PERFORMANCE ON THE FINAL EXAM IN THE PRINCIPLES OF MARKETING COURSE: RELATIONSHIPS WITH SELF-HANDICAPPING

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ABSTRACT

Given the reliance on testing as an evaluation tool in the Principles of Marketing Course, the effectiveness of testing in determining student comprehension is an important area of study. Do the personal qualities of students, however, have the ability to interfere with the relationship between comprehension and exam performance? This study investigates the relationships of self-handicapping with performance expectations, actual performance, and self-reported anxiety at the time of the final exam for 378 students enrolled in Principles of Marketing courses. A negative relationship was observed between self-handicapping and performance expectations, no relationship was observed with actual performance, and a negative relationship was observed with students' self-reported anxiety. These findings are discussed.

INTRODUCTION

In the Principles of Marketing course, testing typically represents the primary tool for measuring students' comprehension of course material. Although other assignments, such as exercises involving the Internet, service-learning opportunities, and project presentations appear to be growing in use, grades in Principles of Marketing courses are still most often based on students' performances on a limited number of exams (Bacon 2003). In fact, so important is the testing process that it is considered to be an integral component of quality teaching (Kelley, Conant, and Smart 1989). As a result, a poor performance on a single exam can often materially adversely affect a student's final grade in the course, particularly when that exam is the final exam.

Although numerous studies have examined the validity and rigor of the examination process, relatively little attention has been placed on the problems of the students who take the exams (Anderson and Sauser 1995). For instance, given the importance of testing situations in the Principles of Marketing course, one could logically expect that students will pursue all opportunities to excel on these evaluative tools. Many instructors in that course, however, will attest that not all students appear to follow this course of action. In fact, some students will at times so seemingly "stack the deck" against themselves that their likelihood of excelling, or even surviving, in a collegiate environment is jeopardized (Smith, Snyder, and Handelsman 1982).

The purpose of this study is to increase understanding of this form of student behavior. Specifically, the objec-

tive of this study is to examine the relationship between students' proclivity to self-handicap, and their expected and actual performances on the final exam in a Principles of Marketing course. First, accounts, or "linguistic devices (spoken or unspoken) employed whenever an action is subjected to a valuative enquiry" (Lyman and Scott 1970, p. 112), will be explored. Second, self-handicapping, a specific form of anticipatory account and a possible origin of such seemingly "irrational" behavior, will be examined. Third, students' proclivity to self-handicap will be related to their expected performance on the final exam, their actual performance on the final exam, and their self-reported anxiety at the time of the final exam. Finally, implications of the findings will be discussed.

ACCOUNTS

The prevalence of the use of accounts, such as excuses and justifications, has been well-documented (Snyder, Higgins, and Stucky 1983). Accounts represent a specific type of attribution, or "the process of constructing explanations for events" (Solomon 2001, p. 81). The purpose of accounts is to provide an explanation for a performance (such as a poor exam performance) with the goal of lessening or eliminating any negativity associated with its outcome. In other words, accounts are explanations that "lessen the negative implication of (one's) performance, thereby maintaining a positive image for oneself and others" (Snyder, Higgins, and Stucky 1983, p. 45). Accounts provide a protective mechanism for an individual to use as a shield against unpleasant or anxiety-producing realities (Wahlroos 1981). They play a key role in the

process of coping in an environment viewed as taxing or as having potential to tax the resources or abilities of a person (Burns and Perkins 1996), or in other words, accounts play a key role in an environment where failure to reach a specific standard is experienced or could be experienced. Through the use of accounts, an individual can attempt to "negotiate reality," or attempt to deceive oneself or others (Higgins 2002; Szabados 1985), by seeking to develop a "reality" which is believed to be more safe and less of a threat. Weiner goes so far to say that accounts are "untrue, tactical communications" (1992, p. 135).

Consistent with attribution theory, the central element of accounts is the self. Without a self to protect, there is no reason for accounts (Jones and Berglas 1978). One's assessment of one's self, or one's self-esteem (Ziller 1973), represents the driving force in the construction of accounts. Many psychology theorists believe that the maintenance of self-esteem represents a fundamental force in motivating an individual's behavior (Adler 1929; Fromm 1941; Horney 1945), a contention which has received a sizable degree of empirical support (see Greenberg, Pyszczynski, and Solomon 1986). In fact, James (1890) regarded self-esteem maintenance as a fundamental instinctive impulse. According to the self-worth theory of motivation (Covington 1997, 1992), self-esteem maintenance arises from a fear of failure and/or the fear of the effect that failure has on one's sense of ability and self worth. The role played by accounts, therefore, appears to be self-esteem maintenance where individuals use attributions in the process of self-image protection (Jones and Berglas 1978). Specifically, accounts act primarily through impression management (Goffman 1959).

IMPRESSION MANAGEMENT

Impression management, a specific aspect of attribution theory, consists of "any behavior by a person that has the purpose of controlling or manipulating the attributions and impressions formed of that person by others" (Tedeschi and Reiss 1981a, p. 3). According to Tedeschi and Reiss, impression management involves two types of explanations:

> The first is the actor's personal explanation, interpretation, or diagnosis as to whether the situation entails a predicament or potential predicament. If the cognitive explanation or definition of the situation as a predicament is reached the actor should become aware that some sort of impression management is required. He will then probably offer a public account for the predicament-provoking actions in order to avoid or escape their undesired implications. . . . Central to the realization that one faces a predicament is the belief that others attribute to oneself responsibility for the event in question (1981b, p. 272).

It can be expected, therefore, that an individual will attempt to lessen or eliminate the adverse effect which a suboptimal performance will have on his/her self-esteem (Schlenker and Pontari 2000). Indeed, once a person has been found responsible for a poor performance, that person stands liable for blame (Shaver 1985) unless s/he can successfully account for the action (Tedeschi and Reiss 1981b).

An individual's self-esteem is directly affected by his/her actions by a responsibility linkage (Snyder, Higgins, and Stucky 1983), where responsibility is "a judgement made about the moral accountability of a person of normal capabilities, which usually but not always involves a causal connection between the person being judged and some morally disapproved action or event" (Shaver 1985, p. 5). This responsibility linkage is influenced by the potential effects of an action and its outcome on the individual's self-esteem. Logically, to maintain self-esteem, individuals can be expected to attempt to strengthen the responsibility linkage where positive events exist and attempt to lessen or sever the responsibility linkage where negative events exist. Empirical research has provided substantial support to this view – individuals have been found to readily claim credit for positive events and to place credit for negative events elsewhere (Goleman 1985; Richins 1985; Zuckerman 1979). It can be said, therefore, "one is inclined to attribute to oneself good things, but one suffers when one has to attribute to oneself something that is not good" (Harvey, Ickes, and Kidd 1976, p. 16). Substantial empirical evidence concerning the success of impression management techniques exists (Schlenker and Pontari 2000; Tedeschi, Gaes, Norman, and Melborg 1986; Wayne and Ferris 1990), as well as attribution theory in general as it relates to self-esteem maintenance (Pyszczynski and Greenberg 1987; Weary 1980; Zuckerman 1979).

Impression management appears to play a role in the academic environment. In education settings, individuals frequently encounter situations of a diagnostic nature, such as exams (Thompson and Richardson 2001). A performance on an exam can be indicative of ability, a key component of self worth (Covington 1992). In the event of a poor exam performance then, it can be expected that a student will attempt to absolve oneself of connections with and/or responsibility for this negative event in order to maintain self worth (Martin, Marsh, Williamson, and Debus 2003). A mechanism which is available to achieve this goal is accounts. Although several have presented frameworks of retrospective accounts (accounts given for performances already given) (Burns and Perkins 1996; Wahlroos 1981), and have examined the use of such accounts in an academic setting (Jung 1988), this study will focus on a form of anticipatory account (accounts given before the performance), or self-handicapping.

SELF-HANDICAPPING

Self-handicapping involves the use of anticipatory excuses, or excuses given prior to a possible negative performance (Baumeister and Scher 1988). Self-handicapping differs from other attributions in that it occurs prior to the performance (Martin, Marsh, Williamson, and Debus 2003). The function of these anticipatory excuses is to shield individuals from the negativity associated with a suboptimal performance before it happens (Snyder 1990). "Self-handicappers choose impediments or obstacles to successful performance that enable them to deflect the cause of failure away from their competence and on to the acquired impediments" (Martin, Debus, and Marsh 2003, p. 3). An individual utilizing self-handicapping then, develops accounts for a subpar performance *before* the performance has occurred. In doing so, the individual is attempting to proactively minimize the potential negativity of a poor performance and/or sever responsibility with it before the performance has commenced (Rhodewalt and Tragakis 2002).

> The self-handicapper, we are suggesting, reaches out for impediments, exaggerates handicaps, embraces any factor reducing personal responsibility for mediocrity and enhancing personal responsibility for success. One does this to shape the implications of performance feedback both in one's own eyes and in the eyes' of others (Jones and Berglas 1978, p. 202).

Self-handicapping, therefore, involves individuals protecting their images of competence by proactively arranging for adversity in specific performances (Higgins 1990; Martin, Marsh, and Debus 2001). If a poor performance occurs, a ready excuse already exists (Martin, Debus, and Marsh 2003).

Thompson and Richardson (2001) provides attributional evidence attesting to the effects of the use of self-handicapping on individuals' self-esteem. Specifically, they observed that low self-handicappers are more likely to internalize their success to a greater degree than are high self-handicappers. Low self-handicappers were also observed, however, to be more likely to internalize failure in high-importance situations than are high self-handicappers. Feick and Rhodewalt (1998) and Rhodewalt and Hill (1995) observed similar findings. These observations suggest that self-handicapping succeeds in sheltering high self-handicappers from the negative effects of failures in situations of high-importance, but it also suggests that high self-handicappers may also shield themselves from the positive effects of successful performances. The process of self-protection, however, appears to come at a price. As a result, Murray and Warden (1990) suggest that high self-handicappers may remain unsure of their abilities, leading to a continuing use of self-handicapping tactics leading to an uncertainty-self-handicapping cycle (Bailis 2001; Zuckerman, Kieffer, and Knee 1998).

Self-handicapping does not appear to involve a fear of failure per se since the primary concern of high self-handicappers is not to avoid failure (Riggs 1992). In fact, self-handicapping behavior will often increase the likelihood of failure (Jones and Berglas 1978). Zuckerman, Kieffer, and Knee (1998) observed, for instance, that in a classroom setting, high self-handicappers display more withdrawal and negative coping strategies and poorer study habits. Instead, self-handicapping is concerned with the effects of failure – protecting oneself from the negative effects that failure can have on one's self-esteem (Rhodewalt and Tragakis 2002). High self-handicapping individuals find that it is easier to minimize the effects a poor performance may produce than to minimize the likelihood of a poor performance since the ability of one to ensure that a poor performance will not occur is limited.

Although research interest in self-handicapping is a relatively recent phenomenon, its foundations lie in the writings of Adler (1929). Adler posited the existence of a striving for superiority as a universal guiding motive (Ansbacher and Ansbacher 1967). Self-handicapping in turn, represents an unhealthy manifestation of this motive. Higgins, Snyder, and Berglas (1990), when discussing the views of Adler, state

> Normal individuals in this scheme sought to achieve superiority by overcoming their felt deficiencies (inferiority feelings) in a largely task-oriented and socially contributory manner. Neurotic individuals, in contrast, were thought to be so impressed with the magnitude of their perceived inferiorities, and so discouraged about their chances of overcoming them in socially useful ways, that they developed an inferiority complex. The inferiority complex, in turn, fostered the development of a superiority complex. For neurotic individuals, then, superiority striving became directed toward protecting their prestige, avoiding defeat, and sustaining the esteem-giving illusion of working toward true superiority (pp. 5–6).

As a result,

> The patient selects certain symptoms and develops them until they impress him as real obstacles. Behind his barricade of symptoms the patient feels hidden and secure. To the question, "What use are you making of your talents?" he answers, "This thing stops me; I cannot go ahead," and points to his self-erected barricade (Adler 1929, p. 13).

The success of this strategy lies in the fact that

> (the individual's) self-esteem is protected in his own judgement, and usually also his prestige in the estimation of others. If the decision fall against him, he can refer to his difficulties and to the proof of his illness (or any other handicap), which he has himself constructed. If he remains victorious, what could he not have done if he were well, when, as a sick man, he achieved so much – one handed, so to speak (Ansbacher and Ansbacher 1967, p. 276).

Paradoxically, therefore, in order to maintain self-esteem in the light of possible failure, the prospect of expected failure is communicated to one's self and one's referent others. This communication typically includes the "rationale," or an account for the possible failure.

The situational conditions in which a performance transpires has been shown to affect the propensity of one to self-handicap (Higgins 1990). For instance, Self (1990), and Snyder and Smith (1982) suggest that self-handicapping is more likely when an individual faces evaluative situations within which the likelihood of success is uncertain. Similarly, Rhodewalt, Saltzman, and Wittmer (1984) observed that increasing the importance of a performance will lead to a similar increase in the use of self-handicapping strategies. Pyszczynski and Greenberg (1983), for example, observed that for a test with "high ego-relevance" (the test was presented as being highly respected and a good predictor of academic success), subjects who were informed that they had a low probability of success reported intending to exert less effort on the test than those who were informed that they had a high probability of success. No such difference was noted for a test with "low ego-relevance." Shepperd and Arkin (1989) observed similar findings.

Self-handicapping can be manifest through a number of avenues, including strategic reduction in effort, procrastination, and the use of drugs/alcohol (Martin, Debus, and Marsh 2003; Martin, Marsh, and Debus 2001; Rhodewalt and Davison 1986; Sheppard and Arkin 1989). Relative to individuals with low proclivity to self-handicap, individuals with a high proclivity to self-handicap will exhibit less effort (Hirt, Deppe, and Gordon 1991; Lay, Knish, and Zanatta 1992) and be more likely to appeal to extenuating circumstances as obstacles of success prior to a performance (Feick and Rhodewalt 1998; Rhodewalt and Hill 1995; Thompson and Richardson 2001). The use of self-handicapping strategies in academia appears to be widespread (Midgley, Arunkumar, and Urdan 1996; Urdan and Midgley 2001). Furthermore, self-handicapping is viewed to be a enduring personal protection style (Higgins 1990).

LOWER GRADE EXPECTATIONS AS A SELF-HANDICAPPING STRATEGY

As mentioned above, the objective of self-handicapping within the realm of academia is to sever or lessen the responsibility connection between one's self and a possible forthcoming poor performance. In doing so, an individual attempts to proactively minimize the potential negativity of a poor performance and/or sever responsibility with it before the performance has commenced (Rhodewalt and Tragakis 2002). Grade expectations, however, represent a standard that an individual has established as the level of expected performance. The higher that one's grade expectations are, therefore, the higher the standard of achievement which is set. It would seem likely, therefore, that if individuals displaying a high proclivity to self-handicap will desire to decrease the possibility of performance failure (not fulfilling expectations), the expression of lower grade expectations can be expected. The lower grade expectations can logically be expected since a lesser chance of failure to achieve these expectations would exist. The lower grade expectations, therefore, in themselves become an avenue that individuals displaying a high proclivity to self-handicap can use to protect themselves from the negativity that would be associated with a poor exam performance.

H1: An individual's proclivity to self-handicap is negatively related to anticipated performance on the final exam.

SELF-HANDICAPPING AND EXAM PERFORMANCE

Jones and Berglas (1978) suggests that proclivity to self-handicap should be inversely related to academic achievement. Rhodewalt (1990) observed a significant inverse relationship between proclivity to self-handicapping and an index based on the individuals' GPA and ACT scores, as did Zuckerman, Kieffer, and Knee (1998) and Urdan, Midgley, and Anderman (1998). Furthermore, Martin, Marsh, and Debus (2001) observed a negative relationship between proclivity to self-handicap and end-of-year grades.

These findings, however, have not been found to be universal across the academic setting. Several studies (Greenberg, Pyszczynski, and Paisley 1985; Harris and Snyder 1986; Hunsley 1985; Jung 1988; Rhodewalt and Davison 1986) have reported that although high self-handicappers studied and/or practiced less than low self-handicappers before a performance, they generally performed as well as did the low self-handicappers. Feick and Rhodewalt (1998) also observed no relationship between self-handicapping and exam performance. Higgins and Berglas (1990) suggest that this finding may be reflective of the fact that very high self-handicappers may have a tendency to avoid self-esteem threatening experiences. Hence, since higher education, given its performance and evaluation orientation, can be viewed as potentially highly threatening to one's self-esteem, very high self-handicappers may be apt to avoid this undertaking altogether. The range of self-handicapping reported in studies examining self-handicapping in higher education, however, does not support this contention. Since the originators of the concept of self-handicapping (Jones and Berglas) hypothesized the existence of a negative relationship between self-handicapping and actual exam performance, and since Higgins and Berglas still support this hypothesis, the following hypothesis also appears to be justified.

H2: An individual's proclivity to self-handicap is negatively related to his/her actual performance on the final exam.

SELF-HANDICAPPING AND TEST ANXIETY

The relationship between self-handicapping and test anxiety appears to be more complex. For instance, although students use numerous self-handicapping strategies, test anxiety is viewed by some as a primary avenue for the expression of self-handicapping in the academic environment (Smith, Snyder, and Handelsman 1982). The condition of test anxiety can be illustrated by the "hapless student who claims to have mastered the course material before the examination but is unable to perform satisfactorily during the test, only to recall the material with complete clarity after it is too late" (Covington and Omelich 1987, p. 393). Test anxiety then, is not given as a reason for not knowing the information, but instead as a reason for not being able to adequately recall the information.

Empirical evidence exists which appears to support the existence of test anxiety. For instance, anxiety arousal is associated with diminishing academic performance (Dusek 1980; Tyron 1980; Wine 1982) and anxiety arousal appears to increase with exam difficulty (Covington 1983). Although Covington and Omelich (1987) also observe evidence of an inverse relationship between anxiety arousal and academic performance, they declare that it is inadequate as an explanation of poor exam performance. Instead, they suggest that students' claims that test anxiety is the cause of poor performance may more accurately reflect a defensive mechanism employed as a means to maintain a sense of competency in the event of inadequate performance. Covington (1984) and Covington, Omelich, and Schwarzer (1986) make the same suggestion.

Test anxiety appears to have its basis in the fear of the negative effects resulting from a possible subpar outcome from the testing process (Phillips, Pitcher, Worsham, and Miller 1980). Specifically, highly test-anxious students "tend to develop problem-solving strategies indicative of a generally higher motive to avoid failure than to approach success" (Dusek 1980, p. 91), leading them to seek external attributions for failure (Dweck 1975). Snyder and Smith (1982) suggest that test anxiety may be a commonly used self-handicapping strategy employed by students. Thompson and Richardson (2001) empirically examined this contention and conclude that individuals with a higher proclivity to self-handicap are more likely to claim impairment due to anxiety before evaluative performances. The setting of the study, however, was contrived – it was not based in a classroom setting.

Self-handicapping also has been examined by in the area of sports where examples of performance anxiety has been identified as a self-handicapping strategy. Ryska and Yin (1998), for instance, observe a positive relationship between proclivity to self-handicap and sport competition anxiety. The instrument used to measure sport competition anxiety (Matens, Burton, Vealey, Bump, and Smith 1990), however, differs significantly from the instruments ordinally used to measure general anxiety – it is much more specific and addresses imminent performance. Items in the scale include "I am concerned about choking under pressure" and "I'm confident I can meet the challenge."

In his study, Bailis (2001), observes results inconsistent with those of Ryska and Yin (1998). A closer look, however, uncovers a fundamental difference between these two studies. Bailis (2001), for instance, administered the instruments immediately prior to a competitive event whereas Rysta and Yin (1998) administered the instruments before a midseason practice session. Bailis (2001), therefore, likely more accurately measured competitive anxiety since the study involves an imminent game, not an abstract "future games" of Ryska and Yin (1998).

Furthermore, Prapavessis, Grove, Maddison, and Zillman (2003) suggest that when test anxiety is used as an self-handicapping strategy, it merely reflects a declaration of what the individual seeks to communicate and is not an indication of the presence of actual increased anxiety. Consistent with this line of thought, Learly and Shepard (1986) and Thompson (2004) speak of the need to make a distinction between behavioral and claimed self-handicapping activity, where behavioral self-handicapping activity is performance-adverse, actually lowering students' chances of success, and claimed self-handicapping merely lessens the responsibility linkage between performance level and one's self and does actually affect the level of one's performance. In the instance of claimed self-handicapping, it seems is possible, therefore, for individuals with high proclivities to self-handicap to appeal to handicaps which do not impede effort or ability (Hirt, Deppe, and Gordon 1991). In fact, the handicap itself may not actually exist in reality; claimed test anxiety may be one of these such handicaps. A student can claim test anxiety at the time of an exam, but in fact may not be experiencing excessive anxiety. Instead, the student may be merely lessening the responsibility linkage in the event of a possible poor performance.

Test anxiety is ordinarily conceptualized as a psychological concept measured via self-report (Anderson and Sauser 1995). Eysenck (1997) suggests self-reported anxiety conceptually differs from the actual anxiety experienced by students. He bases this contention on the observation that individuals who self-report low amounts of anxiety exhibit differing physiological manifestations of anxiety. Specifically, differences have been observed between self-reported anxiety and heart rate (e.g., Derakshan and Eysenck 2001, 1997), blood pressure (e.g., Weinberger, Schwartz, and Davidson 1979), and skin

conductance (e.g., Barger, Kircher, and Croyle 1997). Although Lazurus and Folkman (1984) suggest that the discrepancies result from deficiencies in the measures, empirical results suggest otherwise. Sheffer, Penn, and Cassisi (2001), for instance, observe that several of the physiological manifestations of anxiety vary widely between individuals. Eysenck (1997) suggests that differences between self-reported anxiety and physiological manifestations of anxiety arises from the fact that an individual's self-reported anxiety is a function of the way that one's physiological state and behavior are interpreted by an individual. Since self-handicapping and expected grades are psychological phenomenon, and since self-reported anxiety is also a psychological phenomenon and is the customary conceptualization of anxiety within an academic setting, self-reported anxiety appears to be the appropriate focus in this study.

Although claims of test anxiety have been suggested as a self-handicapping strategy and have been shown to be used as such, the theory behind self-handicapping seems to suggest that individuals with higher proclivities to self-handicap should actually report lesser test anxiety than students with a low propensity to self-handicap. Specifically, since self-handicapping is an anticipatory account with the objective of deflecting the negative effects of a possible poor performance, it would seem that individuals with high proclivities to self-handicap possess fewer reasons to be apprehensive about an upcoming exam performance since they have "less to lose." Since the objective of self-handicapping is to sever or lessen the responsibility connection between one's self and a possible forthcoming poor performance, if the individual does perform poorly, a ready excuse for the poor performance already exists – there are few self costs in the face of a poor performance. Consequently, it would appear that there are fewer reasons to worry about the nature that one's forthcoming performance will take.

H3: An individual's proclivity to self-handicap is positively related to his/her self-reported anxiety at the time of the final exam.

METHODOLOGY

The sample was comprised of 378 students enrolled in introductory marketing classes at a Midwest university taught by a single instructor. All of the students were either juniors or seniors. The students were asked to complete two short questionnaires during the course. The first questionnaire, which was administered at the beginning of the course, included the Self-Handicapping Scale (SHS) – a scale developed to measure the trait of self-handicapping (Rhodewalt 1990). This questionnaire was administered at this time to disguise the intent of this scale. (Since students did not know that their results would subsequently be related to their exam performance expectations on the final exam, their actual performance on the

final exam, or their anxiety experienced a the time of the final exam, expectations were that this approach would minimize that source of bias). Students were asked to include their ID numbers on the questionnaires so that extra credit could be assigned. Although students were informed that the extra credit opportunity consisted of two questionnaires, they were not informed that there responses would be matched (although they were informed that there would be two short questionnaires during the semester and that they needed to complete both questionnaires to receive the extra credit points). The second questionnaire was administered at the end of the course, immediately prior to the start of the final exam. The students were asked to evaluate their anticipated performance on the final exam. Furthermore, the students' self-reported anxiety were assessed at that time. Students were also asked to include their ID numbers on the second questionnaire. Student ID numbers were used to match the two questionnaires.

In an attempt to minimize possible bias, students were expressly guaranteed anonymity on both questionnaires as far as the course instructor was concerned. No nonresponse was observed – all of the students completed both questionnaires.

The final exam was comprised primarily of multiple-choice questions with a small number of true-and-false questions. All of the questions, therefore, were objective in nature. Consequently, students had no options to provide any written answers nor to comment on the exams. Students were aware of the form that the final exam would take prior to the exam.

INSTRUMENTS

The most commonly used instrument to measure trait self-handicapping, the Self-Handicapping Scale, is comprised of 25 statements designed to assess individual proclivity to use self-handicapping behavior (Table 1). For each statement, students were asked to indicate their level of agreement on a six-point scale. After accounting for reversed-scored items, responses were summed for each individual to produce their self-handicapping scores. The results of large group testing sessions indicate that the scale exhibits acceptable internal consistency (Cronbach's alpha = .79) and test-retest reliability (r = .74 after one month) (Rhodewalt 1990). The findings from a number of studies also attest to the predictive ability of the scale (Feick and Rhodewalt 1998; Rhodewalt 1990, 1994; Rhodewalt and Hill 1994; Strube 1986).

Although the Self-Handicapping Scale is the most commonly used scale to assess individual proclivity to self-handicap including within the academic environment, alternative instruments have been used to examine self-handicapping in an academic setting. These instruments, however, have proven not to be satisfactory replacements. A scale developed by Garcia (1995), for

TABLE 1
SELF-HANDICAPPING SCALE

Please indicate the degree to which you agree with each of the following statements as a description of the kind of person you think you are most of the time using the following scale:

0 – Disagree very much
1 – Disagree pretty much
2 – Disagree a little
3 – Agree a little
4 – Agree pretty much
5 – Agree very much

1. When I do something wrong, my first impulse is to blame the circumstances. (1)
2. I tend to put things off to the last moment. (2)
3. I tend to over prepare when I have any kind of exam or "performance." *
4. I suppose I feel "under the weather" more often than most people. (1)
5. I always try to do my best, no matter what. (2)
6. Before I sign up for a course or engage in any important activity, I make sure I have the proper preparation or background.*
7. I tend to get very anxious before an exam or "performance."
8. I am easily distracted by noises or my own creative thoughts when I try to read. (2)
9. I try not to get too intensely involved in competitive activities so it won't hurt too much if I lose or do poorly. (1)
10. I would rather be respected for doing my best than admired for my potential. *
11. I would do a lot better if I tried harder. (2)
12. I prefer the small pleasures in the present to the larger pleasures in the dim future.
13. I generally hate to be in any condition but "at my best." *
14. Someday I might "get it altogether." (2)
15. I sometimes enjoy being mildly ill for a day or two because it takes off the pressure. (1)
16. I would do much better if I did not let my emotions get in the way. (1)
17. When I do poorly at one kind of thing, I often console myself by remembering I am good at other things.
18. I admit that I am tempted to rationalize when I don't live up to others' expectations. (1)
19. I often think I have more than my share of bad luck in sports, card games, and other measures of talent. (1)
20. I would rather not take any drug that interfered with my ability to think clearly and do the right thing. *
21. I overindulge in food and drink more often than I should. (1)
22. When something important is coming up, like an exam or a job interview, I try to get as much sleep as possible the night before. *
23. I never let emotional problems in one part of my life interfere with things in my life. *
24. Usually, when I get anxious about doing well, I end up doing better.
25. Sometimes I get so depressed that even easy tasks become difficult. (1)

* Reverse scored
(1) Item in factor 1 (proclivity for excuse making)
(2) Item in factor 2 (concern about effort or motivation)

instance, addresses only behaviors which are often associated with self-handicapping, but does not address the reasons for the behaviors. Furthermore, the scale exhibits low internal consistency. (This finding was not surprising since the items included in the scale did not exclusively address self-handicapping items, but arguably also in-cluded post-performance accounts). Midgley, Arunku-mar, and Urdan (1996) developed an alternative scale to measure proclivity to self-handicap exclusively within the academic environment. The five items included in their scale address only self-handicapping. Questions remain, however, whether the Midgley, Arunkumar, and

Urdan (1996) scale addresses the entire domain of the construct. As a consequence, the use of the Self-Handicapping Scale has remained the norm when examining self-handicapping within the academic environment (Thompson and Richardson 2001).

Furthermore, attempts have been made to shorten the Self-Handicap Scale, most notably the efforts of Rhodewalt (1990) with the development of a fourteen-item Self-Handicapping Scale. Given validity concerns over the shortened scale (Martin and Brawley 1999), however, Zuckerman, Kieffer, and Knee (1998) recommends the use of the original, full-length version of the instrument.

The Self-Handicapping Scale is also viewed to be a more valid measure of individuals' proclivity to self-handicap than examining practices believed to be result of a high proclivity to self-handicap. High self-handicappers can be expected to exhibit their proclivity via different behavioral avenues. To accurately measure individuals' proclivity to self-handicap via behavior, therefore, will require an identification of each possible behavioral avenue and the development of an appropriate weighting mechanism. Furthermore, the several of the behaviors associated self-handicapping can at times possess origins other than self-handicapping requiring that research must be conducted in a much more structured environment. The use of the Self-Handicapping Scale overcomes these limitations.

Finally, a factor analysis of the Self-Handicapping Scale by Rhodewalt (1990) indicates that it includes two factors – one factor reflecting a proclivity to making excuses and a second representing concern about effort and motivation. Interestingly, the factor structure of the Self-Handicapping Scale has not been recognized in subsequent studies.

Students' expected and actual performance on the final exam are measured on five-point scales based on letter grade similar to Wong (2000) (A = 1, B = 2, C = 3, D = 4, F = 5). It is unlikely that students could predict grades with greater precision via alternative scale (e.g., numerical percentage). Actual performance was measured on the same scale to provide continuity and to be consistent with past research on self-handicapping. Given the predominance of the use of multiple-choice exams in the Principles of Marketing course (Bacon 2003), that was the form which the final exam took.

Students' self-reported anxiety, is not an easy concept to measure (Ebel 1972). For instance, although various test-anxiety scales have been constructed, the validity of these scales have yet to be unequivocally established. Early studies on test anxiety attempted to measure anxiety by physiological means (Cannon 1929; Folin, Demis, and Smillies 1914). Since the autonomic nervous system can seldom be consciously controlled, this form of measurement should suffer little from faking or from problems concerning social desirability (Ander-

son and Sauser 1995). The results of measuring this concept by physiological means, however, have been disappointing (Levitt 1967). When testing five types of physiological measures used to measure anxiety, Hopkins and Chambers observed "the physiological measures are essentially unrelated, and do not provide the basis for the identification of a preferred measure of anxiety" (1966, p. 189).

Several attempts have been made to measure test anxiety via self-administered scales, including such measures as the Test-Anxiety Questionnaire (TAQ) (Mandler and Sarason 1952), the Test Anxiety Scale (TAS) (Sarason 1958), the Test Anxiety Inventory (TAI) (Speilberger 1980), the Reactions to Tests Scale (RTT) (Sarason 1984), and the Revised Test Anxiety Scale (RTA) (Benson et al. 1992). (See Anderson and Sauser (1995) for a complete list). Such "reliance on self-report inventories of anxiety implies not only a disillusionment with other types of measures, but also acceptance of the awareness of test anxiety as a *conscious* process" (Anderson and Sauser 1995, p. 19). Several questions concerning the validity of such scales exist, however. One such problem is that the existing scales have their origins in differing schools of thought. For instance, the trait school of thought emphasizes the stable, enduring nature of test anxiety, whereas the situation approach emphasizes the situtational determinants of test anxiety. Which is the correct approach? Bedell and Marlowe (1995) compared scales developed under the various schools of thought porporting to measure test anxiety. Interestingly, the measures were "essentially equivalent in their assessments. . . . It is obvious that the differences in their (the scales') theoretical basis have little bearing on what is being measured" (Bedell and Marlowe 1995, p. 41).

Anderson and Sauser raise another question on the validity of test anxiety scales – "To what extent do the anxiety measures tap some of the same skills as the ability-achievement scores (test performance): vocabulary, reading comprehension, test taking strategies, and so forth?" (1995, p. 20). A number of the authors and users of these scales have displayed an active concern for these issues (Hopkins and Chambers 1966). This question, however, has not been unequivocally addressed.

Furthermore, Tobias and Hedl (1972) suggests that test anxiety is a manifestation of general anxiety, and should be conceptualized as such. Bedell and Marlowe (1995) observed evidence consistent with this contention. They observed that students' test performances were more strongly related with a scale addressing general trait anxiety than they were with scales which attempt to measure only test anxiety. Moreover, in the presence of self-handicapping, a scale addressing general trait anxiety can be expected to provide a more accurate measure of anxiety at the time of a final exam. Students can be expected to be more likely to notice that an instrument

measuring test anxiety indeed measures test anxiety, possibly resulting in responses which will represent claimed test anxiety as opposed to actual anxiety.

For this study then, in a manner similar to that of Allen and Janiszewski's (1989) procedure to measure mood, a 7-item general anxiety scale (Table 2) was developed. Since it was to be administered immediately prior to the final exam, it was imperative that the scale and the scale items be short so that it could be quickly completed. The scale items were drawn from the State-Trait Anxiety Inventory (STAI) (Spielberger 1983). The STAI is a lengthy instrument (40 items long) which would be inappropriate for admission immediate before the final exam. Numerous attempts have been made to develop short forms of the STAI, a process which has been supported by Speilberger for use where time is a consideration. Although all of the attempts have seemingly produced valid results, none of the short forms have become accepted as a preferred measure (Marteau and Bekker 1992). For this study, items chosen included those scoring high on the anxiety-absent and state-anxiety-present factors (Iwata et al. 1998) and which would easily be understood by a student sample. For each item, students were asked to indicate their level of agreement on a four-point scale. After accounting for reverse-scored items, respondents' answers were summed. An acceptable Cronbach's alpha was observed (.865).

FINDINGS

The distribution of students' self-handicapping scores covered a wide range, indicating the inclusion of individuals with widely varying proclivities to self-handicap (mean 63.8, standard deviation 9.95, range 38–95). The same was true for the scale measuring self-reported anxiety state (mean 15.2, standard deviation 4.9, range 7–28). Students' actual grades on the final exam (mean 3.07, standard deviation 1.166) were significantly lower than their expected grades (mean 1.76, standard deviation .679).

The results of correlation analyses are displayed in Table 3. Evidence was observed in support of Hypothesis 1 – the hypothesized significant negative relationship between self-handicapping and expected final exam grade was observed (r = .258, p < .000). Students with higher proclivities to self-handicap were found to express significantly (at the .05 level) lower grade expectations on the final exam than were students with lower proclivities to self-handicap.

No evidence in support of Hypothesis 2 was observed – a significant relationship was not observed between self-handicapping and actual final exam grade (r = .083, p = .180). No evidence was observed in support of the existence of a negative relationship between self-handicapping and exam performance, indicating that al-

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TABLE 2
GENERAL ANXIETY SCALE

Please describe how you presently feel on the following scale:

1 – Not at all
2 – Somewhat
3 – Moderately so
4 – Very much so

1. I feel calm. *

2. I am tense

3. I feel upset.

4. I feel nervous.

5. I am jittery.

6. I feel content. *

7. I feel over-excited and rattled.

* Reverse scored

TABLE 3
RELATIONSHIPS WITH SELF-HANDICAPPING

	Entire Sample Self-Handicapping		Quartiles Self-Handicapping		
	Correlation	Significance	t-value	df	Significance
Hypothesis1: Expected Final Exam Grade	**.258**	**.000***	**-4.154**	**136**	**.000***
Hypothesis 2: Actual Final Exam Grade	.083	.180	-1.302	137	.195
Hypothesis 3: Self-Reported Anxiety	**.175**	**.005***	**-3.589**	**136**	**.000***
* p < .05					

though self-handicapping appears to affect students' grade expectations, it does not appear to affect actual exam performance.

Support was observed for Hypothesis 3 – a significant negative relationship was observed between self-handicapping and self-reported anxiety (r = .175, p = .005). Students with higher proclivities to self-handicap were observed to be less anxious at the time of the final exam than those with lower proclivities to self-handicap.

Given the significant results for both Hypotheses 1 (expected final exam grade) and 3 (self-reported anxiety), does self-reported anxiety mediate the relationship between proclivity to self handicap and expected final exam grade? This question was examined using the methodology of Baron and Kenny (1986). The results from a regression analysis with self handicapping predicting self-reported anxiety (b = .079, standard error = .028) and results from a regression analysis with self-reported anxiety predicting expected final exam grade (b = .028, standard error = .007) were tested using the Sobel test (Sobel 1982). The result (z = 2.31, p = .021) was significant at the .05 level, suggesting that self-reported anxiety does act as a mediator between self-handicapping and expected final exam grade.

Similarly, does self-handicapping moderate the relationship between self-reported anxiety and expected and actual exam performance on the final exam? The results of adding the product of the possible moderator (self handicapping) and the independent variable (self-reported anxiety) to regression analyses with students' expected and actual final exam grades as the dependent variables (as recommended by Cohen and Cohen (1983)) produced insignificant results (t = .228, significance = .820 for expected exam grade, and t = .192, significance =.848 for actual final exam grade). Self handicapping does not

appear to moderate the relationship between self-reported anxiety and expected or actual final exam grade.

The analysis was repeated including only those students in the top and bottom quartiles of proclivity to self-handicap factor to provide a direct comparison of those students possessing a high proclivity to self-handicap and those with a low proclivity to self-handicap and those with a low proclivity to self-handicap. (The examination of individuals possessing a high proclivity to self-handicap and those with a low proclivity is a widely used form of analysis when using the Self-Handicapping Scale (Thompson 2004; Thompson and Hepburn 2003; Thompson and Richardson 2001)). The mean self-handicapping score for the top quartile was 75.5 (standard deviation 4.90) and 50.8 (standard deviation 5.14) for the bottom quartile. For individuals in the top quartile of self-handicapping scores, the distribution of the scores of the other variables were: self-reported anxiety, mean 16.6, standard deviation 4.36; expected final exam grade, mean 1.95, standard deviation .680; and actual final exam grade, mean 3.05, standard deviation 1.283. For individuals in the bottom quartile of self-handicapping scores, the distribution of the scores of the other variables were: self-reported anxiety, mean 13.8, standard deviation 4.81; expected final exam grade, mean 1.50, standard deviation .563; and actual final exam grade, mean 2.78, standard deviation 1.161. The results of t-tests (also displayed in Table 3) are similar to the results observed for the entire sample – significant differences were observed for expected final exam grade (Hypothesis 1) (t = -4.154, df = 136, p < .000) and self-reported anxiety (Hypothesis 3) (t = -3.589, df = 136, p < .000) , but not for actual final exam grade (Hypothesis 2) (t = -1.302, df = 137, p = .195).

For further insight, the analysis was repeated examining each of the two factors of the Self-Handicapping

TABLE 4
RELATIONSHIPS WITH SELF-HANDICAPPING FACTORS

Factor 1 (Proclivity for Making Excuses)

| | Entire Sample Self-Handicapping | | Quartiles Self-Handicapping | | |
	Correlation	Significance	t-value	df	Significance
Hypothesis1: Expected Final Exam Grade	**.161**	**.000***	-1.498	174	.136
Hypothesis 2: Actual Final Exam Grade	.061	.270	-.442	173	.659
Hypothesis 3: Self-Reported Anxiety	**.335**	**.000***	**-5.516**	**173**	**.000***

Factor 2 (Concern about Effort and Motivation)

| | Entire Sample Self-Handicapping | | Quartiles Self-Handicapping | | |
	Correlation	Significance	t-value	df	Significance
Hypothesis1: Expected Final Exam Grade	**.194**	**.000***	**-4.049**	**198**	**.000***
Hypothesis 2: Actual Final Exam Grade	.072	.190	-1.894	198	.060
Hypothesis 3: Self-Reported Anxiety	.051	.363	-1.284	199	.201

* p < .05

Scale (a proclivity to making excuses and concern about effort and motivation) individually (Table 4). The results observed for the first factor were similar to the results observed for the entire self-handicapping measure (H1 – expected final exam grade r = .161, p < .000; H2 – actual final exam grade r = .061, p = .270; H3 – self-reported anxiety r = .335, p < .000), except that the relationship involving self-reported anxiety appears to be stronger. The results observed for the second factor indicate that a significant relationship exists only for expected final exam grade (Hypothesis 1) (r = .194, p < .000), not for actual final exam grade (Hypothesis 2) (r = .072, p = .190) nor for self-reported anxiety (Hypothesis 3) (r = .051, p = .363).

The analysis was repeated including only those students in the top and bottom quartiles of each proclivity to

self-handicap factor to provide a direct comparison of those students possessing a high proclivity to self-handicap and those with a low proclivity to self-handicap. The results of t-tests for the first factor produced significant results only for self-reported anxiety (also displayed in Figure 4) (H1 – expected final exam grade t = -1.498, df = 174, p = .136; H2 – actual final exam grade t = -.442, df = 173, p = .659; H3 – self-reported anxiety t = -5.516, df = 173, p < .000). Similarly, the results of t-tests for the second factor produced significant results only for expected exam grade (H1 – expected final exam grade t = -4.049, df = 198, p < .000; H2 – actual final exam grade t = -1.894, df = 198, p = .060; H3 – self-reported anxiety t = -1.284, df = 199, p = .201). These findings suggest that the two dimensions of self-handicapping may affect individuals in differing ways.

DISCUSSION

Although the assessment process, especially the examination process, has been the focus of numerous studies in marketing literature, the students who are the subjects of this line of research have received much less attention. As the introductory course, students taking the Principles of Marketing course seem to be of particular concern. For students not majoring in marketing, the Principles of Marketing course is often the only course in marketing that they take. For those majoring in marketing, the Principles of Marketing course forms the basis for the other courses they will be taking in the area. Experiences in the Principles of Marketing course can be expected to affect students' perceptions of other marketing courses to be taken. Furthermore, since many students do not enter college or the business school with a clear understanding of what the discipline of marketing comprises, the Principles of Marketing course acts to introduce the field and, as a result, in attracting students to major in the subject. The purpose of this study was to increase knowledge about students' perceptions of expected performance in a Principles of Marketing course

The relationship observed between the proclivity to self-handicap and expected final exam score was consistent with the hypothesis. High self-handicappers were found to expect to score significantly lower on the final exam in their Principles of Marketing course than were low self-handicappers. This finding supports the contention that individuals with higher proclivities to self-handicap will lower the expectations they possess of their performance on an imminent exam to minimize the probability of experiencing a poor performance. By lowering their expectations, students logically lower their risk of not meeting them, protecting their self-esteem.

Students' expectations of exam performance appears to an important area of concern – "accuracy affords predictability that may help persons cope with their social and physical environments" (Kruglanski 1989, p. 395). "Self-perceptions that are out of touch with reality not only reveal a lack of self-knowledge, but may also impede effective self-regulation and goal setting in academic, professional, and interpersonal situations" (Beyer 1999, p. 280). Since research has also shown a positive relationship between ability to accurately predict exam performance and academic success (Fitzgerald, Gruppen, White, and Davis 1997), the effect that one's self-handicapping appears to have on grade expectations has the potential to affect not just students' performance in the Principles of Marketing course, but whether overall academic success is achieved.

Confirmatory findings were not observed for the second hypothesis. No significant relationship was observed between self-handicapping and actual performance on the final exam. This seems to suggest that proclivity to self-handicap may have little effect on students' actual final exam performance in the Principles of Marketing course. This finding adds to the growing body of research which reports not finding such a relationship (e.g., Feick and Rhodewalt 1998; Greenberg, Pyszczynski, and Paisley 1985; Harris and Snyder 1986; Hunsley 1985; Jung 1988; Rhodewalt and Davison 1986). Similarly, this also seems to indicate that the smaller number of studies which report observing a relationship between self-handicapping and exam performance (e.g., Martin, Marsh, and Debus 2001; Rhodewalt 1990; Urdan, Midgley, and Anderman 1998; Zuckerman, Kieffer, and Knee 1998) may have observed spurious results. The lack of a relationship between self-handicapping and actual exam performance in this study suggests that self-handicapping does not appear to be a major hindering factor on students' performances on the exam.

An alternative explanation for the results observed, however, exists. Since the activities often associated with a high proclivity to self-handicap (e.g., poor study habits, withdrawal) are widely recognized as adversely affecting exam performance, individuals with high proclivities to self-handicap may actually possess higher abilities than individuals with low proclivities to self-handicap. The observation that final exam performance is not related to proclivity to self-handicap may reflect that although individuals with high proclivities to self-handicap may have higher abilities, the realization of better exam performance is thwarted by the negative effects of self-handicapping-motivated activities.

This finding suggests a number of areas for further research. First, what are the abilities of individuals with higher proclivities to self handicap relative to those with lower proclivities to self handicap? This issue is not an easy area to examine given the effects of self-handicapping on the measurement of one's abilities. Specifically, are the abilities of individuals with high proclivities to self handicap equal to those of individuals with lower propensities to self-handicap with self-handicapping having relatively little effect on their performance levels, or are the abilities of individuals with higher proclivities to self handicap actually greater? If their abilities are greater, how can marketing instructors structure the Principles of Marketing course to permit students with higher proclivities to self-handicap achieve success to the extent permitted by their abilities?

Finally, the relationship between self-handicapping and self-reported anxiety was as hypothesized. Low self-handicappers reported feeling significantly more anxious at the time of the final exam than were high self-handicappers. It appears that students with higher proclivities to self-handicap may experience less anxiety at the time of the final exam since they have "less to lose." If they experience a suboptimal performance, they can always appeal to the pre-emptive accounts they have given prior to the exam. It appears, therefore, that self-handicapping may be successful in achieving beneficial results in an

academic setting. If the importance of an exam to the maintenance of one's self-esteem can be reduced, the need to be anxious over one's performance on the exam is reduced.

Analysis of the two factors of self-handicapping (proclivity to make excuses and concern over effort and motivation) provides additional insight into interpreting the results. The fact that only proclivity to make excuses was observed to be related to self-reported anxiety of students with more extreme self-handicapping tendencies (high and low) suggests that excuse making may act as the means by which self-handicapping can reduce students' anxiety over an exam. The fact that concern over effort and motivation was observed to be related to expected exam grade also appears logical.

LIMITATIONS

A number of limitations exist which may limit the generalizability of the results. First, to increase the likelihood that students would respond truthfully to the items on the questionnaires, no attempts were made to capture demographic information from the sample. To control of extraneous variables, the sample included only students taking the Principles of Marketing course at a single medium-sized university located in the Midwest. Furthermore, only students taking the course from a single instructor with a single teaching testing style were included. Additional research is required to establish the generalizability of the results to students attending other universities and to instructors with differing teaching/testing styles. Finally, the general anxiety scale has not yet undergone significant validity testing.

APPLICATION

The findings seem to indicate that self-handicapping may not be a serious hindrance to students' performances on their final exams in the Principles of Marketing course. In no instance was self-handicapping observed to be related to exam performance. Also, self-handicapping appears to lower students' anxiety at the time of the exam. The results appear to indicate that there may be no need for marketing educators to be overly concerned with the self-handicapping proclivities of their students attending the Principles of Marketing course.

Even though these findings do not identify unequivocal specific problems, the findings do not imply that marketing educators should disregard the effects of self-handicapping. As discussed earlier, individuals with high proclivities to self-handicap may also be less likely to internalize the positive effects of successful outcomes. The less ability to internalize the positive effects of success may lead to less confidence in one's abilities and may lead to the avoidance of evaluative situations, such as challenging employment opportunities. Since exam performance is not the final objective of a collegiate education, but instead the future success of students, marketing instructors should still attempt to identify individuals with high proclivities to self-handicap. Although lowered exam performance expectations may aid in self protection in the academic environment, lowered expectations can be expected to adversely affect their subsequent careers. Referring these students to counseling may ultimately prove to be beneficial by helping these students to become more self-assured in their selves and to become less dependent on the outcomes of performances to define their selves.

Similarly, students with lower proclivities to self handicap seem to experience higher test anxiety. Besides possibly adversely affecting their academic performance, higher anxiety is likely to be experienced in other performance situations. The higher anxiety, in turn, may result in poorer performances in evaluative performances in one's career and/or the avoidance of some such endeavors, likely adversely one's career performance. These students, similar to students possessing higher proclivities to self handicap, would also seem to be able to profit from counseling, possibly involving learned optimism (Seligman 1998).

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