

EXPLORING THE LINKS AMONG WORK EXPERIENCES, SELF-EFFICACY
AND ACADEMIC PERFORMANCE

THESIS

Presented to the Graduate Council of
Texas State University
in Partial Fulfillment
of the Requirements

for the Degree

Master of ARTS

by

Vishanti R. Persad, B.A.

San Marcos, Texas
May 2010

COPYRIGHT

by

Vishanti R. Persad

2010

ACKNOWLEDGEMENTS

I would like to thank my family for supporting me in my journey through graduate school. They have been my inspiration and my ever-present support system and have always encouraged me to reach my goals. I would also like to thank my committee chair, Dr. Roque Mendez for his patience and kindness. I thank my committee members, Dr. Paul Raffeld and Dr. Marc Turner for their guidance in writing my thesis. I would also like to thank the friends I have made in my two years at Texas State University-San Marcos. They have made my experience in graduate school fulfilling and I know I have made lifelong friends. I have worked very hard on this thesis and I would never have reached this goal of achieving a Master's degree in Health Psychology without these special people.

This manuscript was submitted on April 16, 2010.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	iv
LIST OF TABLES.....	vii
ABSTRACT.....	viii
CHAPTER	
I. INTRODUCTION.....	1
<i>Purpose and Research Questions.</i>	2
<i>Self-Efficacy and GPA.</i>	3
<i>Work Experiences, Skills and their Links to Self-Efficacy.</i>	4
<i>Work Experiences and Skills and their Links to GPA.</i>	7
<i>Relevance of Work Experiences to College Major</i>	8
<i>Summary</i>	9
<i>Hypotheses</i>	9
II. METHODOLOGY	11
<i>Participants</i>	11
<i>Measures</i>	11
<i>Procedure</i>	13
III. RESULTS	15
<i>Preliminary Analyses</i>	15
<i>Tests of the Hypotheses</i>	16
IV. DISCUSSION	18
<i>Findings</i>	18
<i>Explanation of Exceptions</i>	19
<i>Limitations, Future Research, and Direction</i>	19
<i>Summary</i>	22

APPENDIX.....	23
REFERENCES	29

LIST OF TABLES

Table	Page
1. Participant Demographics.....	14
2. Mean and Standard Deviation Scores.....	15
3. Analysis of Variance for Hypothesis 2	16
4. Summary of Regression Analysis for Hypothesis 2	17
5. Analysis of Variance for Hypothesis 6	17
6. Summary of Regression Analysis for Hypothesis 6	17

ABSTRACT

EXPLORING THE LINKS AMONG WORK EXPERIENCES, SELF-EFFICACY AND ACADEMIC PERFORMANCE

by

Vishanti R. Persad, B.A.

Texas State University-San Marcos

May 2010

SUPERVISING PROFESSOR: ROQUE MENDEZ

The purpose of this study was to explore the links among the variables of work experience, self-efficacy, and academic performance of college students. Specifically, the study predicted that the number of work experiences and skills, and the relevance of job experiences would be positively linked to student academic performance (GPA)

and self-efficacy. Moreover, I predicted that self-efficacy would be positively correlated with GPA. Using data collected from 127 students in this study, analyses showed that the number of job skills learned was positively related to GPA and self-efficacy. Further research in the field of industrial/organizational psychology can help determine what strategies institutions and college students can take to increase student grade point average and sense of self-efficacy.

CHAPTER 1

INTRODUCTION

Preparing for a career after graduation is an important step for students. Students who participate in work or internship experiences relevant to their major are likely to have more skills and be better prepared than those without such experiences. By completing work experiences or internships, students explore a variety of skills and transfer them into their academic coursework.

For example, work experiences provide the fundamental set of communication and analytical skills to complete the assignments, and the organizational skills and dedication to persevere when the workload gets overwhelming (Adams & Hancock, 2004). Moreover, job skills learned may translate into better work habits, such as time management and self-discipline (Knouse, Tanner & Harris, 1999). Through work experiences, students may gain a better understanding of organizations, and solidifying career focus (Knouse, et al., 1999; Schambach & Kephart, 1997) and a more realistic understanding of various career fields and organizational environments (Callanan & Benzing, 2004). In sum, participating in job and internship programs should enhance academic skills and performance (Healy & Mourton, 1987; Knouse et al., 1999). Work and internship experiences, in turn, may be linked to greater self-efficacy and better academic performance. In a study of over 20,000 undergraduate students, Vogelgesang

and Astin (2000) found that students with work experiences had an increased sense of self-efficacy, an increased awareness of the world, an increased awareness of one's personal values, and an increased engagement in classroom academic experience. Moreover, Swail and Kampits (2004) found that students who participated in a work-based learning activity earned a 3.08 GPA on a 4.0 scale, while students who did not participate earned a 2.99. Thus, work experience skills were linked with personal and social competence and enhanced academic achievement and motivation.

As I will argue in this thesis, students with more work experiences and internships have more skills, and these are positively linked to their sense of self-efficacy and grade point average. A study of the importance of internships or work experiences with self-efficacy and academic performance would make an important contribution to the field of industrial and organizational psychology. This research can improve our understanding of how internships and jobs can best prepare students to enter the work force and increase their chances of positive future academic and career outcomes.

Purpose and Research Questions

The purpose of this study is to assess whether working experiences relate to better academic performance and a higher sense of self-efficacy. Specifically, it addresses whether work/internship experiences and the skills gained in such experiences are linked to higher student academic performance and self-efficacy and whether a higher sense of self-efficacy is linked to a higher grade point average. By evaluating findings from questionnaires measuring self-efficacy and grade point average, this study will explore the relationship of work and internship experiences with self-efficacy and academic performance.

Self-Efficacy and GPA

Defined. One of the more important motivational beliefs for student achievement is self-efficacy, which concerns beliefs about capabilities to do a task or activity (Linnenbrink & Pintrich, 2002). Albert Bandura (Bandura, 1994) defined self-efficacy as one's belief in one's ability to succeed in specific situations. One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. The concept of self-efficacy lies at the center of Bandura's social cognitive theory which emphasizes the role of observational learning and social experience in the development of personality (Bandura, 1994). According to Bandura's theory, people with high self-efficacy are more likely to view difficult tasks as something to be mastered rather than something to be avoided. The stronger the self-efficacy or mastery expectations, the more active will be the efforts students make in shaping their future.

Links to GPA. Studies recognize that self-efficacy is an important predictor of college academic performance (Findley & Cooper, 1983; Gottfried, 1985; Harter, 1981; Kernis, 1984; Niemiec, Sikorski & Walberg, 1996; North Central Regional Educational Laboratory, 2004; Pajares, 1996; Stipeck, 1988; Wiest, Wong & Kreil, 1998; Zimmerman & Bandura, 1994). For example, Gottfried (1985) found that students' overall motivational orientation was significantly associated with school achievement and self-perceptions. In particular, students who exhibited higher intrinsic motivation had significantly higher school achievement, more favorable perceptions of their academic competence and lower academic anxiety. Harter (1981) and Stipek (1988) also reported that perceived competence was associated with academic performance. Specifically, children with high perceived competence earned better grades than did those who had

less positive views of themselves. Finally, Pajares (1996) found that that self-efficacy is the strongest predictor of academic performance.

Evidently, self-efficacy has been related to persistence, tenacity, and achievement in educational settings (Bandura, 1986; Schunk, 1981; Chemers, Martin, Hu and Garcia, 2001; Zimmerman, 1989). Students with higher self-efficacy tend to participate more readily, work harder, pursue challenging goals, spend more effort toward fulfilling identified goals, and persist longer in the face of difficulty (Bandura, 1997; Hsieh, Sullivan & Guerra, 2007; Pajares, 2003; Schunk, 1991). Moreover, with increased self-efficacy comes more confidence in one's capacity to perform activities requisite to the work role (Dierdorff & Surface, 2008). Students with more confidence generally are more willing to persist in the face of adversity, and students with goals of "mastering a task" tend to invest in focused effort (Hsieh et al., 2007). Students with this drive may try harder at performing well in school once they believe they have the capability to accomplish tasks presented to them. Additionally, students high in academic self-efficacy also make greater use of effective cognitive strategies in learning, manage their time and learning environments more effectively, and are better at monitoring and regulating their own effort (Chemers et al., 2001). Such students have the ability to focus and set priorities to excel in the tasks presented. In sum, psychological factors such as self-efficacy are important in understanding academic success and these factors should be considered in establishing programs for freshman college students (Rittman, 1999).

Work Experiences, Skills and their Links to Self-Efficacy

Definitions. Job experience is the degree of learning outcomes and skills that individuals accumulate when performing the requirements of their work role (Dierdorff

& Surface, 2008). Learning outcomes include becoming independent, gaining better understanding of organizations, and solidifying career focus (Knouse, et al., 1999; Schambach & Kephart, 1997) gaining a realistic understanding of various career fields and organizational environments (Callanan & Benzing, 2004), making social contacts, building self-confidence and acquiring job and generic skills (Bradley, 2006). Skills acquired during work and internship experiences may include communication, organizational and networking skills, effective problem-solving and decision-making strategies, planning and managing one's personal resources more efficiently (Chemers, et al., 2001). Learning outcomes and skills may vary based on tasks performed, time on job and overall quality of the experience. The current study examined several likely consequences of work, with particular attention placed on the links between work participation (number of job experiences), self-efficacy and academic achievement.

A combination of positive outcomes in the work experience enables an individual to strengthen their self-efficacy and apply what they have learned to various settings. Bandura (1994) points to four main sources of influences that are important in the development of self-efficacy: mastery experiences, social modeling, social persuasions, and physiological factors. The first three of the four sources are the most relevant to this study, so they are discussed more in depth.

Mastery experiences are the most effective way of creating a strong sense of self-efficacy. Students who have had more job and internship experiences, for example, may be more convinced they have what it takes to succeed, persevere in the face of adversity, and quickly rebound from setbacks. By mastering the goals and tasks presented to them,

students' self-efficacy is increased, and a sense of accomplishment, success and motivation to complete more challenging tasks is encouraged.

Social modeling provides students with proficient models who possess the capabilities to which they aspire, giving firsthand experience of what their future would be like in that career. Through their behavior and expressed ways of thinking, competent models in jobs and internships transmit knowledge and teach observers effective skills and strategies for managing environmental demands. Self-efficacy is raised through the acquisition of a fitting model. Therefore, students who are matched with a competent model, such as in a job or internship, are provided with opportunities to excel and become valuable workers.

Students who are persuaded that they possess the capabilities to master given activities are more likely to increase effort and sustain it than if they harbor self-doubts and dwell on personal deficiencies when problems arise. By persuading students that they have what it takes to succeed, superiors promote the development of skills and a sense of personal efficacy in the students. Being praised for a successful work experience encourages self-efficacy when considering future placement in a similar job environment and being presented with similar tasks. In addition to raising people's beliefs in their capabilities, successful efficacy builders structure situations for them in ways that bring success, increasing their positive outlook. Such social persuasion and praise is more likely to have occurred among students with job and internship experiences.

Mastery experiences, social modeling, and social persuasions are important features that are linked to work experiences which can translate to a high sense of self-efficacy. An understanding of these factors is useful to understanding student success.

Finally, experience also provides needed opportunities for knowledge acquisition. As an individual is exposed to novel experiences during his or her job, a sense of self-efficacy is achieved whether or not they succeed in accomplishing a task (Schunk, 1981). In sum, mastery experiences, social modeling, social persuasions, skills and knowledge acquisition can all strengthen a student's beliefs in their capacities (self-efficacy) to meet new challenges and increase academic performance.

Work Experiences and Skills and their Links to GPA

Although there is not a large body of literature addressing the benefits of work for students, research consistently shows that employment provides resources that facilitate the school role (Butler, 2007) and that hours spent working are positively linked to college grades (Pike, Kuh, and Massa-Mckinley, 2008). Students, for example, report that work promotes feelings of mastery and attributes that would be expected to benefit school related activities (Butler, 2007; Finch, Shanahan, Mortimer & Ryu, 1991; Miller, 1988; Mortimer, Harley & Staff, 2002). Job performance factors also explain academic performance, such as the student's ability to work well and cooperate with others and the students' capacity to act responsibly (Fenollar, Roma'n & Cuestas, 2007; Hogan & Holland, 2003). More directly, internships may also help students develop immediate skills such as better time management, better communication skills, better self-discipline, heightened initiative (Healy & Mourton, 1987; Kane, Healy & Henson, 1992; Knouse et al., 1999; Taylor, 1988) that can improve course performance.

Work and/or internship opportunities may promote the development of self-regulation skills such as responsibility, organizational, communication or problem solving skills, among others, that may be vital to succeeding in academics as well as on

the job. Adams and Hancock (2000) suggest that students need to have the intellectual capacity to learn the material, a fundamental set of communication and analytical skills to complete the assignments, and the organizational skills and dedication to persevere when things get tough and the workload seems overwhelming. Previous studies indicate that job skills learned may translate into better academic skills and into better personal habits such as time management and self-discipline and into better academic skills (Healy & Mourton, 1987; Kane et al., 1992; Taylor, 1988). These findings demonstrate that working may be beneficial for students and can enhance academic outcomes.

Adams and Hancock (2000) also examined full-time work experience as an indicator of success in MBA programs. They found that students with experience and knowledge stand out among their peers in academic performance. As a result of having relevant work experiences to their coursework, students are able to transfer learned skills into the classroom and perform better academically.

Relevance of Work Experiences to College Major

Internships, part-time jobs and full-time jobs provide numerous opportunities for students to develop values, competencies and skills that are transferable to their current study as well as future career contexts (Bradley, 2006; Luzzo, McWhirter & Hutcheson, 1997). Cable and Edwards (2004) and Campbell (1990) state that job-school congruence exists when job requirements and collegiate learning are complementary. Job-school congruence allows students to apply concepts learned in a job to school, increasing conceptual understanding, knowledge acquisition and appreciation of the value of higher education (Butler, 2007). Jobs that are congruent with courses may also encourage a stronger appreciation for education (Butler, 2007) and may promote the development of

self-regulation skills which are linked to self-efficacy and improved academic performance (Williams & Alliger, 1994).

Summary

Research shows that skills mastered in job and internship experiences are linked to self-efficacy and academic performance. Completion of internships improves individual career decision-making self-efficacy, strengthen the crystallization of vocational self-concept and allow for the acquisition of job relevant skills (Callanan & Benzing, 2004).

Increases in self-efficacy, in turn, are linked to higher academic performance. Hsieh et al. (2007) found that students who had a stronger belief that they could complete academic tasks successfully adopted more mastery goals when approaching academic tasks. These students with high achievement tended to value effort, persist in the face of difficulty, and engage in academic tasks (Linnenbrink & Pintrich, 2002).

Hypotheses

Seven hypotheses can be proposed as to the nature of the relationships among work experiences, job skills, self-efficacy and academic success:

1. Students with more work experiences will have a greater sense of self-efficacy
2. Students with more job skills reported in their job experiences will have a greater sense of self-efficacy
3. Students whose work experiences were more relevant to their major will have a greater sense of self-efficacy
4. Students with a greater sense of self-efficacy will have a higher grade point average

5. Students with more work experiences will have a higher grade point average
6. Students with more job skills reported in their job experiences will have a higher grade point average
7. Students whose work experiences were more relevant to their major will have a higher grade point average

CHAPTER II

METHODOLOGY

Participants

The sample for this study was comprised of 40 male and 87 female students at Texas State University-San Marcos (see Table 1 for additional demographics). Participants were selected from four undergraduate social psychology courses. Students were given the option to participate in the study or to complete an alternative assignment. Students were given extra credit for their participation, regardless of the option.

Measures

The instrument consisted of three parts: A handwritten part in which students were asked questions relating to their job experiences, a relevancy and self-efficacy scale, and demographic items (see Appendix A). Each of these parts is described below:

The handwritten part asked participants to state their current college major, list up to five work experiences held while enrolled in college and the hours per week worked in each. In addition, a list of job skills was provided and students were asked to check the skills learned for each of the jobs listed. Among the skills participants could select for each of their jobs were:

1. Analytical/Problem Solving skills: recognizes and clarify problems, gathers and reviews information;
2. Interpersonal skills: tactful, good listener, trustworthy, respectful, easy to get along with, patient, fair;
3. Enthusiasm/Motivation skills: take on challenges and responsibilities, observe and apply examples learned from others, ambitious;
4. Time Management skills: sets goals, meets deadlines;
5. Self-Starter skills: needs little supervision, asks questions, responds well to the unexpected, creative, takes action beyond what is expected;
6. Flexibility and Versatility skills: capable of improvisation, perceptive, experiments with new ideas;
7. Oral/Written Communication skills: expresses self clearly and effectively, explains complex ideas and concepts, courteous;
8. Organization/Planning skills: organizes materials and information, can multitask, and works efficiently and effectively under pressure;
9. Leadership Qualities skills: takes initiative, promotes ideas, motivates others to work together, no supervision needed, decisive;
10. Team Player skills: shares credit, expresses appreciation, collaborates with others, responsive to others.

The Relevancy scale asked participants to rate the degree of relevance of each job experience to their college major using a four point Likert scale ranging from 1 (very irrelevant) to 4 (very relevant). Students were able to make an individual assessment of how each work experience related to their current major.

The ten item General Self-Efficacy scale developed by Jerusalem and Schwarzer (1979) included statements such as “I can always manage to solve difficult problems if I try hard enough” and “I am confident that I could deal efficiently with unexpected events”. Participants indicated the extent to which the statements applied to them on a four point Likert scale ranging from 1 (not true) to 4 (very true). Higher scores indicated higher self-efficacy. This unidimensional scale has a reliability of .80. The GSE has been used internationally with success for two decades and is suitable for a broad range of applications. For example, it has been used to predict adaptation after life changes, and as an indicator of quality of life (Jerusalem & Schwarzer, 1979).

Finally, five items measured demographic information, including gender, age, ethnicity, socioeconomic statuses, classification, and self reported grade point average.

Procedure

All data were collected by way of a questionnaire administered in November 2009. Students in each class were briefly informed on the purpose of the study and had an option to take the questionnaire or to participate in an alternate assignment. Students were each given a manila folder containing a consent form, a survey sheet and a questionnaire packet along with a scantron. All materials were identified with a numeric code to keep student names anonymous. Students took approximately 20 minutes to complete the survey.

Table 1
Participant Demographics

Variable	N(%)
<i>Gender</i>	
Male	40 (31%)
Female	87 (69%)
<i>Age</i>	
18	0 (0.0%)
19	6 (4.7%)
20	23 (18%)
21	42 (33%)
22 and above	56 (44%)
<i>Ethnicity</i>	
African American	5 (3.9%)
Asian American	0 (0.0%)
Latino	35 (27.5%)
Anglo/White	77 (60.6%)
Other	9 (7%)
<i>Socioeconomic Status</i>	
Upper Class	2 (1.5%)
Upper-Middle Class	32 (25.1%)
Middle Class	72 (56.6%)
Lower-Middle Class	12 (9.4%)
Working Class	9 (7%)
<i>Classification</i>	
Freshman	0 (0.0%)
Sophomore	8 (6.2%)
Junior	55 (44.3%)
Senior	64 (50.4%)
<i>Self-Reported GPA</i>	
Less than 2.0	0 (0.0%)
2.0-2.5	22 (17.3%)
2.5-3.0	41 (32.3%)
3.0-3.5	42 (33%)
3.5-4.0	20 (15.7%)

Note: Percentages are of the total sample ($N=127$)

CHAPTER III

RESULTS

Preliminary Analyses

Once the surveys were identified and coded, data were scanned and analyzed using the SPSS statistical software package. Current semester grade point averages were obtained for each participant. A reliability analysis was run on the self-efficacy scale. The coefficient alpha for the General Self-Efficacy scale was .78 indicating an internally reliable scale. Subsequent analyses used the following variables: the total score of self-efficacy items, official grade point averages, the total number of job experiences, the job skills (number of job skills divided by the number of work experiences) and job relevancy scores (the number of work experiences relevancy divided by the number of work experiences) (See Table 2).

Table 2

Mean and Standard Deviation Scores

Variable	Mean	SD
Job Experiences	2.56	1.23
Job Skills	7.44	1.89
Relevancy Score	2.81	1.39
Self-Efficacy Score	34.46	3.88
Official GPA	2.92	.48

Tests of the Hypotheses

The aim of this study is to identify a link between the perceived amount and quality of work experience to self-efficacy and academic performance (as measured by grade point average), and the link between self-efficacy to academic performance (GPA). In particular the study tested whether the number of work experiences, the number of job skills, and the relevancy of work experiences each predicted student self-efficacy and student academic performance (GPA). Finally the study tested whether self-efficacy predicted student academic performance (GPA). Regression analyses were used to the test seven specific hypotheses.

Hypotheses 2 and 6 were found to be statistically significant. Students with more job skills reported in their work experiences did have a greater sense of self-efficacy (hypothesis 2). About 10% of the self-efficacy variance is related to the number of job skills a person acquired. (See Table 3 and Table 4). And, students with more job skills reported in their work experiences did have a higher grade point average (hypothesis 6). About 3% of the GPA variance is related to the number of job skills a person acquired (See Table 5 and Table 6). Hypotheses 1, 3, 4, 5 and 7 were not found to be significant.

Table 3

Analysis of Variance for Hypothesis 2

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	182.265	1	182.265	13.813	.00
Residual	1622.983	123	13.195		
Total	1805.248	124			

Note: Predictors: (Constant), Number of Skills. Dependent Variable: Self-Efficacy

Table 4

Summary of Regression Analysis for Hypothesis 2 (N=127)

Variable	B	SE B	Beta
(Constant)	29.720	1.325	
Number of Job Skills	.642	.173	.318

Note: $R^2 = .101$ ($p < .05$). Dependent Variable: Self-Efficacy

Table 5

Analysis of Variance for Hypothesis 6

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.867	1	.867	3.874	.05
Residual	27.540	123	.224		
Total	24.408	124			

Note: Predictors: (Constant), Number of Skills. Dependent Variable: GPA

Table 6

Summary of Regression Analysis for Hypothesis 6 (N=127)

Variable	B	SE B	Beta
(Constant)	2.595	.173	
Number of Job Skills	.044	.022	.175

Note: $R^2 = .031$ ($p < .05$). Dependent Variable: GPA

CHAPTER IV

DISCUSSION

Findings

The present study explored the links among the variables work experiences, self-efficacy and academic performance in undergraduate students at a public university. In general, support was found for hypothesis 2 and 6, namely students with more job skills had significantly higher mean scores on the self-efficacy scale and in their grade point averages, respectively. These results are mostly consistent with studies exploring the links between job skills and self-efficacy (e.g., Chemers et al., 2001) and job skills and academic performance (e.g., Fenollar et al., 2007; Hogan & Holland, 2003).

Job skills and self-efficacy were positively related. Acquired job skills may increase a student's sense of self-worth. By accomplishing a variety of tasks and activities presented in a job, an individual adds these positive achievements to his individual capabilities, thereby strengthening his self-efficacy. However, it is possible that the causal relationship is reversed, namely, self-efficacy may influence the capability of an individual in the working environment. Having a higher sense of self-efficacy may increase a student's belief that he can accomplish various work tasks and activities.

Additionally, it was found that job skills correlated positively with GPA. Proficiency in job skills can have transferable qualities to the academic field. Students

learn useful techniques in their job experiences which can be applied to their college courses. Capability in this area is reflected by a student's grade point average. However, again the causal relationship may be reversed. It is also likely that having a higher GPA can influence a student's ability to use learned techniques in a job. Excelling in work skills can be transferable to academics and have a positive impact on a student's grade point average.

Explanation of Exceptions

Aside from the confirmation of Hypotheses 2 and 6, the study was not able to find support for the other hypotheses. Job experiences did not correlate significantly with self-efficacy (Hypothesis 1). Those with relevant job experiences did not have a significantly higher sense of self-efficacy (Hypothesis 3). Moreover, self-efficacy did not correlate with higher grade point average (Hypothesis 4) and students with more job experiences did not show a higher grade point average (Hypothesis 5). Lastly, students whose job experiences were more relevant to their major did not have a higher grade point average (Hypothesis 7). Reasons for the lack of findings are discussed in the following section.

Limitations, Future Research and Direction

Grade point average was a limiting factor in this study. GPA scores of the students had a narrow variance, ranging from approximately 2.0 to 4.0 because only upper division courses were used. Due to the fact that by its very nature GPA is a self-selecting criterion of class populations, students with grades below 2.0 were not assessed. It would be useful to sample students who may be failing their courses to determine if their work experiences are linked to their GPA and their self-efficacy. Future studies

should widen the sample to include participants in Freshmen and Sophomore classes with GPAs below 2.0 to test these links.

In addition, the range of student classification was limited. The majority of students were sophomores, juniors and seniors who may have already learned the skills necessary to keep their grade point averages up. Sampling a broader range of students may have given different results. Differences in work experience and GPA may be most divergent among freshmen. They may not have had as many work experiences and their jobs may have not been as relevant to their college major as those of the sample. This lack of work experience can have an impact self-efficacy which in turn can affect student GPA. Similarly, sampling students in a Masters program may show an increase in relevant work experiences to college major and links of relevant work experiences to self-efficacy and GPA. By including a range of student classification, the link of work experiences, job skills, job relevancies, to GPAs and self-efficacy may have been seen, confirming the unsupported hypotheses.

A third limitation was that bias may have existed due to the use of non-randomized convenient sampling. Students were chosen from 4 undergraduate psychology courses and were not representative of the entire population of college students. An ideal sample would have looked at a wider range of students and may have shown less overrepresentation of particular school classification (sophomores, juniors and seniors) and a wider range of grade point averages. In addition, a wider range of self-efficacy scores may have been present with a different sampling method.

A fourth limitation is that the use of total grade point average may not truly reflect the links explored. The study measured job relevancy as a link to overall grade point

average. If the grade point average of the courses directly related to the students' college major had been used, a stronger link of job relevancy and GPA may have been discovered, as well as a link of college major GPA to self-efficacy, confirming the hypotheses, as opposed to using a measurement of total overall course grade point average. Future studies should utilize the college major grade point average as a measure of academic performance so that important links of job relevancy to college major may be tested.

A fifth limitation is that students self-reported the skills learned in their work experiences and had to take it upon themselves to decide how relevant their work experiences were to their major. Future studies should incorporate open-ended interviews to expose details of the student's work experiences. By verbally asking questions, students may use more critical thinking and be able to report more skills learned in their jobs, and possibly discover stronger relevancies of their work experiences to their major.

Student participation in the workforce has a number of likely consequences (Bradley, 2006). Although many of these are positive (e.g. becoming independent, receiving pay, making social contacts, building self-confidence and acquiring job and generic skills), past research has also documented a range of negative outcomes, such as a lack of autonomy, social isolation, and high stress (e.g. Lucas & Lammont, 1998; McInnis & Hartley, 2002). These negative consequences from working may have an impact on a student's self-efficacy, and likewise, these hardships may take away a strong sense of self-worth which may negatively impact a student's academic performance. Therefore, variables such as social support and interaction, time management, financial

status, responsibilities outside of school and work, etc., may be covariates or determinants of self-efficacy and grade point average and merit investigating.

Summary

The findings of the present study show that among undergraduate students, a set of multiple skills from work experiences is related to a higher sense of self-efficacy and higher grade point averages. Expanding the methods by which skills are acquired may have a positive impact on students who are in need of increasing their academic performance and strengthening their sense of self-efficacy.

In conclusion, this study sought to explore the links between work experiences (number of experiences, number of job skills, and job relevancy scores) to academic performance and self-efficacy as well as the link between academic performance and self-efficacy. Students who have gained job skills from their work experiences were shown to have a higher grade point average and higher self-efficacy. This result confirms that the skills taken away from work experiences are more important than the amount of jobs held or how relevant the job is to the individual's major. It may be beneficial to conduct further studies so that to understand the job opportunities that provides students with the most beneficial skills. This knowledge, in turn, may be used to enhance their academic performance and their sense of self-efficacy. By expanding this study, it may be possible to bridge the connection between work and education, ultimately providing students with a more fulfilling and positive college experience.

APPENDIX

Survey Instrument

This first part of the survey is handwritten. Please answer on this sheet.

State your current major _____

List the name of the title/position for any job/work experience and/or internship experience you have had while enrolled in college, up to 5, and the hours per week you worked in each.

A. _____ hrs/week _____

B. _____ hrs/week _____

C. _____ hrs/week _____

D. _____ hrs/week _____

E. _____ hrs/week _____

Below is a list of skills and their descriptions. Check the skills you feel you have learned for each of the jobs. Checkmark the boxes under each job if applicable.

Skills	Job A	Job B	Job C	Job D	Job E
Analytical/Problem solving Recognizes and clarifies problems, gathers and reviews information					
Interpersonal Tactful, good listener, trustworthy, respectful, easy to get along with, patient, fair					
Enthusiasm/motivation Takes on challenges and responsibilities, observes and applies examples learned from others, ambitious					
Time Management Sets goals, meets deadlines					
Self – Starter Needs little supervision, asks questions, responds well to the unexpected, creative, takes action beyond what is expected					
Flexibility and Versatility Capable of improvisation, perceptive, experiments with new ideas					
Oral/written communication Express self clearly and effectively, explain complex ideas and concepts, courteous					
Organization/Planning Organizes materials and information, can multitask, works efficiently and effectively under pressure					
Leadership Qualities Takes initiative, promotes ideas, motivates others to work together, no supervision needed, decisive					
Team player Shares credit, expresses appreciation, collaborates with others, responsive to others					

Instructions: For items 6-15 read each statement carefully and then fill in the corresponding circle on the scantron to indicate the extent to which the statement applies to you.

1=not true

2=hardly true

3=moderately true

4=True

6. I can always manage to solve difficult problems if I try hard enough.

1

2

3

4

Not true

True

7. If someone opposes me, I can find the means and ways to get what I want.

1

2

3

4

Not true

True

8. It is easy for me to stick to my aims and accomplish my goals.

1

2

3

4

Not true

True

9. I am confident that I could deal efficiently with unexpected events.

1

2

3

4

Not true

True

10. Thanks to my resourcefulness, I know how to handle unforeseen situations.

1

2

3

4

Not true

True

11. I can solve most problems if I invest the necessary effort.

1

2

3

4

Not true

True

12. I can remain calm when facing difficulties because I can rely on my coping abilities.

1	2	3	4
Not true			True

13. When I am confronted with a problem, I can usually find several solutions.

1	2	3	4
Not true			True

14. If I am in trouble, I can usually think of a solution.

1	2	3	4
Not true			True

15. I can usually handle whatever comes my way.

1	2	3	4
Not true			True

Instructions: For items 16 to 21 fill in the corresponding circle on the scantron.

16. Gender A. Male B. Female

17. Age A. 18 and below B. 19 C. 20

D. 21 E. 22 and above

18. Ethnicity A. African-American B. Asian-American C. Latino

D. Anglo/White E. Other

- | | | | |
|--------------------------|------------------|-----------------------|------------|
| 19. Socioeconomic Status | A. Upper class | B. Upper-middle class | |
| | C. Middle class | D. Lower-middle class | |
| | E. Working class | | |
| 20. Classification | A. Freshman | B. Sophomore | C. Junior |
| | D. Senior | E. Other | |
| 21. GPA | A. less than 2.0 | B. 2.0-2.5 | C. 2.5-3.0 |
| | D. 3.0-3.5 | E. 3.5-4.0 | |

THE END. THANK YOU FOR TAKNG THE TIME TO COMPLETE THIS SURVEY.

REFERENCES

- Adams, A., & Hancock, T. (2000). Work experience as a predictor of MBA performance. *College Student Journal*, 34(2), 211–216.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998).
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Clinical and Social Psychology*, 4, 359–373.
- Bradley, G. (2006). Work participation and academic performance: a test of alternative propositions. *Journal of Education and Work* 19(5), 481-505.
- Butler, A. (2007). Job characteristics and college performance and attitudes: A model of work-school conflict and facilitation. *Journal of Applied Psychology*, 92(2), 500-510.
- Cable, D. M., & Edwards, J. E. (2004). Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology*, 89, 822-834.
- Callanan, G. & Benzing, C. (2004). Assessing the role of internships in the career oriented employment of graduating college students. *Education and Training*, 46(2), 82-89.
- Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 1, pp. 687–732). Palo Alto, CA: Consulting Psychologists Press.
- Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93, 55-64.
- Dierdorff, E. C., & Surface, E. A. (2008). Assessing training needs: Do work experience and capability matter? *Human Performance*, 21, 28-48.

- Fenollar, P., Roma'n, S. & Cuestas, P. J. (2007). University students' academic performance: An integrative conceptual framework and empirical analysis. *British Journal of Educational Society*, 77, 873-891.
- Finch, M. D., Shanahan, M. J., Mortimer, J. T., & Ryu, S. (1991). Work experience and control orientation in adolescence. *American Sociological Review*, 56, 597-611.
- Findley, M. J., & Cooper, H. M. (1983). Locus of control and academic achievement: A literature review. *Journal of Personality and Social Psychology*, 44, 419-427.
- Gottfried, A. (1985). Academic intrinsic motivation in elementary and junior high school students. *Journal of Educational Psychology*, 77, 631-645.
- Harter, S. (1981). A new self-report scale of intrinsic versus extrinsic orientation in the classroom: Motivational and informational components. *Developmental Psychology*, 17, 300-312.
- Healy, C. C., & Mourton, D. C. (1987). The relationship of career exploration, college jobs, and grade point average. *Journal of College Student Personnel*, 28, 28-36.
- Hsieh, P., Sullivan, J. R., & Guerra, N. S. (2007). A closer look at college students: Self efficacy and goal orientation. *Journal of Advanced Academics*, 18(3), 454-476.
- Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job performance relations: A socioanalytic perspective. *Journal of Applied Psychology*, 88, 100-112.
- Jerusalem, M., & Schwarzer, R. (1979). The General Self Efficacy Scale. Retrieved from <http://userpage.fu-berlin.de>
- Kernis, M.H. (1984). Internal versus external attributions are important determinants of subsequent performance. (*Eric Document Reproduction Service No. ED 252 789*).
- Kane, S. T., Healy, C. C., & Henson, J. (1992). College students and their part-time jobs: Job congruency, satisfaction, and quality. *Journal of Employment Counseling*, 29, 138-144.
- Knouse, S. B., Tanner, J. R. & Harris, E. W. (1999). The relation of college internships, college performance, and subsequent job opportunity. *Journal of Employment Counseling*, 36(1), 35-43.
- Linnenbrink, E. A., & Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review*, 31, 313-327.

- Lucas, R., & Lammont, N. (1998). Combining work and study: an empirical study of full time students in school, college and university. *Journal of Education and Work*, 11, 41–56.
- Luzzo, D. A., McWhirter, E. H. & Hutcheson, K. G. (1997). Evaluating career decision making factors associated with employment among first-year college students. *Journal of College Student Development*, 38, 166–172.
- McInnes, C., & Hartley, R. (2002). Managing study and work: The impact of full-time study and paid work on the undergraduate experience in Australian universities [Electronic version]. Department of Education, Science and Training, Commonwealth of Australia. Retrieved from <http://www.dest.gov.au>
- Miller, J. (1988). Jobs and work. In N. J. Smelser (Ed.), *Handbook of sociology* (pp. 327–359). Newbury Park, CA: Sage.
- Mortimer, J. T., Harley, C., & Staff, J. (2002). The quality of work and youth mental health. *Work and Occupations*, 29, 166–197.
- Niemiec, R. P., Sikorski, C., & Walberg, H. J. (1996). Learner-control effects: A review of reviews and a meta-analysis. *Journal of Educational Computing Research*, 15(2), 193–203.
- North Central Regional Educational Laboratory. (2004). Retrieved from <http://www.ncrel.org>
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66, 543–578.
- Pike, G. R., Kuh, G. D. and Massa-McKinley, R. (2008). First-year students' employment engagement, and academic achievement: Untangling the relationship between work and grades. *NASPA Journal*, 45(4), 560–582.
- Pintrich, P. R., & Schunk, D. H. (2002). The role of goals and goal orientation. In P. R. Pintrich & D. H. Schunk (Eds.), *Motivation in education: Theory, research and application* (2nd ed., pp. 190–242). Englewood Cliffs, NJ: Simon & Schuster.
- Rittman, Andrea. (1999). Psychological factors related to academic performance and retention in first year college students. *Psi Chi Journal*, 4(1), 27–32.
- Schambach, T., & Kephart, D. (1997). Do I/S students value internship experiences? *Proceedings of the International Academy for Information Management Annual Conference* (12th, Atlanta, GA, U.S.A), 236–241.
- Schunk, D. H. (1981). Modeling and attributional effects on children's achievement: A self-efficacy analysis. *Journal of Educational Psychology*, 73, 93–105.

- Stipek, D. J. (1988). *Motivation to learn: From theory to practice*. Englewood Cliffs, NJ: Prentice Hall.
- Swail, W. S., & Kampits, E. (2004). Work-based learning & higher education: A Research perspective. *Educational Policy Institute*. Retrieved from <http://www.educationalpolicy.org>
- Taylor, S. M. (1988). Effects of college internships on individual participants. *Journal of Applied Psychology*, 73(3), 393-401.
- University of Victoria, (2004). Top ten transferable skills most likely to be of interest to employers, Human Resources. Retrieved from <http://web.uvic.ca>
- Vogelgesang, L. J., & Astin, A. W. (2000). Comparing the effects of community service and service-learning. *Michigan Journal for Community Service Learning* 7, 25-34.
- Wiest, D., Wong, D., & Kreil, D. (1998). Predictors of academic performance and global self-worth among regular education, learning disabled, and continuation high school students. *Adolescence*, 33, 601-619.
- Williams, K. J., & Alliger, G. M. (1994). Role stressors, mood spillover, and perceptions of work-family conflict in employed parents. *Academy of Management Journal*, 37, 837-868.
- Zimmerman, B. J. (1989). A social-cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81, 329-339.
- Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, 31(4), 845-862.

VITA

Vishanti Persad was born in Trinidad & Tobago on July 25, 1985, the daughter of Khali and Sintra Persad. After completing her work at McNeil High School, Austin, Texas, in May of 2003, she entered the University of Texas at San Antonio and received her Bachelor of Arts degree in May 2007. Following graduation, she was employed as an administrative assistant at the Texas Department of Transportation in Austin, Texas. In August of 2008, she entered the Graduate College of Texas State University-San Marcos to study Health Psychology.

Permanent Address: 7100 Tesoro Trail

Austin, Texas 78729

This thesis was typed by Vishanti R. Persad.