

THE EFFECTS OF A PREPARTORY SKILLS TRAINING  
ON STUDENT SUCCESS

by

AJAL B. PATEL

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## ABSTRACT

### THE EFFECTS OF A PREPARATORY SKILLS TRAINING ON STUDENT SUCCESS

Ajal Patel, M.S.

The University of Texas at Arlington, 2012

Supervising Professor: Shannon Scielzo

The effects of college-level student attrition are wide-spread. Numerous different approaches have been implemented to reduce these rates, such as offering freshman level seminars to aid the transition from high school to college and the use of support systems consisting of guidance counselors, teachers, parents and/or friends. A great deal of research has advocated for, and supported the utility of, using training initiatives for employees to improve their job performance. Based on these same principles, we can improve student success. A thorough literature review was first conducted, examining the factors that relate to student success. Moreover, a pilot study was conducted further examining these factors, in addition to identifying specific idiosyncratic deficiencies or issues that University of Texas at Arlington (UTA) students were facing. The current project applied the knowledge obtained thus far, and examined the effects of a preparatory skills training initiative specifically designed for the purposes of increasing academic success for students using various indicators (i.e., academic self-efficacy, self-esteem, satisfaction, stress, and behavioral items). No significant results were found; however, effects were seen moving in positive directions. Therefore, implications and further directions are discussed as this is an important research area.

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CHAPTER 1  
INTRODUCTION SECTION

1.1 Introduction

After graduating from high school, many students will enroll in some type of college or university program. According to the U.S. Department of Education's National Center for Education Statistics (NCES, 2008), in the fall of 2008, there were over 3 million first time freshman enrolled in degree-granting institutions. However, a large percentage of these students will fail to earn the degrees that they set forth to obtain. A previous longitudinal study conducted by the NCES, referred to as the Beginning Postsecondary Studies Longitudinal Study (BPS), found that after their freshman year, 14.1% of the students were no longer enrolled in any institution and an additional 12.9% of the students were no longer enrolled in any institution after their sophomore year (NCES, 2008). Thus, no more than two years into the student's pursuit of college education, over one fourth of the sample was no longer enrolled in an institution. Research has attempted to address this concern, and the following sections will give some background information. The purpose of this project is to attempt to ameliorate the college attrition problem – specifically, I am interested in applying a technique typically used in organizational endeavors for employees, to better prepare students to perform academically in college. For the current initiative, this approach will be referred to as a preparatory skills training program. In turn, I am hopeful to increase the likelihood of students being successful academically, examining a variety of indicators.

*1.1.1 Training and Performance*

Before we can discuss how to train and improve performance, training must be defined. In Industrial/Organizational Psychology, training and performance is a research interest as training is commonly used for employees in organizations. Goldstein (1980) defined training as

the acquisition of concepts or skills that in turn increases performance in a work environment. Employees in organizations have their own personal knowledge, skills, and abilities (KSAs); however, training can be used to show employees how to use their KSAs most effectively while at the same time combining the necessary KSAs for respective job roles. Using this concept of training, an academic environment can be seen as a work environment as students must work using their KSAs to succeed in college. By implementing a preparatory skills training program, these students can be trained to use their personal KSAs in conjunction with the necessary KSAs to perform successfully and effectively in an academic environment.

There is not one main way to train everyone; it depends on the training needs. However, Salas and Cannon-Bowers (2001) found that no matter what training needs to be conducted, there are four basic principles to ensure effectiveness. The first principle was to make sure that the information or concepts presented for training are actually relevant. The second principle was to demonstrate in some way the KSAs that needed to be learned. The third principle was to have opportunities for trainees to be able to practice what they had been trained on. The fourth and final principle was to provide some sort of feedback both during and after practice. The proposed preparatory skills training used these four basic principles. To ensure the first principle, as this will be seen in later sections, a literature review was conducted to see the main issues students have succeeding academically in college. To ensure the second principle, the training was interactive where the researcher and participants actively discussed all training materials and walked through each concept so everyone can see different points of views and how to apply them to their personal KSAs. To ensure the third principle, after the training was completed, all participants completed an assignment in order to assess how well they learned and understood the training materials. To ensure the fourth principle during the training, this again came along with the interactive training and discussing everyone's thoughts and opinions. To ensure the fourth principle during training, participants and the research would discuss each training component and share their different comments and

opinions. To ensure the fourth principle after training, participants completed an assignment to reinforce the material that they had just been trained on. Finally, if participants would like, they would be able to review results of the study as discussed during the informed consent process.

### *1.1.2 Transition from High School to College*

One of the largest issues that students must face is transitioning from high school to college. For some students this transition process can be an easy one; however, for some students it can be a difficult process. When students first enter college, they have to adjust to a new environment. According to Pancer, Hunsberger, Pratt, and Alisat (2000):

The reality of students' experiences at universities is harsher and more stressful than many of them anticipated. First-year students must learn not only to adjust to the new demands of adult independence; they must also cope with an environment that is very different from the one they have experienced in their high school years. (p. 39)

Not only do students have to become accustomed to college classes and professors, students have to adjust themselves to being in a new environment that ultimately is different from the one they had been in during their high school careers. Adjusting to a new setting can be difficult; however, students have opportunities to become involved in the college life as a whole to help the transition process. In support of this notion, Tinto (1998) found that students were more likely to return for their sophomore year if they were academically and socially involved, which he argued facilitated the adjustment transition.

College undergraduates have to get accustomed to college classes and professors, which is stressful in itself. The transition from high school to college just adds on to the stress for some as going to college is a new beginning and one that students do not have to take on alone. Providing a preparatory skills training program can be very beneficial to help students with this transition by providing college undergraduates skills on how they can become involved in college life as a whole and providing skills on how to become accustomed to the new environment.

### *1.1.3 Support Systems for College Undergraduates*

Some research has looked into different types of support systems that college undergraduates have available to them to help ease the transition from high school to college. Peer support and college academic advisors have been found to be two important support systems for the transition from high school to college (Hurtado, Carter, & Spuler, 1996). Smith and Zhang (2009) found numerous support systems for the transition from high school to college; included were counselors, teachers, and family members. Guidance counselors in high school may be seen as one of the most important support systems in helping students transition from high school to college; however, according to Kelly, Kendrick, Newgent, and Lucas (2007), half of the student population of students they studied did not receive any help from guidance counselors with regards to college.

Once students begin college, one main support system that is available to college students is the student-professor relationship. Professors are available during and outside of class to help students. Research has shown that those who drop out of college were more dissatisfied with learning and college due to the lack of student-professor relationship than those who remained in college (Hannah, 1969). It is imperative to train college students that professors are available to help them and should seek help as soon as possible when encountering difficulties.

### *1.1.4 Motivation and Commitment*

Aside from students learning the best routes to succeed, students need to be motivated and committed to succeed in college. Marks (1967) found those students that had low educational values and aspirations dropped out because these students were more concerned by parent's aspirations for them; these students were not committed for themselves so they struggled to remain in college. Hackman and Dysinger (1970) found students with low commitment to college were more likely to transfer, dropout, or take time off from college; even students with high competence would transfer, dropout, or take time off if they have low commitment to college. This research showed that commitment to college plays a key role in

the decision for students to remain in college or not. If students have low commitment or motivation towards college, it would be very important for students to know what skills they need to succeed in college. When provided with a preparatory skills training program of college-requirements, students can change their strategies from the onset and hopefully maintain higher levels of motivation and commitment that could keep them from becoming stressed and possibly dropping out of college.

#### *1.1.5 When to Inform Students*

Keup and Barefoot (2005) found smoother transitions for college students who participated in first-year seminars. However, students might need guidance before college even begins in order for them to have the smoothest transition possible. Kendrick, Newgent, and Lucas (2007) believed that the transition process should begin while students are still in high school. This in turn gives ample time for future college students to become better prepared for college. However, it is difficult for high schools to provide an adequate preparatory skills training program due to the lack of resources of time and man power. Giving a preparatory skills training program during the orientation process makes the most sense because students can be trained before they begin college and orientations are already in place for colleges and universities. There would be no additional strain of resources to implement this training into orientations. Providing a preparatory skills training program can help to provide the skills college undergraduates need in order to seek the many avenues in terms of support systems when going through difficult times during their freshman year (see Figure 1). For the current study the preparatory skills training was provided to all college undergraduates, not just incoming freshman students. The training was first needed to be tested on a current college sample to see if it would be beneficial to them before tailoring the training to just incoming freshman students. Current college undergraduates already have had experiences with transitioning from high school and have gone through the rigors of college, so they could act as subject matter experts for the preparatory skills training and provide opinions and comments for its potential.

### *1.1.6 High School Helping the Transition from High School to College*

Hill (2008) conducted a study to see how high schools helped students to become prepared to enter into college. In this study it was found that there were three different types of approaches that high schools took to aide in the college-linking process: traditional, clearinghouse, and brokering. The college-linking process is a process where high schools attempt to provide students information on college; the aim is to help prepare high school students about the process to get into college (Hill, 2008). The traditional approach was the strategy that high schools traditionally played in the twentieth century when helping students with the college-linking process; this approach provided students with limited information on college and the high schools were not very committed to relaying this information to students. The clearinghouse approach refers to high schools offering more resources for students for college planning when compared to the traditional approach; however, these high schools failed to play a very active role in relaying these resources to both parents and students as seen with the traditional approach. The brokering approach refers to high schools that have an ample amount of resources and also made sure these resources were well known to both parents and students. The brokering approach would be the ideal approach to take for the college-linking process; however, many high schools cannot provide this type of approach. The problem a lot of high schools face is limited amount of resources (e.g., time, money, employees) - they are oftentimes struggling just to be able to operate the high school and teach the material to students. In order to have access to resources and be able to develop college-linking strategies, more high schools need the manpower and money for this to work. It is hard enough for high schools to find faculty and the time to get all the information passed along to high school students in terms of their own curriculum. It would be ideal for high schools to be able to provide approaches to their students for the college-linking process, but it just is not feasible for most.

With the lack of resources many high schools have, universities are left to tackle the burden of relaying necessary training and skills to incoming students. However, I argue that

universities are not adequately doing this. From a pilot study I conducted during the summer session of 2010, students provided information from their experiences from orientation as well as information from high school and college. Many students stated that they wished someone would have given them a realistic idea of what college life was going to be like, either during high school or during the orientation as an incoming freshman student. Some of the comments they had regarding what they would have like to have known included knowing more about college classes and their requirements, knowing more about what college professors would be like, and hearing stories from some current students on their transition experiences. The orientations that universities offer, although a great tool in many cases for making students initially feel welcomed, are not typically designed to provide students with a preparatory skills training of the necessary skills needed for college undergraduates to succeed academically. Given a training program of these necessary skills, coupled with simple strategies to deal with some of the upcoming obstacles, students would be much better equipped to overcome these challenges. Thus, it does seem more practical to help incoming freshman students during the orientation process since this initiative is already in use for colleges and universities. Thus, provided that the preparatory skills training proposed in the current study has the intended effects, then I argue that a preparatory skills training program should become part of the current orientation process for all students in the future. It is important to train incoming college freshman about college in terms of what is necessary of them skills wise; having these skills before they begin college can be very beneficial.

#### *1.1.7 Differences Between High School and College*

Since academic performance differences between college undergraduates and college professors are likely to be radically different, it is important to delineate the differences between high school and college curricula. According to Michael (1993), there are two very important differences between high school teachers and college professors. For college professors, a significant portion of the learning strategy is a heavy reliance on texts and lectures, whereas

high school teachers rely heavily on class discussions, individual and group projects, homework, and other activities. The second major difference between high school and college involves the main sources for students' grades. In college, exam scores represent the most significant portion of the course grade, while high school class grades are based upon attendance and class participation, with exam scores sometimes being less than half of the class grade (Michael, 1993).

The teaching and learning strategies students become accustomed to in high school suddenly become obsolete in college and, ultimately, this may lead to poor performance. It is imperative that students are given some insight into these differences in skills for academic success before beginning their college-journey – as, once this realization dawns on them otherwise, it may be too late in the semester for them to successfully recover. For example, one main performance discrepancy is the number of hours that should be dedicated toward studying. According to the Higher Education Research Institute (HERI), only 16% of first-year students spent more than 10 hours studying per week for their classes (Way, 2005). For typical lecture courses, the general rule for total studying time is 3 hours for every 1 credit hour taken (Michael, 1993). This means for a typical 3 credit hour class, a student should study a total of 9 hours per week for that class alone. It is clear that first-year students underestimate how much time and effort needs to be put into one class, given that their total study time per week equates to the time needed to study for one class alone. If students are only studying 10 hours per week, they are not studying adequately for their entire course load, which can ultimately lead to poor performance. Students need to be trained early on that college demands are different than the demands from high school in terms of the skills needed to succeed academically. Students need to realize early on it is now more upon themselves to succeed in college, but at the same time students need to be trained on how they can be as successful as possible.



### *1.1.8 Addressing Conflicting Performance Standards*

#### *1.1.8.1 Skills Students Need*

Research has also shown that there are several crucial skills professors believe their students should possess to succeed academically, which include: students showing up to class on time, asking questions, being respectful, and feedback on their performance (Morales, Rodriguez, & Lozada, 1996).

#### *1.1.8.2 Providing Skills Training*

Providing a preparatory skills training program to students can allow college undergraduates to know that college is different than high school in terms of the skills they need to possess in order to academically succeed – and that more effort needs to be provided from the students themselves in order to succeed as well as letting students know that skills needed to succeed in college classes are different than the skills needed to succeed in high school. I believe that there are three main skills that should be targeted: students should be trained regarding study requirements, the skills needed to academically succeed in college courses, and the differences in teaching approaches in college relative to high school.

The remainder of the literature will focus more on the college undergraduates themselves with the attempt to explain certain factors can lead to attrition in college and universities as well as how to assess students as they begin their freshmen year.

### *1.1.9 Factors That Relate to Undergraduate Student Attrition*

It is the hope that the preparatory skills training program proposed in the current study can help facilitate academic success for our students, and ultimately help to reduce student attrition. Although student attrition will not be collected due to methodological limitations (i.e., time frame needed and problems with tracking of students), the indicators of student success are a likely antecedent of attrition. Thus, research examining factors will be briefly discussed.

One prominent researcher in the area of student attrition, Tinto (1975), examined many factors that relate to student attrition. In his model, he proposed that there were various

individual-level factors, and several contextual factors. Specifically, the individual-level factors were family background, individual attributes, and pre-college schooling. These factors helped to formulate the initial skills and commitments students had for college. Once students began college, it was the academic and social systems (contextual factors) that helped to further shape skills and commitments and eventually helped students to decide if they should continue attending college or not. The academic system consisted of grade performance and intellectual development while the social system consisted of peer-group interactions and faculty interactions; these two systems were then integrated into the commitments students had.

Similarly, Pervin and Rubin (1967) explained that a lack of fit between student and college characteristics could lead to the student dropping out; this would be due to the dissatisfaction the student had in result of a poor fit for the student. The lack of fit between student and college characteristics was based more upon nonacademic factors as well the dissatisfaction that resulted from the lack of fit (Pervin & Rubin, 1967). Providing a preparatory skills training program can help students to identify with the college or university. For example, from my own past experience, I have found that students oftentimes feel overwhelmed and that they are markedly behind relative to their peers (which, if we were to survey everyone, we would likely find that a clear majority would privately admit feeling this way). By reducing these sentiments and allowing students to realize that this is a common feeling, students may feel that they belong more so than they would otherwise. This would be an important thing to do because as research has shown (Pervin & Rubin, 1967), students can be dissatisfied with school if they do not identify or fit with the college or university. Giving students an early opportunity to properly identify with a college and university can allow the student to know for sure if the college or university they are about to attend is the right one for them.

Based on an extensive literature review by Pantages and Creedon (1978), these researchers were able to compile the main reasons students gave to explain why they withdrew from colleges and universities. The main reason students provided was due to academic issues

such as not satisfied with the curriculum they were receiving or obtaining low grades in their classes; closely following academic issues was financial issues (Pantages & Creedon, 1978). The next set of reasons students gave for withdrawing were classified under motivational reasons, these reasons ranged from uncertainty of educational goals, lack of interest, and unwillingness to study (Pantages & Creedon, 1978). The next category was personal reasons such as adjusting to a new environment or student or family illnesses; the final main category was dissatisfaction with college to the extent to where students no longer wanted to remain in school (Pantages & Creedon, 1978).

#### 1.1.9.1 Student Success Indicators

For the current study, several indicators of student success were chosen. Specifically, after reviewing the literature, variables were selected that appeared most often when dealing with academic failures and successes. For example, the inability to deal with stress has previously been posited as a cause of student attrition , and given the inordinate amount of stress that some students face acclimating to college life, this is an important academic success variable to look at for the current study. With the transition from high school to college, this can be a stressful time for some students (Pancer, Pratt, Hunsberger, & Alisat, 2004). These researchers found students were stressed because they were unprepared for college; they found four different stressors which were personal, academic, social, and systems.

With getting accustomed to a new environment and trying to succeed in college, students' self-esteem could fluctuate depending on if they are facing tough times or not. In a study conducted by Pritchard and Wilson (2003), they found that those students who intended to drop out of college reported having lower self-esteem than their peers. Having a lack of a social support system has also been found to lower student's self-esteem. Baumeister, Campbell, Krueger, and Vohs (2003) reviewed literature on self-esteem and found that high self-esteem does not lead to good performance. However, they found that high self-esteem can be partly explained by good performance in schools. If students were to have low self-esteem,

this would play a part in academic struggles, and this would be an important variable to assess during the course of the proposed study.

Students' success is important for colleges and universities. Students themselves have the ability to succeed; furthermore, students have to believe in themselves that they can succeed. Academic self-efficacy refers to the degree or extent to which individuals feel competent to undertake various academic-related tasks. Along with succeeding, students need to be motivated to accomplish the tasks and demands colleges ask of them. During tough times in college, the levels of self-efficacy and motivation play a tremendous role. Pajares (1996) found that the more self-efficacy one possesses, the more persistence and effort that person has when facing adversity.

Finally, life satisfaction, specifically the school component of life satisfaction, is another indicator of academic success. Specifically, feeling out of control with your academic goals – believing that you are failing at an extremely important task you are attempting to undertake (i.e., earning your degree) – will have very negative detriments to individuals' life satisfaction. Mashburn (2000) found a negative relationship between satisfaction and attrition ( $r = -.73$ ). It is important to know how satisfied students are with their educational lives as this can help to explain the academic successes or failures they go through.

Given the various indicators of academic success discussed thus far, there are several important antecedents to these indicators that can be manipulated to increase student success. Specifically, there are several behaviors that we can attempt to elicit which in turn will lead to an increased probability of academic success: they are goal setting, time management, professor interactions, studying, and class participation/attendance. Each will be discussed in turn. Each factor was decided upon based either by the literature or the pilot study that was conducted by asking current college students various questions in reference to being prepared for college as an incoming freshman.

#### 1.1.9.2 Individual Goal Setting

Setting goals can allow students to work towards achieving success. By setting personal goals, students are in control of what they want to achieve. When students actually achieve the goals they have set for themselves, their self-efficacy increases which then in turn helps to increase the motivation students have towards their education (Pintrich, 2000). Setting goals can help students to develop effective “game plans” to ensure success. Morisano, Hirsh, Peterson, Pihl, and Shore (2010) explained that students who developed clear goals actually engaged and focused more on goal-relevant activities versus engaging in goal-irrelevant activities; lack of goals has been shown to hinder academic performance. By training students on how to set some goals, as well as making students focus on the methods to attain the goals instead of just focusing on the end product, this can allow students to be more motivated and to improve their academic performance. The focus for these goals will be personal, which means students themselves will come up with and set their own goals.

#### 1.1.9.3 Time Management

Time management is very important for students to have academic success. In a study conducted by van de Meer, Jansen, and Torenbeek (2010), they found that students had a realistic expectation of time management but found difficulties in sticking with their plans and how to go about developing an effective game plan for time management. From the pilot study I conducted, students from UTA reported putting more importance on attending class on a regular basis for college than high school. Students also reported that one of the biggest issues they faced when going through college was finding time to finish all the work they had to do. Students also reported that it was very important to turn all materials in a timely manner as well as the workload is tremendously higher in college than in high school. Having time management training will allow students to be able to set deadlines as well as set up a time line when to complete work. This will allow students to have adequate amount of time to complete their work instead of having to procrastinate to meet deadlines. Time management also includes attending

class on a regular basis as well as being prepared for each class to participate in class discussions. Having good time management skills can allow students to have great success academically.

#### 1.1.9.4 Professor Interactions

Having a student-professor relationship is important for students. Cox, McIntosh, and Terenzini (2010) found with their review on literature of student-professor interactions that this is an important relationship to develop as it helps students through their time in college. From the pilot study I conducted, many students reported that they would have liked to be informed on how college professors were before beginning college. Students also reported that the biggest difference between high school and college was that more responsibility was put on themselves to succeed in college and that students had to put in much more effort to succeed in a college class versus succeeded in a high school class. Students' perceptions of college professors before beginning college were professors were strict, intimidating, scary, unfriendly, mean, and did not care about students. Students' perceptions of college professors after going through classes resulted in students believing that professors were knowledgeable, caring, wanting students to succeed, passionate, funny, and helpful. Interacting with their professors allows students to understand what professors expect from them. Students should also be aware that professors are there to help them, with it being a class related problem or a problem outside of class. Many students seek help from professors when it is already too late in the semester; students need to interact with their professors as soon as a problem arises. Professors do take interests in their students, and students should be aware that professors are available to them for help and guidance. The preparatory skills training in turn would provide the necessary skills students would need interacting with their professors.

#### 1.1.9.5 Studying Habits

One main way students can succeed in college is by studying for classes. Developing good studying habits can allow students to have high academic performance. Pantages and

Creedon (1978) explained that poor study habits lead students to lose persistence and eventually withdrew from colleges or universities; this withdrawal can be voluntary or involuntary. Studying habits can be good in high school, but not necessarily translate into success in college. During the transition from high school to college, it would be greatly beneficial for incoming freshman to be trained on how to study for a college class. As previously stated, for every one credit hour students should study for three hours per week (Michael, 1993). For one three credit hour class, students should be studying for nine hours per week. Students might not know this information, but would benefit if someone trained them before beginning classes. Having this information can allow these students to be better prepared for college classes. As this research progresses, a great time to relay this type of information would be during orientations. Again, to reiterate, all information can be given to students, but students themselves should also take the initiative to better prepare themselves for beginning college.

In closing, these are the behavioral components that are believed to be most important to target for maximizing student success.

#### *1.1.10 Proposed Idea*

With all the literature reviewed in this document, one main theme has emerged. Students might be told information about college via counselors, teachers, friends or parents, but this is not the most effective way to provide students with preparatory skills training. Students find out information during their freshman year, but this could be too late for some. Therefore, the current study seeks to demonstrate the efficacy of employing a brief preparatory skills training program on student success factors. In order to do this, a lab study was conducted where there was a control condition and an experimental condition. The experimental condition was a preparatory skills training session that would help students to be provided with a set of skills to help them succeed in college. The control condition was a training session on teaching students to use a specific electronic search database at the university. Given the previous assertions, it was believed that the preparatory skills training program would be effective at improving

student's academic-related behaviors, and subsequently, they would report higher student success on a variety of indices. Specifically, it was proposed that:

H<sub>1</sub>: Students who are in the preparatory skills training condition will a) interact more with professors, b) study more for classes c) will time manage more d) attend more classes e) participate more in classes and f) have better preparation skills than those students in the PsycINFO training condition.

H<sub>2</sub>: Students who are in the preparatory skills training condition will have a) less stress, b) higher academic self-efficacy, c) higher self-esteem, d) higher school life satisfaction, and e) have better grades in class than those students in the PsycINFO training condition.

H<sub>3</sub>: The relationship of training on student outcomes will be mediated by their behaviors. Specifically:

H<sub>3a</sub>: The relationship of training on GPA will be mediated by study skills.

H<sub>3b</sub>: The relationship of training on academic self-efficacy will be mediated by study skills.

H<sub>3c</sub>: The relationship of training on GPA will be mediated by attending class and participating in class.

H<sub>3d</sub>: The relationship of training on stress will be mediated by interactions with professors.

Figure 1.1 (next page) provides an overall model perspective based on the previous models that were described in the literature review section.



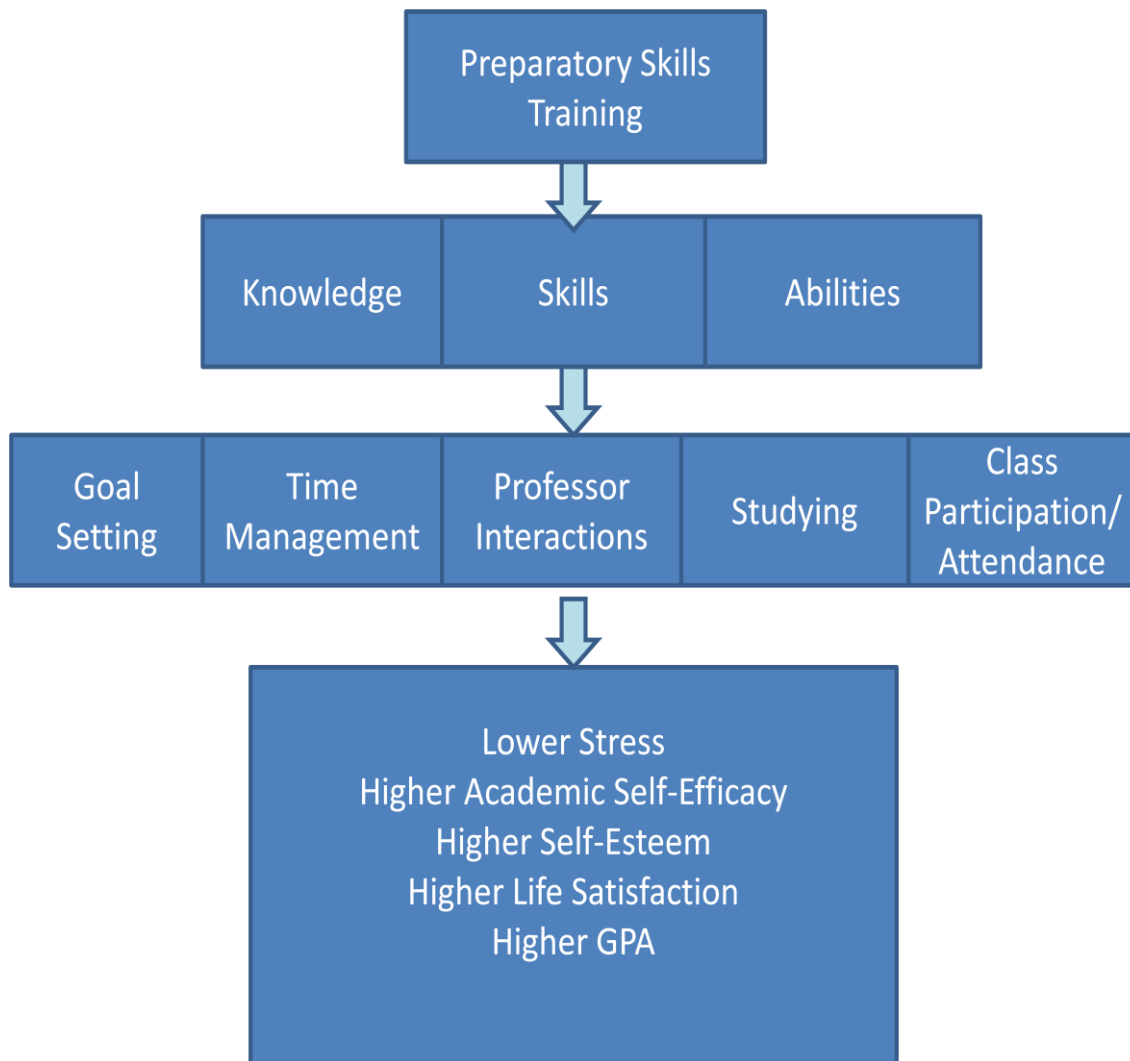


Figure 1.1 The overall model for the preparatory skills training.

### 1.2 Pilot Study

In order to identify the main areas of deficiency for the undergraduate students and to verify the plausibility of the effectiveness of the proposed intervention, a pilot study was conducted using current students at the University of Texas at Arlington. Current students filled out a survey that asked for feedback from the orientation process as well their experiences in high school and college (see Appendix A). The main reason for the pilot survey was to gain personal accounts of information from current students in order to see what potential areas

needed to be addressed for incoming freshman students that was currently lacking in the orientation process. The information gathered also would help in the development in the presentations for the training sessions for the proposed thesis method. Forty two students completed the survey. Of the 42 participants, 31 were female and 11 were male. In terms of ethnicity, 17 were Caucasian, 10 were African American, 6 were Hispanic, 5 were Asian, 1 Pacific Islander, and 3 others. In terms of classification, 9 were freshman, 15 were sophomores, 10 were juniors, and finally 8 were seniors. Finally, 34 participants attended orientation while 8 did not attend orientation.

### 1.2.1 Results

Participants were asked to rate how informative orientation was for them on a 5-point Likert scale with 1 representing “*not informative*”, 3 representing “*informative*”, and 5 representing “*very informative*”. Forty participants responded with a mean rating value of 3.18, which represents just a little above an informative orientation.

Participants were then asked how the current orientation process could be improved; participants were allowed to select more than one item. Results of this question revealed most students wanted to have current students talk about their experiences as a freshman student (42.1%), have faculty members present on what a college class would be like (39.5%), and have more information on the expectations that come with being a college student (31.6%).

The next section asked participants on how they agreed with statements based on the orientation experience. Participants were asked to rate based on a 5-point Likert scale with 1 representing “*completely disagree*”, 3 representing “*unsure*”, and 5 representing “*completely agree*”. Students rated an average value of 2.90 for “orientation prepared me for college”. For the statement “orientation helped the transition from high school to college”, students gave an average rating of 2.89. For the item “at some point during orientation, it was explained what is expected of me for being an incoming college student”, students gave an average rating of 3.46. Students gave an average rating of 3.13 for “I feel that orientation answered all my questions”

and an average rating of 3.28 for “I felt more prepared to begin college after going through orientation”. Finally, students gave an average rating of 3.21 for “I believe orientation prepared me to begin my career at UTA” and an average rating of 3.26 for “through orientation I developed an awareness of the expectations for my future responsibilities as a student at UTA”.

Students were asked who in high school explained what they should expect when they got to college; students were allowed to select more than one choice. Most students reported teachers (47.6%) and guidance counselors (33.3%) explained this information to them; 35.7% of the students reported that no one explained to them what they should expect once they got to college.

Students were asked what information they would have benefited from being told in high school about college; students were allowed to select more than one choice. Students responses were as follows: what a college class is like (65.9%), what college expects from you (63.4%), what you should expect from college (58.5%), what activities you can get involved in (51.2%), and what a college professor is like (41.5%). Along with this question, students were then asked how they agreed with two statements using a 5-point Likert scale with 1 representing “*completely disagree*”, 3 representing “*unsure*”, and 5 representing “*completely agree*”. Students were first given the statement “before beginning college, it would have been beneficial to me to view a video that takes you through a day in the life of a college student”. Average rating for this statement was 3.69. Students were then given the statement “while in high school, it would have been useful to have a college student or professor come in and talk to me about college in general”. Average rating for this item was 4.14.

Students then were asked to rate how important certain characteristics of high school and college were to them on a 5-point Likert scale with 1 representing “*completely disagree*”, 3 representing “*unsure*”, and 5 representing “*completely agree*”. A paired samples t-test was used to compare the responses between high school and college. There was a significant difference between professor’s enthusiasm,  $t(41) = -4.38$ ,  $p < .001$ , where students felt it was more

important for a professor to have enthusiasm in college than in high school. There was no significant difference in professor's humor,  $t(41) = -1.86, p = .07$ . There was a significant difference in attending class on a regular basis,  $t(41) = -5.81, p < .001$ , where students felt it was more important in college than in high school. There was a significant difference between reading assigned materials before class,  $t(41) = -9.31, p < .001$ , and reading assigned materials after class,  $t(41) = -10.37, p < .001$ ; for both variables, it was more important for students in college than in high school. There was a significant difference in professors explaining the structure of the first exam,  $t(41) = -5.73, p < .001$ , and taking notes in class,  $t(41) = -6.85, p < .001$ ; for both variables, students felt it was more important in college than in high school.

Students were then asked if they joined any social club, fraternity, sorority, etc. during their freshman year. Of the total participants, 76.2% did not while 23.8% did.

Students were also asked about their personal support system. Students were asked who they sought out for guidance/help when they faced a difficult time during the freshman year; students were allowed to select more than one response. The ones students sought out the most were friends (76.9%), parents (69.2%), current college students (64.1%), and college advisors (48.7%).

### *1.2.2 Discussion*

When students were asked how informative orientation was for them, the mean rating value indicated that students thought the current orientation was just informative, not very informative. Students believed the orientation process could be improved by having current students giving their freshman experiences as well as having faculty members giving information on what a college class will be like. Finally students would like to be informed on the expectations that come with being a college student. When students were asked about their orientation experiences, most responses were either below unsure or just above unsure. For example students answering if orientation prepared them for college or orientation prepared them for the transition from high school to college, their responses were below unsure. Many

students reported that in high school that no one explained to them what they should expect once they arrive at college. Along with this report, students would have liked in high school to be told what a college class would be like, what college expects from them, what they should expect from college, activities to get involved in, and what a college professor is like. Much agreement was seen with students when asked if it would have been beneficial to have a college student or professor come in and talk to them about college in general while they were still in high school. Students felt it was more important in college than in high school to attending class on a regular basis, reading assigned materials before and after classes, professors explaining the structure of the first exam, and taking notes in class.

Current students at UTA provided extensive feedback on information they wished they would have been given before they began college. It is important to inform incoming students on the information current students wished they would have had. Students would have liked to have been informed during high school, but informing students during orientation would also be a great time to inform them on how they can be successful during their freshman year. Orientations already have structure to them, and by adding in one more element (preparatory skills training program), can be beneficial to incoming students.

CHAPTER 2  
METHODS SECTION

2.1 Method

*2.1.1. Participants*

Eighty undergraduate students from The University of Texas at Arlington participated in the study. Study information was placed on the Psychology Department's online research sign-up system, the SONA system. Even though the research long-term focuses on incoming freshman students, the training needed to be tested first on a current sample of college students in order to test the potential effectiveness for incoming freshman students. Therefore, any college student was allowed to participate in the study. One participant did not complete the time 2 survey and therefore their data could not be used for the analyses for the hypotheses. In order to determine the appropriate sample size for the study, a power analysis was conducted using G\*Power. For the data analyses, regression was used. Each sub-hypothesis included one predictor. Therefore, G\*Power was set to a linear multiple regression with one predictor,  $\alpha = .05$ ,  $\beta = .80$ , and effect size of .15. The power analysis revealed that 55 participants would be needed for this study to conduct the appropriate analyses; the study obtained 79 usable data points for analyses. As for the participants, 64 were female and 15 were male. As for ethnicity, 24 were Caucasian, 15 were African American, 18 were Hispanic, 12 were Asian, and 10 reported as other. Looking at the age for the participants, average age was 21.06 years old ( $SD = 4.55$ ). Finally, in terms of classification, 40 were freshmen, 16 were sophomores, 17 were juniors, and 6 were seniors.

*2.1.2 Materials*

The study was conducted in Industrial/Organizational lab rooms at The University of Texas at Arlington. These lab rooms consisted of tables and computers. Two of the lab rooms

were used for participants to fill out pre-study items as well as feedback from the training they received and one lab room was used to run the training sessions. This lab room had a table with chairs where participants could sit and follow along when the training was being conducted by the researcher. Each participant was provided with a set of PowerPoint slides so they could follow the researcher along when the training was in progress; the PowerPoint slides were printed out and provided to each participant. Participants were not allowed to take the copies of the PowerPoint slides with them after training was completed because there would be risk for these students showing this information to future participants which would then confound the study. Participants also completed a time 2 survey approximately one month after completing the time 1 survey and training. Both the time 1 and 2 surveys were created using previously validated items. Both surveys asked the same questions to participants in order to see if any change occurred approximately one month after completing the training. The survey can be found in Appendix B. The following subsections list out the constructs of interest for the study.

#### 2.1.2.1 Satisfaction

The Multidimensional Students' Life Satisfaction Scale (Huebner, Laughlin, Ash, & Gilman, 1998) was used to assess school life satisfaction. Specifically the school satisfaction component of the scale ( $\alpha = .79$  for time 1 and  $\alpha = .86$  for time 2) was used for this study. This sub-component consists of 8 items; students rated each item using a four point Likert scale. The four point Likert scale ranged from 1 (strongly disagree) to 4 (strongly agree). This scale was used at every time point for the study. An example item was "I look forward to going to college".

#### 2.1.2.2 Academic Self-Efficacy

The Academic Self-Efficacy Scale (Solberg et. al, 1993) was used to assess academic self-efficacy ( $\alpha = .87$  for time 1 and  $\alpha = .90$  for time 2). This scale consists of 15 items; students rated each item using a six point Likert scale. The six point Likert scale ranged from 1 (not confident at all) to 6 (extremely confident). This scale was used at every time point for the study. An example item was "Participate in class discussions".

### 2.1.2.3 Self-Esteem

The Rosenberg self-esteem scale was used to assess self-esteem for participants ( $\alpha = .91$  for time 1 and  $\alpha = .88$  for time 2). This scale consists of 10 items; students rated each item using a four point Likert scale. The four point Likert scale ranged from 1 (strongly agree) to 4 (strongly disagree). This scale was administered at each time point for the study. An example item was “I feel that I have a number of good qualities”.

### 2.1.2.4 Stress

The Perceived Stress Scale (10-item) version was used to assess participant's stress during the course of the academic year ( $\alpha = .25$  for time 1 and  $\alpha = .29$  for time 2). This scale assess stress participant's have felt in the last month. Participant's rated each item on a five point Likert scale. The Likert scale ranged from 0 (never) to 4 (very often). This scale was used for each time point during the study. An example item was “In the last month, how often have you found that you could not cope with all the things that you had to do”.

### 2.1.2.5 Behavioral Items

Items were generated to assess the behavior items of interest for this study. These items are open-ended where participants can enter any value of their choice. An example item was “To what extent do you feel that you ask questions that you have during class? For example, if you feel that you are able to ask every question that you have during your classes, then you might put 100%. If you feel that you are never able to find the right moment to ask your questions, then you might indicate 0%. I feel that I am able to ask about \_\_\_\_\_% of my questions.”

### 2.1.3 Procedure

Participants either went through a training session on preparatory skills or a training session on how to use PsycINFO. In order to counterbalance the study, training sessions were alternated. This kept consistency on how each training condition was being conducted as well as making sure one condition would not be conducted more than the other. Participants first



signed up through the SONA system. The SONA system is an online research sign-up system that the Psychology Department at UTA uses for their undergraduate students. The SONA system provides students information on which studies are currently going on, what each study is about, and the days and times available to sign up for. On the SONA system, participants were made aware that this study was a two part study and both parts must be completed in order to receive credit. The actual in lab part of the study occurred during time 1, but the follow up questionnaire (time 2) occurred approximately a month after completing time 1. Students completed time 2 requirements from any computer with internet access; they did not have to come back into the lab. Each training session had a potential for 6-7 participants to participate; however, only a few times did training sessions completely fill up. There were 20 sessions run total, 10 for each condition. Overall there was an average of four participants per session with three sessions having six participants and two sessions having the maximum number of seven participants. The researcher first reviewed the informed consent with all participants. The researcher then gave participants time to look at the informed consent. After all participants looked through the informed consent and electronically consented to participating, the researcher then began the study. Participants first completed a pre-study questionnaire, as this served as baseline data for each participant. After the completion of the pre-study questionnaire, the researcher began the training session, either the survival of freshman year training or the PsycINFO training. Participants were encouraged to ask questions during the training sessions. Once the training sessions had been completed, participants were asked to complete a post-study questionnaire. Participants were then reminded to fill out the time 2 survey; participants were told that an email would be sent to them when it was time to complete time 2. The time 2 email included a link to the time 2 survey. Collecting multiple data points at different times allowed the researcher to see if students have changed on certain variables as well as how they compared between the experimental and control conditions.

### 2.1.3.1 Preparatory Skills Training

This training session consisted of a PowerPoint presentation, a question and answer session, real life examples being presented by the researcher, and finally an interactive response and feedback session. The PowerPoint slides included information based upon literature gathered as well as the feedback from the pilot questionnaire that was put on the SONA system during the summer 2010 sessions. These slides provided tips for participants to be as successful as possible during their time at college. The information covered topics such as time dedicated towards studying, attending every class, note taking, transitioning into a new environment, participating in class, the student-professor relationship, and setting goals. Using current student's information at UTA, via the pilot data that was gathered, this allows participants to be able to connect with current students and get upfront and personal accounts. It is important to allow participants to ask questions along the way of the training session as they might have had questions during orientation or at some other point that were not addressed or not adequately addressed. Finally, students were presented with a variety of scenarios, asked to respond in writing, and then asked to discuss their answers in writing. This in turn helped enhance the effects of the training intervention. The following sub-sections highlight each training component that was discussed with participants.

#### 2.1.3.1.1 Studying

This part of the training helped participants to understand how much studying is needed to fully grasp the material from classes. As literature pointed out (Michael, 1993), for every one credit hour a student takes, three hours needs to be dedicated to studying per week. This information was relayed to participants, and many were shocked to hear of this heuristic. Participants were also informed that what was done to succeed in high school does not automatically mean it will transfer into college. Participants were told to read before and after classes, ask professors questions as soon as they do not understand the material, and form study groups if need be. Along with reading for classes, participants were told to not

procrastinate and read material for comprehension; taking notes, using the Internet, and other strategies were discussed.

#### 2.1.3.1.2 Time Management

With having to balance the demands from numerous sources, such as school, work, and family, this part of the training aimed at helping participants better manage their time in order to balance all activities they faced on a daily basis. Participants were first asked if they time managed and if so how they went about it. Participants were told to use daily planners, set reminders on the cellular phones, use post it notes, or even using their emails to set reminders of deadlines. Participants were then told to set multiple deadlines in order to help them pace instead of having to procrastinate for their school work. The deadlines set should also be manageable; this further helps to pace the participants (van de Meer, Jansen, & Torenbeek, 2010).

#### 2.1.3.1.3 Goal Setting

With time management, goal setting fits into this same concept as participants were trained on how to have manageable goals and how to work towards them. Participants were first asked if they used goal setting, both short term and long term goals. It was then explained to participants that goal setting can allow students to work towards achieving success and they are in control of what they want to achieve; setting goals help students to develop effective game plans to ensure success (Morisano, Hirsh, Peterson, Pihl, & Shore, 2010). Participants were trained to set realistic and practical goals as well as to make them specific. Setting goals such as to graduate, obtain a 4.0 GPA this semester, get an A on a project, study 20 hours this week were examples of the short and long term goals that were developed. Most importantly, participants were trained to not focus on the end goal, but to focus on the methods to get to the end goal. By wanting a 4.0 GPA for the semester, one would then need to study more, talk with their professors, form study groups, etc.

#### 2.1.3.1.4 Interacting With Professors

Participants were first asked about their interactions with professors, both positive and negative, location of the interactions, and when they occurred. Participants were told that professors are available to help them and the student-professors relationship is underutilized. Participants were then trained on how to interact with their professors. Participants were told to be professional when conversing with professors in person and via email; participants need to show their professors respect. For emailing professors, participants were trained on how to construct an email format where professors can easily identify the student and the question/issue/concern that is being raised. Having a proper greeting (Dear Dr. Doe), clear and informative body of the email (section of the lecture, material that was discussed, what the issue is, etc.), and an appropriate ending (Thank you for your time, Sincerely, Ricky Bobby).

#### 2.1.3.1.5 Class Participation

This final component of the training aimed to relay to participants that in order to participate in class, one must attend all their classes and actively participate in questions and discussions in order to grasp the material. As for the training component, participants were told to show up on time to every class and to not leave early. Also participants should pay attention to class and not be texting or on Facebook. Furthermore, participants were told there is no such thing as a dumb question, and the only way they will learn material they do not understand is to put themselves out there and ask questions and participate during discussions.

#### 2.1.3.2 *PsycINFO training session*

This training session consisted of a PowerPoint presentation. Students were encouraged to ask questions along the way. This training session walked students through the process of getting to the PsycINFO website as well as using the features that PsycINFO had to offer. This training session served as the control condition for this study. Students completed an assignment after the training to test them on what they just learned.

## CHAPTER 3

### RESULTS SECTION

Before analyses were conducted, the dataset was first compiled. Due to there being two time points for the study, data needed to be lined up accurately. Time 1 data was obtained while participants were in the researcher's lab and time 2 data was collected one month later via online surveys. Furthermore, as a whole, participant's time 2 data was not completed in the same order as their time 1 data. Therefore, the two data sets (time 1 and 2) were merged after time 2 data was lined up in the same order as time 1 data was completed. As discussed before, one participant did not complete time 2 data and was removed from the data set. Once the data sets were merged, data screening and cleaning took place. Data screening and cleaning consisted of making sure data in each cell was an appropriate number or value given the information needed for that specific cell. The combined dataset with time 1 and 2 data was also checked to see if they were merged correctly. For each construct (school satisfaction, academic self-efficacy, self-esteem, etc.), overall averages were calculated for each item. In looking at the data set, there were only a few missing data points. Students were not forced to answer every item; therefore, some items were left blank. Where missing data points occurred, both the entire participant's row was scanned and the actual column item was scanned to see how many total data points were missing. Looking through the entire dataset, there was no one participant or item column where more than 3 data points were missing. Given the missing data, as commonly suggested, averages were calculated in lieu of sums. A total score would not fully indicate each participant's scores as missing values would not be taken into consideration. With average scores per item, this in turn took care of any missing values as this gave a more accurate representation of what each participant was responding to by each construct. The data set was

looked through multiple times to ensure data was compiled properly and that any cell had appropriate values or numbers entered.

For both Hypotheses 1 and 2, a multiple regression data analysis was used. Pre-intervention levels were included as covariates for the outcome analyses, to establish baselines. In order to conduct a multiple regression for Hypotheses 1 and 2, the condition variable that was used to indicate whether a participant was in the preparatory skills training or PsycINFO condition was dummy coded in order to see differences between the conditions. After creating the dummy code, interaction variables were also created with the dummy code variable and the pre-intervention levels (time 1 data). Moreover, the approach to test mediation proposed by Baron & Kenny (1986) was used for the third hypothesis. Baron and Kenny (1986) explained that there was a four step process in order to determine if mediation was present. In the first step, the independent variable is shown to predict the outcome variable. The independent variable needs to predict the outcome variable to establish that there is an effect that may be mediated. The second step looks to see if the independent variable predicts the potential mediator(s). The third step looks to see if the mediator(s) predicts the outcome variable while controlling for the independent variable. The final step looks to see if the independent variable predicts the outcome variable while controlling for the mediator(s). For mediation to occur, the initial significant effect found in step one should be reduced in step four. The following sections report the results found for the study.

### 3.1 Hypothesis 1

The first hypothesis for the study looked at the behavior variables that were collected. In comparing the preparatory skills training to the PsycINFO training condition, it was hypothesized that the behaviors (sub-hypothesis listed below) expressed would be seen at higher levels in the preparatory skills training condition. The baseline behavior levels (time 1 data) were used as a control variable for the analyses for Hypothesis 1.

### 3.1.1. $H_{1a}$

Students who are in the preparatory skills training condition will interact more with professors, than those students in the PsycINFO training condition. This hypothesis was tested using three different variables. Participants were asked during both time periods of the study how many times they have met with their professors, the amount of time (in minutes) they have spent with their professors, and how many times have they emailed their professor for the current semester. Looking at how many times participants met with their professors after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .01$ ,  $\Delta F(2, 75) = .55$ ,  $p = .58$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = -1.80$ ,  $t(75) = -1.05$ ,  $p = .30$ ,  $s^2 = 1.37\%$ . Secondly, the amount of time participants spent with their professors after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .01$ ,  $\Delta F(2, 75) = .37$ ,  $p = .70$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = -4.12$ ,  $t(75) = -.39$ ,  $p = .70$ ,  $s^2 = .12\%$ . In looking at the amount of time participants emailed their professors after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .05$ ,  $\Delta F(2, 75) = 2.90$ ,  $p = .06$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = -2.13$ ,  $t(75) = -1.04$ ,  $p = .30$ ,  $s^2 = .94\%$ . Therefore, Hypothesis 1a was not supported.

### 3.1.2 $H_{1b}$

Students who are in the preparatory skills training condition will study more for classes than those students in the PsycINFO training condition. In order to test for this, students were asked at both time points the amount of time (in hours) they spent studying per week during the current semester. Analyses revealed that the amount of time participants spent studying per week after controlling for pre-intervention levels, was not significant,  $\Delta R^2 = .02$ ,  $\Delta F(2, 74) = 1.01$ ,  $p = .37$ . Results showed no significant differences between the training and conditions,  $b = 3.73$ ,  $t(74) = 1.19$ ,  $p = .24$ ,  $s^2 = 1.37\%$ . Therefore, Hypothesis 1b was not supported.

### 3.1.3 $H_{1c}$

Students who are in the preparatory skills training condition will time manage more than those students in the PsycINFO training condition. In order to test for this, students were asked at both time points the extent they time managed for the current semester. In looking at the extent participants time managed after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .003$ ,  $\Delta F(2, 75) = .15$ ,  $p = .87$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = 6.60$ ,  $t(75) = .53$ ,  $p = .60$ ,  $s^2 = .29\%$ . Therefore, Hypothesis 1c was not supported.

### 3.1.4 $H_{1d}$

Students who are in the preparatory skills training condition will attend more classes than those students in the PsycINFO training condition. In order to test for this, participants were asked the percentage of time they attended classes and the number of classes they had missed during the current semester. The percentage of time participants attended classes, after controlling for pre-intervention levels, was not significant,  $\Delta R^2 = .04$ ,  $\Delta F(2, 75) = 2.47$ ,  $p = .09$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = -29.48$ ,  $t(75) = -1.18$ ,  $p = .24$ ,  $s^2 = 1.06\%$ . In looking at the number of classes participants missed after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .01$ ,  $\Delta F(2, 75) = .77$ ,  $p = .47$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = .39$ ,  $t(75) = .50$ ,  $p = .62$ ,  $s^2 = 0.00\%$ . Therefore, Hypothesis 1d was not supported.

### 3.1.5 $H_{1e}$

Students who are in the preparatory skills training condition will participate more in classes than those students in the PsycINFO training condition. Participants were asked how often they asked questions in class (percentage) and the number of times they asked questions during class for the current semester. Looking at how often participants asked questions in class after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .02$ ,  $\Delta F(2,$



75) = 1.09,  $p = .34$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = -17.60$ ,  $t(75) = -1.15$ ,  $p = .25$ ,  $s^2 = 1.25\%$ . Secondly, the number of times participants asked questions in class, after controlling for pre-intervention levels, the model was significant,  $\Delta R^2 = .10$ ,  $\Delta F(2, 73) = 4.94$ ,  $p = .01$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = -1.88$ ,  $t(75) = -.67$ ,  $p = .51$ ,  $s^2 = .48\%$ . Therefore, Hypothesis 1e was not supported.

### 3.1.6 $H_{1f}$

Students who are in the preparatory skills training condition will have better preparation skills than those students in the PsycINFO training condition. Participants were asked the amount of hours per week they used to prepare for classes for the current semester. Looking at the amount of time per week participants used to prepare for classes after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .001$ ,  $\Delta F(2, 74) = .06$ ,  $p = .94$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = .20$ ,  $t(74) = .04$ ,  $p = .97$ ,  $s^2 = 0.00\%$ . Therefore, Hypothesis 1f was not supported.

## 3.2 Hypothesis 2

Hypothesis 2 looked at the individual constructs that the study tested for; these included stress, academic self-efficacy, self-esteem, school life satisfaction, and GPA. It was hypothesized that those in the preparatory skills training condition would have higher academic self-efficacy, self-esteem, school life satisfaction, and GPA while having less stress than those in the PsycINFO training condition. Baseline levels (time 1 data) were used as a control variable for the analyses.

### 3.2.1 $H_{2a}$

Students who are in the preparatory skills training condition will have less stress than those students in the PsycINFO training condition. In order to test for this, the Perceived Stress

Scale was used for both time points for the study. Students were told to answer based on the current semester. In looking at the levels of stress for the participants after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .02$ ,  $\Delta F(2, 75) = .56$ ,  $p = .57$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = .25$ ,  $t(75) = .33$ ,  $p = .74$ ,  $s^2 = .14\%$ . Therefore, Hypothesis 2a was not supported.

### 3.2.2 $H_{2b}$

Students who are in the preparatory skills training condition will have higher academic self-efficacy than those students in the PsycINFO training condition. The Academic Self-Efficacy Scale was used for both time points for the study. Students were told to answer based on the current semester. Analyses revealed that at the levels of academic self-efficacy for the participants after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .01$ ,  $\Delta F(2, 75) = .38$ ,  $p = .69$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = .11$ ,  $t(75) = .10$ ,  $p = .92$ ,  $s^2 = .01\%$ . Therefore, Hypothesis 2b was not supported.

### 3.2.3 $H_{2c}$

Students who are in the preparatory skills training condition will have higher self-esteem than those students in the PsycINFO training condition. The Rosenberg self-esteem scale was used for both time points for the study. Students were told to answer based on the current semester. In looking at the levels of self-esteem for the participants after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .04$ ,  $\Delta F(2, 75) = 1.76$ ,  $p = .18$ . Results showed no significant differences between the training conditions,  $b = 1.35$ ,  $t(75) = 1.87$ ,  $p = .07$ ,  $s^2 = 4.37\%$ . Therefore, Hypothesis 2c was not supported.

### 3.2.4 $H_{2d}$

Students who are in the preparatory skills training condition will have higher overall school life satisfaction than those students in the PsycINFO training condition. The school

component of the Multidimensional Students' Life Satisfaction Scale was used for both time points for the study. Students were told to answer based on the current semester. At different levels of school life satisfaction for the participants after controlling for pre-intervention levels, the model was not significant,  $\Delta R^2 = .04$ ,  $\Delta F(2, 75) = 1.72$ ,  $p = .19$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = 1.68$ ,  $t(75) = 1.85$ ,  $p = .07$ ,  $s^2 = 4.33\%$ . Therefore, Hypothesis 2d was not supported.

### 3.2.5 $H_{2e}$

Students who are in the preparatory skills training condition will have better grades in class than those students in the PsycINFO training condition. In order to test for this, the GPA for participants before the Spring 2011 semester and after the Spring 2011 semester were obtained. Looking at the GPA for the participants after controlling for pre-intervention levels, the model was significant,  $\Delta R^2 = .05$ ,  $\Delta F(2, 18) = 4.76$ ,  $p = .02$ . Results showed no significant differences between the preparatory skills training and PsycINFO training conditions,  $b = .38$ ,  $t(18) = .75$ ,  $p = .46$ ,  $s^2 = .30\%$ . Therefore, Hypothesis 2e was not supported.

## 3.3 Hypothesis 3

Potential meditational hypothesis were developed looking at both the behavioral variables and the constructs of interest for the study. Looking at the training component, it was hypothesized that the overall relationship between training and the constructs of interest (stress, studying, etc.) would be mediated by the behaviors of the participants. The following subsections highlight each sub-hypothesis proposed.

### 3.3.1 $H_{3a}$

The relationship of training on GPA will be mediated by study skills. The first step was to test to see if training predicted GPA. Results showed training significantly predicted GPA,  $b = .23$ ,  $SE = .07$ ,  $t(17) = 3.05$ ,  $p = .007$ . The second step was to see if training predicted studying. Training did not significantly predict studying,  $b = -3.59$ ,  $SE = 3.62$ ,  $t(17) = -.99$ ,  $p = .33$ . The third step was to see if studying predicts GPA while controlling for training. Studying did not

significantly predict GPA while controlling for training,  $b = .001$ ,  $SE = .01$ ,  $t(17) = .23$ ,  $p = .82$ . The final step was to see if training predicted GPA while controlling for studying. Results showed that training did significantly predict GPA while controlling for studying,  $b = .23$ ,  $SE = .08$ ,  $t(17) = 2.94$ ,  $p = .009$ . Looking at the mediation analysis, for steps 1 to 4, there was a decrease of the  $t$ -value as well as the  $p$ -value. However, this reduction was minimal and needed to be further tested.

In order to further investigate to see if mediation was present or not, a bootstrapping method was used. There were two reasons for conducting a bootstrapping method after the initial mediational analysis. First, bootstrapping is straightforward to derive estimates of standard errors and confidence intervals for estimators of the distribution, such as correlation coefficients; moreover, it is an appropriate way to control and check the stability of the results. Second, according to Adèr et al. (2008), bootstrapping is useful when sample sizes are insufficient for straightforward statistical significance. Furthermore, Preacher and Hayes (2004) explained that bootstrapping has become a more popular analysis for testing mediation. The main reasons for this change was bootstrapping does not require for the normality assumption to be met and it can be utilized with smaller sample sizes. For the mediation analyses using GPA, sample size was very small ( $< 20$ ), so bootstrapping was the appropriate method to use to test/confirm mediation. A macro created for SPSS by Preacher and Hayes (2008) was used for the bootstrapping method. The macro created allows researcher to set the number of bootstrap samples for the program to run as well as what type of bootstrapping to conduct. For the current study, 1000 bootstrapping samples were selected. For the bootstrapping method, both bias corrected and accelerated were used. Bias corrected and accelerated bootstrapping adjusts for bias and skewness in the bootstrapping distribution.

Looking at the bootstrapping results for studying, there was no significant effect,  $SE = .04$ , 95%  $CI = [-.09, .10]$ . In order to determine if an effect is significant or not, the confidence intervals are looked at. If zero is not in between the upper and lower values, then there is a

significant indirect effect. If zero is in between the upper and lower values, then there is not a significant indirect effect. Therefore, based on the confidence interval, studying did not mediate training on GPA; Hypothesis 3a was not supported.

### 3.3.2 $H_{3b}$

The relationship of training on academic self-efficacy will be mediated by studying habits. For step one, it was looked at to see if training predicted academic self-efficacy. Results showed that training did not predict academic self-efficacy,  $b = 2.16$ ,  $SE = 2.81$ ,  $t(73) = .77$ ,  $p = .45$ . According to Baron and Kenny (1986), the first step needs to show significance to establish an effect that could potentially be mediated. Due to not finding a significant relationship between training and academic self-efficacy, further mediation analyses could not be conducted. Therefore, Hypothesis 3b was not supported.

### 3.3.3 $H_{3c}$

The relationship of training on GPA will be mediated by attending class and participating in class. The first step was to test to see if training predicted GPA. Results showed training significantly predicted GPA,  $b = .28$ ,  $SE = .09$ ,  $t(15) = 2.97$ ,  $p = .01$ . The second step was to see if training predicted both attending class and participating in class. Training did not significantly predict attending class,  $b = -.28$ ,  $SE = 1.49$ ,  $t(15) = -.19$ ,  $p = .85$  or participating in class,  $b = 5.29$ ,  $SE = 3.48$ ,  $t(15) = 1.52$ ,  $p = .15$ . The third step was to see if attending class and participating in class predicted GPA while controlling for training. Attending class did not significantly predict GPA while controlling for training,  $b = .01$ ,  $SE = .02$ ,  $t(15) = .33$ ,  $p = .75$ . Participating in class did not significantly predict GPA while controlling for training,  $b = .003$ ,  $SE = .01$ ,  $t(15) = .51$ ,  $p = .61$ . The final step was to see if training predicted GPA while controlling for attending class and participating in class. Results showed that training did significantly predict GPA while controlling for attending class and participating in class,  $b = .26$ ,  $SE = .10$ ,  $t(15) = 2.48$ ,  $p = .03$ . Looking at the mediation, there was a decrease of the  $t$ -value as well as the  $p$ -value. However, this reduction needed to be further tested before confirming mediation.

In order to further investigate to see if mediation was present or not, the same bootstrapping method was used as in Hypothesis 3a. Looking at the bootstrapping method, for attending class, there was no significant effect,  $SE = .03$ , 95%  $CI = [-.37, .02]$ . There was no significant effect for participating in class,  $SE = .03$ , 95%  $CI = [-.05, .14]$ . Therefore, based on the confidence interval containing a 0 between the upper and lower bounds, attending class and participating in class did not mediate training on GPA; Hypothesis 3c was not supported.

### 3.3.4 $H_{3d}$

The relationship of training on stress will be mediated by interactions with professors. For step one, it was looked at to see if training predicted stress. Results showed that training did not predict stress,  $b = .91$ ,  $SE = .88$ ,  $t(70) = 1.04$ ,  $p = .30$ . According to Baron and Kenny (1986), the first step needs to show significance to establish an effect that could potentially be mediated. Due to not finding a significant relationship between training and stress, further mediation analyses could not be conducted. Therefore, Hypothesis 3d was not supported.

## 3.4 Supplementary Analyses

Supplementary analyses were conducted to see if there were any variations between classification (freshman/sophomore/junior/senior) in terms of academic performance. The focus of these analyses was in the preparatory skills training condition. In looking at the classification breakdown in the preparatory skills training condition, there were 19 freshmen, 11 sophomores, 11 juniors, and 3 seniors. Due to the low number of seniors in the sample, they were excluded from the analyses.

There was no main effect for classification while controlling for time 1 stress,  $F(2, 37) = .30$ ,  $p = .74$ ,  $\eta_p^2 = .02$ . There was no main effect for classification while controlling for time 1 academic self-efficacy,  $F(2, 37) = 2.37$ ,  $p = .11$ ,  $\eta_p^2 = .11$ . Looking at school life satisfaction, while controlling for time 1 school life satisfaction, there was no main effect for classification,  $F(2, 37) = .78$ ,  $p = .46$ ,  $\eta_p^2 = .04$ . Looking at self-esteem, while controlling for time 1 self-esteem, there was no main effect for classification,  $F(2, 37) = .86$ ,  $p = .43$ ,  $\eta_p^2 = .04$ .

Looking at interactions with professors, while controlling for time 1 interaction with professors, there was no main effect for classification,  $F(2, 37) = .62, p = .55, \eta_p^2 = .03$ . There was no main effect for classification for time spent studying while controlling for time 1 time spent studying,  $F(2, 37) = .27, p = .77, \eta_p^2 = .01$ . Looking at time management while controlling for time 1 time management, there was no main effect for classification,  $F(2, 37) = 1.11, p = .34, \eta_p^2 = .06$ . There was no main effect for classification at attended classes while controlling for time 1 attended classes,  $F(2, 37) = .60, p = .55, \eta_p^2 = .03$ . Looking at participation in classes while controlling for time 1 participation in classes, there was no main effect for classification,  $F(2, 36) = .99, p = .38, \eta_p^2 = .05$ . There was no main effect for classification for preparation time while controlling for time 1 preparation time,  $F(2, 37) = .08, p = .93, \eta_p^2 = .004$ .

CHAPTER 4  
DISCUSSION SECTION

4.1 Discussion

Individuals possess their own personal knowledge, skills, and abilities (KSAs). In order to complete the necessary tasks and perform them well, individuals need to use their KSAs. However, to be successful, there is more needed than just KSAs. With needing to perform well and accomplishing all tasks that school or work gives, training individuals with the necessary skills to accomplish tasks would then increase their performance. Goldstein (1980) found that acquiring skills in turn increases performance. Using the Salas and Cannon-Bowers (2001) four principle approach, the current study attempted to provide preparatory skills training to current college undergraduates in order to increase academic success when compared to a PsycINFO training condition.

Looking at the Salas and Cannon-Bowers (2001) four principle approach, the first principle was to make sure that the information or concepts presented for training are actually relevant. The current study used a literature review that sought to find the main issues students have in trying to succeed academically. The second principle was to demonstrate in some way the KSAs that needed to be learned. Using interactive training, the skills proposed were relayed to students via group discussions and presenting scenarios. The third principle was to have opportunities for trainees to be able to practice what they had been trained on. Students completed an assignment after going through training to see if they had grasped the material they were just trained on. The fourth and final principle was to provide some sort of feedback both during and after practice. Students were given feedback by the researcher when the group discussions and scenario and were told they would be allowed to see the results of the study.



#### *4.1.1 Academic Success Factors*

Looking through the research and via conducting a pilot study, five main factors emerged as skills necessary to perform and succeed well academically. The factors were studying, time management, goal setting, professor interactions, and class participation/attendance. With studying, the heuristic is that for every one credit hour a student takes, he/she needs to dedicate three hours of studying per week. Along with this, study skills come into play (e.g., reading, note taking, study groups). With time management, students do not just have academic lives; some have jobs, families, and other things going on that require their time. By time managing, the work-life balance can be properly set up to ensure academically students are performing well instead of procrastinating and turning work that is not up to the standards of instructors. With goal setting, students realized that there are short and long term goals. The main focus is that goals should be realistic but challenging, while focusing on the methods to attain these goals and not just looking ahead to the end product. Professor interactions entail talking to professors about not only difficulties with material being presented, but also critically thinking about information and developing these skills that can be transferred to other classes and life in general. Professionalism was a main focus of training students. Finally with class participation/attendance, reading material can only get students so far. In order to reinforce material, students need to attend every class and participate in discussions. This in turn helps to develop critical thinking and help to better prepare for projects and exams. The five factors that were found from research and a pilot study formed the preparatory skills training condition. The PsycINFO training condition was developed to guide students through the process of getting to PsycINFO through The University of Texas at Arlington's website as well as how to work through PsycINFO.

With the predictions that participants would show increased behaviors (studying, time management, interactions with professors, etc.), results showed there were no statistically significant differences between the preparatory skills and the PsycINFO training conditions.

Even though none of our proposed analyses reached a statistically significant level, there were several instances where results were headed in the proposed direction. In looking at interactions with professors and participating in class, those in the preparatory skills training did show more interactions and participation than those in the PsycINFO condition. In terms of the percentage of time students attended classes, those in the preparatory skills training had a higher percentage than those in the PsycINFO condition. There are numerous limitations to capturing the proposed effects in this study given the methodology available, thus although not statistically significant, these results may offer some hope for further validation of the proposed relationships. For example, by training students regarding what they should be doing, they may have become more sensitive to what they could be doing (and focusing more on what they were not doing). A great deal of research with subjective indicators of situation awareness suggests that individuals are unaware of what they do not know (Endsley, 1995) – so training may provide a prime that makes them more aware of their short fallings (possibly reflected in their self-report measures). Objective indicators or other-source reports would help overcome this limitation, but are much more difficult to obtain.

It was also found that there were no significant differences from the preparatory skills training and PsycINFO training conditions when also looking at academic self-efficacy, stress, self-esteem, and school life satisfaction. In fact, looking at the results, the trend showed more positive effects for the PsycINFO condition, which was opposite of what was hypothesized. However, for stress, the effect seen was moving in the right direction as those in the preparatory skills training condition had less stress than those in the PsycINFO training condition. As previously argued, individuals in the training condition may have been primed to focus on their relevant behaviors. It is unfortunately quite plausible that students in the preparatory training condition may have become stressed out initially realizing they needed to study more – they may have also begun to subsequently make stress inducing modifications (e.g., such as cancelling their Saturday night date and cutting down TV time so they can study more). This in

turn may initially lead to more stress, but over the long-haul (e.g., over the course of an entire semester or year), lead to positive effects due to the positive outcomes attained. A great deal of training literature has found that time of assessment can be extremely important for learning complicated behaviors – such that performance typically declines in the learning and practice phase (Baldwin & Ford, 1988; Aguinis & Kraiger, 2009). Longer –term studies are needed to further examine this possibility, but the current deleterious effects obtained suggest that this is a likely explanation.

Finally, looking at training predicting student outcomes being mediated by their behaviors, no mediation was found due to not finding an initial significant effect between training and student outcomes. However, for the hypotheses looking at training predicting GPA, there were some positive signs. The initial relationship between training and GPA was significant. It was also seen as mediators were controlled for, the overall relationship between training and GPA reduced. Looking at further analyses, with the bootstrapping method, it was then determined that these effects were not significant and mediation was not present.

#### *4.1.2 Limitations*

As previously discussed, there could have been a priming effect that effected the results of the current study. Tulving, Schacter, and Stark (1982) found that the effects of priming can be salient and long lasting; priming influences responses to later stimuli. While training sessions occurred, students might have realized what they were doing wrong. Students could have become more sensitive in respects to what they were not doing right, which in turn could have reduced their honesty of self-report information when the time 2 data was collected. In other words, students in reality might have been improving their behaviors in which they were trained (from time 1 to time 2), but might have been reluctant to indicate this improvement to not actually admit they were not as strong in the skills they were initially trained on.

Another issue could have been the training itself. Donovan and Radosevich (1999) conducted a meta-analysis looking at spaced versus mass practice and its effects on

performance. Mass practice occurred when individuals do not get time off between training and everything occurred at once while spaced practice allowed individuals time in between training to rest. Results of the meta-analysis indicated those who were allowed spaced practice performed much higher than those in massed practice situations. In looking at the training that was conducted for the current study, there was only one training session. Therefore, mass practice occurred for participants as they were trained and immediately were asked to practice what they just had been trained on. Without allowing time in between the skills trained on or by not providing more than one training session, the information might not have been properly understood by participants. Participants could have performed much better if multiple training sessions had occurred to allow spaced practice to occur.

Transfer of training was not as much as it could have been. Individuals self-reported if they went to more classes, asked more questions, studied more, and so on. Baldwin and Ford (1988) discussed how transfer of training is the way individuals apply their KSAs after being trained. The issue is that this needs to be assessed in some way. For the current study, it was assessed only by self-report. If individuals were brought back into the labs and asked to fill out another practice sheet, which could just be the same one they filled out after their initial training, then information obtained could have given a better indicator if transfer of training had occurred instead of just obtained self-report data.

Furthermore, the training context might not have been sufficient enough to conduct training sessions. One room was used to conduct training sessions, and the room was small where if many participants were in attendance for a session there was a lack of space on the tables. Participants would then be sitting close to one another. With each individual having different perceptions on personal space, this could have affected the training sessions and in turn the data obtained. Hall (1966) discussed personal space and how some individuals become uncomfortable if others are too close to them. With how the seating arrangements were, individuals were almost touching one another. Intimate (18 inches maximum) and

personal (48 inches maximum) are the distances most individuals use with their family and close friends. Participants did not know one another, so this in turn could violate these personal boundaries and taken focus away from the training being conducted. Similarly, the training was relatively short – and longer training interventions might be necessary for proper learning of such complex skills. Moreover, intermittent training sessions (e.g., one every two weeks for 3 months) might offer additional promise.

Another possible confound that could have minimized the effects obtained in the current study is that all levels of undergraduate students were allowed to participate. The training content was geared more towards freshman students, so the training might not have been beneficial to all participants and could have altered results. The reasoning for using all classifications was to see if any student could benefit from this type of training; however, upperclassmen might already be set in their ways and might not have taken the training seriously. Supplementary analyses did not show any statistical differences between upper classman and lower classman, but having training where only freshman students participated could make participants more comfortable as all other participants are in the same place in their progression through college.

Self-report is always an issue as students are not required to answer all questions and also might not give an honest attempt at answering survey items. As discussed earlier, with the potential priming issue, with self-report data individuals might be embarrassed to reveal personal details. With asking about improvements in the skills participants were trained on, participants might have been embarrassed to admit they initially were lacking in those skills and not honestly revealed they had much better performance when the time 2 data was obtained. In terms of data collection, when obtaining GPA from participants, there was a lot of missing data points. This was an unfortunate issue as one of the main predictors of academic success in research comes from the grades or GPA of the research sample. Of the usable 79 data points for the study, only 22 participants provided both GPAs (before the Spring 2011 semester and

after the Spring 2011 semester). The issue was that the end of semester GPA was obtained after research credit was given to participants. Students could not know their end of semester GPA until after the end of the Spring 2011 semester. Research credits must be turned in before even finals are administered; therefore, the only time to obtain end of semester GPA would be after students were given their research credit. Students were contacted by email asking for their GPA information; however, since they had already received their research credit, they most likely felt they had no need to provide this information as it would not affect their research credit. Furthermore, with the small sample size, this affected the mediation analyses that were conducted. Every other analysis had 78-79 usable data points; however, only 22 data points were usable for the hypotheses that looked at mediation with training on GPA. At first mediation seemed present due to relationships being reduced when controlling for the potential mediators, but further analyses revealed this was not the case. Having more data points could have provided significant results as the direction was moving in a positive direction.

#### *4.1.3 Future Directions*

As discussed throughout the discussion section, there are numerous modifications that could be made to the current design to further evaluate the proposed relationships. In looking at future directions with the current study, the study should be conducted again, but over the course of an entire semester. With results Donovan and Radosevich (1999) found with spaced versus massed practice, having more training sessions would allow individuals to grasp the information. Also by having the study occur for a longer period of time, transfer of training can be improved. Baldwin and Ford (1988) found that transfer of training needs to be assessed; the way it is assessed can vary. Allowing participants to have spaced practice in turn then would increase the opportunities to assess transfer of training.

More participants should also be used. If possible it might be more effective in holding training sessions as organizations do with many if not all employees at once. The current study had at most at one point seven participants. Having a more “training type” environment, as

organizations hold, might be able to make the training more effective. This in turn would possibly reduce the personal interactions that was seen in the current study, but still could prove to be beneficial. This would then help with the potential personal space issue seen with the current study. Hall (1966) defined the space that some individuals need to avoid discomfort and having training in a more appropriate training setting and alleviate this problem.

Some role playing could also be used as students are put through scenarios from the training they just received. Students could role play as professors to understand from another perspective. This in turn would reinforce the training and give more realistic examples. Weigman, Dansereau, and Patterson (1992) found that students who assumed the role of a teacher actually had higher academic performance than those who did not role play. This could then help individuals gain a better opportunity to have an effective transfer of training.

In terms of obtaining data, especially with the GPA issue that was encountered with the current study, the university itself should be contacted to see if they would be able to provide certain types of information from their students. This might need special forms or approval from the institutional review board (IRB) as well as other university departments.

Only freshman students should be used for this study if conducted again. As students further continue with their studies, the habits they form along the way become harder to break. Freshman students are new to college and have no fully developed habits, both good and bad. By just looking at freshman students, the training might be at its most effective use.

Finally, this training could be used during the orientation process that college and universities provide for incoming freshman in order to better prepare them for what college expects of them and what they need to do in order to succeed. It is imperative to provide students as early as possible a set of skills that can help them succeed in college. As students advance in their pursuit of a degree, the habits that are preventing them from succeeding become more and more difficult to break. The earlier a student can change their habits, the more potential for them so succeed in college. Providing a preparatory type skills training can

allow incoming college students to be better prepared for college with actually knowing what they need to do to succeed. Colleges and universities provide orientations for incoming students. For many, this is the first experience being in a college environment. Orientations provide incoming students information on college as well as providing them an overall “welcome to college” atmosphere. However, current orientations really say, “Congratulations on graduating high school and welcome to college; have fun with the transition from high school to college, let the good times roll!” Orientations really should say, “Welcome to college, what you did to get to this point was great; however, in order to succeed in college here are some skills you will need to add to your game plan as high school and college are different in many ways.” Adding in a preparatory skills training program to orientations can allow students, in their initial college development, to form positive and effective habits that will only improve as their time in college goes on. Being a successful college students starts before day one of college classes.

#### *4.1.4 Final Thoughts*

As college attrition continues to be a problem, this line of research is extremely important. As there are no solid assessments or tests in being able to predict attrition, as most as asked after the fact why they drop out of college, it is imperative to find ways to help college students be better prepared for college and to succeed to their best abilities. Training improves performance, so research needs to continue in order to provide an effective academic training program to increase academic performance. Looking through the literature and results from a pilot study, factors such as studying, time management, professor interactions, goal setting, attending and participating in classes are important in the success for students. This study was a first step in order to do so.

As students succeed in high school, it is not a guarantee that they will also succeed in college. What worked in high school does not translate into college as high school and college are both different environments. Students are expected to be much more self-reliant in college and it ultimately is up to them to seek ways to succeed. The transition from high school to



college can be a difficult task for some, as information gathered from a pilot study as well as literature indicated that students are not equipped to handle this transition period. All undergraduate students were used for this study in order to see if this type of training would be beneficial to everyone. After making an effective training system, by conducting the initial training again with improvements, the training then needs to be provided to incoming college students.

Conducting this study as well as conducting a pilot study provided a chance to hear students give their own opinions on how they are doing in college and most importantly what types of information they would have liked to have received before beginning college. Across all of the current participants, the struggles paralleled literature in reasons students drop out of college. By giving students training on how to succeed in college while incorporating their individual knowledge, skills, and abilities (KSAs), the attrition problem could be greatly reduced – specifically, unnecessary obstacles could be removed for cognitively-able and motivated students.

APPENDIX A

PILOT SURVEY FOR THESIS

## INFORMED CONSENT

### PRINCIPAL INVESTIGATOR NAME:

Ajal Patel

### TITLE OF PROJECT:

Improving the Orientation Process for Colleges and Universities: Helping to ease the Transition from High School to College

### INTRODUCTION

You are being asked to participate in a research study. Your participation is voluntary. Please ask questions if there is anything you do not understand.

**PURPOSE:** The purpose of this research study is to help us gain an understanding of the college orientation process and how it is and is not effective. We also want to gain an understanding to know how the orientation process can be improved. Finally we aim to see if there are any potential differences students feel or have experienced between high school and college.

**DURATION:** This study will last up to 90 minutes.

**PROCEDURES:** During this study, you will be asked to review a brief set of instructions, answer a set of questions regarding your feedback from experiencing an incoming freshman orientation, high school and college experiences, and differences between high school and college. This study will be worth up to one and one half points of SONA credit.

**EXPERIMENTAL PROCEDURES:** Once you have completed reviewing and accepting this form, you will be forwarded to complete the study (i.e., an electronic survey posted on an external survey service- SurveyMonkey). SONA credit will be allocated within one week of survey completion.

**POSSIBLE BENEFITS:** You understand that you will receive no direct benefit other than:

- Knowledge that participation in this study will aid efforts to improve the performance of future students and help the transition process from high school to college.
- A copy of any publications resulting from the current study if requested

**COMPENSATION:** Up to one and one half points of SONA credit are available for participants.

**POSSIBLE RISKS/DISCOMFORTS:** There are no known risks associated with participating in this research study, however should you feel uncomfortable you have the option to quit any time with no consequence.

**ALTERNATIVE PROCEDURES/TREATMENTS:** You may participate in other studies available on SONA, or complete the requirements for the paper reports (available through SONA) if desired.

**WITHDRAWAL FROM THE STUDY:** Participation in this study is completely voluntary and will not affect any grade or status in any program or class. If you decide to withdraw from further participation in this study, there will be no penalties.

Furthermore, please note that you are not required to answer any questions that you do not feel comfortable answering during the course of this study. If any questions are not clear, please ask for clarification from the researchers.

**NUMBER OF PARTICIPANTS:** We expect up to 1000 participants to enroll in this study.

**CONFIDENTIALITY:** Your identity will be kept confidential. Your confidentiality during the study will be ensured by assigning you a coded identification number during the data collection process. The list connecting your name to this number will be kept in a locked file, with only Dr. Scielzo and Ajal Patel (the lead graduate student for this study) having access to this information. Your name will not be directly associated with any data. The confidentiality of the information related to your participation in this research will be ensured by maintaining records only coded by identification numbers. Copies of electronic data will be kept under lock and key, and will only be viewed by lab researchers. Furthermore, the online data collection mechanism (i.e., the survey collection website) is secure thus further assuring confidentiality of your information. Individual data will be aggregated to the group level, thus individual responses will not be published nor presented. Data will be maintained for 3 years after study procedures are complete, and will be stored in the Training, Mentoring, and Training Laboratory (Room 416, Department of Psychology, LSB). Moreover, only select research assistants with the lab will have access to any of the data. If the results of this research are published or presented at scientific meetings, your identity will not be disclosed.

If in the unlikely event it becomes necessary for the Institutional Review Board to review your research records, then The University of Texas at Arlington will protect the confidentiality of those records to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

**CONTACT FOR QUESTIONS:** You are encouraged to contact us with any questions or concerns that you might have. Furthermore, we will gladly provide you with an in-person debriefing regarding this form, the program or the research if you desire.

Dr. Shannon Scielzo  
(817) 282-5464 (office)  
scielzo@uta.edu

Ajal Patel  
(281) 658-8487  
ajal.patel@mavs.uta.edu

Questions about this research or your rights as a research subject may be directed to Dr. Shannon Scielzo at (817) 272-5464, or scielzo@uta.edu, as well as Ajal Patel at (281) 658-8487 or ajal.patel@mavs.uta.edu. If you have any questions about your rights as a research subject, you can contact the UT Arlington IRB Chairperson, telephone (817)272-3723.

By accepting and submitting your response below, you confirm that you have carefully read and understand this document. If you do not understand, please contact the researchers and we will be glad to go through the document with you.

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time

You voluntarily agree to participate in this study. By accepting, you are not waiving any of your legal rights. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and the you may discontinue participation at any time without penalty or loss of benefits, to which you are otherwise entitled.

Finally, if you are unclear about any information on this form, or have any concerns about the research, please contact us. We will gladly to set up an in-person explanation of this informed consent form for you if desired.

A blank copy of this form is available for you to download at <http://www.uta.edu/faculty/scielzo/mnininformedconsent.doc> .

#### Orientation Feedback

Did you attend orientation?

How informative was orientation to you? (Likert scale 1-5, 1 "not informative at all", 3 "informative", and 5 "extremely informative")

What was the best part of orientation to you? (Short answer)

What was the worst part of orientation to you? (Short answer)

How do you think the orientation process could be improved? (Check all that apply)

1. Nothing-program was effective
2. Have more information on the expectations that come with being a college student
3. Have faculty members present what a college class will be like
4. Have current students talk about their experiences as a freshman student
5. Have more fun activities
6. Make it more serious
7. Have information explained better
8. Better prepare the presenters

How do you agree with the following? (Likert response 1-5, 1 "strongly disagree", 3 "unsure", 5 "strongly agree")

1. Orientation prepared me for college
2. Orientation helped the transition from high school to college
3. At some point during orientation, it was explained what is expected of me for being an incoming college student
4. The information presented was in a logical and clear format
5. I feel that orientation answered all my questions
6. I felt more prepared to begin college after going through orientation
7. Orientation provided adequate information about the different resources available to me on UTA's campus
8. I believe Orientation prepared me to begin my career at UTA

9. Through Orientation I developed an awareness of the expectations for my future responsibilities as a student at UTA
10. My college advisor was very helpful during orientation

What would be the most appropriate format for an Orientation in your opinion? (Check all that apply)

1. Half-day program
2. Full-day program
3. Two-day program
4. Information sessions
5. No information sessions
6. Fun activities
7. No fun activities
8. Advisement and registration only
9. Small groups
10. Large groups
11. Student group leaders
12. Faculty group leaders
13. Student and faculty group leaders

Before Attending Orientation

Please answer these questions from the perspective when you were still in high school

Before attending orientation, what main concerns did you have about the transition from high school to college? (Short answer)

Who in high school explained to you what you should expect when you get to college? (Check all the apply)

1. Guidance counselor
2. Principle
3. Assistant principle
4. Teacher
5. Fellow student
6. No one did

What information might have you benefited from if told in high school about college? (Check all that apply)

1. What a college professor is like
2. What a college class is like
3. What college expects from you
4. What you should expect from college
5. What activities you can get involved in

How do you agree with the following? (Likert response 1-5, 1 "strongly disagree", 3 "unsure", 5 "strongly agree")

1. Before beginning college, it would have been beneficial to me to view a video that takes you through a day in the life of a college student

2. While in high school, it would have been useful to have a college student or professor come in and talk to me about college in general

### High School vs. College

How many hours do you spend a week studying for a 3 hour credit course in college? (Short answer)

How did you study in high school? (Short answer)

How do you study in college? (Short answer)

How important were the following to you while in High School? (Likert scale 1-5, 1 "completely unimportant", 3 "not important", 5 "completely important")

1. Professor's Enthusiasm
2. Professor's Humor
3. Attending class on a regular basis
4. Read assigned materials before class
5. Read assigned materials after class
6. Submit assignments and papers on time, and take tests by the posted dates
7. Professor explaining the structure of the first exam
8. Taking notes in class

How important are the following to you currently being in college? (Likert scale 1-5, 1 "completely unimportant", 3 "not important", 5 "completely important")

1. Professor's Enthusiasm
2. Professor's Humor
3. Attending class on a regular basis
4. Read assigned materials before class
5. Read assigned materials after class
6. Submit assignments and papers on time, and take tests by the posted dates
7. Professor explaining the structure of the first exam
8. Taking notes in class

What was the hardest part for you adjusting from high school to college? (Short answer)

What do you think is the biggest difference between high school and college? (Short answer)

What was your impression of a college professor before you began college? (Short answer)

What is your impression of a college professor now that you have taken college classes? (Short answer)

An ideal college professor would have the following characteristics. (Likert response 1-5, 1 "strongly disagree", 3 "unsure", 5 "strongly agree")

1. Humor
2. Promptness
3. Available outside of class
4. Approachable

5. Serious
6. Laid-back
7. Engaging
8. Direct (not vague)

An ideal high school teacher would have the following characteristics. (Likert response 1-5, 1 “strongly disagree”, 3 “unsure”, 5 “strongly agree”)

1. Humor
2. Promptness
3. Available outside of class
4. Approachable
5. Serious
6. Laid-back
7. Engaging
8. Direct (not vague)

If there was one piece of information you wish you had or were told before beginning college, what would that be and why? (Short answer)

#### UTA Experiences

When you first started at UTA, how do you agree with the following? (Likert response 1-5, 1 “strongly disagree”, 3 “unsure”, 5 “strongly agree”)

1. It was more difficult to keep up with the classes than in high school
2. It was hard adjusting to the size of classes
3. It was easy to meet new people and make friends
4. People were very helpful
5. I studied the same way as in high school and it was not effective for a college class
6. The work requirements for classes was much more than I expected
7. It was difficult to manage time for everything
8. It was easy to talk to my professors when I was having difficulties with class

Do you currently work while attending UTA?

If you said yes to the previous question, how many hours a week do you work?

How many hours did you take during your first semester at UTA?

How many hours did you take during your second semester at UTA?

Did you join any social club, fraternity, sorority, etc. during your freshman year?

How helpful are the following to you? (Likert response 1-5, 1 “not helpful”, 3 “unsure”, 5 “very helpful”)

1. Parents
2. Friends
3. High school counselors
4. High school teachers
5. Current college students



6. Researching via the Internet
7. Former college students
8. College professors
9. College advisors

When you faced a difficult time during your freshman year, who did you seek out for guidance/help? (Check all that apply)

1. Parents
2. Friends
3. High school counselors
4. High school teachers
5. Current college students
6. Researching via the Internet
7. Former college students
8. College professors
9. College advisors

Based on your experiences in college, what advice would you give to an incoming freshman? (Short answer)

Demographics

Gender (Male or Female)

Ethnicity (Caucasian, African American, Hispanic, Asian, Pacific Islander, American Indian, or Other)

Classification (Freshman, Sophomore, Junior, or Senior)

Major

Current GPA

Freshman Year GPA

High School GPA

Transfer student?

Year of entry into UTA

Before attending UTA, you

1. Lived in the area
2. Lived in another area in Texas
3. Lived in another state
4. Lived in another country

Do any of your parents have a bachelor's or higher type degree? (check all that apply)

1. Mother

## 2. Father

APPENDIX B

ACADEMIC SUCCESS SURVEY

Informed consent:

PRINCIPAL INVESTIGATOR NAME:

Ajal Patel

TITLE OF PROJECT:

The Effects of Preparatory Skills Training on Student Success

INTRODUCTION

You are being asked to participate in a research study. Your participation is voluntary. Please ask questions if there is anything you do not understand.

**PURPOSE:** The purpose of the current study is to examine the behaviors and beliefs of current students, and how these behaviors and beliefs relate to various indicators of academic success. Moreover, we are interested in examining the extent to which various types of preparatory skills training initiatives are effective at increasing academic success outcomes.

**DURATION:** This study will last approximately 120 minutes.

**PROCEDURES:** During this study, you will be asked to complete two steps. Specifically, today you will first take some surveys and participate in a short training program followed by a training feedback survey. In one month, we will email a link to you to complete another set of surveys assessing your academic success indicators.

**EXPERIMENTAL PROCEDURES:** Once you have completed reviewing and accepting this form and having questions that you may have answered, you will complete the surveys on a computer. We will then participate in a training session that will last approximately 45 minutes. Then you will complete a post-training feedback survey. The total time for the in lab part of this study will last 90 minutes. Finally, in a month, you will complete the final set of surveys electronically (approximately 30 minutes) - from any location of your choice. SONA credit will be allocated at the end of the semester once you complete all surveys.

**POSSIBLE BENEFITS:** You understand that you will receive no direct benefit other than:

- Knowledge that participation in this study will aid efforts to improve the performance of future students and help the transition process from high school to college.
- A copy of any publications resulting from the current study if requested

**COMPENSATION:** 2.75 credits of SONA credit will be given. Credit will be given once all requirements of the study are completed.

**POSSIBLE RISKS/DISCOMFORTS:** There are no known risks associated with participating in this research study, however should you feel uncomfortable you have the option to quit any time with no consequence.

**ALTERNATIVE PROCEDURES/TREATMENTS:** You may participate in other studies available on SONA, or complete the requirements for the paper reports (available through SONA) if desired.

**WITHDRAWAL FROM THE STUDY:** Participation in this study is completely voluntary and will not affect any grade or status in any program or class. If you decide to withdraw from further participation in this study, there will be no penalties.

Furthermore, please note that you are not required to answer any questions that you do not feel comfortable answering during the course of this study. If any questions are not clear, please ask for clarification from the researchers.

**NUMBER OF PARTICIPANTS:** We expect up to 200 participants to enroll in this study.

**CONFIDENTIALITY:** Your identity will be kept confidential. Your confidentiality during the study will be ensured by assigning you a coded identification number during the data collection process. The list connecting your name to this number will be kept in a locked file, with only Dr. Scielzo and Ajal Patel (the lead graduate student for this study) having access to this information. Your name will not be directly associated with any data. The confidentiality of the information related to your participation in this research will be ensured by maintaining records only coded by identification numbers. Copies of electronic data will be kept under lock and key, and will only be viewed by lab researchers. Furthermore, the online data collection mechanism (i.e., the survey collection website) is secure thus further assuring confidentiality of your information. Individual data will be aggregated to the group level, thus individual responses will not be published nor presented. Data will be maintained for 3 years after study procedures are complete, and will be stored in the Training, Mentoring, and Training Laboratory (Room 416, Department of Psychology, LSB). Moreover, only select research assistants with the lab will have access to any of the data. If the results of this research are published or presented at scientific meetings, your identity will not be disclosed.

If in the unlikely event it becomes necessary for the Institutional Review Board to review your research records, then The University of Texas at Arlington will protect the confidentiality of those records to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

**CONTACT FOR QUESTIONS:** You are encouraged to contact us with any questions or concerns that you might have.

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By accepting below, you confirm that you have carefully read and understand this document. If you do not understand, please ask the researchers and we will be glad to go through the document with you.

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you accept, and you have been told that you can ask other questions at any time

You voluntarily agree to participate in this study. By accepting, you are not waiving any of your legal rights. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and the you may discontinue participation at any time without penalty or loss of benefits, to which you are otherwise entitled.

We would also like to obtain your end of the semester GPA as this will help the researchers when analyzing the data they obtain. In order to obtain your end of the semester GPA, we will need your consent to do so.

You voluntarily agree to give consent to obtaining your end of the semester GPA. By accepting, you are not waiving any of your legal rights. Refusal to consent will involve no penalty or loss of benefits to which you are otherwise entitled, nor preclude you from being able to participate in this study.

First set of questions:

What is your participant number?

Why did you decide to attend UTA? (Short answer)

Did you attend orientation?

Are you apart of the Freshman Interest Group (FIG)?

How informative was orientation to you? (Likert scale 1-5, 1 "not informative at all", 3 "neutral", and 5 "extremely informative")

For this section, you will be presented with some fill in the blank type questions. Please fill out each question or statement to the best of your ability.

Also, think about your behaviors THIS SEMESTER thus far when responding to the following items.

1. How often do you attend class? Write in the number that best expresses the percentage of classes that you have attended this semester; For example, you might write 0% if you haven't even been to one of your classes, or 100% if you haven't missed one. I have attended \_\_\_\_\_ % of my classes.

2. How many class sessions in total have you missed this semester?

3. To what extent do you feel that you ask questions that you have during class? For example, if you feel that you are able to ask every question that you have during your classes, then you might put 100%. If you feel that you are never able to find the right moment to ask your questions, then you might indicate 0%. I feel that I am able to ask about \_\_\_\_\_% of my questions.

4. Relative to other students, how many questions do you feel you ask in classes? If you ask an average amount, you might be at 50%. If you don't ask any, you are probably at about 0%, and, if you ask an inordinate amount, you might be at 100%. I feel that relative to other students, I am at about the \_\_\_\_\_ percentile for asking questions.

5. Approximately, how many times have you asked a question during class this semester thus far?

6. To what extent do you manage your schedule (academic, work, and social combined)? For example, if you have an electronic planner and have every single task during your day planned out with no deviation from your schedule, then you might be at 100%. If you plan out about half of your day, with some deviation, you might be at about 50%, and, if you have no plan whatsoever other than knowing what time you need to be at work and classes, then you are probably at about 10%. I plan out approximately \_\_\_\_\_ of my schedule.

7. How many times this semester have you met with your professors outside of class time?

8. How many minutes would you estimate that you have spent meeting with your professors this semester?

9. How many times have you emailed your professors this semester?

10. How many hours a week, on average, are you currently spending preparing (studying, completing projects) for classes?



11. How many credit hours are you currently taking?
12. How many classes are you currently taking?
13. How many hours a week, on average, are you dedicating to studying specifically?
14. How many hours a week, on average, are you dedicating to projects specifically?

For this section, you will be presented with some items to rate. Please fill out each item to the best of your ability.

Also, think about your behaviors THIS SEMESTER thus far when responding to the following items.

How do you agree with the following items? (Likert response 1-5, 1 “strongly disagree”, 5 “strongly agree”, with a N/A column)

1. If I do not understand something in class, I ask the instructor to clarify
2. I come prepared with questions to class
3. When I'm confused, I look around to see if anyone else looks confused before deciding to ask a question
4. I take note of things I didn't understand in lecture so I can review them later
5. I pay careful attention to the topics and points discussed in class
6. I sometimes send text messages/instant messages during lecture
7. I pay careful attention to any hints or strategies that my professors provide
8. I have to leave early from class often
9. I never miss classes
10. I always arrive to class on time
11. I have not missed any academic deadlines this semester thus far
12. I begin working on projects due at the end of the semester in the first few weeks of class
13. I have self-set deadlines, before actual deadlines for some of my projects
14. Any social/family time that I have is planned out in advance
15. I am careful to disperse my time on projects (e.g., I do not expect to work for 5 hours straight one day on a project) when planning
16. I look at deadlines, and figure out which deadlines are close to one another
17. I had added all of my exams this semester into my planner/electronic calendar
18. Before agreeing to partake in social/family events, I carefully review my calendar to make sure that it won't interfere with my academic endeavors
19. I even schedule my free time, such as time spent playing computer or video games

20. I check my goal progress on a daily basis
21. I typically set weekly goals for myself
22. I have set several short term goals for myself this semester
23. I modify the goals I have set for myself often
24. When setting goals, I typically focus on my behaviors (e.g., I will study 3 hours) relative to outcomes (e.g., I will pass the exam next week)
25. When setting goals, I set lots of outcome related goals (e.g., I will get three As on my projects)
26. When setting goals, I typically set very general goals (e.g., I will do better this semester than last)
27. When setting goals, I typically set easy goals for myself
28. When setting goals, I typically set extremely difficult goals for myself
29. When setting goals, I typically set goals that are challenging for myself
30. Given the questions and concerns that I have had over the course of the semester, I feel that the amount of time I have spent communicating with my professors was adequate
31. I am careful about my grammar and spelling when emailing professors
32. I have interacted with my professors outside of class time numerous times
33. I have emailed my professors numerous times
34. I take notes while I'm reading
35. I get rid of distractions before starting to study
36. I read the material to be covered in class before going to class
37. I bring questions that I have from class readings to class
38. I first read the material I'm studying for the general idea, then go back and re-read for a more in depth understanding
39. I oftentimes spend more time focusing on the material that was covered in class when studying to make sure that I really understand the important topics
40. I sometimes try different strategies when trying to learn new material
41. I oftentimes use other sources (such as looking topics up on the internet or grabbing other books) to understand things I'm learning in my classes
42. I carefully review projects (for spelling, content, meeting all the required points, etc.) before submitting them for a grade
43. I typically wait until the night before an exam to begin studying
44. I attend study groups when I hear about them
45. I go back and really make sure I understand the topics I've learned
46. I study more than 3 hours for each credit hour of classes that I am taking
47. I talk about the topics I'm learning in classes often with my friends, family, and/or peers
48. I study in places with a lot of commotion/noise to keep me engaged
49. I study for exams in large blocks (e.g., study 10 hours straight for an upcoming exam)
50. I attend tutoring/supplemental instruction whenever they are offered

How do you agree with the following statements? (Likert response 1-5, 1 “strongly disagree”, 5 “strongly agree”)

1. I look forward to going to college
2. I like being in college
3. College is interesting
4. I wish I didn't have to go to college
5. There are many things about college I don't like
6. I enjoy college activities
7. I learn a lot at college
8. I feel bad at college

How confident are you that you could successfully complete the following tasks? (Likert response 1-6, 1 “not at all confident”, 7 “extremely confident”)

1. Research a term paper
2. Write class papers
3. Do well on your exams
4. Take good class notes
5. Keep up to date with your class work
6. Manage time effectively
7. Understand your textbooks
8. Participate in class discussions
9. Ask a question in class
10. Talk to your professors
11. Talk to university staff
12. Ask a professor a question
13. Make new friends at college
14. Join a student organization

Below is a list of statements dealing with your general feelings about yourself. Please indicate your level of agreement with each statement. (Likert response 1-5, 1 "strongly disagree", 5 "strongly agree")

1. On the whole, I am satisfied with myself
2. At times, I think I am no good at all
3. I feel that I have a number of good qualities
4. I am able to do things as well as most other people
5. I feel I do not have much to be proud of
6. I certainly feel useless at times
7. I feel that I'm a person of worth, at least on an equal plane with others
8. I wish I could have more respect for myself
9. All in all, I am inclined to feel that I am a failure
10. I take a positive attitude toward myself

The following questions ask you about your feelings and thoughts during the last month. In each case, please indicate how often you felt or thought a certain way. (Likert response, 1 "never", 3 "sometimes", 5 "often")

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and "stressed"?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

The following statements are why people go to college. Please indicate how much each item corresponds to why you are attending college.

Why do you go to college? (Likert response 1-7, 1 "does not correspond at all, 7 "corresponds exactly")

1. Because with only a high-school degree I would not find a high-paying job later on
2. Because I experience pleasure and satisfaction while learning new things
3. Because I think that a college education will help me better prepare for the career I have chosen
4. For the intense feelings I experience when I am communicating my own ideas to others
5. Honestly, I don't know; I really feel that I am wasting my time in school
6. For the pleasure I experience while surpassing myself in my studies
7. To prove to myself that I am capable of completing my college degree
8. In order to obtain a more prestigious job later on
9. For the pleasure I experience when I discover new things never seen before
10. Because eventually it will enable me to enter the job market in a field that I like
11. For the pleasure that I experience when I read interesting authors
12. I once had good reasons for going to college; however, now I wonder whether I should continue
13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments
14. Because of the fact that when I succeed in college I feel important
15. Because I want to have "the good life" later on
16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me
17. Because this will help me make a better choice regarding my career orientation
18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written
19. I can't see why I go to college and frankly, I couldn't care less
20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities
21. To show myself that I am an intelligent person
22. In order to have a better salary later on
23. Because my studies allow me to continue to learn about many things that interest me
24. Because I believe that a few additional years of education will improve my competence as a worker
25. For the "high" feeling that I experience while reading about various interesting subjects
26. I don't know; I can't understand what I am doing in school
27. Because college allows me to experience a personal satisfaction in my quest for excellence in my studies
28. Because I want to show myself that I can succeed in my studies

Please indicate your level of agreement with the following statements.

I am someone who... (Likert response 1-5, 1 "strongly disagree", 3 "neutral", 5 "strongly agree")

1. Is talkative
2. Tends to find fault with others
3. Does a thorough job
4. Is depressed, blue
5. Is original, comes up with new ideas
6. Is reserved
7. Is helpful and unselfish with others
8. Can be somewhat careless
9. Is relaxed, handles stress well
10. Is curious about many different things
11. Is full of energy
12. Starts quarrels with others
13. Is a reliable worker
14. Can be tense
15. Is ingenious, a deep thinker
16. Generates a lot of enthusiasm
17. Has a forgiving nature
18. Tends to be disorganized
19. Worries a lot
20. Has an active imagination
21. Tends to be quiet
22. Is generally trusting
23. Tends to be lazy
24. Is emotionally stable, not easily upset
25. Is inventive
26. Has an assertive personality
27. Can be cold and aloof
28. Perseveres until the task is finished
29. Can be moody
30. Values artistic, aesthetic experiences
31. Is sometimes shy, inhibited
32. Is considerate and kind to almost everyone
33. Does things efficiently
34. Remains calm in tense situations
35. Prefers work that is routine
36. Is outgoing, sociable
37. Is sometimes rude to others
38. Makes plans and follows through with them
39. Gets nervous easily
40. Likes to reflect, play with ideas
41. Has few artistic interests
42. Likes to cooperate with others
43. Is easily distracted
44. Is sophisticated in art, music, or literature

Demographics

Gender (Male or Female)

Ethnicity (Caucasian, African American, Hispanic, Asian, Pacific Islander, American Indian, or Other)

Age

Major

Classification (Freshman, Sophomore, Junior, or Senior)

High School GPA

Your high school GPA was out of what amount? For example 3.0 out of a 4.0 scale or 4.0 out of a 5.0 scale

SAT Score

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## BIOGRAPHICAL INFORMATION

Ajal B. Patel was born and raised in Houston, TX. Mr. Patel received his Bachelor's of Science degree in Psychology from Baylor University in the summer of 2007. After completing his undergraduate degree, Mr. Patel then went onto Stephen F. Austin State University where he received a Master's of Arts degree in General Psychology in the summer of 2009. Immediately after graduating from Stephen F. Austin State University, Mr. Patel began pursuing his Master's of Science in Industrial/Organizational Psychology from The University of Texas at Arlington. Under the supervision of his mentor, Dr. Shannon Scielzo, Mr. Patel developed and completed his thesis which entailed creating a preparatory skills training to promote academic success for undergraduate students. Mr. Patel received his Master's of Science in Industrial/Organizational Psychology in May 2012. Currently Mr. Patel is working in the field of Industrial/Organizational Psychology to apply the knowledge, skills, and abilities he has developed. Ultimately, Mr. Patel would like to open his own consulting firm within the Industrial/Organizational field.