanjan and Peter N. Golder (2006), "How Does Objective Quality Affect Perceived Quality? Short-Term Effects, Long-Term Effects, and Asymmetries," *Marketing Science*, Vol. 25, Iss. 3, May-June, pp. 230-247.
- Mittal, Vikas, Eugene W. Anderson, Akin Sayarak and Pandu Tadikamalla (2005), "Dual Emphasis and the Long-Term Financial Impact of Customer Satisfaction," *Marketing Science*, Vol. 24, Iss. 4, Fall, pp. 544-555.
- Mittal, Vikas and Wagner A. Kamakura (2001), "Satisfaction and Repurchase Behavior: The Moderating Influence of Customer and Market Characteristics," *Journal of Marketing Research*, Vol. 37, February, pp. 102-112.
- Narayandas, Das (1998), "Measuring and Managing the Benefits of Customer Retentions: An Empirical Investigation," *Journal of Service Research*, Vol. 1, Iss. 2, pp. 108-128.
- Nilsson, Lars, Michael Johnson and Anders Gustafsson (2001), "The Impact of Quality Practices on Customer Satisfaction and Business Results: Product vs. Service Organizations," *Journal of Quality Management*, Vol. 6, pp. 5-27.
- Noland, M (2007), "From Industrial Policy to Innovation Policy: Japan's Pursuit of Competitive Advantage," *Asian Economic Policy Review*, Vol. 2, pp. 251-252.
- Nonaka, I. (1988), "Japanese Methodology of Knowledge Creation and Production System," *Organizational Science*, Spring, pp. 21-29.
- Osaki, Takanori (2007), "Relationship Marketing in Menicon: Building Relationships with Consumers in Association with Retailers in a Japanese Contact Lens Manufacturer," *The Marketing Review*, Vol. 7, Iss. 1, pp. 79-88.
- Pande, Peter S., Robert P. Neuman and Roland R. Cavanaugh (2000), *The Six Sigma Way: How GE, Motorola, and Other Top Companies are Honing Their Performance*, New York: McGraw-Hill.
- Peppers, Don and Martha Rogers (1999), *Enterprise One-to-One: Tools for Competing in the Interactive Age*. New York: Doubleday.
- Phillips, Lyn W., Dae R. Chang and Robert D. Buzzell (1983), "Product Quality, Cost Position, and Business Performance: A Test of Some Key Hypotheses," *Journal of Marketing*, Vol. 47, Spring, pp. 26-43.
- Powell, T.C. (1995), "Total Quality Management as a Competitive Advantage," *Strategic Management Journal*, Vol. 16, pp. 15-37.
- Rajaram, Kumar and Tian Zhili (2009), "Buffer Location and Sizing to Optimize Cost and Quality in Semi-Continuous Manufacturing Processes: Methodology and Application," *IIE Transactions*, Vol. 41, Iss. 12, pp. 1035-1048.
- Reed, R., Lemak, D.J. and Mero N.P. (2000), "Total Quality Management and Sustainable Competitive Advantage," *Journal of Quality Management*, Vol. 5, pp. 5-26.
- Reichheld, Frederick F. (1996), *The Loyalty Effect*, Boston: Harvard Business School Press.
- Reichheld, Frederick F. and W. Earl Sasser (1990), "Zero Defections: Quality Comes to Service," *Harvard Business Review*, September-October, pp. 105-11.
- Reinartz, Werner and V. Kumar (2000), "On the Profitability of Long Lifetime Customers: An Empirical Investigation and Implication for Marketing," *Journal of Marketing*, Vol. 64, October, pp. 17-35.



- Rosenfeld, Yehiel (2009), "Cost of Quality Versus Cost of Non-Quality in Construction: The Crucial Balance," *Construction Management & Economics*, Vol. 27, Iss. 2, pp. 107-117.
- Rust, Ronald T., Tim Ambler, Gregory S. Carpenter, V. Kumar and Rajendra K. Srivastava (2004), "Measuring Marketing Productivity: Current Knowledge and Future Directions," *Journal of Marketing*, Vol. 6, October, pp. 76-89.
- Rust, Ronald T., Katherine N. Lemon and Valarie A. Zeithaml (2004), "Return on Marketing: Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing*, Vol. 68, January, pp. 109-27.
- Rust, Ronald T., Christine Moorman and Peter R. Dickson (2002), "Getting Return on Quality: Revenue Expansion, Cost Reduction, or Both?" *Journal of Marketing*, Vol. 66, October, pp. 7-24.
- Rust, Ronald T., R. Subramanian and Mark Wells (1992), "Making Complaints a Management Tool," *Marketing Management*, Vol. 3, pp. 40-45.
- Rust, Ronald T., Anthony J. Zahorik and Timothy L. Keiningham (1994), *Return on Quality: Measuring the Financial Impact of Your Company's Quest for Quality*, Chicago, Free Press.
- Rust, Ronald T., Anthony J. Zahorik and Timothy L. Keiningham (1995), "Return on Quality (ROQ), Making Service Quality Financially Accountable," *Journal of Marketing*, Vol. 59, April, pp. 58-70.
- Rust, Ronald T., Valarie A. Zeithaml and Katherine N. Lemon (2000), *Driving Customer Equity: How Customer Lifetime Value is Reshaping Corporate Strategy*, New York: The Free Press.
- Sanayei, Ali, H. Moeini and M. Shafiei (2008), "Relationship Between Service Quality, Customer Satisfaction, & Customer Loyalty in Shiraz Banking System," *Journal of International Marketing & Marketing Research*, Vol. 33, February, pp. 31-44.
- Sanchez-Fernandez, Raquel, and Angeles M. Iniesta-Bonillo (2009), "Efficiency and Quality as Economic Dimensions of Perceived Value: Conceptualization, Measurement, and Effect on Satisfaction," *Journal of Retailing & Consumer Services*, Vol. 16, Iss. 6, pp. 425-433.
- Scheeres, D. Junell (2010), "Keeping Quality While Cutting Costs," *IE*, Vol. 42, Iss. 3, pp. 24.
- Schultz, Don E. and Anders Gronstedt (1997), "Making Marcom an Investment," *Marketing Management*, Vol. 6, Iss. 3, pp. 40-49.
- Schumpeter, Joseph (1912), *The Theory of Economic Development*, Cambridge, Mass., Harvard University Press.
- Shamdasani, Prem, Arvindan Mukherjee and Neeru Malhotra (2008), "Antecedents and Consequences of Service Quality in Consumer Evaluation of Self-service Internet Technologies," *Service Industries Journal*, Vol. 28, January, pp. 117-138.
- Shirouzu, Norihiko, (2001), "Tailoring World Cars to U.S. Tastes," *The Wall Street Journal*, (January 15), B1, B6.
- Simester, Duncan I., John R. Hauser, Birger Wernerfelt and Roland T. Rust (2000), "Implementing Quality Improvement Programs Designed to Enhance Customer Satisfaction: Quasi-Experiments in the United States and Spain," *Journal of Marketing Research*, Vol. 37, February, pp. 102-112.
- Slotegraaf, Rebecca J. and Jeffrey J. Inman (2004), "Longitudinal Shifts in the Drivers of Satisfaction with Product Quality: The Role of Attribute Resolvability," *Journal of Marketing Research*, August, Vol. 41, Iss. 3, pp. 269-280.
- Smothers, Norman P. (1990), "Patterns of Japanese Strategy: Strategic Combinations of Strategies," *Strategic Management Journal*, Vol. 11, pp. 521-533.
- Song, Michael, Robert W. Nason and C. Anthony Di Benedetto (2008), "Distinctive Marketing and Information Technology Capabilities and Strategic Types: A Cross-National Investigation," *Journal of International Marketing*, Vol. 16, Iss. 1, pp. 4-38.

- Spreng, Richard A. Linda Hui Shi and Thomas F. Page (2009), "Service Quality and Satisfaction in Business-to-Business Services," *Journal of Business & Industrial Marketing*, Vol. 24, Iss. 7/8, pp. 537-548.
- Srivastava, Rajendra K. Tasadduq Shervani and Liam Fahey (1998), "Market-Based Assets and Shareholder Value: A Framework for Analysis," *Journal of Marketing*, Vol. 62, January, pp. 2-18.
- Tellis, Gerard J., Eden Yin and Rakesh Niraj (2009), "Does Quality Win? Network Versus Quality in High-Tech Markets," *Journal of Marketing Research*, Vol. 66, April, pp. 135-149.
- Tsai, Wen-Hsien and Wei Hsu (2010), "A Novel Hybrid Model Based on DEMATEL and ANP for Selecting Cost of Quality Model Development," *Total Quality Management & Business Excellence*, Vol. 21, Iss. 4, pp. 439-456.
- Tsiotsou, Rodoula (2006), "The Role of Perceived Product Quality and Overall Satisfaction on Purchase Intentions," *International Journal of Consumer Studies*, March, Vol. 30, Iss. 2, pp. 207-217.
- Tuli, Kapil R. and Sundar G. Bharadwaj (2009), "Customer Satisfaction and Stock Returns Risk," *Journal of Marketing*, Vol. 73, November, pp. 184-197.
- Vazquez-Casielles, Rodolfo, Leticia Alvarez Suarez and Ana Maria Martin Diaz (2010), "Perceived Justice of Service Recovery Strategies: Impact on Customer Satisfaction and Quality Relationship," *Psychology and Marketing*, Vol. 27, Iss. 5, pp. 487-509.
- Venkatesan, Rajkumar and V. Kumar (2004), "A Customer Lifetime Value Framework for Customer Selection and Resource Allocation Strategy," *Journal of Marketing*, Vol. 68, October, pp. 106-125.
- Werner, J. Reineartz and V. Kumar (2003), "The Impact of Customer Relationship Characteristics on Profitable Lifetime Duration," *Journal of Marketing*, Vol. 67, January, pp. 77-99.
- Wheeler, Donald J. and David S. Chambers (1992), *Understanding Statistical Process Control*. Knoxville, TN: SPC Press.
- Yang, Ching-Chow (2008), "Improving the Definition and Quantification of Quality Costs," *Total Quality Management & Business Excellence*, Vol. 19, March, pp. 175-191.
- Yanmei, Zhu, You Jianxin, Robert Alard and Paul Schonsleben (2009), "Design Quality: A Key to Improve Product Quality in International Production Network," *Production Planning & Control*, March, Vol. 20, Iss. 2, pp. 168-177.
- Yen-Ku, Kuo and Ye Kung-Don (2009), "The Causal Relationship Between Service Quality, Corporate Image and Adults' Learning Satisfaction and Loyalty: A Study of Professional Training Programmes in a Taiwanese Vocational Institute," *Total Quality Management & Business Excellence*, Vol. 20, Iss. 7, pp. 749-762.
- Yip, G. S. (1989), "Global Strategy....In a World of Nations?" *Sloan Management Review*, Vol. 31, Iss. 1, pp. 29-41.
- Zeithaml, Valarie A. (2000), "Service Quality, Profitability, and the Economic Worth of Customers: What We Know and What We Need to Learn," *Journal of the Academy of Marketing Science*, Vol. 28, Iss. 1, pp. 67-85.
- Zhou, Kevin Zheng, Julie Juan Li; Nan Zhou and Chenting Su (2008), "Market Orientation, Job Satisfaction, Product Quality, and Firm Performance: Evidence from China," *Strategic Management Journal*, Vol. 29, Iss. 29, pp. 985-1000.

## IS THE U.S. VEHICLE INDUSTRY RISING FROM THE ASHES?

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*This study uses Consumer Reports surveys by vehicle owners over publication years from 1998 to 2010 to draw annual reliability comparisons of vehicle engines associated with the U.S. and Japan. The reliability comparisons includes vehicles from five years old to less than one year old. Test results indicate that as the measurement of vehicles assessed progresses toward more recent manufacturing, the difference in assessed quality nearly disappears with the superior scores fluctuating between Japanese and the U.S. in the most recent years. However, since consumer perception of reliability may not match reality in assessed engine reliability, U.S. firms face a significant marketing challenge.*

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### INTRODUCTION

Under tremendous financial pressure, the U.S. vehicle manufacturers compete in a worldwide battle for survival with entrenched and tenacious competitors from many cultures. Experts assert the U.S. vehicle firms' viability is in doubt with a multitude of jobs at stake. According to Paul Krugman, the recent Nobel economic prize winner, the U.S. auto industry will likely disappear because... "It is no longer sustained by the current economy" (Rising 2009).

Statistics flooding the popular press and trade journals indicate the challenges facing the vehicle manufacturers in the U.S. with huge sales declines in both units and dollar sales (Terlep and Dolan 2009). With reduction in units sold to levels of 1992, financial losses by vehicle manufacturers reaches into the billions of dollars and former powers such as GM and Chrysler actively and publicly sought monetary relief from the U.S. government in terms of emergency loans. While Japanese auto manufacturers face difficult times in the U.S. along with European and South Korean firms, bankruptcy appears to hover primarily over the

U.S. vehicle manufacturers. Chrysler and General Motors have recently emerged from bankruptcy (Bennett and Kellog 2009; Stoll and Terlep 2009). The market share loss of the U.S. passenger vehicle market by U.S. firms to Japanese firms over the years appears to have gathered a substantial momentum.

One dimension of assessing vehicles that may be telling in this market share shift is that of vehicle quality. The promise of less trouble in terms of repairs could have a substantial impact on buyers' perceptions of brand offerings. The Japanese proved keen on this aspect of vehicles and have positioned themselves as champions in the area. Further, the Japanese have not been content to merely remain in the lead in terms of quality, but have consistently pursued continuous improvement in efforts to increase their advantage relative to the U.S. firms and others.

The purpose of this paper is to examine owner assessments of vehicles associated with both Japan and the U.S. to determine quality judgment comparisons and resulting marketing implications.

### LITERATURE REVIEW

Study perspectives of the automobile industry ranges extensively. Researchers have

concentrated in areas such as the effect of brand names (Sullivan 1998), age and reliability effects on used car prices (Betts and Taran 2004), product differentiation and price discrimination (Mertens and Ginsburgh 1985), the price and quality relationship (Hogarty 1975), market share (Train and Winston 2007), and the impact of recalls (Crafton, Hoffer and Reilly 1981; Bates, Holweg, Lewis and Oliver 2007).

Automobile quality was an area of intense interest. Srinivasan, Pauwels, Silva-Risso and Hanssens (2009) found higher automobile quality and ground-breaking innovations result in higher stock prices. Zaman and Unsal (2000) wrote that Japanese vehicles were considered by consumers to be the most reliable during the 1980s and 1990s. Nichols and Fournier (1999) found the poor reputation of U.S. vehicles caused U.S. used car prices to have discounts of 5 percent more than Japanese vehicles. Using product recalls as a measure of reliability from 1973 to 1992, Barber and Darrough (1996) found the Japanese vehicles of Honda, Nissan, and Toyota were significantly more reliable than the U.S. vehicles of Chrysler, GM, and Ford. Train and Winston (2007) indicated the loss of market share for U.S. car manufacturers could be attributed to reliability and other vehicle attributes such as operating cost, power, size, price, transmission, and body type. In a study of the strategies of GM and Toyota, Regassa and Ahmadian (2007) reported U.S. auto manufacturers had not equaled the Japanese automakers in terms of quality and reliability. However, a recent study reported some improvement in U.S. vehicle quality. Using J. D. Powers 2009 data, Cole and Flynn (2009) stated that Ford and Chevrolet were close in quality to Honda and did not differ statistically from Toyota.

The importance of Japan's reputation for automobile quality is underscored by Toyota's recent acceleration problems. In the fall of 2009, Toyota recalled several models indicating the floor mats could entrap the gas pedal and cause the vehicle to suddenly accelerate (Mitchell 2009). In January 2010, Toyota

issued a recall on the gas pedal itself saying it could stick without interference from the floor mat and cause sudden acceleration (Linebaugh 2010a). Toyota also stopped production on the troubled models for a short period (Linebaugh 2010b). Although Toyota says that there are no problems with the electronics in their cars, the Department of Transportation is investigating electromagnetic interference with electronic gas pedals (Terlep and Mitchell 2010). While Toyota was having trouble with acceleration problems, they also issued a recall for the brakes of the Prius (Tabuchi 2010). The recalls and incidents involving sudden acceleration with Toyotas received extensive coverage by the news media. With Toyota's quality reputation in question, the President of Toyota, Akio Toyoda, issued a public apology and stated that the company would create a global quality committee (Shirouzu and Takahashi 2010).

### **Country of Origin**

Our study analyzes the quality/reliability of vehicles by the country-of-origin: specifically U.S. versus Japan. At first blush, the classification of automobiles as U.S. or Japanese does not seem a difficult task. Historically, most would consider the vehicles made by Ford, General Motors and Chrysler from the U.S. Toyota, Honda, Subaru, Mitsubishi, Mazda, Nissan, and Suzuki would be considered Japanese brands.

When examining corporate ownership, however, the classification becomes murky. On the U.S. side, for example, is the case of Chrysler. Starting in 1998, Chrysler merged with and was controlled by German manufacturer Daimler-Benz (Rutberg 2007). In 2007, however, Daimler-Benz sold Chrysler to Cerberus Capital Management, a U.S. hedge fund (White 2009). After Chrysler emerged from bankruptcy, Fiat, the Italian automobile manufacturer, acquired 20 percent of Chrysler. Fiat can raise its stake to a controlling 51 percent after Chrysler repays its auto loans to the U.S. government (Bennett and Kellogg 2009).

On the Japanese side, the corporate ownership also becomes cloudy. Nissan is a name that most people would consider Japanese. However, the French automaker Renault presently controls the company (Meichtry and Stoll 2009). The CEO of Nissan, Carlos Ghosn, was sent by Renault to turn Nissan around after Renault acquired Nissan. He succeeded in his turnaround mission and is also the CEO of Renault (Kiley, Rowley and Matlock 2008).

When it comes to individual car makes, the picture is no clearer. For example, most people might consider the Toyota Camry, Honda Accord, Nissan Altima, and Subaru Legacy as Japanese vehicles. While some of the vehicles like the Camry and Accord are built in multiple countries, all of those vehicles are built in the U.S. (Global Game 2007). The Cadillac Escalade, Chevrolet Avalanche, Ford Fusion, and Chevrolet Impala generally are considered U.S. vehicles. However, the Cadillac Escalade, Chevrolet Avalanche, and Ford Fusion are made in Mexico, while the Chevrolet Impala is made in Canada (Global Game 2007).

Under the American Automobile Labeling Act, all new cars sold in the U.S. must reveal the percent of parts made in the U.S. or Canada (White 2009). However, according to the National Highway Traffic Safety Administration (NHTSA), most car buyers are unaware of the information on the window sticker and would not allow it to affect their decision even if it was known (White 2009).

To establish an appropriate method to classify a car company and make of car, we examined the rich terrain of country-of-origin literature (Hong and Wyer 1990; Samiee 1994; Al-Sulaiti and Baker 1998; Verlegh and Steenkamp 1999; Gurhan-Canli and Maheswaran 2000; Beverland and Lindgree 2002; Dinnie 2002; Liefeld 2004; Liu and Johnson 2005; Pharr 2005; Yasin, Noor and Mohamad 2007). Researchers found a product's country-of-origin influences a consumer's evaluation of the product's quality (Pharr 2005).

Several researchers have studied country-of-origin and automobile evaluations. Chao and Gupta (1995) found country-of-origin had an impact on the efficiency (quality for the price) of a car purchase. They discovered purchases of Japanese and European cars were more efficient except for mini and subcompact cars. However, they noted that since Japanese cars were known to have better quality, the result was not surprising. Haubl (1996) found country-of-origin had a significant influence on German and French citizens' automobile evaluations. Further, Lawrence, Marr and Pendergrass (1992) determined an automobile's country-of-origin influenced New Zealanders' vehicle perceptions.

For the purpose of this paper, we are concerned how the researchers classified products as associated with one country or another. Country-of-origin researchers realized the difficulty in determining the country to which a product should be associated. Consequently, they have broken the country-of-origin concept into several categories and examined the relevance of these categories. These categories include country-of-assembly (Tse and Lee 1993; Insch and McBride 1998; Chao 2001), country-of-design (Sauer, Young and Unnava 1991; Chao 1993; Ahmed and d'Astous 1995; Insch and McBride 1998; Chao 2001), country-of-parts (Insch and McBride 1998; Chao 2001) and country-of-manufacture (Ulgado 2002; Thakor and Lavack 2003).

Several researchers examined the historical origins of the product. A measure incorporating a product's historical roots is brand origin, which is defined as the country where consumers perceive the brand to originate (Thakor 1996). Researchers found brand origin influences consumers' attitudes toward the brand (Harris, Garner-Earl, Sprick and Carroll 1994; Leclerc, Schmitt and Dube 1994; Thakor and Lavack 2003). Thakor and Lavack (2003) found the country-of-corporate-ownership, a brand origin substitute, was more influential than the country-of-assembly or country-of-parts. Other researchers found brand origin labeled as country-of-brand-origin

or country-of-brand had a greater influence than the country-of-manufacture (Ulgado 2002; Chen 2004). In essence, researchers determined the product's historical origins have a greater influence on consumer perceptions than other country-of-origin measures (Thaker and Lavack 2003).

Consequently, we chose to group the U.S. and Japanese vehicle manufacturers by their brand origin regardless of company ownership, the source of parts, or where an individual car make was manufactured. In our study, the U.S. car companies are Ford, General Motors, and Chrysler. The Japanese automobile manufacturers are Toyota, Honda, Subaru, Mitsubishi, Mazda, Nissan, and Suzuki.

### DATA SOURCE CONSIDERATIONS

*Consumer Reports* has a rich history of offering information to aid in investigating marketing research in a number of areas (Riesz 1978, 1979; Gerstner 1985; Bodell, Kerton and Schuster 1986; Steenkamp 1988; Montgomery and Wernerfelt 1992; Faulds, Grunewald and Johnson 1995). The use of *Consumer Reports* data in examining the vehicle industry is time-tested (Uri 1986; Friedman 1987; Arguea, Hsiao and Taylor 1994; Gupta and Lord 1995; Yerger 1996; Nichols 1998; Sullivan 1998; Apfelbaum, Gerstner and Naik 2003).

As one of the most comprehensive sources on vehicle assessment for U.S. users, *Consumer Reports* annually publishes survey results gathered by Consumers Union of vehicle assessments by vehicle owners. The vehicle quality is determined by a trouble index that ranges from "5" to "1." The index figures indicate both a relative grade for vehicle attributes and an absolute grade, depending on publication issue year. So, a "5" indicates much better than average, "4" indicates better than average, "3" indicates average, "2" indicates worse than average, and "1" indicates much worse than average. The assessment for each variable is considered relative to all other vehicles of a specified model year reported in the survey. So, for example, a Chevrolet

Impala for 2006 would be compared to all other vehicles for all other model years in the same *Consumer Reports* issue. Further, since vehicles may generate problems based on both miles driven and sheer age, an adjustment is made by *Consumer Reports* to eliminate differences in assessments caused by varying mileage by vehicles. According to the issue's 2010 instructions on how to read the reliability charts, because problem rates in some trouble spots are very low, *Consumer Reports* did not assign a score of "1" or "2" unless the model's problem rate exceeds three percent. If a problem rate is below two percent, it was assigned a "4." If the problem rate is below one percent, it was assigned a "5."

Several other aspects give credence to *Consumer Reports* annual assessment. The number of survey results (by 1.4 million *Consumer Reports* and ConsumerReports.org subscribers) based on driver experience was 1.4 million vehicles according to *Consumer Reports* in 2010. Another factor is the Consumer Union does not accept compensation through advertising funding from auto firms. This may further reduce the possibility of *Consumer Reports* bias in publishing the survey results.

Based on the information, we felt the survey information garnered and published by the Consumers Union constitutes a reasonable source of data on vehicle quality experiences by U.S. consumers. For this study's hypotheses concerning all vehicle variables, a "5" to "1" scale was used with "5" as the highest assessment and "1" as the lowest assessment.

### DATA

Data was collected from the annual issues of *Consumer Reports* from 1998 through 2010. The *Consumer Reports* variable examined is "Engine" (or "Engine, Major") depending on the reporting year. The variable "Engine" ("Engine, Major") was chosen because *Consumer Reports* has listed it first of all variables examined in all years encompassed in the study and *Consumer Reports* specifically

identified it as especially serious and expensive to repair. Our depth of analysis and limited reporting space demanded a sharply limited scope for this paper. Certainly, analysis of other or all variables included in the *Consumer Reports* publications could help cast light on the comparisons we study.

Each annual *Consumer Reports* vehicle reliability data offers information on vehicles that extends back at least five years. For example, the 2009 *Consumer Reports* for the Chevrolet Avalanche 1500 show the vehicle survey results for the model years of 2003 through 2008. With the *Consumer Reports* reliability data being one year old when published and extending back at least five years, our data included the model years from 1992 to 2009.

### STUDY HYPOTHESES

- H<sub>1</sub>:** The “Engine” (“Engine-Major”) ratings specified by *Consumer Reports* for U.S. and Japanese vehicles are not significantly different for five-year-old vehicles.
- H<sub>2</sub>:** The “Engine” (“Engine-Major”) ratings specified by *Consumer Reports* for U.S. and Japanese vehicles are not significantly different for four-year-old vehicles.
- H<sub>3</sub>:** The “Engine” (“Engine-Major”) ratings specified by *Consumer Reports* for U.S. and Japanese vehicles are not significantly different for three-year-old vehicles.
- H<sub>4</sub>:** The “Engine” (“Engine-Major”) ratings specified by *Consumer Reports* for U.S. and Japanese vehicles are not significantly different for two-year-old vehicles.
- H<sub>5</sub>:** The “Engine” (“Engine-Major”) ratings specified by *Consumer Reports* for U.S. and Japanese vehicles are not significantly different for one-year-old vehicles.

- H<sub>6</sub>:** The “Engine” (“Engine-Major”) ratings specified by *Consumer Reports* for U.S. and Japanese vehicles are not significantly different for less than one-year-old vehicles.

### HYPOTHESES TESTING

Hypotheses 1 through 6 test vehicle engine reliability for model years from 1992 through 2009. The equality hypotheses stated in the null form were tested using a two-tailed t-test to detect both size and direction of any difference in the mean vehicle assessments between the Japanese and U.S.

The t-test is appropriate when the mean of the null hypothesis is known and the standard deviation is unknown. Since the population size in the hypotheses tests are considerably greater than 30, the population of scores were assumed to be normally distributed (Pagano 1990). The statistical software used in the analysis was SPSS 16.0 for Windows. A p-value of less than .05 was the criterion for differences in means to be considered significant.

### TESTING RESULTS FOR VEHICLE ENGINE RELIABILITY FOR U.S. VERSUS JAPAN

The tables below show the assessment results for the *Consumer Reports* scores for the variable of “Engine” (“Engine-Major”) for model years 1992 to 2009 specified in the 1998 through 2010 publications. The scoring ranges from “5” meaning top assessed quality to “1” indicating the lowest assessed quality score.

### DISCUSSION

The study objective was to compare the vehicle engine evaluations of those associated with Japanese culture and those of the U.S. The data used to make this comparison was generated by *Consumer Reports* surveys completed by vehicle owners of vehicle models from 1992 to 2009. The data variable of engine reliability

**TABLE 1**  
**Consumer Reports “Engine” Five-year-old Vehicle**

Five-Year-Old Engine	Engine Model Year	D.F.	Japan	U.S.	Mean Diff.	P-value
1997	1992	146	3.75	3.10	.65	p < .001
1998	1993	52	3.85	3.27	.58	p = .003
1999	1994	145	3.86	3.35	.51	p = .003
2000	1995	152	4.03	3.13	.93	p < .001
2001	1996	129	4.00	3.10	.90	p < .001
2002	1997	136	4.42	3.31	1.11	p < .001
2003	1998	136	4.35	3.19	1.16	p < .001
2004	1999	140	4.37	3.47	.90	p < .001
2005	2000	148	4.29	3.16	1.13	p < .001
2006	2001	150	4.52	3.66	.86	p < .001
2007	2002	112	4.48	3.92	.56	p = .005
2008	2003	105	4.58	4.23	.35	p = .098
2009	2004	124	4.67	4.50	.17	p = .261

**TABLE 2**  
**Consumer Reports “Engine” Four-year-old Vehicle**

Four-Year-Old Engine	Engine Model Year	D.F.	Japan	U.S.	Mean Diff.	P-value
1997	1993	161	4.08	3.61	.47	p < .001
1998	1994	44	4.17	3.71	.46	p = .022
1999	1995	158	4.14	3.39	.75	p < .001
2000	1996	143	4.14	3.54	.60	p = .002
2001	1997	137	4.51	3.60	.91	p < .001
2002	1998	141	4.59	3.68	.91	p < .001
2003	1999	119	4.53	3.53	1.00	p < .001
2004	2000	151	4.60	4.00	.60	p < .001
2005	2001	155	4.51	3.09	1.42	p < .001
2006	2002	162	4.66	4.05	.61	p < .001
2007	2003	103	4.81	4.30	.51	p = .001
2008	2004	133	4.67	4.57	.10	p = .489
2009	2005	118	4.80	4.59	.21	p = .081

**TABLE 3**  
**Consumer Reports “Engine” Three-year-old Vehicle**

Three-Year-Old Engine	Engine Model Year	D.F.	Japan	U.S.	Mean Diff.	P-value
1997	1994	57	4.36	3.89	.47	p < .002
1998	1995	159	4.41	3.80	.61	p < .001
1999	1996	149	4.33	3.71	.62	p = .001
2000	1997	138	4.84	3.89	.95	p < .001
2001	1998	149	4.73	4.01	.72	p < .001
2002	1999	137	4.76	3.94	.82	p < .001
2003	2000	153	4.67	4.16	.51	p < .001
2004	2001	160	4.74	4.09	.65	p < .001
2005	2002	168	4.30	3.17	1.13	p < .001
2006	2003	171	4.86	4.56	.30	p = .004
2007	2004	137	4.81	4.68	.13	p = .262
2008	2005	140	4.85	4.62	.23	p = .060
2009	2006	117	4.89	4.77	.12	p = .166



**TABLE 4**  
**Consumer Reports "Engine" Two-year-old Vehicle**

Two-Year-Old Engine	Engine Model	D.F.	Japan	U.S.	Mean Diff.	P-value
1997	1995	166	4.61	4.09	.52	p < .001
1998	1996	143	4.63	4.06	.57	p < .001
1999	1997	133	4.77	4.19	.58	p < .001
2000	1998	154	4.95	4.43	.52	p < .001
2001	1999	121	4.82	4.42	.40	p < .001
2002	2000	152	4.81	4.46	.35	p < .001
2003	2001	143	4.89	4.38	.51	p < .001
2004	2002	166	4.82	4.72	.10	p = .117
2005	2003	125	4.77	4.12	.65	p < .001
2006	2004	170	4.89	4.75	.14	p = .082
2007	2005	120	4.93	4.75	.18	p = .046
2008	2006	96	4.96	4.77	.19	p = .042
2009	2007	100	4.96	4.81	.15	p = .037

**TABLE 5**  
**Consumer Reports "Engine" One-year-old Vehicle**

One-Year-Old Engine	Engine Model	D.F.	Japan	U.S.	Mean Diff.	P-value
1997	1996	159	4.61	4.48	.13	p = .321
1998	1997	148	4.93	4.68	.25	p < .001
1999	1998	150	4.95	4.79	.16	p = .002
2000	1999	147	4.95	4.82	.13	p = .009
2001	2000	114	4.88	4.81	.07	p = .292
2002	2001	113	4.98	4.73	.25	p < .001
2003	2002	156	4.96	4.89	.07	p = .164
2004	2003	129	4.97	4.89	.08	p = .053
2005	2004	139	4.81	4.47	.34	p = .002
2006	2005	156	4.96	4.86	.10	p = .036
2007	2006	173	4.92	4.90	.02	p = .672
2008	2007	116	4.97	4.84	.13	p = .067
2009	2008	88	5.00	4.97	.03	p = .083

**TABLE 6**  
**Consumer Reports "Engine" Less than One-year-old Vehicle**

< One-Year-Old Engine	Engine Model	D.F.	Japan	U.S.	Mean Diff.	P-value
1997	1997	115	4.97	4.98	.01	p = .788
1998	1998	88	5.00	4.92	.08	p = .007
1999	1999	92	5.00	4.90	.10	p = .002
2000	2000	88	5.00	4.96	.04	p = .045
2001	2001	76	5.00	4.97	.03	p = .159
2002	2002	81	5.00	4.98	.02	p = .159
2003	2003	73	5.00	4.97	.03	p = .159
2004	2004	61	4.98	5.00	.02	p = .321
2005	2005	156	4.91	4.87	.04	p = .524
2006	2006	94	5.00	4.95	.05	p = .058
2007	2007	78	4.99	5.00	.01	p = .320
2008	2008	77	5.00	4.98	.02	p = .083
2009	2009	61	5.00	5.00	.00	p = *

\* : Cannot be computed because the standard deviations of both groups are 0.

examined was a vehicle dimension. *Consumer Reports* always listed first and considered to be especially serious and expensive to repair.

The information presented by *Consumer Reports* variable of "Engine" ("Engine-Major") assessment indicates a gradual encroachment by the U.S. into the quality dominance associated with the Japanese. The five-year-old vehicle quality results shown in Table 1 illustrates the increasing emphasis on quality by the U.S. over the years. Since changes in manufacturing and quality inspections within manufacturing plants could have taken years to cultivate, that indicates the workers associated with the U.S. vehicles actualized changes probably beginning in the vicinity of 2000. However, that U.S. challenge of the Japanese strength of quality may not be clearly perceived by the vehicle buyers in the U.S.

The information shown in the tables appears to reflect the U.S. associated firms' drive toward higher quality both in measured levels and in comparison to Japanese quality ratings. As the flow of tables progress toward the more recent vehicles assessed in the *Consumer Reports* surveys (from five-year-old to less than one-year-old vehicles), the difference in assessed quality means nearly disappears with the top scores flip-flopping from Japanese to the U.S. in the most recent years. Neither country can claim clear superiority. Of course, the multi-billion dollar question is what does this result indicate?

As the progression of tables indicates, the quality gap noted in *Consumer Reports* survey summations continually narrows with few exceptions as the vehicles assessed are more recently manufactured. The less than one-year-old vehicles associated with the Japanese and U.S. have an extremely narrow gap. Perhaps the comparison could be described as a distinction without a real difference. In short, the U.S. has stormed back in the area of engine quality beginning at around the turn of the 21<sup>st</sup> century. The Japanese firms are hitting their heads on the ceiling of engine quality and the U.S. firms have steadily risen in the area and

now stand equal to the Japanese as shown in Table 6.

Another view of the data is to compare engines from the most recent to the oldest. Examination of the tables starting with Table 6 and working backwards to Table 1 gives this aging view. One would expect with a new car that the quality of the engines would be high. Table 6 bears this out. The 2009 ratings for the less than one-year-old engine for the U.S. and Japan were found equal. In 2008, a less than one-year-old engine had a rating of 4.98 for the U.S. and 5.00 for the Japanese and the difference was not statistically significant. For a less than one-year-old engine, the years that the Japanese were higher at a statistically significant level were back in 1998, 1999 and 2000 and the differences were .08, .10 and .04 respectively. A considerable benefit to consumers is the reliability of the engine as the car ages. Examining older engines, Table 1 reveals that in 1997 a five-year-old U.S. engine had a rating of 3.10, while the Japanese five-year-old engine had a rating of 3.75. This .65 difference was significant at the .001 level. By 2009, however, a five-year-old U.S. engine had a rating of 4.50, and the Japanese had a five-year-old engine rating of 4.67. The U.S. auto industry improved their absolute rating, and they cut the difference to .17 between their five-year-old engines and the Japanese five-year old engines. This difference was not statistically significant at the .05 level. Apparently, U.S. engines may be aging better today than in the past. Consequently, buyers of U.S. automobiles can expect to have fewer engine problems as their cars age than they have in the past.

To hear the comments directed at the U.S. vehicle CEOs during bailout hearings with the U.S. Congress, it may be difficult to believe the U.S. firms were making any substantial changes that would make them more competitive in the marketplace. However, a glance at the information shown on the tables above might indicate that the U.S. has been on a surge in overtaking the Japanese on the quality dimension. Once the vehicles associated with

the U.S. and Japanese are perceived as neck-and-neck on quality ratings, the slight differences may be ignored and other buying variables may be used as the prime buyer points of differentiation. For example, shoppers may then sort out the “best” vehicle through the use of variables such as style, perceived country associated with vehicle, price, prestige, fuel economy, and so on.

Another possible, though less likely, interpretation of the tables could be that the owners may be changing their use and maintenance of the vehicles over time, which leads to varying levels of engine problems. For example, have owners of Japanese cars been more diligent in performing the required maintenance on their vehicles than the owners of American cars?

A third possibility might have to do with how people take the survey. What might constitute a significant engine problem based on one person’s perception and expectations might not be considered a noteworthy point for another. Therefore, the possibility of those driving Japanese vehicles may have different standards of “problems” compared to those who drive U.S. vehicles resulting in differing scores.

### **MANAGEMENT IMPLICATIONS**

The study dealt with the engine component of *Consumer Reports* survey of vehicle owners. While survey results based on examination of other vehicle variables could certainly differ from the analysis of the engine, the assessment of that variable offers a starting point. If the U.S. vehicle manufacturers are now matching the Japanese on vehicle quality, those U.S. firms must make great efforts to inform their target market. Perceptions can lag reality for a very long time, especially when vehicles are often considered deeply and purchased infrequently over the course of years. Disseminating the vehicle quality comparisons to permit rapid information absorption could lead to change in determining which vehicle may be optimal and draw customers.

So, if the U.S. is matching the Japanese in quality, marketing research might best be aimed toward determining the “next” variable that is a motivating force for respective target markets. Discovering factor(s) that buyers will weigh in brand and vehicle decisions other than quality could permit a jump-start on both design of vehicles and facilitating promotion decisions that emphasize a positive point of differentiation.

### **STUDY LIMITATIONS**

A prime limitation of the study is the abbreviated time frame of data used. Covering more years of survey data could be enlightening in better determining the implications of the results.

Another problem is the potential worldview orientation of those who took the vehicle survey compared to the rest of potential vehicle purchasers. Those who subscribe to *Consumer Reports* may have a different value system and manner of sorting out viable vehicles for purchase than those who are not *Consumer Reports* subscribers.

Another clear study limitation is the examination of only one variable “Engine” (“Engine-Major”) from the list of 17 variables considered in latest available *Consumer Reports*. While it would be difficult to argue that the variable of vehicle engine quality was not a critical dimension to consider when shopping for a vehicle (which may be why *Consumer Reports* always lists it first), information about other variables may also offer insight.

### **FUTURE RESEARCH**

Several areas of investigation emerge after analysis of the data. The next step might be to increase the number of years of data analyzed to determine if the pattern in quality comparisons between the Japanese and U.S. vehicle makers remains consistent. Another interesting comparison might be made that considers other countries’ offerings in addition

to the U.S. and Japanese to see the larger picture. A study that analyzes not only the quality perceptions of vehicles, but also the actual sales of vehicles over time might be useful. Perhaps it can be discovered what type of association the perceptions of vehicle quality and the resulting sales of those vehicles share. A further study could research the car maintenance habits of owners of automobiles from different countries. Perhaps there are vehicle maintenance habits differences, which are associated with brand demands by consumers.

### REFERENCES

- Ahmed, Sadrudin A. and Alain d'Astous (1995), "Comparison of Country-of-Origin Effect on Household and Organizational Buyers' Product Perceptions," *European Journal of Marketing*, 29 (3), 35-51.
- Apelbaum, Eidan, Eitan Gerstner and Prasad A. Naik (2003), "The Effects of Expert Quality Evaluations Versus Brand Name on Price Premiums," *Journal of Product and Brand Management*, 12 (3), 154-65.
- Arguea, Nestor M., Cheng Hsiao and Grant A. Taylor (1994), "Estimating Consumer Preferences Using Market Data - An Application to US Automobile Demand," *Journal of Applied Econometrics*, 9 (1), 1-18.
- Al-Sulaiti, Khalid I. and Michael J. Baker (1998), "Country of Origin Effects: A Literature Review," *Marketing Intelligence & Planning*, 16 (3), 150-99.
- Barber, Brad. M., and Masako N. Darrough (1996), "Product Reliability and Firm Value: The Experience of American and Japanese Automakers," 1973-1992," *Journal of Political Economy*, 104 (5), 1084-99.
- Bates, Hilary, Matthias Holweg, Michael Lewis and Nick Oliver (2007), "Motor Vehicle Recalls: Trends, Patterns and Emerging Issues," *Omega*, 35 (2), 202-10.
- Betts, Stephen C. and Zinaida Taran (2004), "The 'Brand Halo' Effect on Durable Goods Prices: Brand Reliability and the Used Car Market," *Academy of Marketing Studies Journal*, 8 (1), 7-18.
- Bennett, Jeff and Alex P. Kellog (2009), "New Day for Chrysler as Fiat Arrives --- But Many Challenges Lurk, Including Restarting Plants, Launching New Models and Boosting Quality," *Wall Street Journal*, June 11, B.1.
- Beverland, Michael and Adam Lindgreen (2002), "Using Country of Origin in Strategy: The Importance of Contest and Strategic Action," *Journal of Brand Management*, 10 (2), 147-67.
- Bodell, Richard W., Robert R. Kerton and Richard W. Schuster, (1986), "Price as a Signal of Quality: Canada in the International Context," *Journal of Consumer Policy*, 9 (4), 431-44.
- Chao, Paul (2001), "The Moderating Effects of Country of Assembly, Country of Parts, and Country of Design on Hybrid Product Evaluations," *Journal of Advertising*, 30 (4), 67-81.
- Chao, Paul and Pola B. Gupta (1995), "Information Search and Efficiency of Consumer Choices of New Cars: Country-of-Origin Effects" *International Marketing Review*, 12 (6), 47-59.
- Chao, Paul (1993), "Partitioning Country-of-Origin Effects: Consumer Evaluation of a Hybrid Product," *Journal of International Business Studies*, 24 (2), 291-306.
- Chen, Hsiu-Li (2004), "Testing the Role of Country of Origin in Consumer Adoption of New Products," *International Advances in Economic Research*, 10 (3), 245-56.
- Cole, Robert E. and Michael S. Flynn (2009), "Automotive Quality Reputation: Hard to Achieve, Hard to Lose, Still Harder to Win Back," *California Management Review*, 52 (1), 67-93.
- Crafton, Steven M., George E. Hoffer and Robert J. Reilly (1981), "Testing the Impact of Recalls on the Demand for Automobiles," *Economic Inquiry*, 19 (4), 694-703.
- Dinnie, Keith (2002), "National Image and Competitive Advantage: The Theory and Practice of Country-of-Origin Effect," *Journal of Brand Management*, 9 (Apr/May), 396-98.

- Faulds, David J., Orlen Grunewald and Denise Johnson (1995), "A Cross-National Investigation of the Relationship between the Price and Quality of Consumer Products: 1970-1990," *Journal of Global Marketing*, 8 (1), 7-25.
- Friedman, Monroe (1987), "Survey Data on Owner-Reported Car Problems: How Useful to Prospective Purchasers of Used Cars?" *Journal of Consumer Research*, Vol. 14 (December), 434-39.
- Gerstner, Eitan (1985), "Do Higher Prices Signal Higher Quality?" *Journal of Marketing Research*, 22 (2), 209-15.
- "Global Game, What is an American Car?" (2007), *Consumer Reports*, April, p. 19.
- Gupta, Pola B. and Kenneth R. Lord (1995), "Identification of Determinant Attributes of Automobiles: Objective Analogues of Perceptual Constructs," *Journal of Marketing Management*, 5 (Spring/Summer), 21-9.
- Gurhan-Canli, Zeynep and Durairaj Maheswaran (2000), "Determinants of Country-of-Origin Evaluations," *Journal of Consumer Research*, 27 (6), 96-108.
- Harris, Richard J., Bettina Garner-Earl, Sara J. Sprick and Collette Carroll (1994), "Effects of Foreign Product Names and Country-of-Origin Attributions on Advertisement Evaluations," *Psychology and Marketing*, 11 (2), 129-44.
- Haubl, Gerald (1996), "A Cross-National Investigation of the Effects of Country of Origin and Brand Name on the Evaluation of a New Car," *International Marketing Review*, 13 (5), 76-98.
- Hogarty, Thomas F. (1975), "Price-Quality Relations for Automobiles: A New Approach," *Applied Economics*, 7 (1), 41-51.
- Hong, Sung-Tai and Robert S. Wyer, Jr. (1990), "Determinants of Product Evaluation: Effects of the Time Interval Between Knowledge of a Product's Country of Origin and Information about its Specific Attributes," *Journal of Consumer Research*, 7 (3), 277-88.
- Insch, Gary S. and J. Brad McBride (1998), "Decomposing the Country-of-Origin Construct: An Empirical Test of Country of Design, Country of Parts, and Country of Assembly," *Journal of International Consumer Marketing*, 10 (4), 69-91.
- Kiley, David, Ian Rowley and Carol Matlack (2008), "Ghosn Hits the Accelerator: The Renault-Nissan CEO is Fighting to Keep Pace in the U.S. and Chasing Chinese and Indian Customers," *Business Week*, 4083 (May 12), 48.
- Lawrence, C., Norman. E. Marr and Gerald. P. Prendergast (1992), "Country-of-Origin Stereotyping: A Case Study in the New Zealand Motor Vehicle Industry," *European Journal of Marketing*, 26 (3), 37-51.
- Leclerc, France, Bernd Schmitt and Laurette Dube, (1994), "Foreign Branding and Its Effects on Product Perceptions and Attitudes," *Journal of Marketing Research*, 31 (2), 263-70.
- Liefeld, John P. (2004), "Consumer Knowledge and Use of Country-of-Origin Information at the Point of Purchase," *Journal of Consumer Research*, 4 (2), 85-97.
- Linebaugh, Kate (2010a), "Toyota Issues Second Recall for Gas Pedal," *The Wall Street Journal*, Jan. 22, B.3.
- Linebaugh, Kate (2010b), "Toyota Halts Sales Over Safety Issue," *The Wall Street Journal*, Jan. 27, A.1, A.12.
- Liu, Scott S. and Keith F. Johnson (2005), "The Automatic Country-of-Origin Effect on Brand Judgments," *Journal of Advertising*, 34 (1), 87-98.
- Meichtry, Stacy and John Stoll (2009), "Fiat Nears Stake in Chrysler That Could Lead to Takeover," *The Wall Street Journal*, Jan. 20, A.1.
- Mertens, Yves and Victor Ginsburgh (1985), "Product Differentiation and Price Discrimination in the European Community: The Case of Automobiles," *Journal of Industrial Economics*, 34 (2), 151-66.
- Mitchell, Josh (2009), "Floor Mats Prompt Largest Toyota Recall," *The Wall Street Journal*, Sept. 30, B.3.

- Montgomery, Cynthia A. and Birger Wernerfelt (1992), "Risk Reduction and Umbrella Branding," *Journal of Business*, 65 (1), 31-50.
- Nichols, Mark W. (1998), "Advertising and Quality in the U.S. Market for Automobiles," *Southern Economic Journal*, 64 (4), 922-39.
- Nichols, Mark W. and Gary M. Fournier (1999), "Recovering from a Bad Reputation: Changing Beliefs about Quality of US Autos," *International Journal of Industrial Organization*, 17 (3), 299-318.
- Pagano, Robert R. (1990), *Understanding Statistics in the Behavioral Sciences*. 3<sup>rd</sup> ed. 295-6. St. Paul, MN: West Publishing Company.
- Pharr, Julie M. (2005), "Synthesizing Country-of-Origin Research from the Last Decade: Is the Concept Still Salient in an Era of Global Brands?" *Journal of Marketing Theory and Practice*, 13 (4), 34-45.
- Regassa, Hailu and Ahmad Ahmadian (2007), "Comparative Study of American and Japanese Auto Industry: General Motors Versus Toyota Motors Corporations," *The Business Review*, 8 (1), 1-11.
- "Reliability, Detailed Data on New and Used Models" (2009), *Consumer Reports*, April, 86-96.
- Riesz, Peter C. (1978), "Price Versus Quality in the Market Place," *Journal of Retailing*, 54 (4), 15-28.
- Riesz, Peter C. (1979), "Price-Quality Correlations for Packaged Food Products," *Journal of Consumer Affairs*, 13 (2), 236-47.
- Rising, Malin (2009), "Krugman: Concentration of US Auto Industry Will Probably Disappear," *The Huffington Post*, January 14, [www.huffingtonpost.com/2008/12/07/krugman-us-auto-industry\\_n\\_149082.html](http://www.huffingtonpost.com/2008/12/07/krugman-us-auto-industry_n_149082.html).
- Rutberg, Sidney (2007), "'Sale' of Chrysler Group to Cerberus Or Take My Auto Company, Please," *The Secured Lender*, 63 (4), 64-6.
- Sauer, Paul L., Murray A. Young, and H. Roa Unnava (1991), "An Experimental Investigation of the Processes Behind the Country-of-Origin Effects," *Journal of International Consumer Marketing*, 3 (2), 29-59.
- Samiee, Saeed (1994), "Customer Evaluation of Products in a Global Market," *Journal of International Business Studies*, 25 (3), 579-604.
- Shirouzu, Norihiko and Yoshio Takahashi (2010), "Toyota Apologizes for Massive Recall," *The Wall Street Journal*, Feb. 6, B.1.
- Srinivasan, Shuba, Koen Pauwels, Jorge Silva-Risso and Dominique M. Hanssens (2009), "Product Innovations, Advertising, and Stock Returns," *Journal of Marketing*, 73 (1), 24-43.
- Steenkamp, Jan-Benedict E. M. (1998), "The Relationship between Price and Quality in the Market Place," *The Economist*, 136 (4), 491-507.
- Stoll, John D. and Sharon Terlep (2009), "GM Takes New Direction --- Car Maker Leaves Bankruptcy; Will Slim Down, Court Consumers," *Wall Street Journal*, Jul 11, B.1.
- Sullivan, Mary W. (1998), "How Brand Names Affect the Demand for Twin Automobiles," *Journal of Marketing Research*, 35 (May), 154-65.
- Tabuchi, Hiroko (2010), "Toyota is Expected to Add 2010 Prius to Safety Recalls," *The New York Times*, Feb. 8, B.1, B.3.
- Terlep, Sharon and Josh Mitchell (2010), "U.S. Widens Toyota Probe to Electronics," *The Wall Street Journal*, Feb. 4, B.1.
- Terlep, Sharon and Matthew Dolan (2009), "Auto Makers Close Books on Awful Year, Face More Ills," *The Wall Street Journal*, January 6, B.1.
- Thakor, Mrugank V. (1996), "Brand Origin: Conceptualization and Review," *Journal of Consumer Marketing*, 13 (3), 27-42.
- Thakor, Mrugank V. and Antoine M. Lavack (2003), "Effect of Perceived Brand Origin Associations on Consumer Perceptions of Quality," *Journal of Product and Brand Management*, 12 (6), 394-408.

- Train, Kenneth E. and Clifford Winston (2007), "Vehicle Choice Behavior and the Declining Market Share of U. S. Automakers," *International Economic Review* 48 (4), 1469-96.
- Tse, David K. and Wei-na Lee (1993), "Removing Negative Country Images: Effects of Decomposition, Branding and Product Experience," *Journal of International Marketing*, 1(4), 25-48.
- Ulgado, Francis M. (2002), "Country-of-Origin Effects on E-Commerce," *Journal of American Academy of Business*, 2 (1), 250-53.
- Uri, Noel D. (1986), "Forecasting Relative Quality," *Journal of Forecasting*, 5 (2), 105-15.
- Verlegh, Peeter W. J. and Jan-Benedict E. M. Steenkamp (1999), "A Review and Meta-analysis of Country-of-Origin Research," *Journal of Economic Psychology*, 20 (5), 521-46.
- White, Joseph B. (2009), "What Is an American Car?" *Wall Street Journal*, (Jan. 26), D.6.
- Yasin, Norjaya Mohd, Mohd Nasser Noor and Osman Mohamad (2007), "Does Image of Country-of-Origin Matter to Brand Equity?" *The Journal of Product and Brand Management*, 16 (1), 38-48.
- Yerger, David B. (1996), "Used Car Markets: Reliability Does Matter, but Do Consumer Reports?" *Applied Economics Letters*, 3 (2), 67-70.
- Zaman, M. Raquibuz and Fahri Unsal (2000), "Comparative Performance of American, European and Japanese Automobile Companies in the 1990s" *American Business Review*, 18 (1), 115-22.

## ETHICAL BELIEFS OF AMERICAN AND TURKISH MBA STUDENTS: A CROSS-CULTURAL STUDY

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*After the Enron-era scandals, business colleges hurriedly crafted business courses, centers and endowed chairs (Porter 2008). Research indicates that academic misconduct has become a persistent and growing problem in higher education. In extension of similar studies conducted in different contexts, this study assesses the ethical beliefs and academic dishonesty of American and Turkish MBA students. The results indicate that opportunism, for both groups, is the factor that most contributes to academic dishonesty. Regression analyses reveal that some personal beliefs and values variables also contribute to academic dishonesty behaviors. MANOVA and MDA reveal that Turkish MBA students tend to be less theistic, more tolerant, more detached, more idealistic and less sensitive to academic dishonesty than their American counterparts.*

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### INTRODUCTION

After the Enron-era scandals, business colleges hurriedly crafted business ethics courses, centers and endowed chairs (Porter 2008). Research indicates that academic misconduct has become a persistent and growing problem in higher education. Garten (2005) indicated that business schools need to do more in terms of helping students make moral choices, which is important since there is a positive correlation between academic dishonesty in college and unethical behavior in the workplace (Anitsal et al. 2008). In a decade long study involving academic dishonesty, McCabe et al. (2001) asserted the prevalence and augmentation of cheating over the past 30 years. Furthermore, the results of another study of academic dishonesty involving more than 50,000 undergraduates on more than 60 campuses in the U.S. indicated that ethical misconduct was disturbing, provocative and challenging (McCabe 2005). Seventy percent of surveyed students disclosed some form of cheating, and fifteen percent indicated that they have cheated on tests in the past year. Pillsbury (2004)

affirmed that academic misconduct has been sweeping the country undermining the environment of trust that has always been a hallmark of higher education. Stearns and Borna (1998) found that inmates were as ethical as MBA students, and at times more commendable, when confronted with moral business predicaments.

The importance of understanding academic dishonesty has produced some cross-cultural studies (e.g., Chapman and Lupton 2004; Ahmed et al. 2003; De Lambert et al. 2003; Fisher et al. 2003; Marta et al. 2003). Other studies have investigated ethical beliefs of MBA students in the US and other countries. Rawwas et al. (2004) compared academic dishonesty attitudes in behaviors in two contrasting cultures, China and the US. The results indicated that Chinese students were more tolerant of academic dishonesty behaviors compared to American students. Likewise, Rawwas et al. (2007) investigated personal beliefs and related variables on two samples, one from the US and the other from Hong Kong. The authors collected data from two groups of MBA marketing students from a public university in the U.S. and from a Hong Kong university in the fall 2003 semester. They found that Hong Kong students showed



less ethical sensitivity and less sensitivity to academic dishonesty, compared to US students. The following study is a replication of this latest study comparing the same US student sample with students from a totally different culture that is of Turkey. Because most MBA students do have work experience before and/or during their MBA study, earlier research has used MBA students as prospective managers to examine ethical theories and relationships between ethics and business practices (e.g. Cianci and Kaplan 2008; Awasthi 2008; Kaplan et al. 2007). In fact, it is asserted that business managers develop their moral reasoning during their MBA study at college (Strautmanis 2008). International managers operating in the U.S. and/or in Turkey would benefit from understanding the ethical beliefs and behavior of MBA students or prospective business managers. A proper assessment of the levels of ethicality and patterns of academic cheating has been deemed important by researchers as those students, especially graduate business students, are the future leaders of business organizations (McCabe, Butterfield, and Trevino 2006). Academic dishonesty is one sign of an overall pattern of deviance in some peoples' lives, and such deviance includes unethical behavior on the job (Blankenship and Whitely 2000; Harding et al. 2003). Correlations have been uncovered in several studies between cheating in college and cheating in the workplace (Eastman, Eastman, and Iyer 2008; Nonis and Swift 2001). Iyer and Eastman (2006) stated the importance of more study and action regarding academic dishonesty in the business schools noting that, "what students learn in the classroom impacts their expectations of what is acceptable professionally (p. 101)."

Turkey is a country of prime importance to international management. It has a population of over 62 million (Pahre and Uçaray-Mangitli 2009), and acts as a natural, cultural, and economic bridge between east and west. Despite the turbulence in economic markets over the past few years, this has not precluded several global businesses from increasing their investments in Turkey (Monthly Review 2006).

The Economist reports that, despite the obstacles faced, "most Western investors agree that the business environment in Turkey has improved a lot since the mildly Islamist Justice and Development (AK) party came to power in 2002. GDP growth has averaged 6.6 percent, inflation has been tamed, and FDI has boomed.... PricewaterhouseCoopers, a consultancy, predicts that Turkey's economy will equal Italy's in size by 2050." (Anonymous 2008 p. 86). The business environment in Turkey is burdened with various ethical problems (Hisrich et al. 2003). Some examples of these ethical infringements include production of unsafe products, deceptive advertising, bribery, insider trading, tax evasion and environmental pollution (Rawwas et al. 2005; Ekin et al. 1999). According to its annual survey, the Berlin-based organization, Transparency International, ranked Turkey as number sixty on the 2006 Corruption Index (CPI) among 163 countries (Transparency International 2006). While previous research has indicated a relationship between corporate misconduct and academic dishonesty (Sims 1993; Nonis and Swift 2001), Turkish studies have focused solely on business ethics (Halici and Kucukaslan 2005; Vitell and Paolillo 2004 ; Sims and Gegez 2004) ignoring academic dishonesty. Therefore, the purpose of this study is to investigate the ethical beliefs of Turkish MBA students and compare them with those of U.S. students concerning academic dishonesty. Understanding the ethical beliefs of Turkish MBA students may help Western firms formulate strategies to deal with their future business counterparts (and vice-versa), and may facilitate and promote a more ethical business environment in Turkey.

Although there are no comprehensive studies that address the issue in Turkey, the problem of academic dishonesty has been mentioned in several research studies. Semerci (2006), for example, noted that while many Turkish medical students emphasized the illegitimate or sinful nature of cheating, they were nevertheless involved in such behavior during examinations. Selsky (2000) recounted how Turkish students tended to become involved in

collective cheating. He explained that in some Mediterranean cultures, such as Turkey where face-saving is important, students collectively fight the system through breaking the rules as this would give them perceived power and status among their peers. Pazarci (1996) opinionated that cheating in US universities was less frequent among low performing students compared to Turkish students. He attributed this to the existence of relaxed measures against cheating in Turkish universities.

The present study seeks to investigate the impact of several personal beliefs and values on the ethical beliefs of MBA students. In addition, it compares the personal beliefs and values of American and Turkish MBA students and their perceptions vis-à-vis several academic dishonesty practices. The study concludes by presenting some recommendations that would help in developing awareness concerning academic dishonesty issues in both countries.

## CONCEPTUAL FOUNDATIONS

### A Cultural Typology

Hofstede (1984, 1997) identified four dimensions portraying how various cultures differ from each other. One dimension, power distance, refers to the degree to which less powerful individuals in society accept the unequal distribution of power. In Hofstede's studies, the U.S. scored 40/100 (rank 38) while Turkey scored 66/100 (rank 18) indicating that Turkish individuals tend to respect authority more than those in the U.S. A second dimension, individualism/collectivism, refers to the extent people are concerned about their own interest and the interests of their immediate families versus interests concerning broader ties among extended families and groups. On this dimension, the U.S. scored 91/100 (rank 1) while Turkey scored 37/100 (rank 28) indicating that the U.S. is a more individualistic society while Turkey tends to be a more collectivistic community. The third dimension, femininity/masculinity, refers to the degree to which gender roles overlap as well as

the degree to which both men and women share values of modesty and tenderness. The U.S. scored 62/100 (rank 15) on this dimension while Turkey scored 45/100 (rank 32) indicating that the U.S. was a more masculine society while Turkey was more feminine. Finally, the fourth dimension, uncertainty avoidance, refers to the degree to which members of a society are tolerant of ambiguous situations. The U.S. scored 46/100 (rank 43) and Turkey scored 85/100 (rank 16) indicating that Turkey was characterized by a strong uncertainty avoidance culture. Thus, overall, Turkey is characterized by being relatively higher on power distance, collectivism, femininity, and uncertainty avoidance.

### Personal Beliefs and Values

One's personal beliefs present an essential factor of an individual's reasoning about ethical dilemmas (Hunt and Vitell 1986; 1993). A number of studies have also identified personal values as determinants of ethical judgments. For example, Roig and Ballew (1994) believed that the decision to cheat or not to cheat inherently rested within the individual's personal value system. In another study, Singhapakdi and Vitell (1993) reported that marketing managers' ethical judgments could be partly explained by their personal beliefs and values, such as "self-respect" and "being well-respected." In the following sections, we address several personal values that may be linked to academic dishonesty behaviors.

### Tolerance/ Intolerance to Misconduct

Whitley (1998) explored the relationship between students' attitudes towards cheating and actual cheating behavior. While attitudes towards a certain behavior definitely impact involvement with that behavior, other factors also play an important role. Based on Ajzen's theory of planned behavior (1991), perceptions of social norms, perceived ability to perform, and perceptions of moral obligation, all impact a specified behavior. Studying ethical ideology and its impact on behavior has been advanced by Forsyth (1992) who asserted that people's

decisions to engage in certain behaviors of ethical nature are impacted by their personal philosophies. While it is expected that tolerance to unethical behavior will impact decisions to engage in unethical acts, the interplay of different forces impacting behavior may vary cross-culturally. That is why it would be interesting to assess whether there is a cross-cultural difference between espoused attitudes (tolerance to cheating in our case) and intended behaviors (academic dishonesty practices).

Tolerant people are more broadminded and accept alternative ways of doing things. Intolerant people, on the other hand, are less lenient and they often demonstrate a fixed perspective about how people should behave in a given context. Hofstede's (1984) uncertainty avoidance addresses the notion of tolerance toward accepting or rejecting risk. Intolerant people encourage conformity and agreement more than independence and risk taking (Singh 1990). Conversely, tolerant people do not fear ambiguity, tolerate risk (Hofstede 1984; Kale 1991; Kale and Barnes 1992), severe existing relationships (Kale and Barnes 1992) and accept errors as inevitable during one's learning process (Doney, Cannon and Mullen 1998).

Since Turkey was characterized by Hofstede (1984) as high in uncertainty avoidance, people in that culture may tend to be anxious about the future, adopting rules and standards that help alleviate uncertainty. Consequently, they would not be likely to engage in deviant behavior because doing so would jeopardize existing relationships (Doney et al. 1998). Research has found a negative association between tolerance to misconduct and ethical decision-making (Roig and Neaman 1994). Accordingly, the following hypotheses are posited:

**H<sub>1a</sub>:** Intolerance to academic dishonesty will be negatively associated with academic dishonesty practices; however, tolerance of academic dishonesty will have the opposite effect.

**H<sub>1b</sub>:** Turkish MBA students will be less tolerant to academic dishonesty than will be the U.S. MBA students.

### Achievement/Experience

Earlier research relating achievement motivation to cheating is mixed. Smith et al. (1972) argued that achievement motivation would have a negative correlation to cheating on examinations. Later studies, however, argued that achievement motivation, putting pressures on the learner to accomplish and stand out, lead to academic dishonesty practices. Glover et. al (1997), for example, indicated that it has been shown in earlier research that individuals with a high need for achievement place goal accomplishment above all things. They found that individuals with a high need for achievement will make the more ethical choice when the moral intensity is not extreme. Murdock and Anderman (2006) presented an integrated model that attempts to explain motivational mechanisms that can predict student cheating. They asserted that students' achievement aspirations are linked to the frequency of cheating in a predictable fashion. Students are motivated to cheat either by an extrinsic factor, such as to get a higher grade on an exam, or to look competent in front of others, or because the student feels a lower level of self-efficacy on a certain exam or assignment. Whitely (1998), reviewing 107 earlier studies on cheating among college students, found a small positive relationship between achievement motivation and cheating. He argued that it could be the case that students, who are high on achievement motivation, yet low on their willingness to work hard, are those most likely to be involved in such dishonest practices. Arslan (2001) noted that a high achievement orientation level is linked to short-term opportunistic thinking. Donoho et al. (2003) indicated that the higher people are on the need for achievement, the more tolerant they become to problems of ethical dimensions. Since researchers have found differing effects of motivation on cheating using various contextual variables, this

underscores the importance of investigating cheating behavior using similar studies, but in different contexts, such as culture.

Achievement-oriented persons are more likely to appreciate goal accomplishment, achievement and success whereas experience-oriented people are more prone to be relaxed having lesser relative appreciation to the aforementioned values. Achievement orientation seems to correspond well with Hofstede's masculine cultures. In masculine cultures, competitiveness and the accumulation of riches and possessions are encouraged (Hofstede 1984), and proper management and organization of time is treated with care (Schuster and Copeland 1996). People within these cultures, such as the U.S., often pride themselves on individual accomplishments and achievement, effectiveness and efficiency (Kale 1991; Ueno and Sekaran 1992). In masculine cultures, people suppose that ethical conflicts can mostly be resolved without prior identification of standardized rules; these should be set only in case of absolute necessity (Rawwas 2001; Hofstede 1984). In more feminine cultures, such as Turkey, there is a tendency to resolve conflicts through compromise and negotiations. Values of modesty, equality, solidarity, consensus and quality of work life are encouraged (Hofstede 1997).

Earlier research has suggested that those who work hard to feel gratified rather than to obtain a mere reward, are less likely to cheat (Foltz and Miller 1994). Based on the above explanations of experience-oriented versus achievement-oriented individuals and the cultural prototypes of both the U.S. and Turkey, the following hypotheses are presented:

**H<sub>2a</sub>:** Experience will be negatively associated with academic dishonesty practices; however, achievement will have the opposite effect.

**H<sub>2b</sub>:** Turkish MBA students will be more experience-oriented than will U.S. MBA students, and the U.S. MBA students will be more

achievement-oriented than will Turkish MBA students.

### **Idealism/Relativism**

Park (2005) concluded that idealism and relativism, which are two key classes of moral philosophy, play important roles in ethical decision-making and such processes must not be ignored by researchers and business organizations. Idealism focuses on the innate righteousness of deeds or behaviors of the individual. Idealists believe in universal standards that will lead to good outcomes if consistently applied. Idealists uphold that individuals should maintain commitment to high standards even in contexts where behaving against such norms may seem warranted. In contrast, those who are low in idealism would maintain that it is sometimes necessary and acceptable to divert from moral norms if the situation warrants that sort of behavior (Forsyth 1980; Henle et al. 2005). Idealists believe that the inherent righteousness or wrongness of a certain behavior should be the basis through which people choose a certain course of action. Relativism, on the other hand, refers to the rejection of the belief that universal standards should be applied irrespective of the situation. Relativists consider that the righteousness of a deed is essentially based on the subsequent positive versus negative results when compared to other available options.

Singhapakdi and Vitell (1990) uncovered a negative relationship between Machiavellianism and idealism and a positive relationship between Machiavellianism and relativism. Axinn et al. (2004) found that Malaysian MBA students scored higher than did the American MBA students on Relativism and Idealism. Ukrainian responses were generally similar to those of the American MBAs with the exception of the Relativism scale. Their responses to this scale were the highest of any group. Henle et al. (2005) found that individuals, who scored low on the idealism scale, were found to be more prone to get involved in organizational and interpersonal deviance than those higher in idealism.

Relativism, on the other hand, was not significantly linked to either type of deviance. Singhapakdi and Marta (2005) found that marketing students displayed higher idealism compared to practitioners. In addition, their results indicated that students were more relativistic than practitioners. Singhapakdi et al. (2001), comparing Australian and American subjects, found that, contrary to expectations, Australian marketers were more idealistic and more relativistic than Americans

The Turkish culture is deeply impacted by both its history and geography. The location of Turkey as a bridge between Asia and Europe has clearly impacted its identity. While some research has reported corporate ethical problems in Turkey ranging from bribery to insider trading and fraud (Hisrich et al. 2003), other research studies indicate that Turkish managers rely primarily on deontological evaluations in evaluating the ethical components of a behavior (Menguc 1998). This means that the inherent rightness of behaviors is stressed as opposed to end results.

In Western culture, Aristotle's theory of ethics notes that the goal of the moral life is the self-perfection of the individual human being. In order to attain this goal, one should use practical reason to determine what ought to be done in a concrete situation. Practical reason is the use of judgment, rather than formalized rules, by which an individual determines the morality of a real situation. This moral judgment can vary from person to person, and certain judgments can have larger roles in the lives of some persons than others (McGee 1992).

Given the earlier description of masculine cultures, it becomes clear that persons in such cultures, while aggressively pursuing success and accomplishment, would compare all possible options and select the one that promises the best result (i.e., relativism) (Hofstede 1997). In a poll of 5000 American students, most responded that the highest authority in issues of truth was "their gut instinct, whatever feels right, whatever turns

them on, whatever is relative, negotiable" (Kidder 1992, p. 10). Accordingly, it is hypothesized that:

**H<sub>3a</sub>:** Idealism will be negatively associated with academic dishonesty practices; however, relativism will have the opposite effect.

**H<sub>3b</sub>:** Turkish MBA students will be more idealistic than the U.S. MBA students, and Turkish MBA students will be less relativistic than the U.S. MBA students.

### Positivism/Negativism

Positive people have an optimistic outlook, are hopeful about the future, and believe that things will get better. Negative individuals have a pessimistic perspective, aren't sure about the future, and aren't confident about the favorable development of things. People with a positive self-concept tend to develop an ethical posture and recognize the function of conscience in life (Shainess 1993). People with negative personal perspectives have been found to be more likely to be associated with ethical misconduct (Love and Simmons 1998).

While research on cross-cultural levels of positivism/negativism is mixed, some earlier investigations have found that Americans tend to have a positive outlook. Kitamaya, Markus, Matsumoto and Norasakkunkit (1997) argue that the American culture is characterized by the view that the self is an independent unit and this implicates finding and expressing "positively valenced internal attributes for the self" (p. 1260). This tendency towards "self-enhancement" describes to a great degree individualistic cultures. On the other hand, many non-Western cultures tend to exhibit a propensity in the "direction of self-criticism—namely, in the direction of attending, elaborating, and emphasizing negatively aspects of the self" (p. 1260). It could be argued that the notion of self-enhancement vs. self criticism is closely related to individualistic versus collective cultures (Changa, Sannab and Yangc 2003). As the US ranks extremely high

on individualism, one can hypothesize that Americans tend to have higher positive outlook compared to several other nations, including Turkey which is high on collectivism.

Earlier research has indicated that people, who have a negative outlook towards themselves and the organization, were less likely to report unethical acts (Miceli et al. 1991). In studying the ethical beliefs of American students, Rawwas et al. (2004) found that positivism was a negative determinant and negativism was a positive determinant of academic dishonesty. Curtis (2006) theorized that negativity is associated with a lesser ability to perceive the wrongdoing of a certain event. Accordingly, we hypothesize that:

- H<sub>4a</sub>:** Positivism will be negatively associated with academic dishonesty practices; however, negativism will have the opposite effect.
- H<sub>4b</sub>:** Turkish MBA students will be more negative than will U.S. MBA students, and the U.S. MBA students will be more positive than will Turkish MBA students.

### **Behaviorism/Humanism**

The behaviorist perspective implies that people are not born with an intrinsic inclination to behave either ethically or unethically. People are neither good nor bad at birth, but they have the potential to lean toward either ethical or unethical behavior. They do not rely on subtle means such as intuitions, instincts or implicit senses in dealing with, or in understanding, others. The whole realm of behavior, including ethical and unethical behavior occurs by socialization from an early age, through the multitude of reinforcements that people find in their environments. The humanist perspective, on the other hand, entails that people are born with an innate tendency toward good behavior. Ethical practice is based on human experience and people have a constructive innate motivation to develop and grow. Humanism claims that people do not have to rely on the external to develop as they have the capacity to

develop autonomous ethical decision making (Kurtz 1997). It is people's surroundings, according to this view, that socializes them into unethical and destructive behavior (Mele 2003). The humanist perspective argues that humans have a level of self-consciousness that prompts them to liberate themselves and grow (Aktouf 1992). People, by nature, are inclined to live with each other and through such communal interaction they continue to uncover their true selves and become more conscious about their beings. Traditional humanism espouses that people have ontological freedom, which means that they have the capacity to perfect themselves (Sanbonmatsu 2007).

Social science research asserts that individualistic and masculine societies tend to believe in behaviorism (Hofstede 1984; Rawwas et al. 2007). The large degree of freedom endorsed by individualist societies does little to restrict variance in human behavior (Doney et al. 1998; Kale and McIntyre 1991). Accordingly, costs for insensitive conduct toward others do not appear to be substantial (Hofstede 1984). Thus, the individualism/collectivism dimension impacts the likelihood of people acting either ethically or unethically (Doney et al. 1998). Collectivists, such as the Turkish, hold group values and beliefs and seek affiliated interests which reduce the probability of people involving themselves in deviant behavior (Hofstede 1984; Singh 1990). Violating group norms in collective societies is costly and violators face the possibility of being excluded by the group (Earley 1989; Ueno and Sekaran 1992). Accordingly we hypothesize:

- H<sub>5a</sub>:** Humanism will be negatively associated with academic dishonesty practices; however, behaviorism will have the opposite effect.
- H<sub>5b</sub>:** Turkish MBA students will be more humanistic-oriented than will the U.S. MBA students, and U.S. MBA students will be more behaviorist-oriented than will Turkish MBA students.

### Detachment/Involvement

Detached people tend to stay away from others and avoid emotional risk. Involved, or attached people, on the other hand appreciate the value of connecting and affiliating with others. Kayes (2006) argued that detachment could be perceived as a response to corruption in business activity, "detachment acts as a means to isolate the organization from the corruption of the external social order" (p. 54). Detached individuals, not satisfied with the current social order, will set their own ideals and norms. So, while Kayes stressed that dissatisfaction with prevailing corrupt norms leads to detachment, the ensuing result is an alienation that resists existing rules and regulations. Gilligan (1987) asserted that detachment, while considered under one worldview as the hallmark of mature moral thinking, poses a moral problem by itself. This is the case because detachment leads to apathy and a moral loss of direction. Some earlier studies have shown that detached individuals tend to tolerate acts of questionable ethical content. Vitell and Muncy (1992), for example, found that individuals who believe themselves alienated from business seem to be more prone to tolerate questionable acts. Likewise, Rawwas et al. (2004) uncovered a positive relationship between detachment and receiving and abetting academic dishonesty.

In collective societies, such as in Turkey, people have a strong sense of group identification and importance is accorded to family and other societal groups. Thus they are expected to have higher relative group attachment. In Turkish work environments, the manager is perceived to be the ultimate decision-maker who has the respect of others but also has a duty regarding the well-being of employees (Cavusgil et al. 2003). In individualistic societies, on the other hand, people appreciate the value of standing alone and often define themselves separate from the group; they emphasize personal identity and individual position (Steidlmeier 1999). The theory of motivation asserts that each individual should seek to maximize his or her own pleasure (Grassian 1981). Other pleasures are

important only if they are seen as means to the satisfaction of one's own enjoyment (Grassian 1981). Roig and Neaman (1994) found indications that the attitudes underlying cheating also seem to be associated with individualism.

Accordingly, the following hypotheses were formulated:

**H<sub>6a</sub>:** Involvement will be negatively associated with academic dishonesty practices; however, detachment will have the opposite effect.

**H<sub>6b</sub>:** Turkish MBA students will be more involved than will the U.S. MBA students, and the U.S. MBA students will be more detached than will Turkey MBA students.

### Theism/Nontheism

Theistic-oriented individuals accept the existence of God or a supreme being, while non-theistic individuals share a secular outlook on behavior. According to Meyer (1997), modern moral theory has been shaped by two forces. The first relates to the notion that there can be no theoretical knowledge of God, or the Supreme Being. The second relates to the notion that morality does not need religion. It goes without saying that this is a contested issue among moral philosophers and this paper does intend to argue for the afore-mentioned position or a different one thereof. It is interesting to note, however, that many recent studies have addressed the role of religion and theology in business and business ethics. Fort (1997) argued that it does not make sense to exclude religion from political and economic life. Accordingly, he suggested that theology could positively contribute to different aspect of public life, including the business realm. Epstein (2002) and Calkins (2000) invite management education circles to recognize the potential role that religion could play in advancing business and business ethics.

Irrespective of the position one has towards origin of moral attitudes and behaviors, many

previous studies have drawn a link between theism and ethical attitudes and behaviors. Giorgi and Marsh (1990) found out that the level of religious commitment of people had a positive effect on their ethics. Singhapakdi et al. (2000) reported that religiosity partly explained the insights and intentions of marketers toward an ethical dilemma. Likewise, Kennedy and Lawton (1998) uncovered a negative relationship between religiosity and willingness to behave unethically. In addition, research has found that students at a religious affiliated university were far less willing to engage in unethical behavior than were students at an unaffiliated university (Roberts and Rabinowitz 1992). Similarly, Cornwell et al. (2005) found that religion had some influence on the ethical decisions of consumers. Brammer et al. (2007) found that religious people tend to hold more extensive notions about the social responsibilities of firms compared to non-religious individuals. Cornwell et al. (2005) asserted that they found religion to impact – modestly- ethical attitudes.

Yildirim (1999), in a sample of Turkish students, found out that 25 percent categorized themselves as religious, 60 percent as partly-religious, and 15 percent atheist. On the other hand, according to the Universal Almanac (1996), 93 percent of the U.S. population defined themselves as religious and 7 percent of the population did not affiliate themselves with any religion. Turkey is considered to be the only country in the Middle East with religion having a limited role in public life (Arslan, 2001). In a survey involving seven Muslim countries, Turkey scored sixth in religiosity scores, after Pakistan, Egypt, Malaysia, Indonesia, Iran, and before Kazakhstan (Hasan, 2006). In another study, Elci (2007) found that there is a positive and significant relationship between hard working and religiosity. The Gross Domestic Product (GDP), which assesses a nation's economic standing, is a good measure to assess hard working of various countries. The United States has a much higher GDP per capita than does in Turkey (Bureau of Economic Analysis 2009) and consequently has

a stronger relationship between hard working and religiosity. Based on this, it can be hypothesized that U.S. MBA students will be more theistic than Turkish MBA students. Accordingly, the following hypotheses were formulated:

**H<sub>7a</sub>:** Theism will be negatively associated with academic dishonesty practices; however, non-theism will be positively associated with academic dishonesty.

**H<sub>7b</sub>:** The U.S. MBA students will be more theistic than will Turkish MBA students.

### Opportunism

Williamson (1975, p.6) defines opportunism as “self-interest seeking with guile.” For example, an official who conceals information or provides favoritism for the sake of self-enhancement is taking advantage of opportunism. Temptation can even sway those with strong personal ethics. Malinowski and Smith (1985) reported lower incidents of cheating among those who possessed higher moral reasoning; however, this group was inclined to behave unethically when the temptation was sufficiently great. Newstead et al. (1996) found indications that individuals who cheat neutralize their behavior by blaming it on the situation rather than on themselves. Sakalaki et al. (2007) found a significant positive correlation between Machiavellianism and opportunism. Al-Khatib et al. (2005) also found that corrupt consumers were high at Machiavellianism, took advantage of opportunities, and were more prone to get involved in unethical behaviors.

Hofstede's (1984) power distance dimension addresses ideological orientations and behavioral adaptations to authority. Opportunism may be less likely in low power distance cultures (such as the U.S.), which tend toward a natural sharing of power and more participative decision-making. In such cultures, people are more willing to consult with others and moderate the use of power (Kale and



McIntyre 1991). However, the use of power and coercion are frequent occurrences in high power cultures (such as Turkey) (Kale and McIntyre 1991). John (1984) showed empirically that perceptions of increased centralization, controls and coercion led to more opportunism. Indeed, oppressed individuals are more likely to seek opportunistic behavior to alleviate oppression. Based on the above rationale, two hypotheses are developed:

- H<sub>8a</sub>:** Opportunism will be positively associated with academic dishonesty practices.
- H<sub>8b</sub>:** Turkish MBA students will be more opportunistic than will the U.S. MBA students.

### Individual Characteristics:

#### Age

Hunt and Vitell (1986; 1993) suggested in their general theory of marketing ethics that demographic characteristics of a person have an effect on his or her ethical decision. Kohlberg (1976); Rawwas and Singhapakdi (1998); and Rawwas et al. (2006) found that older individuals tended to be more ethical than did younger ones. In addition, Haines et al. (1986) found that older students tended to be more ethical than those who went straight into college from high school. They contended that age-related development of moral reasoning tended to reduce the incidence of cheating. Serwinek (1992) concluded that age was the most significant ethics predictor. He found that older workers had more rigid interpretations of ethical standards. Accordingly, we propose:

- H<sub>9</sub>:** Older students will be negatively associated with unethical behaviors, while younger students will be positively associated with unethical behaviors.

#### Gender

Most research agreed that women were more ethical than men. For example, Rawwas (1996) and Rawwas et al. (2006) reported that females

tended to be more ethical than did males when evaluating questionable practices. Similarly, Serwinek (1992) reported that females were strong opponents of unethical business practices. In addition, Borkowski and Ugras (1998) reported that female students exhibited stronger ethical attitudes than did males. Accordingly, we propose:

- H<sub>10</sub>:** Female students will be negatively associated with unethical behaviors, while male students will be positively associated with unethical behaviors.

## METHODOLOGY

### Sample

Masters of Business Administration (MBA) students, who were taking marketing classes, were selected as respondents for this study. This choice was motivated by several issues. As noted earlier, cheating in college is a highly appropriate form of unethical behavior to study because students' involvement in cheating is so prevalent. Second, previous research used academic dishonesty as a type of business organizational wrongdoing (e.g., Burton and Near 1995). Finally, future business leaders will come from the ranks of today's MBA students.

Two self-administered questionnaires were distributed to the two groups of MBA students in 2003. The first group consisted of 288 students in nine MBA marketing classes of a public university in the U.S (Rawwas et al., 2007). The second group consisted of 200 students in seven MBA marketing classes in a Turkish university. This was a state university located in western Turkey between Istanbul and Ankara. MBA students in the U.S. and Turkey completed the questionnaires during the first portion of the class period. Students in Turkey completed Turkish versions of the questionnaires. The questionnaire was translated into Turkish by using back-translation and de-centering methods (Brislin 1986). Two bilingual Turkish professors and five graduate students at a university in Turkey

and the American coauthor moved back and forth between languages to make sure that language was not the “center” of attention. A common problem in ethics research is the propensity of respondents to use self biasing strategies, such as social desirability responses, when filling out the survey (Miyazaki and Taylor, 2008). Although it is nearly impossible to erase social desirability responses, it is possible to reduce it by keeping the surveys anonymous (Randall and Fernandes 1991) and ensuring that the questions are third party and not asking if the participants have participated in the behaviors of interest (Bernardi and Gupta 2008). Consequently, all responses were anonymous and respondents were assured about the confidentiality of their responses and the questions were of a third party nature. The means of the beliefs and values of both samples and a previous U.S. national sample of Foltz and Miller (1994) are shown in Table 1. The U.S. sample seemed to benchmark reasonably well against the U.S. national sample of Foltz and Miller (1994).

### **Student Attitudes toward Various Forms of Cheating**

Student attitudes toward cheating were measured using twenty situations involving various forms of cheating. These items were adopted from Rawwas and Isakson (2000) and factor analysis was performed with factor labels being adopted from Rawwas et al. (2004). Respondents were asked to indicate their approval of each activity on a standard Likert scale with 1, indicating “strongly believe that it is wrong,” to 5, indicating “strongly believe that it is not wrong.” Factor analysis with varimax rotation identified four significant factors representing four academic dishonesty activities (see Appendix). The reliabilities of the dimensions were adequate ( $\alpha =$  or  $> .65$ ) for all groups (see factor loadings and coefficient alphas in the Appendix). All factors were treated as dependent variables.

The first factor was “receiving and abetting academic dishonesty.” The most significant characteristics of this factor were: (1) almost

universally perceived as unethical and (2) initiated by the student (e.g., using unauthorized “crib notes” during an exam). The second factor, labeled as “obtaining an unfair advantage,” occurred when students were engaged in questionable situations (e.g., receiving extra credit because the instructor likes you). The third factor was labeled “fabricating information” and it involved situations where the student would make up information or excuses to reach a desired end such as “using a faked illness as an excuse for missing an exam.” The fourth factor was termed “ignoring prevalent norms” where the student would pay no heed to the customary behaviors and be involved in situations such as having exclusive access to previous exams.

### **Opportunism**

This construct included items that described situations in which students were engaged in a questionable situation when it provided rewards (e.g., taking advantage of answers you inadvertently saw on another student’s exam). This scale was adopted from Rawwas and Isakson (2000). Respondents were asked to indicate their approval of each activity on a standard Likert scale with 1, indicating “strongly believe that it is wrong” to 5, indicating “strongly believe that it is not wrong.” The reliability of this scale was .70 for each of the groups.

### **Personal Beliefs and Values**

Eight dimensions were used to measure the beliefs and values of students about life and people. Six of these measures were adopted from the Beliefs and Values Questionnaire (BVQ) used by Foltz and Miller (1994). The other two were the ethical ideologies (idealism and relativism) of the Ethics Position Questionnaire (EPQ) used by Forsyth (1980). The reliabilities of the latter two scales were .83 for Idealism and .70 for Relativism for the American group, and .79 for Idealism and .75 for Relativism for the Turkish group. Respondents were asked to indicate their agreement or disagreement with each item for

**TABLE 1:**  
**Descriptive Statistics: Beliefs and Values of American and Turkish MBA Students**

<b>Beliefs and Values</b>					
Variable	U.S.A. National mean <sup>1</sup>	U.S.A Sample Mean	U.S.A. Sample Dev.	Turkish Sample Mean	Turkish Sample Dev.
THEISTIC / NONTHEISTIC	10	13.13	3.5	12.52	3.42
ACHIEVEMENT / EXPERIENCE	11	10.28	1.72	9.82	2.52
DETACHMENT / INVOLVEMENT	6	7.38	2.14	9.38	2.34
TOLERANCE / INTOLERANCE	10	9.51	1.91	11.01	2.04
BEHAVIORISM / HUMANISM	7	8.16	2.19	8.72	2.41
POSITIVE / NEGATIVE	10	11.45	2.36	11.18	2.88

<sup>1</sup>Source: George Jana Foltz and Naomi Miller, Northern Kentucky University, in O. C. Ferrell and John Fraedrich, Business Ethics: Ethical Decision Making and Cases, Second Edition, (1994), Boston: Houghton Mifflin Company, PP. 326-328.

1) Theistic/Nontheistic: Higher scores indicate a conventional religious outlook and low scores reflect a secular outlook.

2) Achievement/Experience orientation: High scores characterize achievement oriented individuals while low scores describe experience oriented individuals.

3) Detachment/Involvement: High scores illustrate detached people while low scores characterize involved people.

4) Tolerance/Intolerance: High scorers are tolerant while low scorers are intolerant.

5) Behaviorism/Humanism: The high scorer tends to be behavioristic while the low scorer tends to be humanistic.

all above dimensions using a five-point Likert scale. All of the eight dimensions were treated as independent variables.

### Statistical Analysis

The relationship between the attitudes of students toward the four forms of cheating was examined using standard multiple regression analyses. The relationship between the four attitudes (ethical attitudes) and the independent variables (opportunism, personal beliefs and values, and individual characteristics) was assumed to be linear as follows:

$$F_i = a_i + b_i X_{ij} + e_{ij} \quad (1)$$

Where  $F_i$  represented a vector of the four attitudes toward cheating,  $X_{ij}$  represented a vector of the nine independent variables for each of the four attitudes, and  $e_{ij}$  represents the error term that was assumed to have a multivariate normal distribution. The parameters  $a_i$  and  $b_i$  were estimated from the

data using the stepwise ordinary least squares techniques. To determine whether ethical beliefs of Turkish and American MBA students differed with respect to the variables of interest, multivariate analysis of variance (MANOVA) and multiple discriminant analysis (MDA) were used.

### RESULTS

The results of the regression analyses are reported in Tables 2 for the American sample and in 3 for Turkish sample. The F-statistic of each regression and the coefficient of each independent variable were statistically significant. Independent variables that did not appear in the regressions for both groups as reported in Tables 2 and 3, were eliminated by the stepwise regression technique due to their poor contribution to the explanatory power of the regressions.

Table 4 summarizes the MANOVA and MDA results for the American and Turkish groups.

**TABLE 2:**  
**Multiple Regression: The Impact of Beliefs and Values, Individual Characteristics,**  
**and Opportunism on American Business Students' Propensity to Be Involved in Cheating.**

**Dependent Variable: RECEIVING AND ABETTING ACADEMIC DISHONESTY**

F Value 32.950

Significant F .000

R Square .350

Variable	Coefficient	Standardized Beta	T-test	Significance of T-test
Tolerance	.042	.231	3.925	.000
Positivism	-.023	-.117	-2.274	.023
Age	-.096	-.109	-2.088	.037
Opportunism	.279	.516	9.921	.000
(Constant)	.870		3.971	.000

**Dependent Variable: OBTAINING AN UNFAIR ADVANTAGE**

F Value 31.250

Significant F .000

R Square .277

Variable	Coefficient	Standardized Beta	T-test	Significance of T-test
Theism	-.023	-.125	-2.180	.030
Idealism	-.300	-.300	-5.300	.000
Opportunism	.300	.382	6.870	.000
(Constant)	2.275		8.890	.000

**Dependent Variable: FABRICATING INFORMATION**

F Value 40.296

Significant F .000

R Square .250

Variable	Coefficient	Standardized Beta	T-test	Significance of T-test
Tolerance	.045	.124	2.181	.030
Opportunism	.425	.471	8.460	.000
(Constant)	.923		3.881	.000

**Dependent Variable: IGNORING PREVALENT NORMS**

F Value 5.620

Significant F .000

R Square .100

**TABLE 3:**  
**Multiple Regression: The Impact of Beliefs and Values, Individual Characteristics,**  
**and Opportunism on Turkish Business Students' Propensity to Be Involved in Cheating.**

**Dependent Variable: RECEIVING AND ABETTING ACADEMIC DISHONESTY**

F Value 34.940

Significant F .000

R Square .350

Variable	Coefficient	Standardized Beta	T-test	Significance of T-test
Opportunism	.365	.530	9.200	.000
Detachment	.050	.140	2.400	.015
Idealism	-.310	-.240	-4.100	.000
(Constant)	1.620		4.400	.000

**Dependent Variable: OBTAINING AN UNFAIR ADVANTAGE**

F Value 19.200

Significant F .000

R Square .230

Variable	Coefficient	Standardized Beta	T-test	Significance of T-test
Opportunism	.270	.360	5.630	.000
Idealism	-.330	-.240	-3.710	.000
Age	-.196	-.187	-2.960	.003
(Constant)	2.910		6.940	.000

**Dependent Variable: FABRICATING INFORMATION**

F Value 8.189

Significant F .005

R Square .040

Variable	Coefficient	Standardized Beta	T-test	Significance of T-test
Tolerance	.086	.200	2.862	.005
(Constant)	2.146		6.340	.000

**Dependent Variable: IGNORING PREVALENT NORMS**

F Value 19.600

Significant F .000

R Square 0.230

The multivariate result was significant with high statistical power ( $1-\beta = 0.99$ ), allowing for the subsequent univariate interpretation of the results. Ten criterion variables (six values and beliefs and three ethical behaviors variables and opportunism) out of the thirteen variables differed significantly between the groups. Specific findings related to the hypotheses are discussed below.

### Hypothesis 1: Tolerance/Intolerance

Hypothesis  $H_{1a}$  is supported. Analyses reveal that tolerance to academic dishonesty, in both the American and Turkish groups, was positively related to academic dishonesty practices (three academic dishonesty behaviors for the American sample and one behavior for the Turkish sample). However, MANOVA and MDA did not show support for hypothesis  $H_{1b}$ .

**TABLE 4:**  
**Comparison of Beliefs and Values of American and Turkish MBA Students<sup>1</sup>**  
**MANOVA and Multiple Discriminant Analysis).**

			MEANS	
	CANONICAL LOADINGS	F-TEST P-VALUE	AMERICAN GROUP(1)	TURKISH GROUP (2)
1) <b>THEISTIC/NONTHEISTIC</b>	-.0938	.047	<b>13.14</b>	12.50
2) <b>EXPERIENCE/ACHIEVEMENT/</b>	-.1273	.007	<b>10.27</b>	9.75
3) <b>INVOLVEMENT/DETACHMENT</b>	.4439	.000	7.40	<b>9.35</b>
4) <b>TOLERANCE/INTOLERANCE</b>	.3896	.000	9.51	<b>11.03</b>
5) <b>BEHAVIORISM/HUMANISM</b>	.1081	.022	8.16	<b>8.64</b>
6) <b>NEGATIVISM/POSITIVISM</b>	-.0617	.191	11.46	11.15
7) <b>RELATIVISM<sup>2</sup></b>	.0804	.088	3.39	3.48
8) <b>IDEALISM<sup>2</sup></b>	.3112	.000	3.79	<b>4.16</b>
9) <b>RECEIVING AND ABETTING ACA- DEMIC DISHONESTY</b>	.3617	.000	1.50	1.90
10) <b>OBTAINING AN UNFAIR ADVAN- TAGE</b>	-.0223	.636	2.02	1.99
11) <b>FABRICATING INFORMATION</b>	.4069	.000	2.45	3.10
12) <b>IGNORING PREVALENT NORMS</b>	-.3129	.000	3.45	3.07
13) <b>OPPORTUNISM</b>	.3588	.000	2.56	<b>3.21</b>
MULTIVARIATE MANOVA		.0001		

<sup>1</sup> Questionable Student practices are measured on a five-point scale with "1" indicating "Strongly Believe That It Is Wrong" and "5" indicating "Strongly Believe That It Is *Not* Wrong."

<sup>2</sup> Relativism and Idealism are measured on a five point-scale with "1" indicating "Completely Disagree" and "5" indicating "Completely Agree."

Turkish business students were found to be more tolerant of academic dishonesty practices than were those in the U.S. This is in contrast with the earlier assertion that cultures high in uncertainty avoidance would be less tolerant to unethical practices. Culture alone may not be sufficient to explain ethical practices in certain countries, other factors such as government practices and public policy may have some influence. For example, while piracy of films, music and books is widespread in Turkey, Turkish courts have failed to penalize pirates for fear of alienating a large number of its people. U.S. industry estimated losses to piracy in Turkey in 2004 at \$50 million for motion pictures, \$15 million for records/music and \$23 million for books (The Office of the United States Trade Representative 2005).

### **Hypothesis 2: Achievement/Experience**

Hypothesis H<sub>2a</sub> was not supported by the regression analyses. Empirical evidence indicated no significant relationship between achievement/experience and academic dishonesty. However, hypothesis H<sub>2b</sub> was supported by the MANOVA and MDA results. These results revealed that Turkish business students tended to be less achievement-oriented and more experience-oriented than did those in the U.S. Apparently, the American culture may encourage more individual decision-making, competitiveness, assertiveness, efficiency, the accrual of wealth and belongings, and places a higher price on success than does the Turkish culture.

### **Hypothesis 3: Idealism/Relativism**

Multiple regression analyses partially supported hypothesis H<sub>3a</sub>. It revealed that idealism, in both the American and Turkish groups, was negatively related to two of the academic dishonesty practices (see Tables 2 and 3). However, relativism was associated with only a single academic dishonesty practice in the Turkish sample. A comparison of the Turkish and U.S. samples also provided partial support to hypothesis H<sub>3b</sub>. The results indicated that Turkish business students were more idealistic

than were those in the U.S. However, no difference was found between the groups with respect to relativism (hypothesis H<sub>3b</sub>). This supports the earlier contention that Turkish students may seem to primarily rely on deontological evaluations in determining the ethicality of a situation.

### **Hypothesis 4: Positivism/Negativism**

Multiple regression analyses partially supported H<sub>4a</sub>. The regression results revealed that the American group perceived a negative association between positivism and one of the academic dishonesty practices (see Table 2). However, no such association was found for the Turkish group. The comparison of the two countries, contrary to H<sub>4b</sub>, revealed no significant differences between American and Turkish business students

### **Hypothesis 5: Behaviorism/Humanism**

The regression analyses did not support hypothesis H<sub>5a</sub>. The results did not reveal any relationships between humanism/behaviorism and academic dishonesty. In addition, contrary to hypothesis H<sub>5b</sub>, the MANOVA and MDA results revealed that Turkish business students tended to be less humanist-oriented than did their U.S. counterparts.

### **Hypothesis 6: Detachment/Involvement**

According to the regression results, hypothesis H<sub>6a</sub> was partially supported. The results indicated that involvement/detachment predicted one academic dishonesty behavior in both groups. Detachment was negatively related to academic dishonesty in the American group but positively related in the Turkish sample. The MANOVA and MDA results revealed that, contrary to the hypothesis H<sub>6b</sub>, Turkish business students tended to be less involved (i.e., more detached) than did the U.S. students.

**Hypothesis 7: Theism/Nontheism**

Multiple regression analyses partially supported hypothesis  $H_{7a}$  revealing that the theism of the American group was negatively related to one academic dishonesty behavior (see Table 2). In support of hypothesis  $H_{7b}$ , MANOVA and MDA results showed that the American business students were more theistic than were those in Turkey. This finding supported the fact that 85 percent of Americans classified themselves as religious (Brandweek 2001).

**Hypothesis 8: Opportunism**

As hypothesized in  $H_{8a}$ , opportunism was found to be linked to all four factors of academic dishonesty in the American group, and to three factors in the Turkish group. Additionally, the coefficient of opportunism was more robust than any of the other studied variables. A comparison of the Turkish and American students supported  $H_{8b}$ . The mean of the opportunism score for Turkish business students was significantly higher than was that of the U.S. students. This was in line with the expectation that high power distance cultures tend to create environments that are more opportunistic than their individualistic counterparts.

**Hypothesis 9: Age**

According to the multiple regression analyses, hypothesis  $H_9$  was supported in both groups, each in only one of the four dimensions of academic dishonesty. The U.S. group found that age explained "receiving and abetting academic dishonesty" dimension (see Table 2), and the Turkish group found age explained "obtaining an unfair advantage" dimension (see Table 3). Individuals who were older tended to be more ethical than were those who were younger. This result is consistent with Kohlberg's cognitive moral development theory which states that people's beliefs and judgments may evolve as they move through stages of moral development due to their various personal experiences (Rawwas and Singhapakdi 1998).

**Hypothesis 10: Gender**

According to the multiple regression analyses, hypothesis  $H_{10}$  was supported. The Turkish group found that gender explained one academic dishonesty practice "ignoring prevalent norms" (see Table 3). Individuals who were females tended to be more ethical than were those who were males. Perhaps the techniques parents use to rear and nurture their children may influence their children's ethical behavior. While girls are usually taught to be modest, caring and cooperative, and to be concerned with their quality of life, boys are taught to be aggressive, competitive and tough, and to be focused on material success (Rawwas et al. 2006).

**Summary of Hypotheses**

Apparently, opportunism and tolerance to academic dishonesty had the greatest impact upon the attitudes of the U.S. students toward all four forms of academic dishonesty. Students who scored high on tolerance to academic dishonesty and opportunism were most likely to be engaged in academic dishonesty. On the other hand, theistic and idealistic students tended to find some forms of academic dishonesty less acceptable.

The results of the analyses reveal that the characteristics of the American business students who are most likely to find any form of academic dishonesty acceptable include younger students with high scores on tolerance to academic dishonesty and opportunism, and low scores on idealism and theism. Conversely, the characteristics of the American students most likely to find any form of academic dishonesty unacceptable include older students with low scores on tolerance to academic dishonesty and opportunism, and high scores on idealism and theism.

For Turkish students, opportunism and idealism have considerable influence upon their attitudes toward the four forms of academic dishonesty. In addition, among Turkish business students, positivism tends to be negatively associated



with academic dishonesty. The characteristics of Turkish business students most likely to find any form of academic dishonesty acceptable include younger and male students with high scores on opportunism, and low scores on idealism. Conversely, the characteristics of Turkish business students most likely to find any form of academic dishonesty unacceptable include older and female students with high scores on idealism, and low scores on opportunism.

The relationship between unethical behaviors and opportunism was supported by the regression analyses for both groups. When business students were presented with the opportunity to cheat, they tended to take advantage of it. This result suggests that the reduction of opportunities to behave unethically would tend to reduce students' cheating. Moreover, the coefficients of opportunism for both groups are, in almost all cases, higher than the coefficients for any other variable. This makes opportunism the strongest determinant of students' attitudes toward academic dishonesty.

## CONCLUSIONS AND IMPLICATIONS

The present study observed the impact of personal beliefs and values of U.S. and Turkish business students on academic dishonesty behaviors. It focused on replicating previous empirical studies regarding the relationship between personal beliefs, values and opportunism of Turkish and American business MBA students with respect to various forms of academic dishonesty.

The first aim was to identify the factors impacting academic dishonesty in both contexts. Common to both groups were opportunism, idealism, tolerance to academic dishonesty, and age. The results indicate that opportunism, for both groups, was the factor that most contributed to academic dishonesty. This means that for both groups, opportunism, a contextual factor, was best able to explain behaviors of academic dishonesty. This reinforces the findings of earlier studies in the

notion that opportunism seems to explain cheating more than any other variable. The implication here is that an effective approach toward limiting such unethical behaviors rests with a contextual solution such as limiting opportunities for cheating and other academic dishonesty behaviors. The debate in the literature about the impact of ethics training on ethical behavior is not without merits, but a fast-forward approach towards restricting dishonest actions lies with making students aware of the reduced opportunities through proper supervision and control of student exams and assignments. While modern technology (the internet for example) has increased the *opportunity* for academic misconduct, software uncovering internet student plagiarism adopted by academic institutions and publicized to students, makes them aware of the limited opportunities to plagiarize. Actions such as this should have a positive impact towards higher ethical compliance in student assignments and exams.

The second strong factor that seems to contribute to academic dishonesty behaviors is related to a tolerance for academic dishonesty. This is again similar to the findings of past studies reviewed earlier. Environments that send mixed messages to students indicating that academic misconduct is wrong, but on the other hand, are permissive in implementing disciplinary actions, will be plagued by an increase in such lamentable actions on the part of students. Overall, this study showed that Turkish students were more tolerant of academic dishonesty than were their American counterparts. This means that Turkish academic environments may suffer from relatively higher rates of dishonest student behaviors.

It is important to note that we found full or partial support for eleven of the eighteen hypotheses. Seven hypotheses were fully rejected. The pattern of hypotheses acceptance and rejection is interesting. Out of the eight (a) hypotheses, six were fully or partially supported. These hypotheses did not deal with cross-cultural differences, but rather with the

relationship between different variables analyzed in this study for both groups. The second set of hypotheses dealt with comparisons between the two samples and no support was found for five of the eight purported relationships. Differences were found for achievement-orientation, theism, and opportunism. This could lead us to the conclusion while they may be some differences among the two groups; these differences are not as striking as initially supposed. The first difference relates to achievement orientation where it was expected and found that American students are more achievement-oriented than Turkish students. This could be understood in light of the historic experiences of both nations. The high individualism of the Americans and the historical experiences that led to the development of the Protestant work ethic, which has not happened in the Turkish case, could well explain the difference. The second main difference relates to difference of theism levels between Americans and Turkish. As explained earlier, most Americans categorize themselves as religious, but the Turkish do not. The final difference relating to opportunism, can be linked, first to the existence of a high-power distance and collective culture in Turkey, and second to the relative relaxed measures -compared to the US- against academic dishonesty, that could lead to more opportunistic behaviors.

A worthwhile investigation, not addressed in this study, would be to assess the cross-cultural difference in tolerance among administrators and faculty towards academic dishonesty behaviors. From the personal experience of the authors, faculty at some universities who come from different cultures often display varying levels of tolerance to such behaviors when dealing with cases of academic misconduct. Whether these differences are significant and how they impact different university settings deserves a separate investigation.

Idealism also seems to be a factor that is negatively associated with academic dishonesty in both groups. Turkish students were higher on the idealism scale meaning that they are

more likely to search for the innate rightness of their actions. Educators and administrators can benefit from this fact by emphasizing the role of ideals in fighting dishonest behaviors. In collectivist societies, however, one should be careful as to which ideals should be emphasized. While many cherished ideals and values correlate negatively with dishonesty, other ideals may have a different impact. For example, the importance of group harmony or "helping others," a cherished ideal in collective societies, may lead some individuals in some cultures to be more tolerant to, if not more insistent on, providing information and communicating answers to other students on a test. In fact, in some universities in collective societies, based on the experiences of the authors, cheating is never called cheating, but rather is called "social cooperation." It is important to select those ideals and values that the Turkish people cherish and appreciate, and which correspond to the importance of ethical behavior irrespective of group pressures, and use these to convey the notion that academic dishonesty is inherently wrong. This would contribute towards lessening incidents of fraudulent academic behaviors.

Overall, however, most personal beliefs and values did not contribute directly to academic dishonesty behaviors. Opportunism, as explained earlier, did a better job in explaining such behaviors. It is interesting to note that theism, for example, was negatively related to one academic dishonesty behavior in the American sample. This indicates that mere instruction on ethical behavior based on religious teaching may have a small impact on limiting its occurrence. Rather, this should be supplemented by hands-on training and awareness about the negative impacts of academic misconduct.

Comparing the attitudes of the American and the Turkish sample vis-à-vis the four dishonesty behaviors we find that both groups were very similar in terms of seeking to obtain an unfair advantage. The Turkish group, however, scored significantly higher on two behaviors: (1) receiving and abetting academic dishonesty

and (2) fabricating information. The American group scored higher on ignoring prevalent norms. In addition, the Turkish respondents were less theistic, more experience-oriented, more detached, more tolerant to academic dishonesty, more idealistic and more opportunistic. These results indicate that, overall, Turkish students demonstrated lower levels of ethical sensitivity compared to U.S. students.

In conclusion, schools in both the U.S. and Turkey should work on lessening the opportunities of students being involved in dishonest behaviors. In addition, while both countries suffer from student fraud, it seems that the Turkish academic environments are challenged by an added tolerance to such behaviors augmented by the greater collective nature of their society. Finally, educators who are interested in creating healthier academic environments should implement a two-way approach: emphasize discipline and principles of reward and punishment, and also address the need to integrate the selected cherished positive cultural ideals that work against dishonest behaviors in all contexts.

Two limitations were encountered in this study. The first was that respondents might not truthfully answer questions related to their business practices. Another limitation was that MBA students might not represent the whole population in Turkey and the U.S. Future researchers are not only encouraged to study unethical behaviors of business managers, but also to interview them to determine whether their answers about their behaviors in the marketplace were true or not. In addition, researchers are encouraged to use a national sample in Turkey so their results will be more generalized.

## REFERENCES

- Ahmed, M.M., K.Y. Chung and J.W. Eichenseher (2003), „Business Students' Perception of Ethics and Moral Judgment: A Cross-Cultural Study.“ *Journal of Business Ethics*, Vol. 43, ½, pp. 89-102.
- Ajzen, I. (1991), “The Theory of Planned Behavior.” *Organizational Behavior and Human Decision Processes*, Vol. 50, pp. 179-211.
- Aktouf, O. (1992), “Management and Theories of Organizations in the 1990s: Toward a Critical Radical Humanism?” *The Academy of Management Review*, Vol. 17 (3), pp. 407-431.
- Al-Khatib, J.A. A.D. Stanton and M.Y.A. Rawwas (2005), “Ethical Segmentation of Consumers in Developing Countries: A Comparative Analysis”, *International Marketing Review*, Vol. 22 (2), pp. 225-246.
- Anitsal, I., M.M. Anitsal and R. Elmore (2008), “Academic Dishonesty and Intention to Cheat: A Model on ‘Active’ Versus ‘Passive’ Academic Dishonesty as Perceived by Business Students”, *Proceedings of the Academy of Educational Leadership*, Vol. 13 (1), p. 3.
- Anonymous (2008), “Business in Turkey.” (March 6th), *The Economist*, Vol. 386(8570), p. 86
- Arslan. M. (2001), “A Cross-Cultural Comparison of Achievement and Power Orientation as Leadership Dimensions in Three European Countries: Britain, Ireland and Turkey”, *Business Ethics: A European Review*, Vol. 10 (4), pp. 340-345.
- Awasthi, V.N. (2008), “Managerial Decision-Making on Moral Issues and the Effects of Teaching Ethics”, *Journal of Business Ethics*, Vol. 78(1-2), pp. 207-223.
- Axinn, C.N., M.E. Blair, A. Heorhiadi and S.V. Thach (2004), “Comparing Ethical Ideologies Across Cultures”, *Journal of Business Ethics*, Vol. 54, pp.103–119.
- Bernardi, R.A. and S.T. Guptill “Social Desirability Response Bias, Gender, and Factors Influencing Organizational Commitment: an International Study,” *Journal of Business Ethics*, Vol. 81 (4), pp. 797-809.
- Blankenship, K.L. and B.L. Whitley Jr. (2000), “Relation of General Deviance to Academic Dishonesty”, *Ethics and Behavior*, Vol. 10(1), pp. 1–12.

- Borkowski, S.C. and Y.S. Ugras (1998), "Business Students Ethics: A Meta-Analysis," *Journal of Business Ethics*, Vol. 17 (11), pp. 1117-1127.
- Brammer, S., G. Williams and J. Zinkin (2007), "Religion and Attitudes to Corporate Social Responsibility in a Large Cross-Country Sample", *Journal of Business Ethics*, Vol. 71 (3), pp. 229-243.
- Brandweek* (2001). "Psalms Pilots," June, Vol. 18, 42 (25), p. 20.
- Brislin, Richard W. (1986), "The Wording and Translation of Research Instruments," In *Field Methods in Cross-Cultural Research*, Eds. Walter J. Lonner and John W. Berry, Sage Publications, pp. 137-164.
- Brown, B.S. and M. McInerney (2001), "The Academic Ethics of Business Management Students: A Lesson for Professors," *The International Journal of Business Disciplines*, Vol. 11 (3), pp. 79-88.
- Burton, Brian K. and Janet Near (1995), "Estimating the Incidence of Wrong Doing and Whistle-Blowing: Results of a Study Using Randomized Response Technique," *Journal of Business Ethics*, Vol. (14), pp. 17-30.
- Bureau of Economic Analysis, U.S. Department of Commerce, [www.bea.gov/bea/dn/home/gdp.htm](http://www.bea.gov/bea/dn/home/gdp.htm) (accessed Jan. 28, 2009).
- Calkins, M. (2000), "Recovering Religion's Prophetic Voice for Business Ethics," *Journal of Business Ethics*, Vol. 23 (4), pp. 339-352.
- Cavusgil, S.T., E. Civi, H.H. Tutek and T. Dalgic (2003), "Doing Business in Turkey", *Thunderbird International Business Review*, Vol. 45 (4), pp. 467-479.
- Changa, E.C., L.J. Sannab and K.M. Yange (2003), "Optimism, Pessimism, Affectivity, and Psychological Adjustment in US and Korea: A Test of a Mediation Model", *Personality and Individual Differences*, Vol. 34, pp. 1195-1208.
- Chapman, K.J. and R.A. Lupton (2004), "Academic Dishonesty in a Global Educational Market: a Comparison of Hong Kong and American Business Students", *The International Journal of Educational Management*, Vol. 18 (6/7), pp. 425-435.
- Cianci, A.M. and S. Kaplan (2008), "The Effects of Management's Preannouncement Strategies on Investors' Judgments of the Trustworthiness of Management", *Journal of Business Ethics*, Vol. 79(4), pp. 423-444.
- Cornwell, B., C.C. Cui, V. Mitchell, B. Schlegelmilch, A. Dzulkiflee, and J. Chan (2005), "A Cross-Cultural Study of the Role of Religion in Consumers' Ethical Positions", *International Marketing Review*, Vol. 22 (5), pp. 531- 546.
- Curtis, M.B. (2006), "Are Audit-Related Ethical Decisions Dependent Upon Mood?" *Journal of Business Ethics*, Vol. 68, pp. 191-209.
- De Lambert, K., N. Ellen and L. Taylor (2003), « Cheating - What is it and Why Do it: A Study in New Zealand Tertiary Institutions of the Perceptions and Justifications for Academic Dishonesty, » *Journal of American Academy of Business*, Vol. 3 (1/2), pp. 98-101.
- Doney, P.M., J.P. Cannon and M.R. Mullen (1998), "Understanding the Influence of a National Culture on the Development of Trust." *The Academy of Management Review*, Vol. 23(3), pp. 601-620.
- Donoho, C. L., J. Hershe, and M.J. Swenson (2003), "A Cross-Cultural Study of the Effects of Achievement and Relationship Values on Student Evaluations of Personal Selling Ethical Dilemmas," *Marketing Education Review*, Vol. 13(3), pp. 53-63.
- Earley, P.C., (1989), "Social Loafing and Collectivism: a Comparison of the United States and the People's Republic of China.", *Administrative Science Quarterly*, Vol. 34, pp. 565-581.
- Eastman, K.L., J.K. Eastman and R. Iyer (2008), "Academic Dishonesty: an Exploratory Study Examining Whether Insurance Students are Different from other College Students", *Risk Management and Insurance Review*, Vol. 11(1), pp. 209-226.
- Eisenberger, R. and D.M. Shank (1985), "Personal Work Ethic and Effort Training Affect Cheating", *Journal of Personality and Social Psychology*, Vol. 49(2), pp. 520-528.

- Ekin, M., G. Serap and S.H. Tezolmez (1999), "Business Ethics in Turkey: An Empirical Investigation with Special Emphasis on Gender," *Journal of Business Ethics* Vol. 18(1), pp. 17-35.
- Elçi, Meral (2007), "Effect of Manifest Needs, Religiosity and Selected Demographics on Hard Working: An Empirical Investigation in Turkey", *Journal of International Business Research*. Vol. 6, Iss. 2; p. 97-122.
- Epstein, E.M. (2002), "Religion and Business -- the Critical Role of Religious Traditions in Management Education", *Journal of Business Ethics*, Vol. 38 (1/2), pp. 91-96.
- Farling, M. L. and B.E. Winston (2001), "A Replication Study: Attitudes toward Ethics: a View of the College Student", *Teaching Business Ethics*, Vol. 5 (3), pp. 251-266.
- Fisher, J., G. Woodbine and S. Fullerton (2003), "A Cross-Cultural Assessment of Attitudes Regarding Perceived Breaches of Ethical Conduct by both Parties in the Business-Consumer Dyad," *Journal of Consumer Behaviour*, Vol. 2 (4), pp. 333-353.
- Foltz, G. Jana and N. Miller (1994), "Beliefs and Values Questionnaire (BVQ)" In *Business Ethics: Ethical Decision Making and Cases*, Eds. O. C. Ferrell and John Fraedrich, Houghton Mifflin Company: Boston, pp. 326-328.
- Forsyth, D. R. (1980), "A Taxonomy of Ethical Ideologies," *Journal of Personality and Social Psychology*, Vol. 46, pp. 1365-1375.
- Forsyth, D. R. (1992), "Judging the Morality of Business Practices: the Influence of Personal Moral Philosophies," *Journal of Business Ethics*, Vol.11 (5/6), pp. 461-470.
- Fort, T.L. (1997), "Religion and Business Ethics: the Lessons from Political Morality", *Journal of Business Ethics*, Vol. 16 (3), pp. 263-273.
- Garten, J.E. (2005). "B-Schools: Only a C+ in Ethics," *Business Week*. New York, Vol. 3949, p. 110.
- Gilligan, Carol (1987), "Moral Orientation and Moral Development: In Women and Moral Theory, ed. Eva Feder Kittay and Diana T. Meyers. Totowa, N.J.: Rowman and Littlefield.
- Giorgi, L. and C. Marsh (1990), "The Protestant Work Ethic is a Cultural Phenomenon", *European Journal of Social Psychology*, Vol. 20(6), pp. 499-517
- Glover, S.H., M.A. Bumpus, J.E. Logan and J.R. Ciesla (1997), "Re-Examining the Influence of Individual Values on Ethical Decision Making," *Journal of Business Ethics*, Vol. 16 (12/13), pp. 1319-1329.
- Grant, Jr., E. W. and L.S. Broom (1988), "Attitudes toward Ethics: a View of the College Student", *Journal of Business Ethics*, Vol. 7 (8), pp. 617-619.
- Grassian, V. (1981), *Moral Reasoning: ethical theory and some contemporary moral problems*, Prentice Hall, Englewood Cliffs, New Jersey.
- Halici, A. and L. Kucukaslan (2005), "Turkish Companies' Ethical Statements: Content Analysis with Comparisons," *Management Research News*, Vol. 28 (1), pp. 45-62.
- Haines, V., G. Diekhoff, D. LaBeff and R. Clark (1986), "College Cheating: Immaturity, Lack of Commitment, and a Neutralizing Attitude," *Research in Higher Education*, Vol. 25, pp. 342-354
- Harding, T.S., D.D. Carpenter, C.J. Finelli and H. Passow (2004), "Does Academic Dishonesty Relate to Unethical Behavior in Professional Practice? An Exploratory Study", *Science and Engineering Ethics*, Vol. 10 Issue 2, pp. 311-324.
- Hassan, R. (2006), "Expressions of Religiosity and Blasphemy in Modern Societies": In *Negotiating the Sacred: Blasphemy and Sacrilege in a Multicultural Society*. Elizabeth Burns Coleman and Kevin White (Editors). Australia: ANU Press.
- Henle, C.A., R.A. Giacalone and C.L. Jurkiewicz (2005), "The Role of Ethical Ideology in Workplace Deviance", *Journal of Business Ethics*, Vol. 56, pp. 219-230.
- Hisrich, R.D., B. Bucar and S. Oztark (2003), "A Cross-Cultural Comparison of Business Ethics: Cases of Russia, Slovenia, Turkey, and United States", *Cross-Cultural Management*, Vol. 10 (1), pp. 3-28.
- Hofstede, Geert (1984), *Cultural consequences: international differences in work-related values*, Beverly Hills, CA.: Sage Publications.

- Hofstede, Geert (1997), *Cultures and Organizations: Software of the Mind*, Cambridge, England: McGraw-Hill.
- Hunt, S. D. and S. Vitell (1986), "A General Theory of Marketing Ethics," *Journal of Macromarketing*, Vol. 6(1), pp. 5-16.
- Hunt, S. D. and S. Vitell (1993), "A General Theory of Marketing Ethics: a Retrospective and Revision," *Ethics in Marketing*, N.C. Smith and J.A. Quelch, eds., Homewood, IL: Irwin Inc., pp. 776-784.
- Iyer, R. and J.K. Eastman (2006), "Academic Dishonesty: Are Business Students Different from other College Students?" *Journal of Education for Business*, Vol. 82 (2), pp. 101-110.
- Jendrek, M.P., (1989), "Faculty Reactions to Academic Dishonesty", *Journal of College Student Development*, Vol. 30(5), pp. 401-406.
- John, G. (1984), "An Empirical Investigation of Some Antecedents of Opportunism in a Marketing Channel," *Journal of Marketing Research*, Vol. 21, pp. 278-289.
- Kale, S. H. (1991), "Culture-Specific Marketing Communications: an Analytical Approach," *International Marketing Review*, Vol. 8 (2), pp. 18-30.
- Kale, S. H., and J.W. Barnes (1992), "Understanding the Domain of Cross-National Buyer-Seller Interactions", *Journal of International Business Studies*, Vol. 23 (1), pp. 101-132.
- Kale, S.H. and R.P. McIntyre (1991), "Distribution Channel Relationships in Diverse Cultures", *International Marketing Review*, Vol. 8(3), pp. 31-45.
- Kaplan, S.E., J.C. McElroy, S.P. Ravenscroft and C.B. Shrader (2007), "Moral Judgment and Causal Attributions: Consequences of Engaging in Earnings Management", *Journal of Business Ethics*, Vol. 74(2), pp. 149-164.
- Kayes, D.C. (2006), "Organizational Corruption as Theodicy", *Journal of Business Ethics*, Vol. 67 (1), pp. 51-62.
- Kennedy, E. J. and L. Lawton (1998), "Religiousness and Business Ethics", *Journal of Business Ethics*, Vol. 17 (2), pp. 163-175.
- Kidder, R. M. (1992), "Ethics, a Matter of Survival", *The Futurist*, Vol. 26 (2), p. 10.
- Kidwell, L.A., K. Wozniak, and J.P. Laurel (2003), "Student Reports and Faculty Perceptions of Academic Dishonesty," *Teaching Business Ethics*, Vol. 7 (3), pp. 205-213.
- Kitayama, S., H.R. Markus, H. Matsumoto and V. Norasakkunkit (1997), "Individual and Collective Processes in the Construction of the Self: Self-Enhancement in the United States and Self-Criticism in Japan," *Journal of Personality and Social Psychology*, Vol. 72, pp. 1245-1267.
- Kohlberg, L. (1976), "Moral Stages and Moralization," in LICKONA, T. (Ed) *Moral Development and Behavior*, New York: Holt, Rinehart and Winston.
- Kurtz, Paul. (1997), *The Courage To Become: The Virtues of Humanism*, Praeger.
- Lane, M. S. and D. Schaupp (1989), "Ethics in Education: a Comparative Study," *Journal of Business Ethics*, Vol. 8 (12), pp. 943-949.
- Love, P. G. and J. Simmons (1998), "Factors Influencing Cheating and Plagiarism among Graduate Students in a College of Education", *College Student Journal*, Vol. 32 (4), pp. 539-550.
- Ludlum, M. and S. Mascaloinov (2004), "Right and Wrong and Cultural Diversity: Replication of the 2002 NAS/Zogby Poll on Business Ethics", *Journal of Education for Business*, Vol. 79 (5), pp. 294-298.
- Lupton, R.A., K.J. Chapman and J.E. Weiss (2000), "A Cross-National Exploration of Business Students' Attitudes, Perceptions, and Tendencies toward Academic Dishonesty", *Journal of Education for Business*, Vol. 75 (4), pp. 231-235.
- Malinowski, C.I. and C.P. Smith (1985), "Moral Reasoning and Moral Conduct: an Investigation Prompted by Kohlberg's Theory", *Journal of Personality and Social Psychology*, Vol. 49, pp. 1016-1027.
- Marta, J. K. M., A. Attia and A. Singhapakdi (2005), "Comparing Thai and US Businesspeople: Perceived Intensity of Unethical Marketing Practices, Corporate Ethical Values, and Perceived Importance of Ethics", *International Marketing Review*, Vol. 22 (5), pp. 562-575.

- Marta, J. K. M., A. Attia, A. Singhapakdi and N. Atteya (2003), "A Comparison of Ethical Perceptions and Moral Philosophies of American and Egyptian Business Students", *Teaching Business Ethics*, Vol. 7 (1), pp. 1-20.
- McCabe, D. (2005), [http://www.academicintegrity.org/cai\\_research.asp](http://www.academicintegrity.org/cai_research.asp), *Center for Academic Integrity*, Accessed September 29, 2005.
- McCabe, D.L. and L.K. Trevino (1997), "Individual and Contextual Influences on Academic Dishonesty: a Multi-campus Investigation", *Research in Higher Education*, Vol. 38, pp. 379-396.
- McCabe, D.L., K.D. Butterfield and L.K. Trevino (2006), "Academic Dishonesty in Graduate Business Programs: Prevalence, Causes, and Proposed Action", *Academy of Management Learning and Education*, Vol. 5(3), pp. 294-305.
- McCabe, D.L., L.K. Trevino and K.D. Butterfield (2001), "Cheating in Academic Institutions: A Decade of Research," *Ethics and Behavior*, Vol. 11 (3), pp. 219-232.
- McGee, Robert W. (1992), *Business Ethics and Common Sense*, Quorum Books, Westport, Connecticut.
- Mele, D. (2003), "The Challenge of Humanistic Management," *Journal of Business Ethics*, Vol. 44 (1), pp. 77-88.
- Menguc, B. (1998), "Organizational Consequences, Marketing Ethics and Salesforce Supervision: Further Empirical Evidence", *Journal of Business Ethics*, Vol. 17 (4), pp. 333-352.
- Meyer, W.J. (1997), "Ethics, Theism and Metaphysics: an Analysis of the Theo-centric Ethics of James Gustafson," *International Journal for Philosophy of Religion*, Vol. 41 (3), pp. 149-178.
- Miceli, M. P., J. P. Near and C. R. Schwenk (1991), "Who Blows the Whistle and Why?" *Industrial and Labor Relations Review*, Vol. 45(1), pp. 113-130.
- Miyazaki, A.D. and K.A. Taylor (2008), "Researcher Interaction Biases and Business Ethics Research: Respondent Reactions to Researcher Characteristics," *Journal of Business Ethics*, Vol. 81 (4), pp. 779-795.
- MONTHLY REVIEW (2006, June), *Emerging Markets Watch*, pp. 1-2.
- Murdock, T.B. and E.M. Anderman (2006), "Motivational Perspectives on Student Cheating: Toward an Integrated Model of Academic Dishonesty," *Educational Psychologist*, Vol. 41, pp. 129-145.
- Newstead, S. E., A. Franklyn-Stokes and P. Armstead (1996), "Individual Differences in Student Cheating", *Journal of Educational Psychology*, Vol. 87 (2), pp. 229-241.
- Nonis, S. and C.O. Swift (2001), "An Examination of the Relationship between Academic Dishonesty and Workplace Dishonesty: A Multi-campus Investigation," *Journal of Education for Business*, Vol. 77(2), pp. 69-77.
- Nyaw, M.K. and I. Ng (1994), "A Comparative Analysis of Ethical Beliefs: A Four Country Study", *Journal of Business Ethics*, Vol. 13 (7), pp. 543- 555.
- Office of the United States Trade Representative*, (2005), Turkey, <http://www.ustr.gov>. accessed October 24, 2005.
- Pahre, R. and B. Uçaray-Mangitli (2009), "The Myths of Turkish Influence in the European Union. *Journal of Common Market Studies*", Vol. 47(2), pp. 357-384.
- Park, H. (2005), "The Role of Idealism and Relativism as Dispositional Characteristics in the Socially Responsible Decision-making Process", *Journal of Business Ethics*, Vol. 56 (1), pp. 81-98
- Pazarci, M. (1996), "Mission Report: Visit to the National Technological University (NTU) - CO/USA." <http://www2.itu.edu.tr/~pazarci/ituuzem/Ntutrip.htm>. Accessed January 10, 2008.
- Perry, A. R., K.M. Kane, K.J. Bernesser and P.T. Spicker (1990), "Type A Behavior, Competitive Achievement-Striving, and Cheating among College Students," *Psychological Reports*, Vol. 66 (2), pp. 459-465.
- Peterson, R.A., R.F. Beltramini and G. Kozmetsky (1991), "Concerns of College Students Regarding Business Ethics: a Replication", *Journal of Business Ethics*, Vol. 10 (10), pp. 733-738.

- Pillsbury, C. (2004), "Reflections on Academic Misconduct: An Investigating Officer's Experiences and Ethics Supplements", *Journal of American Academy of Business*, Vol. 5, 1/2, pp. 446-454
- Pino, N.W. and W.L. Smith (2003), "College Students and Academic Dishonesty", *College Student Journal*, Vol. 37 (4), pp. 490-500.
- Porter, Jane (2008), "Using Ex-Cons to Scare MBAs Straight," *BusinessWeek*, May 5, p. 58.
- Randall, D.M. and M.F. Fernandes (1991), "The Social Desirability Response Bias in Ethics Research," *Journal of Business Ethics*, Vol. 10 (11), pp. 805-817.
- Rawwas, M.Y.A., Z. Swaidan and J. Al-Khatib (2006), "Does Religion Matter? A Comparison Study of the Ethical Beliefs of Marketing Students of Religious and Secular Universities in Japan", *Journal of Business Ethics*, Vol. 65 (1), pp. 69-85.
- Rawwas, M.Y.A. (1996), "Consumer Ethics: an Empirical Investigation of the Ethical Beliefs of Austrian Consumers," *Journal of Business Ethics*, Vol. 15, pp. 1009-1019.
- Rawwas, M.Y.A. (2001), "Culture, Personality and Morality: a Typology of International Consumers' Ethical Beliefs", *International Marketing Review*, Vol. 18 (2), pp. 188-209.
- Rawwas, M.Y.A., J. Al-Khatib and S. Vitell (2004), "Academic Dishonesty: a Cross-cultural Comparison of U.S. and Chinese Marketing Students", *Journal of Marketing Education*, Vol. 26 (1), pp. 89-100.
- Rawwas, M.Y.A. and H. Isakson (2000), "Ethics of Tomorrow's Business Managers: the Influence of Personal Beliefs and Values, Individual Characteristics, and the Opportunity to Cheat," *Journal of Education for Business*, Vol. 75 (6), pp. 321-330.
- Rawwas, M.Y.A. and A. Singhapakdi (1998), "Do Consumers' Ethical Beliefs vary with Age? A Substantiation of Kohlberg's Typology in Marketing", *Journal of Marketing Theory and Practice*, Vol. 6 (2), pp. 26-38.
- Rawwas, M.Y.A., Z. Swaidan and M. Oyman (2005), "Consumer Ethics: a Cross-cultural Study of the Ethical Beliefs of Turkish and American Consumers", *Journal of Business Ethics*, Vol. 57 (2), pp. 183-195.
- Rawwas, M.Y.A., Z. Swaidan and H. Isakson (2007), "A Comparative Study of Ethical Beliefs of MBA Students in the U.S. and Those in Hong Kong," *Journal of Education for Business*, Vol. 82 (3), pp. 146-158.
- Roberts, D. and W. Rabinowitz, (1992), "An Investigation of Student Perceptions of Cheating in Academic Situations", *The Review of Higher Education*, Vol. (15), pp. 179-190.
- Roig, M. and C.L. Ballew (1994), "Attitudes toward Cheating of Self and others by College Students and Professors", *The Psychological Record*, Vol. 44 (1), pp. 3-10.
- Roig, M. and Neaman (1994), "Alienation, Learning or Grade Orientation, and Achievement as Correlates of Attitudes toward Cheating", *Perceptual and Motor Skills*, Vol. (78), pp. 1096-1098
- Sakalaki1, M., C. Richardson and Y. Thepaut (2007), "Machiavellianism and Economic Opportunism", *Journal of Applied Social Psychology*, Vol. 37 (6), pp. 1181-1190.
- Sanbonmatsu, J. (2007), "The Subject of Freedom at the end of History: Socialism beyond Humanism," *American Journal of Economics and Sociology*, Vol. 66 (1), pp. 217-235.
- Schuster, C. and M. Copeland (1996), *Global Business: Planning for Sales and Negotiations*, Fort Worth, TX: Dryden.
- Selsky, J.W. (2000), "Even we are Sheep, Cultural Displacement in a Turkish Classroom", *Journal of Management Inquiry*, Vol. 9 (4), pp. 362-373.
- Semerici, Ç. (2006), "The Opinions of Medicine Faculty Students Regarding Cheating in Relation to Kohlberg's Moral Development Concept", *Social Behavior and Personality: An International Journal*, Vol. 34 (1), pp. 41-49.
- Serwinek, P. J. (1992), "Demographic and Related Differences in Ethical Views among Small Businesses," *Journal of Business Ethics*, Vol. 11 (7), pp. 555-570.



- Shainess, N. (1993), "Ruminations on Chivalry", *Contemporary Psychoanalysis*, Vol. 29 (1), pp. 144-152.
- Sims, R. L. and A. E. Gegez, (2004), "Attitudes Towards Business Ethics: a Five Nation Comparative Study," *Journal of Business Ethic*, Vol. 50 (3), pp. 253-265.
- Sims, R. L., (1993), "The Relationship between Academic Dishonesty and Unethical Business Practices," *Journal of Education for Business*, Vol. 68 (4), pp. 207-211.
- Singh, J. (1990), "Managerial Culture and Work-Related Values in India," *Organization Studies*, Vol. 11, pp. 75-101.
- Singhapakdi, A. and S.J. Vitell (1990), "Marketing Ethics: Factors Influencing Perceptions of Ethical Problems and Alternatives", *Journal of Macromarketing*, Vol. 12, pp. 4-18.
- Singhapakdi, A. and S. Vitell (1993), "Person-al and Professio-nal Values Underlying the Ethical Judgments of Marketers," *Journal of Business Ethics*, Vol. 12, pp. 525-533.
- Singhapakdi, A., J.K. Marta, K.C. Rallapalli and C.P. Rao (2000), "Toward an Understanding of Religiousness and Marketing Ethics: an Empirical Study," *Journal of Business Ethics*, Vol. 27 (4), pp. 305-319.
- Singhapakdi, A., J.K. Marta, C.P. Rao and M. Cicic (2001), "Is Cross-Cultural Similarity an Indicator of Similar Marketing Ethics?" *Journal of Business Ethics*, Vol. 32 (1), pp. 55-68.
- Smith, C.P, E.R. Ryan and D.R. Diggins (1972), "Moral Decision Making: Cheating on Examinations", *Journal of Personality*, Vol. 40 (4), pp. 640-660.
- Steidlmeier, P. (1999), "Gift Giving, Bribery and Corruption: Ethical Management of Business Relationships in China," *Journal of Business Ethics*, Vol. 20 (2), pp. 121-132.
- Stearns, J. M. and S. Born. (1998), "A Comparison of the Ethics of Convicted Felons and Graduate Business Students: Implications for Business Practice and Business Ethics Education", *Teaching Business Ethics* Vol. 2 (1), pp. 175-195.
- Teitelbaum, M.S. and P.L. Martin (2003), "Is Turkey Ready for Europe?" *Foreign Affairs*, Vol. 82, 3, p. 97.
- Transparency International (2006), [http://www.transparency.org/policy\\_research/surveys\\_indices/cpi/2006](http://www.transparency.org/policy_research/surveys_indices/cpi/2006), obtained on January 14, 2007.
- Ueno, S. and U. Sekaran (1992), "The Influence of Culture on Budget Control Practices in the USA and Japan: An Empirical Study," *Journal of International Business Studies*, Vol. 23, pp. 659-674.
- Vitell, S. J. and J. Paolillo (2004), "A Cross-Cultural Study of the Antecedents of the Perceived Role of Ethics and Social Responsibility," *Business Ethics: A European Review*. Vol. 13 (2-3), pp. 185-198.
- Vitell, S. J and James Muncy (1992), "Consumer Ethics: An Empirical Investigation of Factors Influencing Ethical Judgments", *Journal of Business Ethics*, Vol. 11 (8), pp. 585-597.
- Ward, D. A. (1986), "Self-Esteem and Dishonest Behavior Revisited," *Journal of Social Psychology*, Vol. 126(6), pp. 709-713.
- Ward, D. A. and W.L. Beck (1990), "Gender and Dishonesty", *Journal of Social Psychology*, Vol. 130(3), pp. 333-339.
- Whitley, B. E. Jr. (1998), "Factors Associated with Cheating among College Students: A Review", *Research in Higher Education*, Vol. 39 (3), pp. 235-74.
- Williamson, O.E. (1975), *Markets and Hierarchies, Analysis and Antitrust Implications*, New York: Free Press.
- Yildirim, I. (1999), "Some Values of Turkish University Students from varying Degrees of Religiosity", *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, Vol. 16-17, pp. 13-23.

**APPENDIX 1:**  
**Factor Analysis Results and Reliabilities of Scales Used**

	U.S. Fac- tor Load- ing	U.S. Rel. <u>Alpha</u>	Turkish Factor Loading	Turkish Rel <u>Alpha</u> .
<b>Factor One: Receiving and Abetting Academic Dishonesty</b>		<b>.77</b>		<b>.73</b>
1. Communicating answers (for e.g., whisper, give sign language) to a friend during a test.	.65		.60	
2. "Hacking" your way into the university's computer system to	.64		.58	
3. Hiring someone or having a friend take a test for you in a very	.62		.57	
4. Peeping at your neighbor's exam during the test.	.61		.56	
5. Using unauthorized "crib notes" during an exam.	.59		.55	
6. Turning in a term paper that you purchased or borrowed from	.53		.50	
<b>Factor Two: Obtaining an Unfair Advantage</b>		<b>.71</b>		<b>.70</b>
1. Receiving favoritism as a result of being a student athlete or mem-	.70		.70	
2. Receiving a higher grade through the influence of a family or per-	.60		.59	
3. Brown-nosing your professors.	.59		.58	
4. Contributing little to group work and projects, yet still receiving	.55		.53	
<b>Factor Three: Fabricating Information</b>		<b>.73</b>		<b>.70</b>
1. Using a faked illness as an excuse for missing an exam.	.68		.65	
2. Receiving information about an exam from someone in an earlier	.56		.54	
3. Using "formulas" programmed into your pocket calculator during	.52		.50	
4. Asking a friend to cover for you (for e.g., sign you as in atten-	.50		.48	
<b>Factor Four: Opportunism</b>		<b>.70</b>		<b>.70</b>
1. Over hearing answers to exam questions when your neighbor	.72		.71	
2. Taking advantage of answers you inadvertently saw on another	.62		.63	

	U.S. Factor Loading	U.S. Rel. Alpha	Turkish Factor Loading	Turkish Rel Alpha.
<b>Factor Five: Ignoring Prevalent Norms</b>		<b>.72</b>		<b>.70</b>
1. Visiting a professor's office frequently seeking help in a course.	.77		.75	
2. Attending commercial test preparatory courses such as those offered by Kaplan.	.65		.63	
3. Comparing work on assignments with classmates before submitting the work to the instructor.	.62		.60	
4. Receiving extra credit because the instructor likes you	.60		.58	
5. Having access to old exams in a particular course that other students do not have access to.	.57		.56	
6. Being allowed to perform extra work, which is not assigned to all class members, to improve your grade.	.55		.56	
<b>Factor Six: Idealism</b>		<b>.83</b>		<b>.79</b>
1. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.	.80		.78	
2. One should never psychologically or physically harm another person.	.75		.74	
3. One should not perform an action which might in any way threaten the dignity and welfare of another individual.	.74		.73	
4. Risks to another should never be tolerated, irrespective of how small the risks might be.	.73		.72	
5. A person should make certain their actions never intentionally harm another even to a small degree.	.72		.70	
6. If an action could harm an innocent person, it should not be done.	.66		.65	
7. The dignity and welfare of people should be the most important concern in any society.	.55		.60	
8. Moral actions are those which closely match the ideals of the most "perfect" action.	.53		.55	
9. It is never necessary to sacrifice the welfare of others.	.50		.51	
<b>Factor Seven: Relativism</b>		<b>.70</b>		<b>.75</b>
1. No rule concerning lying can be formulated; whether or not it's permissible totally depends upon the situation.	.72		.70	
2. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.	.69		.67	
3. What is ethical for everyone can never be resolved since what is moral or immoral is up to the individual.	.64		.65	
4. Different types of moralities cannot be compared as to the "rightness".	.61		.64	
5. Moral standards are simply personal rules which indicate how a person should behave, and are not to be applied in making judgments of others.	.59		.61	
6. Moral standards are individualistic; what one person considers to be moral may seem immoral to another.	.58		.56	
7. What is ethical varies from one situation to another.	.58		.55	
8. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes.	.53		.50	
9. Rigidly establishing an ethical position that prevents certain types of actions stands in the way of better human relations.	.52		.50	