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Traditional/nontraditional students' use of goal orientations and coping strategies

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TRADITIONAL/NONTRADITIONAL STUDENTS'
USE OF GOAL ORIENTATIONS AND
COPING STRATEGIES

by

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Bachelor of Science
University of California, Davis
2004

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University of California, Irvine
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A thesis proposal submitted in partial fulfillment
of the requirements for the

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Department of Educational Psychology
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Traditional/Nontraditional Students' Use of Goal Orientations and
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ABSTRACT

Traditional/Nontraditional College Students Use of Goal Orientations and Coping Strategies

by

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This study sought to improve upon the definition of nontraditional student status, and to identify relationships between student status, goal orientations, and coping strategies. Two of this study's hypotheses included the expectation that nontraditional students would employ more adaptive goal orientations (e.g. mastery-approach) more often than traditional students; and students who use more adaptive goal orientations would employ more adaptive coping strategies (e.g. task-oriented coping).

This study involved 180 undergraduates, and used a participant information questionnaire, the Coping Inventory for Stressful Situations (CISS), and the Achievement Goal Questionnaire (AGQ). Factor and cluster analyses revealed that the variables age, marital status, parental status, and whether time was ever taken off from school, shared enough variance to allow the identification of two clusters. Correlations and regressions showed that the nontraditional student cluster used mastery-approach goals more than the traditional cluster, and confirmed a significant relationship between mastery-approach goal orientation and task-oriented coping.

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CHAPTER 1

INTRODUCTION

What are the motives and attitudes college students have towards their education?

As you could imagine, there are numerous motives and strategies college students can apply to their academic lives. Perhaps they are driven by their parents' encouragements; perhaps they are driven by the idea that they will have better job opportunities; or perhaps they are buying their time to try and figure out what it is they really want to do. For those with family and parental commitments, perhaps the motive is to prepare for career changes. There are many other reasons why one would choose to attend college and endure the many stressors that come with its workload. Persistence and strategic planning can play crucial roles in one's academic success. The academic stressors of labs, note-taking, studying for exams, and writing term papers take a great deal of effort. The way in which students choose to deal with these stressors can have both adaptive and maladaptive effects. Therefore, many psychologists, particularly educational psychologists, have invested their time and research efforts in studying student motivation and coping strategies to better understand the hindrances and promoters of student achievement.

Undergraduate college student populations in the United States are projected to increase by approximately 200,000 students annually for the next half decade. The population of older student populations (ages 24 and older) who may be returning to

college is also projected to have a dramatic increase (National Center for Education Statistics, 2006). Accommodating the growing student population with the proper resources and guidance will be a major undertaking for universities throughout the United States. Therefore, it should be a high priority for universities to better understand not just the motives and coping strategies of their “traditional” aged students, but also the motives and coping strategies of their older “nontraditional” aged students.

Despite the numerous studies on student status (traditional vs. nontraditional), student motivation, and coping strategies, few studies have attempted to seek relationships between the three. A study by Morris, Brooks and Mays (2003) was one of the rare studies that has presented data on the relationship between student status, motivation, and coping strategies. In their study, a relationship between achievement goal orientation (motivation), coping style, and student status was drawn using the dichotomous framework of achievement goal theory (mastery vs. performance goal orientations). The two goal orientations were correlated with the two coping styles of emotion-orientation and task-orientation. Finally, comparisons between ‘traditional students’ (defined as ages 18-22, who resided on campus) and ‘nontraditional students’ (defined as ages 22 & up, with multiple roles) were made to determine whether each group preferred any particular coping strategy or goal orientation.

Morris et al. hypothesized that the older nontraditional students may have more obligations towards family, spouse, and careers than do traditional students. With these additional obligations, the Morris et al. study predicted that nontraditional students would display more complex and advantageous coping strategies (task-oriented coping) and therefore higher levels of mastery goal orientations more than their younger and more

traditional counterparts. Results indicated that 'nontraditional' students favor task-oriented coping strategies and mastery goal orientations more often than 'traditional' students. The implications of the Morris et al. study were that (a) goal orientations may be predictive of the coping strategies students tend to use and (b) older, more mature, students would more often use mastery goal orientations. Though Morris et al. discuss stimulating implications, their study had many limitations and weaknesses.

First, the study used a dated survey to measure participants' goal orientations, despite recent alterations that have been made to the achievement goal theory. Modifications have been made to both 'achievement goal theory' as well as the constructs of coping strategies. The two achievement goal orientations traditionally recognized by researchers were mastery (learning) goal orientations and performance goal orientations. Mastery goal orientation is simply defined as the motive to master a task for the sake of gaining competence in that task, whereas performance goal orientation is defined as the motive to gain favorable judgments of competence and to avoid situations that may lead to unfavorable judgments (Dweck & Leggett, 1988). Scholars such as Harackiewicz, Barron, Pintrich, Elliot and Thrash (2002), Elliot (1999), and Pintrich (2000), however, have explored whether the two traditionally recognized goal orientations could be further divided, and have proposed additional modifications to the achievement goal theory. They argue that even within mastery and performance goals orientations, individuals may have a tendency to avoid certain aspects of an academic task, or openly approach certain aspects of an academic task (approach vs. avoidance).

Early modifications to achievement goal theory applied a trichotomous framework, acknowledging mastery goals, performance-approach goals, and

performance-avoidance goals (Midgley et al. 1997). This framework differentiated performance-approach individuals as wanting to outperform others and performance-avoidance individuals as those who want to avoid doing worse than others. Yet Harackiewicz et al. (2002) advocated that an “approach” and “avoidance” differentiation can be applied to mastery goals as well. Therefore, in more contemporary forms of the achievement goal theory, both mastery and performance goal orientations have been split further into four separate orientations: mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goal orientations (2x2 framework of achievement goal theory). In this framework, mastery-approach individuals retain the characteristics of wanting to learn for the sake of gaining competence; mastery-avoidance as individuals who want to avoid failing at a task; performance-approach as individuals who want to outperform others; and performance-avoidance as individuals who want to avoid doing worse than others. These differences between these four goal orientations may affect how people cope with challenging academic tasks.

The second limitation in the Morris et al. study was the researchers’ decision to discard measuring the coping strategy “avoidance-oriented coping.” Just as the constructs for achievement goal theory have undergone modifications, so too has the conceptualization of coping strategies. Traditionally, two coping strategies, task-oriented coping and emotion-oriented coping, were assessed (Parker & Endler, 1992). Individuals who employed a task-oriented coping strategy sought to confront their stressors and persist in their attempts to find solutions to their problematic tasks. Emotion-oriented coping strategies, on the other hand, are simply emotional responses to problematic tasks and are said to have more negative consequences (e.g. self-blame). Yet, just as in

achievement goal theory, contemporary research has debated whether additional orientations should be recognized. The coping strategy termed ‘avoidance-oriented’ coping is said to be utilized by individuals who attempt to avoid a stressful situation by replacing it with a substitute situation (distraction) or by seeking out other individuals (social diversion) (Parker & Endler, 1992).

The third major limitation of the Morris et al. study was the failure to explain the methods that were used to differentiate between traditional and nontraditional students. In regards to the current literature on student status, differentiation between ‘traditional’ and ‘nontraditional’ students has been inconsistent. The majority of previous studies have used age as the only variable to differentiate between traditional and nontraditional students. Some define nontraditional college students as individuals over the age of 22 (Harju & Eppler, 1997), others identify individuals over the age of 24 (Chartrand, 1992; Justice & Dornan, 2001), and yet others choose to use individuals over the age of 25 (Chao & Good, 2004; Myers & Mobley, 2004). In 1990, Chartrand had defined nontraditional college students as those who held “two or more major life roles” (Chartrand, 1990), which included parental roles, spousal roles, and employment roles. In a study by Dill and Henley (1998), their definition consisted of “returning adults” ages 24-54. Regardless of the multiple methods used in defining student status, the underlying theme among these studies is that they all hold the idea that nontraditional college students are older students, who have matured and/or acquired experiences that are considered significant enough to differentiate them from traditional students. These experiences may include those mentioned by Chartrand (1990) as well as other variables, such as time taken off from formal schooling or involvement in various out of school

activities. One of the aims of this study is to better identify characteristics to differentiate between 'traditional' and 'nontraditional' students, thus improving upon the current definitions. To accomplish this, the following study will use of factor analysis to identify relevant factors deemed appropriate to defining student status, followed by a cluster analysis to identify and separate students into groups.

Due to the innovative methods intended to be used in defining student status, the more contemporary versions of 'achievement goal theory,' and the use of the additional construct for coping strategy (avoidance-oriented coping), it seems appropriate to perform a follow-up to the Morris et al. study in attempts to determine whether a relationship between coping strategies and goal orientations is maintained, and whether my alternative identification for student status is a strong predictor of coping strategies and goals orientations. My proposed study will be a follow-up and expansion of the Morris et al. study. Follow-up studies are important in scientific research to test the reliability of results from prior studies (follow-up studies may or may not yield similar results). Given the absence of the application of the 2x2 framework of goal orientation and poor explanation in identifying traditional and nontraditional students by the Morris et al. study, my study will employ different instruments (for goal orientations and participant demographics). The goals of this study are four-fold: 1) to identify character traits that better define the nontraditional student status; 2) to investigate whether student status is a strong predictor of certain goal orientations; 3) to investigate whether certain goal orientations are strong predictors of certain coping strategies; and 4) to add and contribute to the literature on goal orientations and coping strategies. Though they are not the primary goals of this study, for exploratory reasons, this study will compare its

findings with those of the Morris et al. study and attempt to identify the goal and coping style preferences of other subgroups within the student population (e.g. student athletes and commuting students).

In attempts to further validate the relationship between goal orientations and coping strategies, this study will use the “Achievement Goal Questionnaire” (AGQ) to evaluate students’ goal orientations because it was developed using a 2x2 framework of achievement goal theory. The additional instruments to be employed in this study will include a participant information questionnaire (to further identify characteristics within the student population), and the “Coping Inventory for Stressful Situations” (CISS). A more detailed discussion and description of these instruments are included in both the literature review and methods chapters of this study. Included in the literature review is information that further explains how previous studies have defined student status; the various types of coping styles researchers have identified and how they relate to academia; the development, applications, and modifications of the “Achievement Goal Theory”; and a more detailed summary of the Morris et al. study. Information pertaining to the demographics of the participants, sample selection, instrument choice, procedures, and results can be found in later chapters.

Regardless of the outcomes, future investigations correlating coping strategies, goal orientations, and student status will inevitably have to be conducted to further validate the claims made by both the Morris et al. study and this study. Hopefully, the analysis of this study’s results [in addition to evidence from prior research] will have implications for how student status may affect and predict goal orientations and, in turn, coping strategies. I expect to find that student status will be a strong predictor of goal

orientations, and that certain goal orientations will be strong predictors of certain coping strategies.

CHAPTER 2

LITERATURE REVIEW

Overview

This chapter discusses the topics of student status, coping strategies, achievement goal orientations, the Morris et al. study, and both the rationale and hypotheses of this study. Details in regards to the development and definitions for student status, coping strategies and achievement goal orientations are given in the subsequent sections. The presentation of these three constructs includes discussions of studies and the limitations and modifications of various theories, and is intended to serve as evidence for the rationale for this study. This chapter is also meant to provide further detail as to the findings and rationale of the Morris et al. study, which allows my study to gain greater insight in developing new hypotheses.

Student Status

One important classification of students is traditional versus nontraditional students. Numerous studies have been done to identify differences between the two groups, however, the literature on defining student status has been inconsistent. Some studies define nontraditional students as those who have returned to schooling (Dill & Henley, 1998), or as students who hold multiple life roles (Chartrand, 1990), or working adults who attend evening classes (James & Sooner, 2001; Shields, 1993), or college

students over the age of 24 (Eppler, Carsen-Plentl, & Harju, 2000). The use of age as the differentiating factor between traditional and nontraditional students is the most prevalent method of classifying student status, yet agreement on the cutoff age has also been inconsistent.

Some studies use the age of 22 years as the cutoff mark (Harju & Eppler, 1997), others use the age of 24 (Chartrand, 1992; Justice & Dornan, 2001; Eppler, Carsen-Plentl, & Harju, 2000), and yet others use the age of 25 (Chao and Good, 2004; Myers & Mobley, 2004). The various inconsistencies in defining student status become confusing and make it difficult to interpret the behaviors of the nontraditional group as a whole whenever different defining variables and/or cutoffs are used. One of the few consistencies the various studies do agree upon is that nontraditional students are older and somehow more mature than traditional students. Eppler, Carsen-Plentl, and Harju (2000) suggest that nontraditional students have tended to have out-of-school commitments and later return to schooling with the primary purpose of gaining new knowledge and skills. Chartrand (1990) suggests that it can be the multiple roles as spouse, parent, and employee that differentiates traditional students from nontraditional.

Collectively, from the various studies, it can be assumed that nontraditional students are typically older, more mature, and have more life experiences than traditional students. Yet how does one categorize individuals who are older with little life experiences, or those who are younger with many life experiences? What category would a 23 year old student be placed in if they had never taken time off from school or have 'life experiences' (e.g. parental duties, spousal responsibility, or employment)? What about the 19 year old student who is married with one child, but has never taken time off

school? What about the 20 year old student who had taken 6 months off from school to serve on their religious missions? Would all these students be traditional or nontraditional? From these questions, it is apparent that age alone is not a sufficient enough characteristic to define student status and that multiple variables must be considered. Therefore, if one were to be diligent and thorough in defining student status, one will have to use innovative approaches to identify traditional from nontraditional students.

Coping Strategies

Dimensions of coping. Stressors and threatening situations are experienced by all living organisms. How those organisms respond to them, if any action is taken, can greatly influence the outcomes with adaptive or maladaptive effects. Impalas being hunted on the Serengeti, for example, may take the ‘flight or fight response’ approach; students with low self-efficacy in math may choose to give-up on the math portion of their high school exit exams; or a community can work together to build levees near rivers to prevent seasonal floods from damaging urban development. There are numerous responses (conscious or unconscious) to numerous stressors and threats (implicit or explicit). In attempts to try and understand the behaviors of responses to stressors, some researchers have placed their focus on ‘coping strategies’ (Lazarus, 1966; Houston, 1973; Averill, O’Brien, & DeWitt, 1977).

To apply their theories of coping strategies, many of these researchers turn to academic institutions and school environments, where certain stressors tend to remain consistent and are rarely life threatening. School-aged students encounter numerous

forms of stressors that may include peer pressure, text anxiety, parental pressure for school success, and perhaps even physical threats from school bullies. Some stressors can even be traumatic enough to engender school phobias, in which some students may avoid attending school, leading to detrimental effects on students' academic achievement (Evans, 2000). Yet despite some of the behaviors of giving-up, there remain a good number of students who choose to persist and move on with their daily activities in spite of their stressors. Some choose to give into their stressor (e.g., giving into peer pressure resulting in the purchase of a lucrative jacket). Others may choose to face their stressors head-on, until they find a solution they are comfortable with (e.g., budgeting their time with friends, so they can attend baseball practice, or completing their homework, or helping plan the decorations for school prom).

Though there are numerous ways in which students can respond to the stressors in their lives, two dimensions of coping tend to be predominantly expressed in the literature: emotion-oriented and task-oriented. Those students who choose to face their stressors head-on until they find a solution are termed 'task-oriented or 'problem-focused' students (Endler & Parker, 1990a; Folkman & Lazarus, 1985). They will persist at their problems or stressful situations, perhaps utilizing problem-solving or reasoning skills. For example task-oriented students who know that their high school exit exams will begin next week may prepare themselves by trying to predict what kind of questions they will encounter, review vocabulary they feel needs to be brushed up on, and practice their math skills by working problems out on paper and on calculator. Those students whose responses tend to be more emotionally charged (e.g., self-blame) would be termed 'emotion-oriented' (Kurokawa and Weed, 1998). Emotion-oriented students who know about their upcoming

high school exit exams may simply dwell on the fact that they may be poor at math or poor at grammar, and become increasingly anxious or angry with themselves, instead of trying to strengthen their academic weaknesses.

A third, yet more intricate dimension that was acknowledged but not used in the Morris, Brooks, and Mays' study (2003) is 'avoidance-oriented coping.' Often overlooked, avoidance-orientated coping refers to a coping strategy in which an individual attempts to avoid a stressful situation by replacing it with a substitute situation (distraction) or by seeking out other individuals (social diversion) (Parker & Endler, 1992). A legitimate reason as to why some researchers choose to set this orientation aside is because it may include either task or emotion-oriented strategies, making it difficult to categorize (Ender & Parker, 1994).

Trends in conceptualization and measurement. Early studies pertaining to coping styles began with a focus on internal (unconscious) threats as was popular in the time of Sigmund Freud (circa 1930). The term 'defense mechanisms' (Freud, 1930), instead of coping strategies, was used to describe people's responses to stress, depression, and anxiety. Classifications of defense mechanisms were also developed, such as "regressions, over-compensations, and apprehensions" (Howe, 1931), "introversion, ego-narcissism, and fear of the super-ego" (Benedek, 1937), and "repression vs. projection" (White, 1948), just to name a few. Yet the shift in studying coping, which began to take place as early as the 1970s, has altered the focus to how people respond to external (conscious) threats (Higgins & Endler, 1995). "Current theory and research on coping rests on the notion that coping primarily involves conscious strategies or styles of responding to stressful or negative events . . . Individuals may have characteristic coping

patterns or styles” says Higgins and Endler (1995). The significance in this shift in research is apparent in that the manner in which people choose to deal and respond to stressors no longer has to be diagnosed by clinical psychologists and with tedious hours psychoanalyzing individuals. Instead self-report inventories can effectively gather large sums of information (Ender & Parker, 1990a).

Though various classifications of coping strategies are still being measured [e.g., wishful thinking, self-blame, and self-isolation (Folkman & Lazarus, 1985)], a consistent and popular theme in many late 1980s and early 1990s inventories maintained categories for task-oriented and emotion-oriented coping strategies (Endler & Parker, 1990a; Folkman & Lazarus, 1985). Parker and Endler (1992) claim that many researchers tended to favor an inter-individual approach to developing instruments that measure coping orientations. This meant that an individual’s score signified a certain coping style or identified a coping style that the individual favored in stressful situations. This is different from the ‘intra-individual’ approach which attempts to measure the coping behaviors of individuals across different types of situations, both stressful and non-stressful. The former was likely a more suitable approach for the reasons that its scores were stable enough to easily compare individuals (Endler & Parker, 1994; McWilliams, Cox, & Enns, 2003).

Today, the Coping Inventory for Stressful Situations (CISS) has received considerable recognition (Endler & Parker, 1990a), and is used in various studies to accurately measure coping styles. In a study by Endler, Macrodimitris, and Kocovski (2000), a modified version of the CISS (geared for a specified situation) was employed in attempts to find correlations between controllability (one’s self-perceived control in a

task), coping style, distress, and performance variables. This adapted version, called CISS-Situation Specific Coping (CISS-SSC), along with the Endler Multidimensional Anxiety Scales State Component (EMAS-S), 10 anagrams, and the Event Perception Measure, were completed by 84 male and 84 female undergraduate psychology students from York University. Results from the Endler et al. study (2000) revealed that perceived control was positively related to the number of anagrams solved correctly, but negatively related to state anxiety (distress) and situation-specific, emotion-oriented coping. Situation-specific, task-oriented coping was found to be positively related to perceived control and negatively related to distress for interpersonal tasks.

In short, students who perceived control during a situation-specific task tended to utilize situation-specific task-oriented coping strategies. They were also less likely to employ situation-specific emotion-oriented coping, and were able to correctly solve more anagrams. An implication of the Endler et al. study (2000) may be that students prefer to use task-oriented coping strategies in academic related situations because these situations require prioritizing academic responsibilities and learning from mistakes (Kurokawa & Weed, 1998). Emotion-oriented coping on the other hand may be seen as disadvantageous since it could heighten one's anxiety (McWilliams, Cox, & Enns, 2003).

However, a study by Brooks, Morgan, and Scherer, (1990) suggests that using a larger 'repertoire' of coping strategies (employing both task and emotion-oriented coping) may be most favorable, due to the various coping styles one can utilize. Brooks et al. (1990) claim that limited use of one coping style can make a person vulnerable to maladaptive symptoms (e.g. symptoms of depression like helplessness and negative thinking), due to their lack of ability to apply various coping strategies that may be more

appropriate to their stressful situation (e.g. avoiding a fist fight, instead of reacting emotionally and engaging in the fight; or purposely reacting emotionally to verbally defend oneself when standing trial).

Achievement Goal Orientation (AGO)

For the past two decades, achievement goal orientations have been used to describe people's motives for engaging in achievement-related behavior (Kaplan, Gheen, & Midgley, 2002a). They have been traditionally used in a way that categorizes people into two goal types (a dichotomous framework), termed 'mastery goal oriented' and 'performance goal oriented' (Ames, 1992; Elliot & Harackiewicz, 1996) [Task vs. Performance (Maehr & Midgley, 1991); Task-Involved and Ego-Involved (Nicholls, 1984); Learning vs. Performance (Dweck & Leggett, 1988)]. Mastery goals are utilized by individuals whose primary concern in a task is to master that task for the sake of mastering it and to experience pride in the accomplishment. Performance goals are utilized by individuals whose primary concern is to gain favorable judgments of their competence and avoid situations that may lead to unfavorable judgments (Elliot & Dweck, 1988). Since performance, mastery, and achievement activities are high priorities for academic institutions, many studies on goal orientations have been applied to school-aged students.

Kaplan, Middleton, Urdan, and Midgley (2002b) claim that students who employ mastery goals are likely to report "adaptive cognitive, behavioral and emotional outcomes Mastery [learning] goals have been found to be associated with feeling academically efficacious, preferring challenging tasks, and persisting in the face of difficulties."

Additionally, mastery goals were found to be associated with positive well-being, positive attitudes towards academia, the use of effective cognitive and metacognitive strategies, long-term retention of information, more effort while studying, and intrinsic motivation (Kaplan, Gheen, & Midgley, 2002a; Elliot, 1999). Furthermore, Kaplan et al. (2002a) went on to describe the implications of performance goal orientations, referencing a number of inconsistencies that attempt to associate performance goals with negative outcomes (Pieper, 2004). Some studies reported positive relationships between performance goals and negative outcomes, which include low GPA, low academic efficacy, low test score (Ames, 1992; Dweck & Leggett 1988), tendency to cheat, and lack of cooperation with others (Ormrod, 2004), whereas others found positive relationships between performance goals and positive outcomes, but only in competitive environments (Midgley, Kaplan, & Middleton, 2001). One explanation given for the inconsistencies found with performance goal orientations was attributed to the possibility that the measurements of performance goals were ill-defined. Therefore, researchers began to rethink and modify achievement goal theory.

Between the late 1980s and mid 1990s, researchers considered once again their understanding of rewards and punishments (positive and negative), as well as Atkinson's Value-Expectancy Theory. "Atkinson (1957) originally defined expectancies as individuals' anticipations that their performance will be followed by either success or failure, and defined value as the relative attractiveness of succeeding or failing on a task" (Wigfield, 1994). Atkinson described achievement behavior as being a conflict between the propensity to approach tasks and the propensity to avoid tasks (approach vs. avoidance). Furthermore, from the idea that students would want to maximize their

rewards and avoid punishments, a reclassification of performance goal orientation took place, in which it was split into two separate categories: performance-avoidance goal orientation and performance-approach goal orientation. Persons who endorsed a performance-avoidance goal orientation were characterized as wanting to avoid negative judgments from others and therefore avoided situations that would possibly bring about negative judgments. This was influenced by self-worth and attribution theory, where students engage in self-handicapping so their failure can be attributed to lack of effort, and not ability (Covington, 1984). On the other hand, performance-approach goal orientation, was characterized as wanting to maximize positive judgments of others and therefore engaging in behaviors in which they can compare themselves with others, with the intent of outperforming them.

Due to the positing of two forms of performance goals, in addition to the maintained mastery goal orientation, a trichotomous framework of achievement goal theory was formed. Between the two performance orientations, performance-avoidance goals were associated with negative outcomes (Elliot, 1999). Students identified as utilizing performance-avoidance goals were reported as feeling more anxious, received lower grades, had decreased academic efficacy, avoided seeking help in the classroom, and engaged in academic self-handicapping (Urdan, Ryan, & Anderman, 2002). Performance-approach goal orientations seemed to mostly be beneficial in competitive environments (e.g., compete for grades to get into college), resulting in higher achievement. Yet despite the positive outcomes of some students having higher scores on tests, it was also found that students who endorsed performance-approach goal orientations were more likely to avoid seeking help and to, cheat, and were less likely to

cooperate with peers (Midgley, Kaplan, & Middleton, 2001). This seemed to counter early hypotheses that performance-approach would only yield positive outcomes. Since many researchers would prefer to reduce competition yet not abandon performance-approach goals entirely, considerations to modify the achievement goal theory has resurfaced.

Elliot and Harackiewicz (1996) and Harackiewicz et al. (2002) argued that approach and avoidance strivings should not only be separated due to their different implications, but that a revision of the achievement goal theory would be appropriate due to empirical studies. Studies such as Dweck and Leggett's (1988) advocated the idea that students' use of multiple goal orientations would be most advantageous (e.g. learners employing various goal orientations depending on the situation and pursuing multiple goals simultaneously) (Pieper, 2004; Brophey, 2005; Harackiewicz et al. 2002).

In response to this concept of multiple goals perspective, and Harackiewicz et al.'s suggestion to separate approach and avoidance strivings, Elliot (1999) and Pintrich (2000) proposed a 2x2 achievement goal framework (crossing mastery and performance goal distinction with approach and avoidance motivation), which added a fourth dimension of goal orientation, 'mastery-avoidance goals.' The split of the mastery goal distinction forced the achievement goal theory to modify some of its terminology. People who employ mastery-avoidance orientation, for example, are defined as those who attempt to avoid making mistakes or failing to learn (e.g., perfectionists). Mastery-approach goal orientation, hypothesized to be more positively related to positive outcomes than mastery-avoidance, is characterized as striving to improve competence. Elliot and McGregor (2001) applied this 2x2 framework of goal orientation to the

inventory “Achievement Goal Questionnaire (AGQ). In comparison to the trichotomous and dichotomous frameworks, the AGQ model had a better fit to the data, confirming mastery-avoidance to be more positive (adaptive) than performance-avoidance goals and more negative (maladaptive) than mastery-approach goals. Investigations to further validate the 2x2 framework of goal orientation continue, and even additional goal orientations are being proposed. Although researchers such as Pieper (2002) have advocated that work-avoidance goal orientations be included in achievement goal theory, inconsistencies in the validity of such orientations have prevented them from becoming main-stream. Urdan and Mestas (2006) have even suggested ‘appearance’ and ‘competition’ categories for performance goals, however, they admit the limitations of their interview data (low external validity, so generalizations to other populations is questionable) and suggest further examination of achievement goals.

Morris, Brooks, and Mays’ Study (2003)

In a study by Morris, Brooks, and Mays (2003), a relationship among achievement goal orientations, coping styles, and student status was found using a sample of 103 undergraduate students at a northeast liberal arts college. The purpose of the study was to expand the body of research on traditional (ages 18-22) vs. nontraditional (ages 22 and up) students, examine the achievement orientations and coping styles of both groups, and finally determine whether a significant relationship was shared between coping styles and achievement goal orientations as a means to better understand the differences between traditional and nontraditional students. Morris, Brooks and Mays hypothesized that they would find a relationship between students’ goal orientations and the coping

styles they employed. Their rationale for the relationship was that students who display more complex coping strategies (task-oriented coping) would have higher levels of mastery goals due to their persistence and commitment to a task. Students with performance goals would be less likely to engage in deep processing strategies and therefore opt for simple alternative coping strategies (e.g., emotion-oriented coping). Thus, task-oriented coping and mastery goal orientations, as well as emotion-oriented coping and performance goal orientations, were expected to be positively related, respectively. In addition, Morris et al. hypothesized that traditional college students would be more apt to utilize performance goal orientations and emotion-oriented coping styles more frequent than their older nontraditional counterparts because they more often worry about their performance in school. Likewise, nontraditional students were predicted to employ task-oriented coping styles and mastery goals more than the younger traditional students because “having multiple roles increases the use of task-oriented coping by necessity Greater overall maturity increases the likelihood of more adaptive coping and a focus on learning for its own sake” (Morris et al., 2003).

Supporting their predictions, Morris, Brooks, and Mays’ referenced the works of Dill and Henley (1998), Jacobi (1987), McNair and Elliot (1992), and Eppler and Harju (1997). From these studies, Morris et al. found that nontraditional college students significantly endorsed a mastery goal orientation in relation to their academic performance (Eppler & Harju, 1997; Shields, 1993). “The older the nontraditional student was, the more frequently they adopted [mastery] learning goals and were more committed to them than their younger traditional peers [(Eppler & Harju, 1997)]” (Morris et al., 2003). Despite time and role conflicts (e.g., obligations to children, spouse, and

employment), nontraditional students tended to report less academic stress and greater satisfaction with their academic careers (Jacobi, 1987). Additionally, nontraditional students were said to have a greater desire to learn, viewed homework more desirably than younger students, and completed their homework more often than the younger traditional students, who reported concerns about their school performance (Dill & Henley, 1998). Undergraduates who reported more effective problem-solving skills were more apt to use task-oriented coping styles (MacNair & Elliot, 1992); and finally, when task-oriented coping strategies were utilized during events students considered challenging, the negative effects of stress were reversed (Santiago-Rivera, Bernstein & Gard, 1995).

Based on their evidence and formulated hypotheses, Morris et al. set out to test their predictions by having their 103 participants complete the Goals Inventory (GI)(Roedel, Schraw, & Plake, 1994), the Coping Inventory for Stressful Situations (CISS)(Endler & Parker, 1990b), and a demographic survey. From the demographic survey, students were categorized (traditional [ages 18-22 who live on campus] vs. nontraditional [22 and up with multiple roles]), with the average age for traditional students being 19.5 years of age, and the average age for nontraditional students being 28 years of age. Tested in groups of 5-20, participants were briefed as to the purpose of the study, specifically, “to study stress and how it relates to traditional vs. nontraditional students.” Participants were then allotted an hour to complete the packet (containing the three inventories).

Although the CISS, in its original form, consisted of 48 items, measuring five types of coping styles (task-oriented, emotion-oriented, avoidance oriented, social

diversion, and distraction-oriented), Morris et al. opted to only measure two (task-oriented and emotion-oriented), allowing for the range of scores for the two types of coping styles to be between 18-80. The use of the GI, which uses a dichotomous framework of achievement goal theory, measured both mastery goals and performance goals (scores ranging from 12-60).

Results indicated that nontraditional college students did utilize mastery goal orientations and task-oriented coping more often than traditional students. They also reported higher grade point averages, which positively correlated with mastery goal orientations (however, no information indicated whether a positive correlation was found for GPA and any of the coping strategies). A positive relationship between increased age and use of mastery goal orientations was also found. Although no significant relationship to support the prediction that traditional students would use performance goal orientations and emotion-oriented coping styles was found, the hypothesis that the two groups of traditional vs. nontraditional students would differ in achievement goal orientations and coping styles was supported.

One of the implications that Morris et al. stated was that because nontraditional students attained higher scores for both task and emotion-oriented coping, a larger repertoire of coping strategies may be optimal (Brooks, Morgan, & Scherer, 1990). The utilization of both goal orientations may also be optimal (Dweck & Leggett, 1988), because nontraditional students occasionally endorsed performance goals and had higher achievement. Other implications from this study included the possibility that mastery goal orientations may be predictive of a wider range of coping styles, and vice versa. Morris et al. encouraged further investigations into the relationship of grade point

averages, coping style, and achievement goals; and the strength of those relationships as they apply to traditional and nontraditional college students. Additional emphasis was placed on identifying the differences and similarities among the two groups, in hopes to better understand and help traditional and nontraditional college students develop. Unfortunately, however, additional studies by Morris et al. could not be found in regards to this topic.

Rationale for Follow-Up

The lack of additional studies by Morris et al., as well as the lack of replication and follow-up studies, makes the Morris et al. study vulnerable to heavy inspection as there are limited resources with which to compare it. Overall, several limitations and weaknesses were identified in the Morris et al. study. The use of a dated survey to measure participants' goal orientations was one drawback of the Morris et al. study, along with the dismissal of the coping strategy "avoidance-oriented" coping, and the failure to explain the methods used to differentiate between traditional and nontraditional students. Such limitations can be remedied through replication and follow-up studies, which are important to help test the validity and reliability of the available research.

The major drawback in using a dated goal orientation inventory is that it is limited in what it can measure, considering the modifications made to achievement goal theory. With the addition of the constructs for performance-approach versus performance-avoidance goal orientations, it is possible that traditional students could favor performance-avoidance goals in attempts to delay their graduation and obtain more time to figure out what career choice is right for them. Such a finding would allow scholars to

better understand and identify adaptive and maladaptive behaviors and even develop methods to foster the development of the most adaptive practices. Many scholars, including Anderman and Midgley (1997) and Anderman and Anderman (1999), suggest that students' goal orientations can change across time, especially in the transition years from elementary to middle school. Ebner, Freund, and Baltes (2006) suggest that goal orientations can also change throughout one's adult life. Therefore the malleability of goal orientations may be an adaptive trait if one were to develop more advantageous goals across time. Scholars in sports and exercise strongly believe that certain goal orientations, such as achievement goals, can be trained and developed (Harwood & Swain, 2002). Studies pertaining to the training of business negotiators, such as Stevens and Gist (1997), have shown that intervention trainings in mastery goals yield more positive outcomes (e.g. more effort and positive affect) by negotiators than those who received performance goal training. Overall, studies suggest that adaptive goal orientations can be fostered and developed. Thus, by using more contemporary instruments to measure goal orientations, scholars can gain a better understanding of which goal orientations and motives they want their students or trainees to acquire.

The second limitation of the Morris et al. study was the failure to provide justification for dismissing the construct of avoidance-oriented coping. This limitation makes it difficult for follow-up studies to develop hypotheses that want to utilize the entire CISS instrument. By dismissing the avoidance-oriented coping construct in their study, Morris et al. missed the opportunity of collecting and reporting data that may have revealed different, yet pertinent conclusions. If, for example, traditional or nontraditional students favored avoidance-oriented coping over task and emotion-oriented coping, the

implications would be profound. Such a finding would suggest that one of the student groups would be in great need of developing coping skills, as avoidance-oriented coping is often considered maladaptive. Scholars whose interests rests with coping strategies have suggested that coping strategies can be developed and trained with proper interventions (Hess & Copeland, 2001; Pincus & Friedman, 2004; Stenstrud & Stenstrud, 1983).

The third limitation of the Morris et al. study was the failure to explain the methods used to differentiate between traditional and nontraditional students. This limitation makes it unfeasible to perform a replication study. Due to the inconsistencies that already exist in the literature pertaining to traditional and nontraditional student populations, no clear definition or method of determining student status exists. Various studies have used age as the lone variable to differentiate between traditional and nontraditional students; however, the cutoff ages used by various studies has also been inconsistent. Therefore, one of the goals of this study is to clearly explain the methods used to categorize students and improve upon the current definition of nontraditional student status.

The other goal and rationale for this follow-up to the Morris et al. study is to add to the literature on coping strategies and goal orientations. As educators continue to seek innovative teaching methods to enhance their students' experiences, research should continue to encourage the fostering and development of advantageous characteristics of meaningful and self-regulatory learning (e.g., having students set their own goals). Understanding the processes by which students are motivated to engage in learning activities, and the processes by which students cope with the challenges of those learning

activities, will allow for methods to be developed to maximize the learning potentials of students. Failing to do so would hinder the development on new and diverse teaching methods that could potentially benefit students. If a particular coping strategy or goal orientation is found to be advantageous and yields adaptive behaviors, educators will want to find ways to build those coping and goal attaining skills, whether it is by allowing students to set their own goals, or even allowing students to pursue multiple goals simultaneously (Ormrod, 2004).

If one were to have to choose between mastery and performance goals, or task and emotion-oriented coping, most research studies indicate that mastery goals and task-oriented coping are the preferred characteristics for students to display (MacNair & Elliot, 1992; Dill & Henley, 1998; Endler, Macrodimitris, & Kocovski, 2000). In a study by Endler et al. (2000), it was found that students who tended to utilize task-oriented coping strategies during a 'situation-specific task' were more likely to have high self-efficacy (perceived control), to correctly solve problems (in this case anagrams), and were less likely to experience distress. As seen in the Morris et al. study, nontraditional students who employed both mastery goals and task-oriented coping attained higher grade point averages. Equal use of all the various forms of goal orientations and coping styles, however, were found adaptive in studies by Dweck and Leggett's (1988) and Brooks et al. (1990), as this tends to diversify one's ability to apply different goal orientations and coping styles depending on the situation. The literature in both coping strategies and goal orientations reveal numerous conclusions that greatly influence teaching practices and the development of students' learning skills. Thus, this follow-up

study intends to contribute to the academic understandings of student status, goal orientations, and coping strategies.

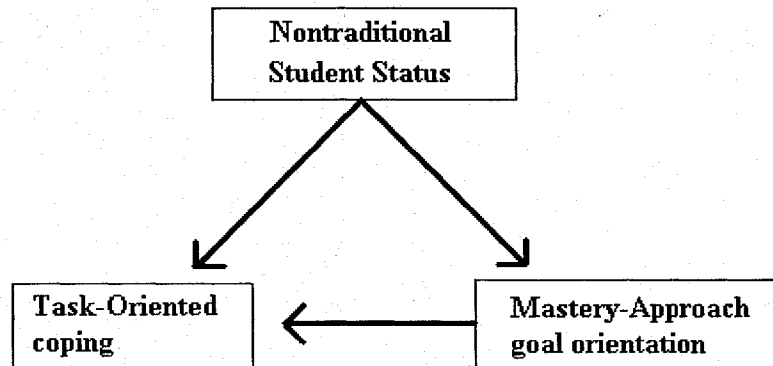
Hypothesis and Aims of this Study

The predictions by Morris et al. (2003) included the expectation of a relationship between students' goal orientations and the coping styles they employed. Task-oriented coping and mastery goal orientations, as well as emotion-oriented coping and performance goal orientations, were expected to be positively correlated, respectively. In addition, Morris et al. hypothesized that nontraditional students would be more apt to utilize task-oriented coping styles and mastery goals than the younger traditional students. Likewise, traditional college students were predicted to employ performance goal orientation and emotion-oriented coping styles more frequently than their older nontraditional counterparts.

The current use of the 2x2 framework of achievement goal theory and construction of the participant information questionnaire allow for my study's hypotheses to be somewhat different from the Morris et al. study. This study has five hypotheses, with the first three pertaining to nontraditional student status (see Figure 1a).

FIGURE 1a.

Hypothesized Path Model for Nontraditional Student Status



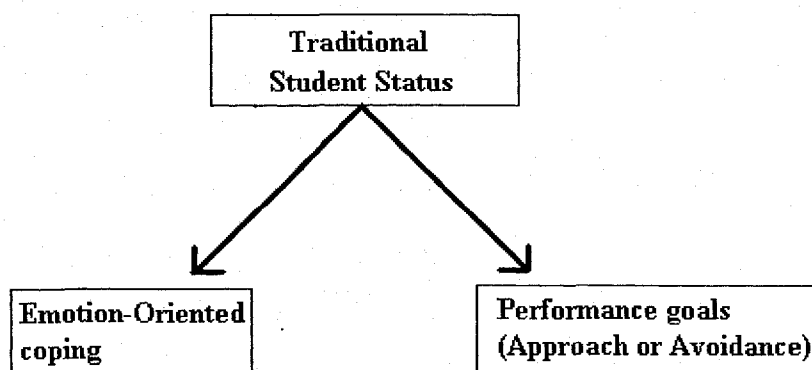
First, nontraditional student status will be a strong predictor of mastery-approach goal orientation. The rationale for this hypothesis was consistent with that of the Morris et al. study, as well as the Eppler et al. (2000) study, in that nontraditional students are expected to hold the most advantageous goal orientation (mastery-approach) because they have been found to be more intrinsically motivated and have expressed their goal of gaining knowledge in previous studies (Eppler et al, 2000). Many may return to school specifically to gain knowledge and to further their intellectual development. Due to the similar characteristic of persistence, and the results of the Morris et al. study, the hypotheses that nontraditional students would utilize task-oriented coping more often than traditional students, and that mastery-approach goals would have a strong correlation with task-oriented coping, were maintained for this study. Thus the second hypothesis states that nontraditional student status will be a strong predictor of task-oriented coping, because such students may have more experience and practice coping with multiple

demands. Third, mastery-approach goal orientation will be a strong predictor of task-oriented coping because they are both characterized by adaptive behaviors.

The fourth hypothesis states that traditional student status will be a strong predictor of performance goals, and the fifth hypothesis states that traditional student status will be a strong predictor of emotion-oriented coping. In regards to these last two hypotheses involving traditional students (see Figure 1b), the rationale was that since Eppler et al. (2000) suggested that traditional students were more extrinsically motivated and were supposedly career oriented, they would have more performance goals due to the competitiveness of pursuing careers. Furthermore, it is hypothesized that traditional students would also utilize emotion-oriented coping due to elicitation of emotions in being career oriented. No hypothesis was made to link emotion-oriented coping and any of the performance goals because there is no supporting evidence to justify such a prediction; however, if a relationship is found later in the study, it will be reported as an exploratory finding.

FIGURE 1b.

Hypothesized Path Model for Traditional Student Status



CHAPTER 3

METHODS

Overview

This study employed some unique procedures in classifying its participants into traditional and nontraditional college student groups. Therefore, the methods used to identify characteristics of this study's participant population will be discussed. It should also be mentioned that this study utilized different instruments and explored various student characteristics which may yield different outcomes than the results from previous studies pertaining to coping strategies and goal orientations. The three instruments used in this study, the Coping Inventory for Stressful Situations (CISS), the Achievement Goal Questionnaire (AGQ), and a participant information questionnaire, will be introduced. Details pertaining to the justification for their use and their development are included. Finally, a description of this study's design is also presented as to explain how this study's hypotheses will be confirmed or refuted.

Participants

The study had aimed for a target population ranging from 100 to 200 participants. A total of 180 undergraduate students from the college of education subject pool of an urban western university participated in this study. Of the 180 participants, only 178 fully completed their surveys. Therefore, 178 data sets were valid for use.

The age of the students ranged from 18 years to 52 years, with an average age of 23.9 years. In regards to other pertinent sample characteristics, 83.1% of the total sample were female and 16.9% male; 1.1% freshmen, 15.7% sophomores, 57.3% juniors, and 25.8% were seniors; 1.6% were student athletes; 98.3% lived off campus and commuted to school; 46.6% majored in Elementary Education and 16.9% majored in Secondary Education. The average grade-point-average was 3.28; and on average participants worked 25 hours weekly. The ethnic breakdown of the sample was: 2.8% Asian, 3.9% Pacific Islander, 6.7% Black/African American, 11.2% Hispanic/Latino, 69.7% Caucasian, and 5.6% other.

Religious affiliation was a variable of interest, due to some students departure from school for religious mission related reasons. The major religious affiliations recorded in the study consisted of 30.9% Catholic, 35.5% Christian, 10.1% Mormon, 15.2% with no religious affiliation, and 7.3% of other various religious affiliations.

Instruments

This study employed three instruments: The Achievement Goal Questionnaire (Elliot & McGregor, 2001), Coping Inventory of Stressful Situations (Endler & Parker, 1990a), and a participant information questionnaire. The original Morris et al. study used the Goals Inventory (Roedel, Schraw, & Plake, 1994) to measure students' goal orientations (mastery goal orientation and performance goal orientation). However, as mentioned before, modifications to achievement goal theory has resulted in four categories for goal orientations: mastery-avoidance (individuals who want to master a task for the sake of mastering it), mastery-approach (individuals who want to master a

task while avoiding making mistakes), performance-approach (individuals who simply want to outperform their peers), and performance-avoidance (individuals who want to avoid doing worse than their peers) goal orientations. Therefore, the more contemporary 2x2 framework inventory that measures goal orientations, the AGQ, was necessary to adequately yield results that would be more compatible with current research.

Popular and valid inventories including the Patterns of Adaptive Learning Survey (PALS) (Midgley et al. 1997), Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich, Smith, Garcia, & McKeachie, 1993), and the Achievement Motivation Profile (AMP) (Mandel, Friedland, & Marcus, 1996), were also considered for this study; however they did not provide clear distinctions of the four goal orientations of interest, and consisted of more items than the AGQ. The PALS, for example, despite being validated for the college level by Ross, Shannon, Salisbury-Glennon, and Guarino (2002), uses a trichotomous framework (measure 3 goal orientations) and consists of 47 Likert-Type items. The AMP consists of 140 brief self-report statements that claim to measure goal orientation along with inner resources, interpersonal strengths, and work habits (Mandel, Friedland, & Marcus, 1996). Because 140 items might be considered lengthy for this investigation, the use of this inventory was rejected. The MSLQ was validated for the college level (Pintrich et al., 1993), but nevertheless was also rejected for use, due to its length of 81 items and unclear distinction of the goal orientations of interest (instead measuring intrinsic goal orientation, extrinsic goal orientation, and task value beliefs). The 12 self-reported items used in the AGQ, however, seemed to be adequate in length, were developed for the college level, and measured mastery-

approach, mastery-avoidance, performance-approach, and performance-avoidance goal orientations.

The Achievement Goal Questionnaire (AGQ) was created by Elliot and McGregor in 2001. As shown in Appendix A, it consists of 12 Likert-scale items. Pilot studies that originally used college participants helped Elliot and McGregor validate the use of their instrument, claiming that hierarchically, mastery-approach goal orientations yield more positive outcomes (e.g. greater use of adaptive study skills or deeper information processing) than mastery-avoidance goal orientation; mastery-avoidance yields more positive outcomes than performance-approach, and performance-approach yields more positive outcomes than performance-avoidance. To identify the various goal orientations, the AGQ uses items like “My goal is to do better than most other performers” (performance-approach); “I worry that I may not perform as well as I possibly can” (mastery-avoidance); “It is important to me to perform as well as I possibly can” (mastery-approach); and “I just want to avoid performing worse than others” (performance-avoidance).

In a study by Finney, Pieper, and Barron (2004), the confirmatory factor analysis (CFA) among Elliot and McGregor’s AGQ, two models that used a trichotomous framework, and two models that used a dichotomous framework, confirmed that the four-factor model (AGQ) fit significantly better than alternative models. Finney et al. (2004) state that the comparative fit index (CFI) for the AGQ was .95, which was larger than the values reported for alternative models; hence strengthening the claim that the AGQ has a better fit. Furthermore, “*all standardized pattern coefficients [for the four-factor model AGQ] had values greater than .50, with the majority having values at or greater than .70*

... The reliabilities of the scores for the items representing mastery-approach, mastery-avoidance, and performance-approach were all greater than .70 as predicted ... The reliability of the scores for item representing performance-avoidance was lower than expected [with item 5 having the lowest item-total correlation] ... [however] the low pattern coefficient and item-total correlation does not appear to be a function of the distributional characteristics of item 5” (Finney et al., 2004).

The Coping Inventory of Stressful Situations (CISS) was designed by Endler and Parker in 1990 to categorize one’s coping strategy as being: task-oriented coping, emotion-oriented coping, or avoidance-oriented coping (which can also be further split into avoidance-oriented social diversion or avoidance-oriented distraction coping). The CISS consists of 48 items, comes in an adult version, is self-reported, and has an estimated administration time of 10 minutes. The original Morris et al. study only used task and emotion-oriented coping to easily make correlations with the dual goal orientations of mastery and performance goal orientations. However for this study, both task and emotion-oriented coping strategies were examined, as well as avoidance-oriented coping.

Task-oriented coping is defined by the CISS to be a strategy an individual employs to purposefully seek out a solution to a stressful situation (responding strongly to items like “schedule my time better”). Emotion-oriented coping is described as the style of coping with a stressful situation with an intense emotional reaction (responding strongly to items like “Blame myself for not knowing what to do”). Avoidance-oriented coping is simply characterized as the strategy employed by one who attempts to avoid the stressful situation (responding strongly to items like “watch TV” or “phone a friend”)

(Endler & Parker, 1994). Though alternative inventories such as the 'Ways of Coping Checklist' (Folkman & Lazarus, 1985) which measures task and emotion-oriented coping, was considered for this study, the option to measure the additional dimension of avoidance-oriented coping was preferred to see if it positively correlated with any of the other variables in this study. It is possible that avoidance-oriented coping may have significant relationships with mastery-avoidance and/or performance-avoidance goal orientations since they all involve the characteristic of avoiding a situation or an aspect of that situations. Appendix B contains sample items from the CISS.

Finally, the personal information questionnaire, a nonstandardized and researcher-developed instrument, will be used to identify characteristics of the population and identify additional subgroups (e.g., student athletes and commuting students) within the student sample population. Due to the absence of a demographic survey (assumed to be nonstandardized and researcher-developed) being reported in the Morris et al. study, it is unclear as to the exact items used to categorize the nontraditional and traditional student groups that were identified; yet it can be inferred that age was a determining characteristic asked in the demographic survey. My study's use of the participant information questionnaire served as a way to describe the characteristics of this study's sample as well as a recording of variables pertinent to defining student status. It consisted of 33 self-report items, including: age, sex, year in college, involvement in school activities, marital status, socioeconomic status, methods for paying for college, methods of getting to school, and parents' educational background, just to name a few. Appendix C presents the full survey.

Design

This study's design was correlational and involved both Kendall's tau correlations and multiple regressions. Descriptive statistics and frequencies were initially used to describe the student sample and factor analysis and cluster analysis were used to form categories for student status. Once dichotomized, student status was regressed on both goal orientations and coping strategies, and goal orientations was regressed on coping strategies, in order to evaluate this study's hypotheses. This study expected to find nontraditional students to have a strong preference to use mastery-approach goal orientations; nontraditional students to have a strong preference to use task-oriented coping; master-approach goal orientations to be positively correlated with task-oriented coping; traditional students to have a strong preference to use one of the performance goal orientations; and traditional students to have a strong preference to use emotion-oriented coping (see Figures 1a & 1b).

FIGURE 1a.

Hypothesized Path Model for Nontraditional Student Status

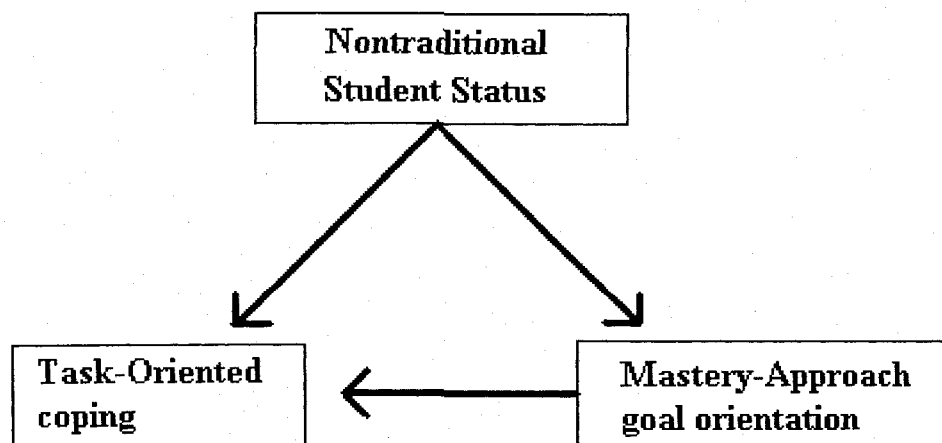
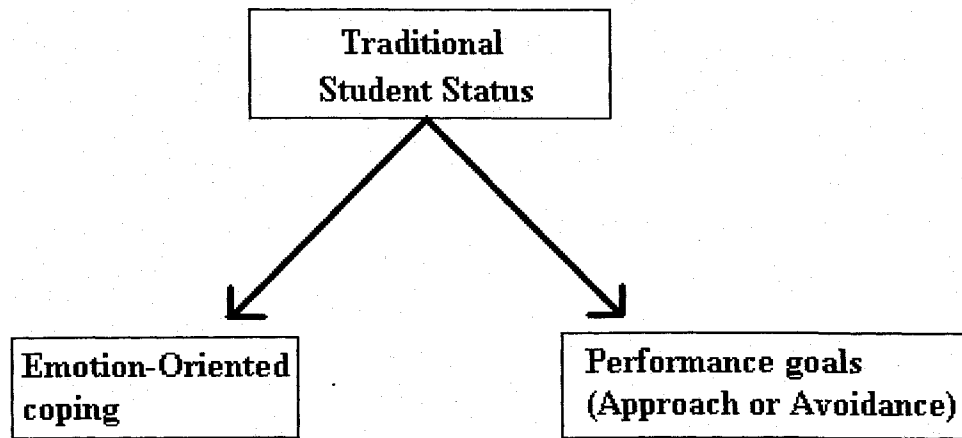


FIGURE 1b.

Hypothesized Path Model for Traditional Student Status



Procedures

Prior to the dispersal of any instruments, participants made appointments (often through the online research system, OURRS) and were informed of designated times and locations for participation in this study. Participants were distributed consent forms and given a brief description of the study by the test administrator. After their briefing, further information regarding credit hours for participation, how the study would be conducted, and how the study results would be used were described to the participants. They were reminded that they could opt out of the study at anytime. Participants were tested in groups of 2-25 and allotted one hour for completion of surveys, though most students completed all their surveys within 20 minutes. The instruments were all self-reported. A set of three inventories (the Participant Information Questionnaire, CISS, and AGQ) were given to each participant in a manila folder. All materials, including the manila folder,

had coded identification numbers on them to assure that students filled out the surveys with the same identification number. These identification numbers were used to keep data organized and maintain confidentiality, as names were excluded from each instrument. Once collected, the inventories were assessed and data statistics were computed and recorded.

To simplify the coding for marital and parental status, participants were dichotomized into groups of having children versus not having children, and single/never married versus committed/previously married. Because many students checked multiple answers for how they paid for college, participant responses were “dummy coded.” The item of participants’ hometowns was also dichotomized after the data collection into the group “Las Vegas, Nevada is my hometown” and “Las Vegas, Nevada is NOT my hometown.” This was done to determine whether being from out of town had any effect on defining nontraditional students (acknowledging the possibility that adjusting to a new setting may influence one’s coping). This dichotomized variable was not ultimately used in defining student status, based on the results of the factor analysis.

CHAPTER 4

RESULTS

Overview

This chapter discusses the data and statistics gathered from the collected instruments. Sections within this chapter include reliabilities of instruments, factor and cluster analysis, means and standard deviations for the student groups, skew and kurtosis, correlations, regressions and path models, and finally exploratory findings. Each section discusses the trends and significance of the data, which sets up further discussions of this study's implications in Chapter 5.

Reliabilities of Instruments

The correlation between the overall CISS score and participants' score for each of the subcategories was .79. Cronbach's alpha for each of the CISS subscales were: .88 for task-oriented coping; .89 for emotion-oriented coping; .84 for avoidance-oriented coping; .79 for distraction; and .80 for social diversion.

The correlation between the overall AGQ score and participants' score for each of its subscales was .75. Cronbach's alpha for each of the AGQ subscales were: .82 for mastery-approach goals; .86 for mastery-avoidance goals; .88 for performance-approach goals; and .82 for performance avoidance goals. Though it would be ideal to have all of the values closer to 1.0, they still indicate a strong and positive reliability.

Factor and Cluster Analysis

As one goal of this study was to identify character traits that would better define nontraditional student status, a factor analysis was performed on the variables: age, number of work hours, parental status, marital status, whether time was taken off from school, whether Las Vegas, Nevada was their hometown, and method of paying for college. The reasoning behind using number of work hours, marital status, and parental status was due to Chartrand's (1990) notion of nontraditional students having multiple roles (e.g. work, marital status, and parental responsibilities). Work hours were used instead of work status due to the large percentage of student employment across the entire sample. The methods of paying for college were thought to be relevant for the reasons that older nontraditional students may not rely on their parents in paying for college. The variable of whether participants considered the greater Las Vegas area to be their hometown was considered for the reason that Las Vegas, Nevada happens to be a transient city in which older adults are moving to the city and having to adjust, whereas younger college aged students have typically grown up in the area.

For the factor analysis, Promax rotation was used along with principal axis factoring for extraction, and missing cases were excluded pairwise. The factor matrix revealed that the variables age, time taken off from school, marital status, and parental status were relevant. As Table 1 shows, all these items loaded on the same factor (Factor 1).

TABLE 1

Factor Loading of Student Status Variables (n=178)

<u>Variable</u>	<u>Factor</u>				
	1	2	3	4	h ²
Children	0.91	-0.12	0.13	-0.04	0.69
Marital Status	0.77	-0.02	0.06	0.02	0.56
Age	0.73	0.12	-0.16	-0.11	0.64
Time taken off from school	0.39	0.17	-0.16	0.11	0.35
Working hours	0.06	0.29	0.02	0.03	0.10
Parents: Pay for College	-0.08	-0.26	-0.06	-0.67	-0.63
Scholarships: Pay for College	0.01	-0.04	0.92	0.0	0.85
Financial Aid: Pay for College	-0.10	-0.19	-0.12	0.49	0.25
I : Pay for College	-0.09	0.93	0.06	-0.11	0.83
Other: Pay for College	0.18	-0.14	-0.10	0.11	0.09
Las Vegas is my Hometown	0.01	0.17	0.38	-0.11	0.19

Note. Bold indicates highest loading .30 and above. The factor solution accounted for 63.27% of the item variance. Factor correlations were: Factor 1 and Factor 2 (.15), Factor 1 and Factor 3 (-.44), Factor 1 and Factor 4 (.42), Factor 2 and Factor 3 (-.06), Factor 2 and Factor 4 (.22), and Factor 3 and Factor 4 (-.32).

Therefore, using these four variables, a TwoStep Cluster analysis was used to identify whether the participants would fall into separate and distinguishable clusters. Results from the cluster analysis revealed two clusters which were easily identifiable. The students were then dichotomized into their student status cluster variable. The two clusters therefore acted as the two groups for student status. The first cluster revealed a group of 94 subjects with the average age of 20.8 years, 100% having never taken time off from school, 100% being single/not married, and 100% having no children. They

were considered the traditional student cluster. The second cluster revealed a group of 84 subjects with the average age of 27.3 years, 80% having taken time off from school, approximately 60% having been married, and approximately 30% with parental responsibilities. They were deemed the nontraditional student cluster. The average ages of traditional and nontraditional students in the Morris et al. study were 19.5 and 28 years respectively.

Means and Standard Deviation

Table 2 lists the means and standard deviations for both traditional and nontraditional students. Overall, the nontraditional clustered students had higher averages on age, GPA, mastery-approach goals, performance-approach goals, and task-oriented coping. The traditional students obtained higher averages on all of the other variables listed, which include: overall total scores for both the AGQ and CISS, mastery-avoidance goals, performance-avoidance goals, emotion oriented coping, and avoidance-oriented coping. Thus, the trends from these mean scores suggest that nontraditional students practice more adaptive behaviors.

TABLE 2

Means and Standard Deviations for the Traditional and Nontraditional Student Status

	<u>Traditional</u>		<u>Nontraditional</u>	
	Mean	SD	Mean	SD
Age	20.78	1.41	27.32	7.73
GPA	3.23	0.39	3.33	0.48
Total AGQ score	60.04	10.68	59.58	12.05
Mastery-approach score	18.35	2.67	18.90	2.84
Mastery-avoidance score	16.09	3.77	15.62	4.48
Performance-approach score	13.03	4.82	13.13	5.30
Performance-avoidance score	12.56	4.68	11.91	5.36
Total CISS score	156.66	21.11	150.86	17.61
Task-oriented coping score	59.05	8.47	61.27	7.93
Emotion-oriented coping score	49.01	11.81	43.22	10.85
Avoidance-oriented coping score	49.14	11.12	45.97	10.47
** social diversion-oriented coping	17.27	4.51	16.27	4.58
** distraction-oriented coping	23.70	6.65	22.15	6.30

** Distraction-oriented coping and social diversion-oriented coping are subcategories of Avoidance-oriented coping. Neither were variables of interest for this study's primary hypotheses, however the CISS scored them regardless. They are reported here, yet no further analysis is given of them.

Skews and Kurtosis

Histograms and skew/kurtosis statistics were evaluated after the initial means and standard deviations. The mastery-approach variable became a concern because it had a dramatic negative skew (skewness = -1.80, kurtosis = 4.30). Therefore, in an attempt to reduce skew, the Box-Cox transformations of 'log' and 'inverse' were used; however, even after outliers were identified and removed, the overall skew and kurtosis remained severe (skewness = -2.16, kurtosis = 6.26). For this reason, it was decided that a rank transformation would be more appropriate.

Correlation

Once the mastery-approach values were returned to their original values, a separate variable called 'ranked mastery-approach' was created, in which the mastery-approach values were ranked. This was done as a cautionary method to see whether it would reduce the effect of outliers and skew (which reduces statistical power).

Furthermore, it was decided that nonparametric correlations (Kendall's tau) would be used to examine correlations. Kendall's tau (τ) examines what proportion of all possible pairings of data points are concordant (Y increases when X increases) as opposed to discordant (Y decreases when X increases). The dichotomized clusters for student status, CISS scores, and AGQ scores (along with academic GPA) were then correlated with one another.

TABLE 3

Correlations (Kendall's τ) Between Variables (n = 178)

Variable	1	2	3	4	5	6	7	8	9	10
1. Student Status [clustered]	1									
2. Academic GPA	.11	1								
3. Mastery Approach	.13*	.15**	1							
4. Mastery Approach [ranked]	.13*	.15**	1**	1						
5. Mastery Avoidance	-.03	-.04	.23**	.23**	1					
6. Performance Approach	.01	.10	.10	.10	.03	1				
7. Performance Avoidance	-.06	.01	.03	.03	.06	.63**	1			
8. Task-Oriented	.11	.09	.32**	.32**	-.02	.11*	.04	1		
9. Emotion-Oriented	-.21**	-.12*	.01	.01	.27**	.08	.15**	-.11*	1	
10. Avoidance-Oriented	-.11	-.06	.01	.01	-.05	.11*	.17**	.08	.21**	1

* $p < .05$, ** $p < .01$

The Kendall's tau correlations revealed the same values for the 'ranked mastery-approach' scores and the normal non-ranked scores. The significant correlations proved to include: a significant correlation between performance-approach goal orientation scores and performance-avoidance goal orientation scores ($\tau = .63, p < .0005$); between mastery-approach goal orientation scores and mastery-avoidance goal orientation scores ($\tau = .23, p < .0005$); and between emotion-oriented coping scores and avoidance-oriented coping scores ($\tau = .21, p < .0005$). The results suggest that the constructs within the various coping strategies and goal orientations may be sharing similar characteristics. Both mastery-approach and mastery-avoidance share the commonality of desiring to master a task, as well as the commonality of comparing oneself with classmates in performance-approach and performance avoidance goals. A commonality may exist between emotion-oriented and avoidance-oriented coping, which may be the use of maladaptive practices (e.g. avoiding a task by complaining about it with others).

Other significant correlations were found between mastery-approach goal orientation scores and task-oriented coping scores ($\tau = .32, p < .0005$), between mastery-avoidance goal orientation scores and emotion-oriented coping scores ($\tau = .27, p < .0005$), between performance-approach goal orientation scores and task-oriented coping scores ($\tau = .11, p < .05$), and between performance-approach goal orientation scores and avoidance-oriented coping ($\tau = .11, p < .05$). These correlations suggest that certain goal orientations may be predictive of certain coping strategies, or vice versa. Additional significant correlations included: a significant correlation between student status and emotion oriented coping scores ($\tau = -.21, p \leq .001$), as well as between student status and mastery-approach goal orientation scores ($\tau = .13, p < .05$), suggesting that as one ages,

the use of emotion-oriented coping declines and the use of mastery-approach goal increases.

The correlation between performance-avoidance goal orientation scores and avoidance-oriented coping scores ($\tau = .17, p \leq .001$), as well as between emotion-oriented coping scores and performance-avoidance goal orientation scores ($\tau = .15, p \leq .005$) suggests that there may be a common characteristic that is shared between the variables. The correlation between task-oriented coping scores and emotion-oriented coping scores ($\tau = -.15, p \leq .005$) suggests that as one utilizes task-oriented coping, the use of emotion-oriented coping declines, and vice versa. This is at odds with models predicting that the use of both strategies would be adaptive and that both would therefore be used at a higher frequency by nontraditional students.

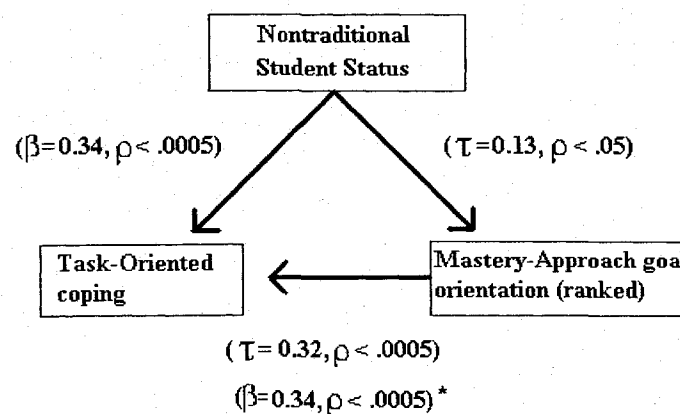
Regression and Path Analysis

To test the hypotheses, regressions were run between student status and mastery-approach goal orientation, student status and task-oriented coping, and mastery-approach goal orientation and task-oriented coping while controlling for student status. Regressions were also drawn between student status and performance goal orientations (both approach and avoidance), and student status and emotion-oriented coping. As shown in Figure 2, the hypothesis that nontraditional student status would be a strong predictor of task-oriented coping was confirmed by the significant positive direct effect nontraditional student status had on task-oriented coping ($\beta = .34, p < .0005$). The hypothesis that mastery-approach goal orientation would be a strong predictor of task-oriented coping ($\beta = .34, p < .0005$) was also confirmed by the positive direct effect mastery-approach goal

orientation (ranked) had on task-oriented coping when nontraditional student status was controlled for. Because the variable mastery-approach goal orientation was highly skewed, the nonparametric coefficient was used to confirm the hypothesis that nontraditional student status would be a strong predictor of mastery-approach goal orientation ($p < .05$); however, the effect size was small ($\tau = .13$).

FIGURE 2

Path Analysis Model for Nontraditional Student Status



Note. We report the nonparametric coefficient for the mastery-approach relationship because that variable was highly skewed.

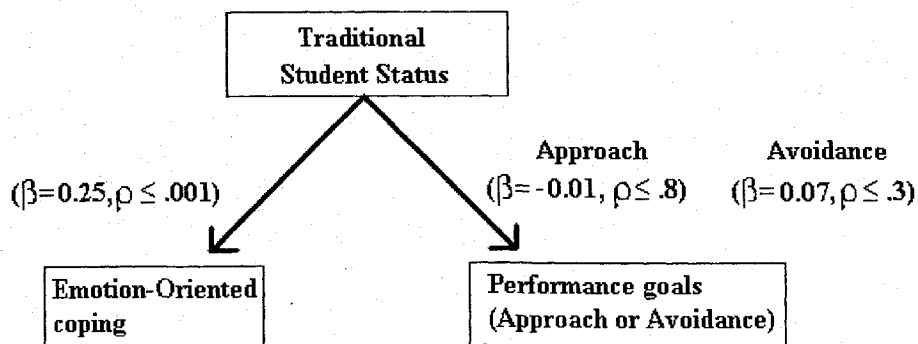
* Controlled for nontraditional student status

As shown in Figure 3, the hypothesis that traditional student status would be a strong predictor of emotion-oriented coping was confirmed by its positive direct effect ($\beta = .248, p \leq .001$), however, the hypothesis that traditional student status would be a

strong predictor of performance goals (either performance-approach or performance-avoidance) was not confirmed (see Figure 3). Traditional student status had no significant direct effect on performance approach goals ($\beta = .01, p \leq .80$), nor performance-avoidance goal orientation ($\beta = -.065, p \leq .30$).

FIGURE 3

Path Analysis Model for Traditional Student Status



Exploratory Findings

Early on in this study, the two groups of students who lived on campus and student athletes were populations of interest for exploratory reasons. Unfortunately, however, less than 2% of the entire sample fell into either of the groups, which was considered insufficient for further analysis. Nevertheless, strong correlations were found among variables that were used in the Morris et al. study and considered to be interesting to evaluate for comparison reasons. Correlations were found between student status and

age ($\tau = .52, p < .005$); between academic GPA and mastery-approach goal orientation scores ($\tau = .15, p \leq .008$); between academic GPA and emotion-oriented coping scores ($\tau = -.13, p \leq .017$); and between age and emotion-oriented coping scores ($\tau = -.16, p \leq .003$).

CHAPTER 5

DISCUSSION

Overview

In this chapter, I will recap and elaborate on the pertinent results. Some of this study's limitations and strengths will be presented and will serve as a precursor to the recommendations for future studies. Implications that were drawn from the results will also be discussed, and the chapter will conclude with my suggestions for future research.

In regards to the results, four of the five hypotheses of this study were confirmed. Nontraditional students more often used mastery-approach goal orientation and task-oriented coping than did traditional students, therefore supporting the claims that nontraditional students utilize adaptive mastery goals and adaptive coping strategies. This study also confirms the strong relationship between mastery-approach goal orientation and task-oriented coping and the strong relationship between traditional student status and emotion-oriented coping. The hypothesis that traditional students would have strong relationships with either performance-approach or performance-avoidance goal orientations, was not confirmed.

In regards to the exploratory findings, a significant correlation was found between age and emotion-oriented coping, suggesting that as students age, their use of emotion-oriented coping weakens. Aside from this lone correlation, no other pertinent correlations

were found. A variable that dichotomized students into two groups based solely on age 'traditional-age' students (ages 18-22) and 'nontraditional-age' students (ages 22 and up) was also correlated with goal orientation and coping strategy; however this proved to reveal no significant correlations. Thus, the discrepancy with the results of Morris et al. cannot be due to the different way that nontraditional student status was operationalized.

Limitations and Strengths

Limitations. The major limitations of this study include the demographics of the participants and location of the study. In regards to the participants' demographics, the sample primarily consisted of students in the College of Education. Of course this is due to the fact that subjects had signed up for the study through the College of Education subject pool. Due to the specific sample, this study has very limited external validity, making it difficult to generalize to other populations (e.g. engineering students, pre-med students, or political science students). It is possible that education students may have been exposed to lessons on goal orientations and have preconceptions of certain goal orientations, thus potentially providing answers to AGQ questions they feel puts them in the most advantageous group. Students from other academic disciplines may yield different results. For example, students in science majors may be exposed to classes that grade on 'curves.' Thus, exposure to competition for the top grades may have these types of students favor performance goals. Therefore, alternative populations may be of interest for future studies.

The location of this study was another major limitation of external validity. The location of this study took place in a large urban city which has been struggling with an

ever changing and transient population (57% of this study's sample having moved into this city), high rates of career changes, a large commuting community, and problems recruiting and training potential educators for licensing. These various factors may have affected the response and beliefs of the participants. For example, the fact that 98% of the participants did not live on campus may have potentially skewed the data on CISS questions like "Go for a walk." (With 98% of the participating sample having access to mechanical transportation, activities such as going for a walk may not be as favorable a coping activity as going for a drive.)

A third limitation of external validity is that the correlation and regression results may depend on how nontraditional status was operationalized. A different operationalization could have yielded different results. Finally, some of the variables in the data collection, particularly those pertaining to job status, contained some limitations. Several students had stated that they were employed full-time as parents. Furthermore these individuals submitted responses for working hours of be 24 hours a day, 7 days a week. The two variables pertaining to employment should be given further attention and perhaps even reworded for future studies. Other variables that possessed some limitations included parents' highest levels of education, because the best way of coding the variable was unclear; both school activities and out-of-school activities, because the majority of students failed to specify their activities; and how one gets to school, because some students checked multiple answers.

Strengths. The use of different instruments and methods for categorizing students presented the task of having to develop and test hypotheses that had not previously been made. The use of the AGQ or the 2 x 2 framework of achievement goal theory had not

been used in previous studies attempting to find a relationship between goal orientation and coping strategy. Furthermore, the use of factor and cluster analyses has seldom been used, if at all, to define student status in previous studies. Therefore, this study provides new and useful descriptive data. It should be pointed out however, that despite the significant correlations found between variables, such as mastery-approach goal orientation and task-oriented coping, causality cannot be inferred. Nevertheless, some implications can be drawn from this study's results.

Implications

The implications of this study suggest that the use of age as a single variable in determining student status may be insufficient. The factor and cluster analysis methods used in this study to identify traditional and nontraditional students yielded significant correlations to goal orientation and coping strategy. Results from the factor and cluster analyses suggest that the addition of marital status, parental status, and time taken off from school are key factors in determining one's maturity rather than age alone. Therefore, this study's methods for defining student status is highly recommended for future studies on student status.

Though mastery-approach goal orientations were positively correlated to nontraditional student status, the relationship was weaker than Morris et al.'s results (between mastery [learning] goals and nontraditional student), and may therefore need to be given further attention in future studies. The different correlation and significance values between this study and the Morris et al. study may be attributed to the different instruments used, different methods used to categorize student status, and/or the sample

itself. It is possible that the nontraditional students in this study may have different reasons for returning to school (e.g. some may be returning for a career change, others may be returning to obtain credentials for higher pay, and yet others may simply be returning to school out of pure interest to learn the subject matter).

Nevertheless, the major implication of the positive correlation between student status and mastery-approach goals (along with positive correlations between student status and task-oriented coping) suggests that nontraditional students carry adaptive traits that should be welcomed by institutions of higher education. There is a possibility that nontraditional students may face barriers that dissuade them from returning to school (e.g. lack of social supports, low self-efficacy, or lack of finances), thus greater efforts to accommodate and appeal to nontraditional students may be advantageous to both universities and students, as the students will have greater access to a higher education and the universities will admit a more desirable student body. Furthermore, institutions of higher education may also want to consider exploring the possibilities of allowing students to take their time in developing their priorities and goals prior to undertaking college level courses, to allow students to become more “mature.” Internships, apprenticeships, mission trips, and even career experiences may be advantageous in one’s goal and coping development.

The strong relationship between mastery-approach goals and task-oriented coping does suggest that certain goal orientations are strong predictors of coping strategy. It also suggests that if one chooses to master a task for the sake of mastering that task, one also chooses to persist (cope) at challenging and stressful tasks. Nevertheless, strong positive correlations were also found between other goal orientations and coping strategies,

though the correlations were not as strong. Specifically, the correlation between performance-approach goals and task-oriented coping was also significant and positive. Thus one could infer that task-oriented coping is reflective of 'approach' goals in general. In addition, emotion-oriented coping was found to have strong positive correlations with mastery-avoidance goal orientations and performance-avoidance goals, potentially implying that emotion-oriented coping is reflective of 'avoidance' goals.

These findings suggest that there may be underlying characteristics shared between 'approach' goals and task-oriented coping, as well as between 'avoidance' goals and emotion-oriented coping. One could infer that a characteristic, such as persistence or eagerness, is shared by individuals with 'approach' goals and task-oriented coping, and a characteristic, such as low self-efficacy or learned helplessness, could be shared amongst individuals with 'avoidance' goals and emotion-oriented coping. These inferences make sense due to the assumptions that 'approach' goals and task-oriented coping are advantageous, whereas 'avoidance' goals and emotion-oriented coping are considered maladaptive.

Overall, the major implications that one can take from this study is that nontraditional clustered students as a whole will more often score higher on mastery-approach goal orientation scales and have higher GPAs than would traditional students. The increased use of mastery-approach goal orientation will also allow one to acquire and employ more task-oriented coping strategies. Therefore, as one becomes more 'nontraditional' (perhaps through aging, maturity, acquisition of various life experience/roles, etc . . .), individuals will develop advantageous goals, and increase the probability of eventually developing and employing advantageous coping strategies.

Future Studies

Future studies will want to consider using more diverse and varied populations to test the validity and reliability of the findings in this study (perhaps students with varying academic majors, varying involvement in school and out-of-school activities, and from various locations). Future studies should also consider further testing the validity and reliability of instruments that utilize the 2 x 2 framework of achievement goal theory, like the AGQ. More detailed demographic questionnaires may also reveal interesting variables to be included in the factor and cluster analysis approach to defining student status. (Although employment status was not found to share enough variance with the other student status variables in this study's factor analysis, future studies with different populations may yield different results.) Other possible suggestions for future studies include the identification of students' reasons for attending college and correlating them with goal orientations. Intervention studies that attempt to foster the development of one's goal orientation or coping strategy can allow for causal relationships to be found, if they exist. Such studies would also contribute to the exploration of the malleability of goal orientations and coping strategies.

The development of instruments that can determine maturation effects may also be considered for future use and correlated with either coping strategies or goal orientation. The theories of identity development should also be a strong consideration for future studies involving student status and goals, as the solidification of one's identity may influence their maturity and life perspectives. The finding that older, more mature nontraditional students obtain higher GPAs and utilize adaptive goal orientations and

coping strategies also suggests that nontraditional students may be more receptive to undergoing conceptual change and utilizing other metacognitive skills. Many educational research projects fall short of studying older populations, however there is a possibility that development of metacognitive skills improves in adult populations.

In summary, the findings of this study are unique for several reasons. One is the definition of student status and the use of factor and cluster analysis method to determine it. Another is the significant positive correlation between mastery-approach goal orientation and task-oriented coping, which had not been tested before. Finally, the finding that traditional clustered students tend to score higher on emotion-oriented coping is unique because previous studies (Morris et al., 2003) had found that nontraditional students more frequently endorsed emotion-oriented coping. Therefore, future decisions will have to be made in methodology, instrument use, and the definition of student status to clarify and validate whether student status truly influences the development of one's goal orientation, coping strategy, and even academic achievement. Overall, this study extends the literature on the topics of student status, goal orientations, and coping strategies because it attends to the limitations and inconsistencies found in previous research. Though this study can also be improved upon, it has revealed important descriptions of nontraditional students, and expands to a greater extent the nature of the relationships between approach/avoidance goals and coping strategies, in addition to the traditional mastery/performance goal relationships.

APPENDIX A

Achievement Goal Questionnaire

Consider the courses you are enrolled in and what you are trying to accomplish during those courses. Indicate how strongly you agree or disagree with each of the 12 statements listed below, using the 7-point scale.

1 - Strongly Disagree
7 = Strongly Agree

Questions:

Circle One:

Strongly..... Strongly
Disagree..... Agree

- | | |
|--|---------------|
| 1. It is important to me to perform as well as I possibly can. | 1 2 3 4 5 6 7 |
| 2. I just want to avoid performing worse than others. | 1 2 3 4 5 6 7 |
| 3. I worry that I may not perform as well as I possibly can. | 1 2 3 4 5 6 7 |
| 4. It is important to me to do well compared to others. | 1 2 3 4 5 6 7 |
| 5. My goal is to avoid performing worse than everyone else. | 1 2 3 4 5 6 7 |
| 6. I want to perform as well as it is possible for me to perform. | 1 2 3 4 5 6 7 |
| 7. Sometimes I'm afraid that I may not perform as well as I'd like. | 1 2 3 4 5 6 7 |
| 8. It is important to me to perform better than others. | 1 2 3 4 5 6 7 |
| 9. It is important for me to avoid being one of the worst performers in the group. | 1 2 3 4 5 6 7 |
| 10. My goal is to do better than most other performers. | 1 2 3 4 5 6 7 |
| 11. I'm often concerned that I may not perform as well as I can perform. | 1 2 3 4 5 6 7 |
| 12. It is important for me to master all aspects of my performance. | 1 2 3 4 5 6 7 |

APPENDIX B

Coping Inventory for Stressful Situations (Sample Questions)

Coping Inventory for Stressful Situations **(SAMPLE QUESTIONS)**

1 = Not at All
5 = Very Much

Questions:

Circle One:

- | | |
|--|-----------|
| 1. Schedule my time better. | 1 2 3 4 5 |
| 4. Try to be with other people. | 1 2 3 4 5 |
| 7. Preoccupied with aches and pains. | 1 2 3 4 5 |
| 15. Think about how I have solved similar problems. | 1 2 3 4 5 |
| 16. Tell myself that it is not really happening to me. | 1 2 3 4 5 |
| 18. Go out for a snack or meal. | 1 2 3 4 5 |
| 22. Blame myself for not knowing what to do. | 1 2 3 4 5 |
| 32. Go for a walk. | 1 2 3 4 5 |
| 33. Worry about what I am going to do. | 1 2 3 4 5 |
| 36. Analyze the problem before reacting. | 1 2 3 4 5 |
| 37. Phone a friend. | 1 2 3 4 5 |
| 43. Come up with several different solutions to the problem. | 1 2 3 4 5 |
| 48. Watch TV. | 1 2 3 4 5 |

APPENDIX C

Participant Information Questionnaire

Participant Information Questionnaire

Office Use Only:

M-Ap _____ M-Av _____ P-Ap _____ P-Av _____
 Task _____ Emot. _____ Avo. _____ (Dis.) _____ (S. Di) _____

Age: _____ Years Old

Sex: Male _____ Female _____

Year in college: Freshman _____ Junior _____ Professional/Graduate _____
 Sophomore _____ Senior _____ Other _____ (please specify) _____

Academic Major: _____

Student Status: Part time _____ Full time _____

Cumulative GPA: _____ (on a 4.0 scale)

Employment: Part time _____ Full time _____ Not employed _____

If employed, how many hours per week: _____

Number of Classes enrolled in: 1 _____ 2 _____ 3 _____
 4 _____ 5 _____ 6 & up _____

Number of psychology classes taken: 1 _____ 2 _____ 3 _____
 4 _____ 5 _____ 6 & up _____

Ethnicity: Caucasian _____
 (Circle the one you Hispanic/Latino _____
 most identify with) Native American _____
 Black/African-American _____
 Asian _____
 Pacific-Islander _____
 Other _____

School Activity:	Not Applicable _____	1 _____	2 _____	3 & up _____
(# of school sponsored activities [sports, clubs, student council, fraternity/sorority, etc . . .])				
Please specify using titles and description [e.g. Baseball (athletics), Alpha Beta (Fraternity)]:				

Have you ever taken any time off of school?				
No		Yes		
If yes, please specify why and how long _____				
Marital Status:	Single, Never Married _____ Married _____ Divorced _____ Engaged _____ Widowed _____ Separated _____			
Children:	0 _____	1 _____	2 _____	3 _____ 4 & up _____
Perceived Socioeconomic Status:	Lower _____	Lower-Middle _____	Middle _____	Upper-Middle _____ Upper _____
Parents' Highest Level of Education:	Mother		Father	
Less than High School	_____	_____	_____	_____
High School Graduate (or GED)	_____	_____	_____	_____
Some College	_____	_____	_____	_____
2-year College Degree (associates)	_____	_____	_____	_____
4-year College Degree (B.S., B.A.)	_____	_____	_____	_____
Master's Degree	_____	_____	_____	_____
Doctorate Degree	_____	_____	_____	_____
Professional School (MD, JD)	_____	_____	_____	_____
Not Applicable (or Don't Know)	_____	_____	_____	_____
What is your religious affiliation:	Christian _____		Catholic _____	
	Jewish _____		Muslim _____	
	Hindu _____		Buddhist _____	
	Mormon _____		Not Applicable _____	
	Other (please specify) _____			
Is English your first language:	Yes		No (please specify) _____	

Out-of-School Activity: Not Applicable ____ 1 ____ 2 ____ 3 & up ____
 (# of sponsored or organized activities [Camp counselor, volunteer, clubs, sports, etc...])

Please specify using titles & description [e.g. mission work (religious), volunteer (community)]:

Do you live on campus? yes no

Do you live close to campus? yes no

Do you commute to campus? yes no

How do you usually get to school? I drive ____
 By bus ____
 I walk or bike ____
 Friend drops me off ____
 Family drops me off ____
 Not Applicable (live on campus) ____
 Other (please specify) _____

How many miles do you travel to get to campus (rough estimate)? ____

How long does it take you to get to campus? ____

How do you pay for your education? Parents ____
 Scholarship ____
 Financial Aid ____
 I work and pay with my own money ____
 Other (please specify) _____

Are you the first in your family to attend college? (Circle your choice)

Yes No (parents were the first) I don't know No (grandparents were the first)

No (but I don't know who the first were) No (the first were before my grandparents)

Where is your hometown: _____ (city, state, country)
 Rural ____ Sub-Urban ____ Urban ____

How long have you been here in Las Vegas, Nevada? _____

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