

Using DISC® to Facilitate Instruction of Adaptive Selling

Abstract

Cindy B. Rippé, Brian Martinson and Alan J. Dubinsky

Purpose of the Study: For adaptive selling to be successful, salespeople need to categorize their customers to tailor their sales approach. But how do students who are learning to sell know how to categorize customers when they often have little or no experience with customers? Students intuitively understand that customers are unique and thus adaptive selling techniques are needed. However, they lack the experience to create customer typologies and to know what kind of adaptations they should make and how to implement those adaptations throughout the steps in the sales process based on specific customer types. This article describes a pedagogical methodology that is empirically tested to help educators teach adaptive selling knowledge by using DISC® (Dominance, Influence, Steadiness, and Conscientious). In so doing, a cumulative hierarchical structure is created that assists teaching adaptive selling throughout the entire sales process.

Method/Design and Sample: Assessment from quantitative and qualitative methods with 82 students from traditional and online modalities was utilized.

Results: Findings provide support for the instructional methodology. Additionally, qualitative research uncovered students' perceptions of DISC® in four key areas: (1) DISC® knowledge, (2) self-awareness, (3) changes to views of others, and (4) interpersonal communication.

Value to Marketing Educators: Step-by-step project implementation is provided for ease of use and adaptation to selling, as well as other marketing classes. Moreover, the article includes a table that applies DISC® to all steps of the selling process, detailing how to use established selling techniques for different behavioral styles.

Keywords: personal selling, sales process, adaptive selling, DISC®

Cindy B. Rippé, Assistant Professor of Marketing, Flagler College, Department of Business Administration, 74 King Street, St. Augustine, FL, 32084, Email: crippe@flagler.edu. **Brian Martinson, Assistant Professor of Management**, College of Business and Administration, Department of Management, Tarleton State University, Box T-0200, Stephenville, TX, 76402, Email: martinson@tarleton.edu. **Alan J. Dubinsky, Distinguished Visiting Professor of Marketing**, Ziegler College of Business, Bloomsburg University of Pennsylvania, 400 East Second Street, Bloomsburg, PA, 17815; and **Professor Emeritus**, Purdue University, West Lafayette, IN, 40506. Email: dubinsky@purdue.edu.

Adaptive selling is the cornerstone of personal selling, as it enables salespeople to capitalize on the unique benefits of tailoring a marketing message based on interactive customer input (Sujan, Weitz, & Sujan, 1988). Adaptive selling entails “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, & Sujan, 1986, p. 175). For adaptive selling to be successful, salespeople “need to stereotype or categorize their customers” (Sujan et al., 1988, p. 11).

A key question facing sales educators, however, is how do students who are learning to sell know how to categorize customers when they often have no experience selling or working with customers. Teaching adaptive selling to inexperienced students is relevant, because experience level affects adaptive

selling ability, which positively influences performance of experienced, but not of new or inexperienced, salespeople (Franke & Park, 2006; Levy & Sharma, 1994). For example, research suggests that inexperienced salespeople vis-à-vis their experienced counterparts underperform in executing certain selling behaviors (Dixon, Spiro, & Forbes, 2003).

Absence of experience of those who have never sold thus poses challenges to sales educators. For example, as related to adaptive selling, students learning to sell products and services intuitively understand that customers are different and that salespeople may, therefore, need to change their approach for different customers. But, how do students who are just learning how to sell know what kind of adaptations they should make? Additionally, how can sales students who are just learning the sales process recognize which types of

adaptions are appropriate for different stages of the sales process?

The foregoing conundrum led to the development of a methodology for teaching adaptive selling in sales courses. It incorporates a widely-accepted sales tool—DISC® (e.g., Inscape Publishing, 1996). DISC® is an acronym that represents four behavioral traits: D (Dominance), I (Influence), S (Steadiness), and C (Conscientious). It is a statistically validated, behavioral style classification tool (subsequently discussed).

Adaptive selling is germane in both beginning and advanced sales courses, as adjusting to customer needs and personality types is part of the entire sales process typically taught in sales courses (Inks, Schetzle, & Avila, 2011). For example, if one is using adaptive selling, the salesperson will change sales strategies and approaches, depending on whether he/she is seeking a prospect, building rapport, handling objections, negotiating a price, presenting, or closing the sale. As such, it is a skill required in all steps of the sales process.

With the foregoing in mind, this article describes a pedagogical methodology that was empirically tested. The approach is designed to help educators teach adaptive selling knowledge by employing DISC®, thus creating a process that assists in teaching adaptive selling throughout the entire sales process. The remainder of this article will describe behavioral styles, introduce the teaching methodology, discuss its effectiveness, propose its utilization in non-sales courses, and proffer concluding thoughts.

BEHAVIORAL STYLES

Cognitive psychology supports the categorization of customers when selling in order to minimize complications, reduce salesperson's cognitive burden, and allow for unencumbered creative thought (Sujan et al., 1988). Such cognitive efforts can assist individuals in identifying their own and others' behavioral styles. Behavioral style "reflects a pervasive and enduring set of interpersonal behaviors....Does a person ask questions or issue commands? Decide issues quickly or analyze the facts in detail before making decisions? Confront conflict situations directly or avoid them? Allow policies to govern or adapt policies to fit changing conditions?" (Darling & Walker, 2001, p. 232).

Knowledge of behavioral styles facilitates recognition of patterns of how groups of people cognitively process, communicate, and perform (McKenna, Shelton, & Darling, 2002). As related to selling, various categorization schema have been suggested based on sales behaviors (Buzzotta, Lefton, & Sherberg, 1982; Jolson, 1984), buyer behaviors (Dubinsky & Ingram, 1981-1982; Larson & Bone, 2012), communication styles (Manning, Ahearne, & Reece, 2015), gender (Comer & Jolson, 1991), sales orientation (Blake & Mouton, 1980), and general behavioral styles—such as Social Style (Merrill & Reid, 1981), DISC®, Myers-Briggs (Lloyd, 2012; Mosby, 2010), and Psycho-Geometric Types (Comer, Dubinsky, Shao, Chia-Chi, & Schetzle, 2014). For the

purpose of this research, *general behavioral styles* were chosen as the focus for two reasons. First, they are often used for training on interpersonal skills (Kraiger & Kirkpatrick, 2010; Reynierse, Ackerman, Fink, & Harker, 2000), which conceivably would further benefit students' self-development, in addition to teaching them adaptive selling. Second, like its above alternatives, use of general behavioral styles has been empirically supported (Kraiger & Kirkpatrick, 2010; Reynierse et al., 2000).

General Behavioral Styles: Psycho-Geometric Types, DISC®, Myers-Briggs, & Social Styles

Psycho-geometric types, a way of classifying customers based on geometric shapes, was not used in the pedagogical methodology because it is a newly developed scale that needs further validation (Comer et al., 2014). DISC® and Myers-Briggs (MB) are similar because they both are based on the theoretical work of Carl G. Jung, featuring psychological typing. Social Styles is predicated on behavioral psychology (McKenna et al., 2002) from the work of Merrill and Reid (1981). MB was not chosen for inclusion in the teaching methodology because it has more variations (16 styles) than the four in DISC®, thus making it complex for students to grasp (Tracom Group, 2013). Social Styles has four main profiles that are easy to learn and similar to DISC®'s—analyticals, drivers, expressives, and amiables (Sujan et al., 1988). Social Styles, however, requires *multiple* assessments from others and would complicate the implementation of the assessment.

Alternatively, DISC® utilizes a *single* self-assessment, thus making implementation more feasible vis-à-vis Social Styles. Furthermore, DISC® has strong validity (Extended DISC, 2013; Inscape Publishing, 1996; Renaud, Rutledge, & Shepherd, 2012). Given the abovementioned reasons, DISC® was chosen for inclusion in the teaching methodology. DISC® is used by many companies to teach how to analyze and observe behavior by identifying and categorizing four behavioral styles (Geissler, 2014): "D" styles are direct, firm, forceful, and results oriented; "I" styles are influential, outgoing, enthusiastic, optimistic, and lively; "S" styles are steady, even-tempered, accommodating, and tactful; and "C" styles are conscientious, analytical, reserved, precise, and private.

DISC® AND Adaptive Selling

DISC® classification enables students with little or no sales experience to implement tangible techniques into their adaptive selling strategy, which requires an effective choice of communication behaviors through acquisition of information (i.e., via listening and watching others) and provision of feedback (i.e., responding) that is consistent with the flow of communication (Boorum, Goolsby, & Ramsey, 1998; Miles, Arnold, & Nash, 1990). As such, a "repertoire of behaviors or developing a unique response strategy perceived to have a high likelihood of achieving the desired results" (Boorum et al., 1998, p. 19) can ensue. DISC® fits in with these "recommended behaviors" by providing an inventory of potential behavioral styles and

responses to those behaviors categorized by the DISC® styles. Accordingly, DISC® offers inexperienced salespersons a framework for identifying and responding to customer types. Additionally, DISC® can facilitate role plays (Slowikowski, 2005) and improve workplace communication and diversity appreciation (Geissler, 2014; Sugerman, 2009). Admittedly, it has been used extensively in sales and industry (Reynierse et al., 2000; Sugerman, 2009). DISC® has not, though, been empirically tested as a tool in *sales education*—a key contribution of this article.

In this article’s pedagogical methodology, adaptive selling is taught to students by connecting DISC® profiles to steps in the sales process. Essentially, students use DISC® knowledge as a framework to adjust to different styles as they progress through the selling process. That is, different selling techniques are tailored to particular behavioral styles and can be used to direct adaptation choices at varying points in the sales process. The end result from this methodology is a *cumulative* hierarchical structure that is particularly helpful to novices—as it is linked to the personal selling process which requires adaptations not just once, but throughout the changing dyadic connection with the prospect.

The complexity of learning adaptive selling, while simultaneously learning the steps of the sales process, might create a cognitive burden for inexperienced salespeople. Educators have a similar burden as they try to address a wide scope of material in a limited time and are challenged to provide meaningful activities that enable students to learn and practice adaptive selling skills while concurrently learning and practicing the sales process. The methodology described here creates a framework that embeds adaptations within the course structure by using DISC®.

To test the efficacy of DISC® in a sales class, the focus was twofold. First, an intervention was undertaken in the classroom to teach students about the four DISC® styles and how to identify and apply them. Then, after they had learned and practiced using DISC® styles during the first two weeks of the semester, another intervention was undertaken in the

classroom to teach students how to employ DISC® styles in learning adaptive selling vis-à-vis the selling process. This was done over the balance of the semester.

Prior to launching the two interventions, students were given a *pre-DISC®* training test and a *pre-adaptive selling* training test to assess their knowledge of DISC® styles and adaptive selling, respectively. At the conclusion of the DISC® and adaptive selling “training,” students were administered the identical instruments given to them in the pre-training tests. The *difference* between the pre- and post-test scores was employed to discern the effectiveness of DISC® styles and adaptive selling teaching (i.e., student ability to use those particular course materials effectively).

Given the preceding discussion, the following hypotheses are posited:

H1: Instruction on DISC® will produce higher student post-DISC® training test scores than pre-DISC® training test scores.

H2: Instruction on DISC® will produce higher student post-adaptive selling training test scores than pre-adaptive selling training test scores.

IMPLEMENTATION OF THE PEDAGOGICAL METHODOLOGY

This section of the article presents the procedure that was used to execute the previously discussed didactic approach. It entailed experiential learning. Experiential learning is “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Kolb, 1984, p. 41). Experiential learning activities are often utilized in sales-related teaching tools because they typically require hands-on application (e.g., Chapman, Schetzle, & Wahlers, 2016; Levin & Peterson, 2016; Rippé, 2015). The steps used to engage students in this article’s pedagogical methodology are outlined in Figure 1.

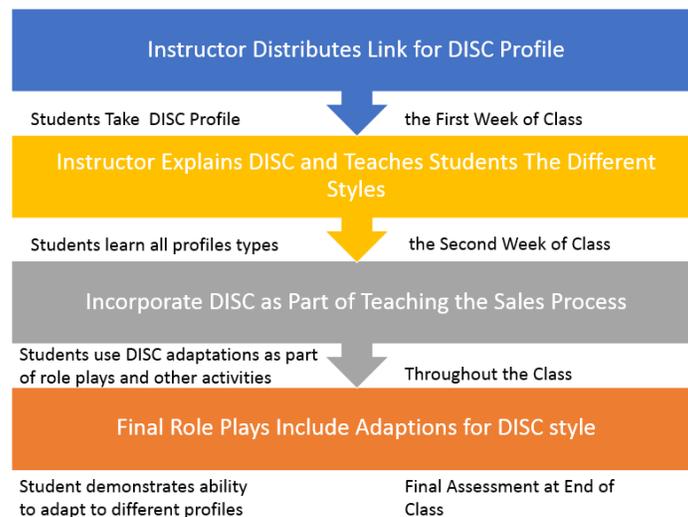


Figure 1. Steps to Implementation

Distribution of DISC® Profile. In the first step, the instructor e-mails a link on which students complete their own online DISC® profile. There are complimentary (see <http://discpersonalitytesting.com/discassess/work-free/free-start.php>) and paid-for (see <http://www.extendeddisc.org/disc-products/>) profiles. Students learn about their own style after answering 24 questions (the *Extended* DISC® paid-for version was used for this study, owing to its enhanced detail vis-à-vis the free option). Student responses culminate in a customized report identifying attributes, motivators, communication styles, reactions to pressure, and sales competencies of the individual student.

Explanation and Instruction of DISC® Styles. In the second step, the instructor teaches DISC® by (1) helping students understand their own unique style and how others perceive them, (2) describing how to identify other styles, and (3) discussing how to read others and adapt to various styles. Students learn their own style and how others perceive them by taking the DISC profile and studying their customized report mentioned above. In terms of teaching students how to identify other styles, the instructor teaches the student to first recognize if someone is an extrovert or slightly reserved. Per DISC®, if one is an extrovert, he/she is labeled a “D” or an “I.” If one is slightly reserved, he/she is identified as an “S” or a “C.” If an individual is agreeable and cooperative, he/she is typed as an “S”; if analytical and detail-oriented, a “C”; if direct, a “D”; if

friendly, an “I.” The instructor provides specific direction about acutely listening to words and observing gestures, tone, energy levels, and body language to determine a behavioral style. Subsequently, explicit adaptations are provided based on students’ recognition of profiles.

For example, when selling to a “D,” one should be concise and direct and allow the prospect to take control. Working with an “I” implies that the seller should be positive, match the buyer’s enthusiasm level, and ask questions—as such prospects like to talk. With an “S,” salespeople should be friendly and patient in sharing new ideas, as this kind of individual does not like change. Also, they should ask questions to draw out the customer’s opinions, as “S” styles often listen by nodding (although doing so does not necessarily mean agreement). When dealing with a “C,” one should be detail oriented, set the pace, and stay on task without socializing (the foregoing is per DISC®).

Incorporation of DISC® into Instruction of the Sales Process. In step three, the instructor begins to teach the steps of the sales process and incorporates DISC® into this teaching. Dubinsky (1981) described seven stages in the selling process, as well as specific tactical approaches for each step of the sales process. Using the work of Dubinsky (1981), shown in Table 1 are specific *examples* of how DISC® can be applied to the seven stages of the sales process.

Table 1. Applying DISC to the Sales Process Using Techniques from Dubinsky (1981).

Step of the Sales Process	Techniques to Use on Particular Style.			
	Step 1: Identify style. Step 2: Use Technique on Style Identified.			
	D Styles	I Styles	S Style	C Style
1. Prospecting <i>Find potential buyers</i>	Cold Calling: Use with <i>D styles</i> who are direct and want salespeople to get to the point quickly.	Referral Approach: Use with sociable and talkative <i>I styles</i> who have a people orientation. Mention the name of a person who suggested you meet with them. “I hope you can help me. Bill Johnson at XYZ company suggested I call you.”	Introduction Approach: Ask other prospects to introduce you to new ones. This is appropriate because <i>S styles</i> are more comfortable around people and things they know.	Hold/Attend Trade Shows: Use with <i>C styles</i> who like detail and information. They take their time making decisions, so this would be a great way to connect with them and let them study specifications and information.
2. Pre-approach <i>Collect information to qualify prospect</i>	The Prospect: Obtain information from the prospect directly by asking direct questions. <i>D styles</i> appreciate getting to the point. “I only need five minutes to get to the bottom line and see if we can solve your problem.”	Other Intermediaries: With <i>I styles</i> use networking through mutual contacts to arrange the appointment because it is important to them to be liked by others and popular.	Phone for the Appointment: <i>S styles</i> are good listeners, easy going, and thoughtful. Ask questions to draw them out.	Personal Letter/Email: <i>C styles</i> prefer to have a lot of information and are better with written communication. Written contact allows lots of specifics to be included in the initial contact.
3. Approach <i>Gain and hold prospect’s attention</i>	Referral Approach: <i>D styles</i> are competitive. Use a present customer’s name who is a competitor.	Showmanship: <i>I styles</i> like to have fun and to interact with others so grab their attention with unusual dramatic effects.	Find Needs by Asking Questions: Ask <i>S styles</i> open- and closed-ended questions to uncover needs. They listen carefully and are	Curiosity: <i>C styles</i> like to consciously think about things so use an opening approach that raises their curiosity.

			easy-going so converse with them.	
4. Presentation <i>Explain offering and persuade desire</i>	Demonstrate: Because <i>D styles</i> are leaders and often pioneers in their field, demonstrate the offering to them getting them to think of what they could achieve.	Ask Questions During Presentation: <i>I styles</i> are expressive and positive and open when in agreement. Use their natural talkativeness to ask questions and engage them.	Tailor the Presentation: Because <i>S styles</i> are good listeners and want some details, tailor the presentation by providing supporting material that helps them process the offering. Plus, giving them more than they expect will build trust.	Talk the Prospect's Language: <i>C styles</i> are methodical and want detailed information. Provide this in their terms using industry appropriate jargon.
5. Handling Objections <i>Get past unwillingness to buy</i>	Yes, But Method: When <i>D styles</i> object, agree with them because they like to be in control, but then quickly and directly make a statement to offset the concern.	Case History Method: <i>I styles</i> are people-oriented. Provide a third-party story of another customer who used the product and benefitted from it.	Answer Objection with a Question: <i>S styles</i> like to be part of the team and because they are laid back, it helps to draw out their opinion and walk through the concerns step by step.	Comparison or Contrast Method: <i>C styles</i> like specific details, diminish their objection by comparing it to something that cost justifies through another benefit. For example, "Yes, there will be a substantial upfront cost, but implementing this system will reduce bottlenecks in the long term and increase the overall productivity of the department by 10%, just in the first year alone."
6. Closing <i>Reinforce and sell based on the needs initially discussed during step three</i>	Choice Close: <i>D styles</i> make decisions quickly and want to know what is in it to benefit them so offer two product versions to choose from.	Emotional Close: Appeal to <i>I styles'</i> desire for popularity, fun, status, or recognition. "People who purchase this often get recognized for the good they bring to the company."	Minor Decision Close: <i>S styles</i> do not want to be pressured and they prefer a steady and orderly way. Help them go at a comfortable pace by asking seemingly minor closing questions on things they would have to consider if they were to actually purchase the product. For example, "If you did choose this model, which color would best work with your décor?" Then move on to the final close from there.	Summarize: <i>C styles</i> like facts and details and plenty of information to make a decision. Summarize all the benefits previously discussed, step by step, and in a logical order recapping and detailing all the possible sub-items and features.
7. Follow up: <i>Reduce concerns, increase satisfaction, and create environment for repeat purchases</i>	Get Customer Referrals: Check in quickly with the <i>D style</i> : "I wanted to make sure you were having success with your purchase and ask if you knew someone else in the field who may benefit from my service?"	Thank You Notes: <i>I styles</i> like to feel as they belong and are acknowledged and appreciated. A hand-written thank you note will reinforce the relationship.	Follow-Up: <i>S styles</i> want things to be steady and stable for the team. Check in soon after the sale to ensure the initial use is smooth.	Consult: Consult with <i>C styles</i> on how to get the most out of the product. Share specific details to help them master product usage.

Material depicted in Table 1 differentiates techniques related to *each step* of the sales process for *each behavioral style*. For example, when addressing how to handle objections, the preceptor would teach that managing a prospect's objections varies depending on a buyer's specific behavioral style. For instance, with a "D" style, use of the *Yes, But Method* can be appropriate. For an "I," employment of the *Case History Method* may well be beneficial. For an "S," utilization of the *Answer Objection with a Question* conceivably seems apposite. Dealing with a "C," the *Comparison or Contrast Method* might be valuable. As such, the technique that a salesperson assays is predicated on the prospect's, *not* the salesperson's, style.

Inclusion of Adaptations of DISC® Styles in Role Plays. In step four, students practice adapting the sales process to the different DISC® styles through role plays. This happens throughout the sessions, as the instructor teaches the various steps of the selling process. This learning culminates in a major final role play for each student. The instructor, who has knowledge of all students' DISC® profiles, matches students for role plays so that they can practice selling to different behavioral styles, thus requiring their adjusting throughout the role play. Typically, pairing those with contrasting styles—for example, putting together a demonstrative, affectionate "I" with a direct, non-feeling "D"—allows students to stretch their sales skills, enabling better mastery of DISC® adaptation.

METHODS

Research Design

To measure the effectiveness of the article's pedagogical methodology, a quasi-experimental design was used. It featured a pre-test/post-test without control group design (Shadish, Cook, & Campbell, 2002). Subjects were asked to complete an online survey on the first day of class and then, after receiving instruction on DISC® styles and subsequently on adaptive selling, the same survey was distributed to participants at the end of the semester.

Subjects

The sample consisted of four sections of a personal selling class at a medium-size public university located in the southwest of the United States. A total of 88 students were enrolled. The response rate was 93%, meaning that 82 students completed both pre-test and post-test instruments, with 80 students providing complete information. Sixty-two percent of the sample were enrolled in an online version of the course, and the remaining 39% in a traditional face-to-face classroom setting. Sixty-two percent of the students were female. Forty-nine percent were between 21 and 23-years old; 28%, between 24 and 34 years old; and 14%, between 18 and 20 years-old. Seventy-nine percent of subjects were Caucasian; 11%, Hispanic; and 5%, African American.

Measures

The independent and dependent variables were calculated as gain scores, based on Knapp and Schafer

(2009). Pre-test measures were subtracted from post-test measures with positive/negative numbers indicating an increase/decrease in subjects' response values. The scale item values for both the dependent and independent variables were summed and then standardized to normalize the unit of measurement (Field, 2009).

Dependent Variable

The dependent variable included four items from the Shortened Adaptive Selling Scale (Robinson, Marshall, Moncrief, & Lassk, 2002). The items are shown in Table 2. Scale reliability (coefficient alpha) for the pre-test was 0.83 and 0.73 for the post-test. Both values are within the 0.70 cutoff for acceptable reliability (Kline, 2000).

Independent Variable

The independent variable (change in knowledge of DISC® profiles) was calculated as the number of correct responses on a six-item, multiple-choice test. The test asked students to identify the DISC® profile of a described customer. An example of the test questions used in the test included the following: "*Matthew is strong and results focused and, when he so desires, a friendly entrepreneur. He tries his best to get everyone to focus their efforts to achieve his goals. He is not good in taking care of the administrative routines, although he is able to organize other activities. Matthew took a big risk in leaving his job to start up his own company in a very competitive field. What behavioral style is Matthew?*" Answer choices included "D," "I," "S," or "C," with the correct answer being "D." The variable was calculated as the difference between the student's pre-test and post-test scores on the test by subtracting the pre-test value from the post-test value.

Analysis and Results

The analysis was conducted in two parts. First, outcome variables were tested for normal distribution visually using histograms, as well as with SPSS skewness and kurtosis statistics. The histograms suggested that the data followed a normal distribution. Skewness and kurtosis revealed that all items were within the +/-1.96 limit proposed by Rose, Spinks, and Canhoto (2014)—save for one item, "When my approach does not work, I can easily change to another approach"—which just met the skewness threshold of 2.03. Because the kurtosis statistic was within acceptable limits and the item was within the parameters (+/-2.58) for larger sample sizes, the item was retained.

Next, one-way ANOVA was undertaken to determine the impact of selected demographic variables on the outcome variables. DISC® Profiles Knowledge and adaptive selling standardized gain scores were tested vis-à-vis subjects' age, sex, and race. None of the demographic variables had a significant impact on the DISC® Profiles Knowledge gain scores. The Adaptive Selling gain score, though, showed a statistically significant ($p < .05$) between-group difference with sex. Further analysis of this relationship indicated that males' perception of their adaptive selling ability decreased slightly (from a mean

= 5.83, s.d. = 0.60 to a mean = 5.56, s.d. = 0.65) between the beginning and conclusion of the course. Females' perception of this ability, however, increased (from a mean = 5.19, s.d. = 1.19 to a mean = 5.52, s.d. = 0.87). This finding suggests that males and females have varying levels of confidence in their abilities to use different selling approaches. Further, as they learn about selling approaches, males seemingly adjust for their over confidence, and females experience an increase in their confidence. This confidence differential is consistent with research that shows females are initially not as confident as males (Pugh & Wahrman, 1983; Sarsons & Xu, 2015; Thomas-Hunt & Phillips, 2004). The effect of age and race on the Adaptive Selling gain score was found to be not significant at a 95% confidence level.

Then, one-way ANOVA was performed to determine whether the instructional delivery mode—online or face to face—had an effect on the outcome variables. DISC® Profiles Knowledge gain scores and Adaptive Selling gain scores were tested with subjects' course modality. Findings showed that instructional delivery mode had a statistically significant relationship with DISC® Profiles Knowledge gain scores but no statistically significant impact on Adaptive Selling gain scores. The face-to-face instructional delivery mode on DISC® Profiles Knowledge gain scores mean was 2.32 (s.d., 2.12), while the online mode mean was 0.39 (s.d., 1.61); these findings suggest that the face-to-face

delivery mode yielded higher DISC® Profiles Knowledge gain scores than the online mode. However, instructional delivery mode did not influence the relationship between DISC® Profiles Knowledge gain scores and Adaptive Selling gains scores (discussed below).

To test whether DISC® knowledge can be developed through instruction (H1), a paired-sample t-test was performed. The test compared DISC® Profile Knowledge test scores before and after DISC® Profile Knowledge instruction was provided. Results of the test revealed a significant difference ($p < .05$) between the pre-test DISC® Profile Knowledge scores and post-test scores (a 41% increase in mean test scores from 3.25 to 4.58). Thus, H1 was supported.

The final analysis included testing an OLS regression model with the Adaptive Selling gain score as the dependent variable, and the DISC® Profile Knowledge gain score as the independent variable, while controlling for age, sex, race, and instructional delivery mode. The model was statistically significant with a p-value of 0.03. The results of the regression analysis suggest that a one-unit increase in the DISC knowledge gain score leads to an increase in the Adaptive Selling gain score of between 0.06 and 0.93 at a 95% confidence level, thus indicating support for H2. (See Table 2 for the statistical findings for the second phase of the analysis mentioned above.)

Table 2. Results.

Descriptive Statistics (n = 79)	Mean	SD	
DISC Profile Knowledge Pre-test	3.25	1.70	
DISC Profile Knowledge Post-test	4.58	1.83	
Adaptive Selling Pre-test	5.43	1.05	
Adaptive Selling Post-test	5.53	0.79	
Paired-samples T-test (Hypothesis 1)	Mean	SD	p-value
DISC Profile Knowledge Pre-test to Post-test	1.32	1.99	0.00
One-way ANOVA test - DISC Profile Knowledge GS	F	p-value	
Age	2.63	0.04*	
Sex	1.41	0.42	
Race	1.26	0.29	
Instructional delivery mode: Online vs Face-to-face	15.08	0.00	
One-way ANOVA test - Adaptive Selling GS	F	p-value	
Age	0.26	0.90	
Sex	8.61	0.00	

Race	0.57	0.68
Instructional delivery mode: Online vs Face-to-face	0.01	0.92

Regression Model - (Hypothesis 2)	Beta	SE	p-value
Dependent variable = Adaptive Selling Gain Score			
Model 1			
Constant	-0.34	1.43	0.81
Age	0.21	0.50	0.67
Sex	-2.67	0.86	0.00
Race	1.37	1.00	0.17
Instructional delivery mode: Online vs Face-to-face	-0.80	0.90	0.38
Model 2			
Constant	-1.34	1.53	0.81
Age	0.54	0.50	0.67
Sex	-2.70	0.83	0.00
Race	0.95	1.00	0.17
Instructional delivery mode: Online vs Face-to-face	0.02	0.90	0.38
DISC Profile Knowledge GS	0.58	0.226	0.01

* Post hoc analysis yielded no significant differences between factor levels.

Note: "GS" denotes "Gain Score."

The post-test survey also included three open-ended questions asking students how learning DISC® will help them now and in the future. Although not directly related to study hypotheses, the qualitative measures illuminate how students across formats (hybrid, online, and face-to-face) viewed DISC® learning. Such questions have been used in prior research for qualitative evaluation (Rippé, Weisfeld-Spolter, Cummins, & Dastoor, 2016).

Responses were coded by three qualitative researchers who independently reviewed responses, discussed discrepancies, and made corresponding modifications after discussion. No responses were deleted for lack of agreement, thus leading to almost perfect inter-rater reliability assessed using percentage agreement (100%), as well as a kappa score of 1 (Hruschka et al., 2004; Liebetrau, 1983). Four main

themes emerged (student statements along these themes are shown in Table 3). One was knowledge of DISC styles and its use in approaching customers (e.g., "it helped me understand how to approach consumers"). A second theme was increased self-awareness (e.g., "helped me better understand myself"). Another theme pertains to changes in student perceptions of people (e.g., "I find myself figuring out what personality type people are that I encounter every day"). The last theme revolves around improved interpersonal communication (e.g., "I can have conversations and show empathy in a really good way"). These responses seemingly provide further support for use of the article's pedagogical methodology and infer promise as a teaching alternative.

Table 3

Themes from Responses to Qualitative Survey Questions

<p>Knowledge of DISC styles and using it to approach customers DISC has helped me to analyze people around me and figure out their needs. It helped me understand how to approach consumers.</p> <p>I was able to converse with different people for my role-plays and was able to use adaptive selling to get a commitment. It has taught me some of the various ways in which a sales presentation can be developed around the four core categories of a prospect's personality.</p>	<p>Increased self-awareness Helped me better understand myself. It helped me realize my strengths and weaknesses in my selling technique and I was able to fix them. It has helped me better understand what type of personality I have so that I can improve my communication skills. It has helped me grasp a better understanding of how to incorporate my personality traits in my approach during work and sales situations and to understand others</p>
<p>Changed how I view people I find myself figuring out what personality type people are that I encounter everyday.</p> <p>DISC has helped me to realize that everyone is different and we all do things in different ways. Using DISC has made me more tolerant of others that are different than me.</p>	<p>Improved interpersonal communication I can have conversations and show empathy in a really good way. That has been really nice. I think it will help me to approach situations really well and allow me to understand how people feel based on verbal and nonverbal communication. Perhaps on dealing with my coworkers. If I can understand their tendencies I can work with them better.</p>

DISCUSSION

The purpose of this article was to introduce and empirically examine a pedagogical methodology that could assist educators teach adaptive selling knowledge by employing DISC® (Dominance, Influence, Steadiness, and Conscientious). Research findings revealed that the approach can be efficacious in leading to enhanced student knowledge of customer profiles, which further ameliorates their use of adaptive selling behavior. Moreover, these findings are invariant across teaching modalities (online or face-to-face instruction) vis-à-vis the DISC® gain score → Adaptive Selling gains score relationship, as well as the Adaptive Selling gain scores. However, a face-to-face pedagogical approach did lead to an increase in DISC® knowledge gain scores. Accordingly, educators should give serious consideration to employing DISC® in their classrooms.

Salespeople rely on their experience of customer classification to employ adaptive selling behavior; however, sales students often lack the experience with customers to implement a typology that would allow them to respond to customers adaptively. This lack of knowledge, coupled with students' unfamiliarity with the selling process, creates challenges for sales educators in teaching adaptive selling. The pedagogical methodology described here has potential to help marketing educators bear less of a burden when teaching adaptive selling to their sales students.

Value of DISC® in Non-Sales Courses

The procedure outlined in this article can be adapted to any type or level of sales course (or marketing class that addresses sales) and has been used across modalities (online, hybrid, and face-to-face) as a tool for teaching adaptive selling. The first author is a certified DISC® trainer and has employed DISC® in other kinds of

marketing classes. Specifically, it has been utilized seven times in marketing principles (when teaching the chapter on personal selling) and six times in marketing management. For those courses, the same steps shown in Figure 1 are followed, with the only changes being as follows: (1) perforce, the sales process is taught in a shorter timeframe and with much less detail; and (2) role plays focus only on one step of the selling process (such as the presentation) and do not culminate in a final project.

The first author has also utilized the methodology twice in a consumer behavior class to show differences in people as applied to buyer behavior. Its implementation in this capacity entailed only Steps 1 and 2 of Figure 1. Even in the non-sales classes, students appear to benefit from learning about DISC® and adapting to different people. Preliminary evidence of this phenomenon exists, as a majority of students in those classes mentioned DISC® in their final course assessments; nonetheless, additional empirical testing is needed.

Limitations and Future Research

This study is limited by a quasi-experimental design. It is also constrained owing to its being used by only one instructor. Future research should examine the methodology denoted in this article using multiple instructors and a control group. Hybrid classes, other non-sales marketing courses, as well as different student levels could also be examined in future empirical efforts. Additional work could employ the approach comparing experienced sales students with inexperienced sales students. Moreover, researchers could examine how DISC® affects other sales-related variables, such as emotional intelligence, rapport building, and detection of non-verbal cues.

Chapman, J., Schetzle, S., & Wahlers, R. (2016). An innovative, experiential-learning project for sales management and professional selling students. *Marketing Education Review*, 26(1), 45-50. doi:10.1080/10528008.2015.1091674

Comer, L. B., Dubinsky, A. J., Shao, C., Chia-Chi, C., & Schetzle, S. (2014). A new approach for teaching customer personality types in the personal selling course. *Journal of Higher Education Theory & Practice*, 14(2), 11-27.

Comer, L. B., & Jolson, M. A. (1991). Perceptions of gender stereotypic behavior: An exploratory study of women in selling. *The Journal of Personal Selling & Sales Management*, 11(1), 43-59.

Darling, J. R., & Walker, W. E. (2001). Effective conflict management: Use of the behavioral style model. *Leadership & Organization Development Journal*, 22(5/6), 230-242.

Dixon, A. L., Spiro, R. L., & Forbes, L. P. (2003). Attributions and behavioral intentions of inexperienced salespersons to failure: An empirical investigation. *Journal of the Academy of Marketing*

REFERENCES

Blake, R. R., & Mouton, J. S. (1980). *Grid for sales excellence*. New York, New York: McGraw Hill.

Boorum, M. L., Goolsby, J. R., & Ramsey, R. P. (1998). Relational communication traits and their effect on adaptiveness and sales performance. *Journal of the Academy of Marketing Science*, 26(1), 16-30. doi:10.1177/0092070398261003

Buzzotta, V. R., Lefton, R. E., & Sherberg, M. (1982). *Effective selling through psychology: Dimensional sales and sales management strategies*. Cambridge, MA: Bollinger.

- Science, 31(4), 459-467. doi:10.1177/0092070303255473
- Dubinsky, A. J. (1981). A factor analytic study of the personal selling process. *Journal of Personal Selling & Sales Management*, 1(1), 26-33. doi:10.1080/08853134.1981.10754192
- Dubinsky, A. J., & Ingram, T. N. (1981-1982). A classification of industrial buyers: Implications for sales training. *Journal of Personal Selling & Sales Management*, 2(Fall/Winter), 46-51.
- Eckert, J. A. (2006). Adaptive selling behavior: adding depth and specificity to the range of adaptive outputs. *American Journal of Business*, 21(1), 31-40. doi:10.1108/19355181200600003
- Extended DISC. (2013). Extended DISC personal analysis validation report. Retrieved from <http://www.extendeddisc.com/>
- Franke, G. R., & Park, J. E. (2006). Salesperson adaptive selling behavior and customer orientation: A meta-analysis. *Journal of Marketing Research*, 43(4), 693-702. doi:10.1509/jmkr.43.4.693
- Geissler, D. L. (2014). The black and white effect of being labeled: The influence of being labeled by the DISC personality model from the perspective of the labeled participants (Masters Thesis). University of Twente, Enschede, Netherlands.
- Hruschka, D. J., Schwartz, D., St. John, D. C., Picone-Decaro, E., Jenkins, R. A., & Carey, J. W. (2004). Reliability in coding open-ended data: Lessons learned from HIV behavioral research. *Field Methods*, 16(3), 307-331. doi:10.1177/1525822X04266540
- Inks, S. A., Schetzle, S., & Avila, R. (2011). Taking the professional sales student to the field for experiential learning. *Journal for Advancement of Marketing Education*, 19, 35-47.
- Inscape Publishing. (1996). The DISC® classic research report. Retrieved from <https://www.discprofile.com>
- Jolson, M. A. (1984). Selling assertively. *Business Horizons*, 27(5), 71.
- Kline, P. (2000). *The handbook of psychological testing* (2nd ed.). London: Routledge
- Knapp, T. R., & Schafer, W. D. (2009). From gain score T to ANCOVA F (and vice versa). *Practical Assessment, Research & Evaluation*, 14(6), 1-7.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Kraiger, K., & Kirkpatrick, S. (2010). An empirical evaluation of three popular training programs to improve interpersonal skills. *Journal of Psychological Issues in Organizational Culture*, 1(1), 60-73. doi:10.1002/jpoc.20005
- Larson, J. S., & Bone, S. A. (2012). A new customer typology for adaptive selling. *AMA Summer Educators' Conference Proceedings*, 23, 498.
- Levin, M. A., & Peterson, L. T. (2016). A sales representative is made: An innovative sales course. *Marketing Education Review*, 26(1), 39-44. doi:10.1080/10528008.2015.1091671
- Levy, M., & Sharma, A. (1994). Adaptive selling: The role of gender, age, sales experience, and education. *Journal of Business Research*, 31(1), 39-47. doi:10.1016/0148-2963(94)90044-2
- Liebetrau, A. M. (1983). *Measures of association*. Newbury Park, CA: Sage.
- Lloyd, J. B. (2012). The Myers-Briggs type indicator® and mainstream psychology: Analysis and evaluation of an unresolved hostility. *Journal of Beliefs & Values*, 33(1), 23-34. doi:10.1080/13617672.2012.650028
- Manning, G. L., Ahearne, M., & Reece, B. L. (2015). *Selling today: Partnering to create value* (13 ed.). Upper Saddle River, NJ: Prentice Hall.
- McKenna, M. K., Shelton, C. D., & Darling, J. R. (2002). The impact of behavioral style assessment on organizational effectiveness: A call for action. *Leadership & Organization Development Journal*, 23(5/6), 314-322.
- Merrill, D. W., & Reid, R. H. (1981). *Personal styles and effective performance*. Radnor, PA: Chilton.
- Miles, M. P., Arnold, D. R., & Nash, H. W. (1990). Adaptive communication: The adaptation of the seller's interpersonal style to the stage of the dyad's relationship and the buyer's communication style. *Journal of Personal Selling & Sales Management*, 10(1), 21-27. doi:10.1080/08853134.1990.10753811
- Mosby, C. (2010). Finding the right way to connect with doctors. *Pharmaceutical Representative*, 40(1), 18-19.
- Pugh, M. D., & Wahrman, R. (1983). Neutralizing sexism in mixed-sex groups: Do women have to be better than men? *American Journal of Sociology*, 88(4), 746-762.
- Renaud, M. T., Rutledge, C., & Shepherd, L. (2012). Preparing emotionally intelligent doctor of nursing practice leaders. *Journal of Nursing Education*, 51(8), 454-460. doi:10.3928/01484834-20120523-03
- Reynierse, J. H., Ackerman, D., Fink, A. A., & Harker, J. B. (2000). The effects of personality and management role on perceived values in business settings. *International Journal of Value-Based Management*, 13(1), 1-13.
- Rippé, C. B. (2015). Show and sell: Teaching sales through hands-on selling *Marketing Education Review*, 25(1), 15-19. doi:10.1080/10528008.2015.999595
- Rippé, C. B., Weisfeld-Spolter, S., Cummins, S., & Dastoor, B. (2016). TONS: A guide to teaching on-line sales courses. *Journal for Advancement of Marketing Education*, 24(1), 1-7.
- Robinson, L., Marshall, G. W., Moncrief, W. C., & Lassk, F. G. (2002). Toward a shortened measure of adaptive selling. *Journal of Personal Selling & Sales Management*, 22(2), 111-119. doi:10.1037/0033-2909.107.2.238
- Rose, S., Spinks, N., & Canhoto, A. I. (2014). *Management research: Applying the principles*. New York, New York: Routledge.

- Sarsons, H., & Xu, G. (2015). Confidence men? Gender and confidence: Evidence among top economists. Retrieved from <http://www.guoxu.org/docs/confidence.pdf>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Wadsworth Cengage Learning.
- Slowikowski, M. K. (2005). Using the DISC behavioral instrument to guide leadership and communication. *AORN Journal*, 82(5), 835-843. doi:10.1016/S0001-2092(06)60276-7
- Sugerman, J. (2009). Using the DISC® model to improve communication effectiveness. *Industrial & Commercial Training*, 41(3), 151-154. doi:10.1108/00197850910950952
- Sujan, H., Weitz, B. A., & Sujan, M. (1988). Increasing sales productivity by getting salespeople to work smarter. *Journal of Personal Selling & Sales Management*, 8(2), 9-19. doi:10.1080/08853134.1988.10754487
- Thomas-Hunt, M. C., & Phillips, K. W. (2004). When what you know is not enough: Expertise and gender dynamics in task groups. *Personality and Social Psychology Bulletin*, 30(12), 1585-1598. doi:10.1177/0146167204271186
- Tracom Group. (2013). *Comparing social style and Myers Briggs*. Retrieved from <http://www.tracomcorp.com/wp-content/uploads/2014/01/SocialStyle-Whitepaper-ComparingSocialStyleandMyersBriggs.pdf>
- Weitz, B. A., Sujan, H., & Sujan, M. (1986). Knowledge, motivation, and adaptive behavior: A framework for improving selling effectiveness. *The Journal of Marketing*, 50(4), 174-191. doi:10.2307/1251294