August 2020

Exploring the Association of Academic Psychological Capital and Experiential Learning with Academic Performance

Diane Kutz
University of South Florida

Follow this and additional works at: https://scholarcommons.usf.edu/etd

Part of the Business Administration, Management, and Operations Commons, Education Commons, and the Psychology Commons

Scholar Commons Citation

This Dissertation is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.
Exploring the Association of Academic Psychological Capital and Experiential Learning with Academic Performance

by

Diane Kutz

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Business Administration
Muma College of Business
University of South Florida

Co-Major Professor: Gert-Jan de Vreede, Ph.D.
Co-Major Professor: Robert W. Hammond, D.B.A.
Sajeev Varki, Ph.D.
Doug Hughes, Ph.D.

Date of Approval:
June 12, 2020

Keywords: Hope, Efficacy, Resilience, Optimism, Social Cognitive Theory, Broaden and Build Theory

Copyright © 2020, Diane Kutz
DEDICATION

I would like to dedicate this dissertation to my parents, who instilled in me a genuine love for learning and inspired me to focus on the positive and persevere through all trials. My father, a survivor of World War II, unknowingly sparked my interest in positive psychology when he gave me my first book - *The Power of Positive Thinking* by Norman Vincent Peale. This focus on the positive has sustained me through the many trials of life, including this dissertation and this never-ending year of 2020! My mother always encouraged me to see the positive side of every trial. I wish they were still alive to celebrate this accomplishment with me! I owe them a great depth of gratitude!
ACKNOWLEDGMENTS

I want to thank my loving, dedicated, husband Kelly, who encouraged me to pursue this doctorate and has supported me on this journey. I also want to thank my children, Becka, Brandon, Kaitlyn, Matthew, Lucas, and Jonathan, my son-in-law Chase Christian, and my soon to be son-in-law, Armand Hunt, for their support and continuous encouragement.

I want to thank my dissertation committee, my cohort, my colleagues, and my friends for their advice, help and encouragement along the way. I couldn’t have done this without all of you!
# TABLE OF CONTENTS

List of Tables ........................................................................................................ iii

List of Figures ........................................................................................................ iv

Abstract ................................................................................................................ v

Chapter One: Introduction ...................................................................................... 1
  Literature Review .................................................................................................. 5
  Positive Psychology .............................................................................................. 6
  Positive Organizational Scholarship (POS) ........................................................ 7
  Positive Organizational Behavior (POB) ............................................................. 7
  Psychological Capital (PsyCap) ........................................................................... 8
  Academic Psychological Capital and Academic Performance ......................... 10
  Experiential Learning and Academic Performance ........................................... 12
  Academic Psychological Capital / Experiential Learning and Academic
  Performance ......................................................................................................... 13
  Social Cognitive Theory (SCT) ........................................................................... 13
  Broaden and Build Theory .................................................................................. 14
  Research Model ................................................................................................... 16

Methodology ........................................................................................................... 16
  Sample and Procedure ......................................................................................... 16
  Measures .............................................................................................................. 17
    Academic Psychological Capital ........................................................................ 17
    Academic Performance ....................................................................................... 18
    Participation in Experiential Learning Activities ............................................. 18
    Demographic Variables ..................................................................................... 19
    Extra Credit ........................................................................................................ 19

Research Findings .................................................................................................. 19
  Hypothesis 1 Analysis ......................................................................................... 21
  Hypothesis 2 Analysis ......................................................................................... 22
  Hypothesis 3 Analysis ......................................................................................... 24
  Exploratory Statistical Analysis ......................................................................... 24

Discussion and Conclusion ..................................................................................... 26

Future Studies and Limitations ............................................................................. 30

References .............................................................................................................. 31

Appendices ............................................................................................................. 35
Appendix A: Reliability Measures of Academic Psychological Capital
Measurement........................................................................................................................................36
Appendix B: Code Book for Variables.................................................................................................37
LIST OF TABLES

Table 1: Age and Gender Breakdown ................................................................. 20
Table 2: Major Disciple Breakdown ................................................................ 20
Table 3: Highest Parental Education Breakdown .............................................. 20
Table 4: Number of Hours Worked and Studied Breakdown ............................ 20
Table 5: Descriptive Statistics ........................................................................ 21
Table 6: Regression .......................................................................................... 21
Table 7: Participation Intensity ........................................................................ 22
Table 8: Participation Intensity Categorization ............................................... 22
Table 9: Tukey’s Test on Categorized Participation in Experiential Learning and GPA ........... 23
Table 10: Hypothesis 2 Regression Model ......................................................... 23
Table 11: Coefficients for Interaction Effect ..................................................... 24
Table 12: Multiple Regression Model without Interaction ................................. 24
Table 13: Exploratory Regression Model ......................................................... 25
Table 14: ANOVA ............................................................................................ 25
Table 15: Coefficients ...................................................................................... 25
LIST OF FIGURES

Figure 1: Recreated from: Source COB Provides a Total Student Experience. UNA (2015).......4

Figure 2: Source: Adapted from Psychological Capital and Beyond, Luthans, et al, 2015 p.25.................................................................................................................................8

Figure 3: Four Components of Psychological Capital .........................................................9

Figure 4: Source: Adapted from Positive Psychological Capital: Beyond the human and social, Luthans et. Al (2004), p. 46.......................................................................................10

Figure 5: Research Model ..................................................................................................16
ABSTRACT

This research study expands upon the body of research seeking to define the effect of Academic Psychological Capital (Academic PsyCap) and student Participation in Experiential Learning on one success measure of students, Academic Performance, as measured by grade point average (GPA). It also seeks to investigate the moderating effect of Experiential Learning on the relationship between Academic PsyCap and Academic Performance. The study argues that Social Cognitive Theory and Broaden and Build Theory supported a reciprocal relationship between Academic PsyCap and Participation in Experiential Learning Activities and the positive relationship between both constructs and Academic Performance.

The study was conducted at a regional university located in the south where juniors and seniors enrolled in the College of Business were surveyed. The survey contained questions regarding their Academic PsyCap, their participation in Experiential Learning Activities, and their GPA. The study found a statistically significant positive correlation between Academic PsyCap and GPA as well as a statistically significant positive correlation between Academic PsyCap and participation in Experiential Learning. An interesting note was there was not a statistically significant difference between participating in one, two, or three or more activities, indicating that it is not the intensity of participation but rather that they participated in at least one activity. Lastly, the study did not find evidence of an interaction effect of Participation in Experiential Learning on the relationship between Academic PsyCap and Academic Performance.
This research is important for institutions of higher learning as they seek to differentiate themselves, increase their impact, and improve the success of their students during college and after graduation. It is also an important consideration during social isolation due to the COVID-19 pandemic, in that institutions of higher learning need to ensure that they continue to provide avenues for students to participate in Experiential Learning in the era of social distancing.
CHAPTER ONE:
INTRODUCTION

Students are entering a workplace that is dynamic, highly competitive, fast-paced, global, and uncertain. To achieve and sustain a competitive advantage, organizations must increasingly rely on their human resources (B. C. Luthans, Luthans, & Jensen, 2012). These human resources must bring to the table more than just technical skills and intellectual abilities (human capital), and relationships and networks (social capital); they must also bring to the table positive psychological capital (Hope, Confidence, Resilience, and Optimism) (F. Luthans, Luthans, & Luthans, 2004). Therefore, as the overarching goal of higher education is to prepare our students to be successful in the workforce, we must go beyond just teaching technical and intellectual skills and also focus on developing a student’s positive psychological capital (B. C. Luthans, Luthans, & Avey, 2014; B. C. Luthans et al., 2012; Siu, Bakker, & Jiang, 2014; Sweet, Swayze, & Busse, 2019).

Psychological Capital (PsyCap) is defined as:

... an individual’s positive psychological state of development and is characterized by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success. (F. Luthans, 2007, p. 2)

Research has shown that positive psychological resources such as PsyCap are strongly related to academic performance (B. C. Luthans et al., 2012; Sweet et al., 2019) as well as
desired employee and personal outcomes such as productivity, work performance, job satisfaction, positive attitudes, positive behaviors, good health, positive relationships, and feelings of well-being (F. Luthans, Avolio, Avey, & Norman, 2007; F. Luthans & Youssef-Morgan, 2017). PsyCap, initially studied in workplace settings, was modified by B. C. Luthans et al. (2012) to be relevant in an academic setting. In such a context, it is referred to as Academic Psychological Capital (Academic PsyCap). Academic PsyCap has been demonstrated in empirical studies to contribute to desired management education outcomes such as academic performance (B. C. Luthans et al., 2012), student engagement (Luthans, Luthans, & Palmer 2016), and student adjustment (Hazan Liran & Miller, 2019). Furthermore, PsyCap is a state-like trait, such that someone can improve their Psychological Capital through personal growth and development (F. Luthans & Youssef, 2007).

There are a multitude of research studies exploring interventions to develop Psychological Capital. F. Luthans, Avey, Avolio, Norman, and Combs (2006) developed a micro-intervention they named Psychological Capital Intervention (PCI), and testing has shown preliminary support that this intervention results in increased PsyCap. B. C. Luthans et al. (2014) studied the PCI intervention with business students and found initial support for its effectiveness, and in turn, the malleability of PsyCap. They note that other strategies may be effective in helping to maintain and enhance PsyCap, including vicarious learning. They define this as students “… placing themselves in positive situations and to identify efficacious role models” (p. 197).

Vicarious learning differs from experiential learning in that vicarious learning is focused on observational activities, while Kolb (1984) defines experiential learning as: “the process whereby knowledge is created through the transformation of experience. Knowledge results from
the combination of grasping and transforming experience” (p. 41). This provides the motivation for this study focusing on experiential learning activities that include observational learning (vicarious) and experiential learning.

While there is an abundance of research on the topic of experiential learning, there has been limited research on the relationship between experiential learning activities and academic performance. Two studies, one by Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008) and the other by Antonio and Gema (2019), found that Participation in Experiential Learning activities is strongly related to academic performance. Also, in an initial exploratory study, K. W. Luthans, Luthans, and Palmer (2016) proposed that students with a higher PsyCap would have higher levels of engagement in what they termed educationally sound activities, such as internships and study abroad programs. They found that there is “... a significant relationship between the academic PsyCap of undergraduate business students and their levels of engagement in educationally sound activities” (p.1112).

That said, this study narrows the focus of experiential learning activities to six different categories of experiential learning activities; global engagement/study abroad, internships, idea creation events, networking with student and professional organizations or clubs, earning certifications or badges, and presenting research. These activities were selected because they are the focus of The University of North Alabama College of Business’ focus on the Total Student Experience, as shown in Figure 1. This program launched in 2015, and according to Dr. Guihua Li, Director of Asia Programs and Assurance of Learning, “This [Total Student Experience] framework will help us to guide our delivery of the education experience to students. We started with students in mind. Of course, academics is one major part of it, with different concentrations
in different areas. However, if we want students to be successful, to be contributing citizens after they leave college, we’ve got to have all these other areas in mind” (UNA, 2015).

**Figure 1.** Recreated from: Source COB Provides a Total Student Experience. UNA (2015).*


This research study seeks to expand upon the body of research seeking to define further the effect of Academic PsyCap and student Participation in Experiential Learning on one success measure of students, Academic Performance, as measured by GPA. It also seeks to investigate the moderating effect of Experiential Learning on the relationship between Academic PsyCap and Academic Performance. Therefore, this study seeks to answer the following research questions.

*Research Question 1:* What is the effect of Academic Psychological Capital on Academic Performance?
Research Question 2: What is the effect of Participation in Experiential Learning activities on GPA?

Research Question 3: What is the moderating effect of Student Participation in Experiential Learning on the relationship between Academic Psychological Capital and Academic Performance?

This dissertation begins with a discussion regarding the development of the Academic PsyCap construct, followed by a discussion of relevant literature related to Academic PsyCap and Academic Performance (Hypothesis 1), Experiential Learning and Academic Performance (Hypothesis 2), and lastly, Academic PsyCap / Experiential Learning and Academic Performance (Hypothesis 3). The dissertation then focuses on the methodology of the study and the study findings. Lastly, the dissertation discussion focuses on the importance of the findings, future studies, and implications for university administrators and students.

Literature Review

The literature review begins with a discussion regarding the development of the Academic PsyCap construct. It starts with the history of Positive Psychology, followed by coverage of Positive Organizational Scholarship (POS) and Positive Organizational Behavior (POB), and Psychological Capital (PsyCap). The focus then turns to Academic PsyCap and Academic Performance, Experiential Learning and Academic Performance, and lastly, the theories beyond the proposed moderating effect of Experiential Learning on the relationship between Academic PsyCap and Academic Performance.
Positive Psychology

Linley, Joseph, Harrington, and Wood (2006) point out that positive psychology has been around for many decades, tracing it back to the 1902 writings of William James. However, Martin Seligman brought it back to the forefront in his 1998 Presidential Address to the American Psychological Association. Seligman called for a re-focus on “positive psychology,” and he defined this as “… a reoriented science that emphasizes the understanding and building of the most positive qualities of an individual: optimism, courage, work ethic, future-mindedness, interpersonal skill, the capacity for pleasure and insight, and social responsibility” (Fowler & Seligman, 1999, p. 559). While it seems that the negatives always appear to outweigh the positives, according to Seligman, the negative effects of World War II had narrowed the focus of psychology on healing the damages of the psyche. This focus on mental illness and negative psychological states brought in grants which led to a wealth of research; however, the profession had essentially ignored the positive side of psychology for many years (Seligman & Csikszentmihalyi, 2000, p. 5). Seligman called for “… a “positive psychology” that explicitly focuses on studying and understanding “normal” people’s well-being, productivity, optimal functioning, and realizing one’s full potential” (F. Luthans & Youssef-Morgan, 2017, p. 340).

This positive psychology movement has exploded with scholarly research published in a variety of journals, including the Journal for Positive Psychology, established in 2006. Additionally, many handbooks and bestselling practitioner-oriented books have been written about positive psychology (F. Luthans, Youssef-Morgan, & Avolio, 2015). It was out of this focus that the areas of positive organizational scholarship (POS), positive organizational behavior (POB), and lastly, psychological capital (PsyCap) were born.
Positive Organizational Scholarship (POS)

According to K. S. Cameron and Caza (2004), “Positive organizational scholarship (POS) is the study of that which is positive, flourishing, and life-giving in organizations” (p 731). The inclusion of the word scholarship is important to note, as it delineates this concept as research-based. POS acknowledges both the positive and negative of the organizational environment and advocates for a positive process approach. There is an overwhelming focus on the negative in business, and scholarly literature, thus the focus on positive organizational scholarship is to address this issue and bring forth a more positive outlook (K. S. Cameron & Caza, 2004).

Positive Organizational Scholarship (POS) is the primary focus of a research team at the University of Michigan (K. Cameron, Dutton, & Quinn, 2003) and it is closely related the Positive Organizational Behavior (POB) that emanates primarily from the University of Nebraska’s Gallup Leadership Institute (F. Luthans, 2002; F. Luthans & Church, 2002).

Positive Organizational Behavior (POB)

Positive Organizational Behavior (POB), defined “… as the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (F. Luthans & Church, 2002, p. 59), is the framework for Psychological Capital.

“One of the most important POB criteria, and a distinguishing characteristic of PsyCap, is its plasticity or malleability and openness to change and development” (F. Luthans & Youssef-Morgan, 2017, p. 344). F. Luthans and Youssef (2007) explain that while traits, such as intelligence, have been shown to be stable over time, and states, like mood, are continuously changing, the four constructs of PsyCap are state-like in they are not on either end of that
continuum. Figure 2 presents a graphic of this continuum, showing where Psychological Capital falls in the continuum.

**Figure 2.** Source: Adapted from Psychological Capital and Beyond, Luthans, et al, 2015 p. 25

**Psychological Capital (PsyCap)**

Psychological Capital, born out of Positive Organizational Behavior (POB), focuses on the positive constructs of hope, self-efficacy, resilience, and optimism. Diagramed in figure 3, these “… four components are now sometimes referred to as the HERO within for ease of recall” (F. Luthans et al., 2015, p. 28).

Prior research has shown that positive psychological resources; such as Psychological Capital are strongly related to academic performance (B. C. Luthans et al., 2012; Sweet et al., 2019) as well as desired employee and personal outcomes such as productivity, work performance, job satisfaction, positive attitudes, positive behaviors, good health, positive relationships, and feelings of well-being (F. Luthans et al., 2007; F. Luthans & Youssef-Morgan, 2017).
Today’s business environment, “…requires flexibility, innovation, and speed-to-market, effectively developing and managing employees’ knowledge, experiences, skills, and expertise—collectively defined as “human capital”—has become a key success factor for sustained organizational performance” (F. Luthans et al., 2004). Even in this day of rampant automation, human capital is still of critical value for organizational competitiveness. Bill Gates has been quoted as saying that the most important assets of Microsoft go home every night (F. Luthans et al., 2004).

F. Luthans et al. (2004) expands the traditional capital model to account for the increasing importance of human and social capital as well as positive psychological capital, as shown in figure 4.

This is “… consistent with the resource-based theory of the firm that human capital can provide a company with an asset that is valuable, rare, and difficult to replicate—and therefore a source of sustained competitive advantage” (F. Luthans et al., 2004). Many studies have shown that psychological capital is a valuable asset to companies (F. Luthans, 2007), (F. Luthans et al.,...
Additionally, prior research has shown that students with higher academic psychological capital perform better in the classroom (Sweet et al., 2019), (B. C. Luthans et al., 2014), (Vanno, Kaemkate, & Wongwanich, 2014). Therefore, focusing on improving student academic psychological capital will have a two-fold impact.

**Figure 4.** Source: Adapted from Positive Psychological Capital: Beyond the human and social, Luthans et. Al (2004), p. 46.

**Academic Psychological Capital and Academic Performance**

The first study on Academic Psychological Capital was by B. C. Luthans et al. (2012), and they adapted the Psychological Capital Questionnaire (PCQ) to fit the academic setting. The adapted Psychological Capital Questionnaire (PCQ), simply adapted the questions to focus on a student’s schoolwork, rather than their overall life. This first study was conducted at a medium-sized Midwestern university, and they surveyed 95 undergraduate students that were enrolled in business courses. The study found that Academic Psychological Capital was positively related to Academic Performance based on their self-reported GPA’s (r = .281 and R² = .079). This conclusion is further supported by research by Martínez, Youssef-Morgan, Chambel, and Marques-Pinto (2019) who studied Portuguese and Spanish students at two public universities in their respective countries and found a statistically significant positive correlation between
Psychological Capital and Academic Performance as well as a significant direct effect at p < .01 (Portuguese $\beta = 0.21$; Spanish $\beta = 0.32$).

A study by Sweet et al. (2019) of incoming first-year students at a liberal arts college in the Mid-Atlantic region further supports this hypothesis. This study focused on their Academic Psychological Capital, their actual fall and spring GPAs, and a predictive GPA. The university calculated this predictive GPA using an algorithm that took into account their high school performance and standardized test scores. They measured the student’s Academic Psychological Capital at the beginning of their first semester (fall), but there is no indication that it was measured again. The study found a statistically significant positive relationship between Psychological Capital and actual fall ($r = .132$) and spring GPA ($r = .176$), suggesting that “… as PsyCap increased so did academic performance” (p. 135). However, they did not find that Academic Psychological Capital was a statistically significant predictor of fall GPA ($p = .079$). However, they found that it was a statistically significant predictor of spring GPA ($p = .009$), but with a low effect size ($\Delta$Adjusted$R^2 = .004$), when adjusted for the control of predicted GPA.

While this data may seem contradictory, the explanation may lie in the adjustment period that students go through during their first semester.

One contradictory study was found by Vanno et al. (2014). Their study was based on Thai undergraduate psychology majors, where they made the opposite claim and reported that “academic performance has a direct effect on students’ PsyCap” (p.5), ($\beta = .249$ $P < .001$). Their argument in justification of this directionality is not cogent, and one paper that they reference, Walumbwa, Luthans, Avey, and Oke (2011), has since been retracted by the Journal of Organizational Behavior. The retraction statement notes:

“This retraction is on the grounds of the authors’ advice that they made an error in relation to the level of analysis used. As a result of this error, the authors
incorrectly calculated key fit statistics. When correctly estimated, the fit statistics do not provide an acceptable level of support for the hypothesized model, render the authors’ conclusions, as stated in the article, unsustainable.” (“Retraction statement : Authentically leading groups: The mediating role of collective psychological capital and trust," 2014, p. 1)

In line with the above research, I hypothesize the following:

*Hypothesis 1:* Academic Psychological Capital has a positive effect on GPA.

**Experiential Learning and Academic Performance**

An early reference to the term experiential learning was in a book written by John Dewey in 1938 entitled “Experience and Education.” In this book, Dewey “… sought to develop a theory of experience and present his thoughts about experience as an optimal stimulus for learning” (Mandell, Coulter, & Beard, 2018, p. 27). Mandell et al. (2018) made the statement when discussing experiential learning today that:

“Experience *for* learning, and the experience *of* learning, are designed and/or interpreted by professional educators as serving as guides, instructors, mentors, and coaches. They are educative experiences that engage the whole person and stimulate investigation and interaction among learners, learners and teachers, and learners and their environment.” (p. 28)

Based on Dewey’s work and the work of other scholars, Kolb (1984) introduced experiential learning theory (ELT), and he defined experiential learning as: “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (p. 41). The experiential learning activities that are the topic of this paper; global engagement/study abroad, internships, idea creation events, networking with student and professional organizations or clubs, earning certifications or badges, and presenting research are all designed for the student to take their classroom knowledge and interact with others to further expand and solidify this knowledge through these experiences.
Research on the topic of experiential learning is broad and encompasses the topic of student engagement including the National Survey of Student Engagement (NSSE), which is an annual survey administered to first-year and senior students regarding their “…participation in programs and activities that institutions provide for their learning and personal development” (Center for Postsecondary Research, 2020, p. 1). There seem to be limited studies providing evidence of a relationship between experiential learning and academic performance. A study conducted by Kuh et al. (2008) combined data from the NSSE with student background and pre-college experiences and academic and financial aid information. They found that student background and pre-college experiences accounted for approximately “…29% of the variance in first-year grades. Adding student engagement measures to the model accounted for an additional 13% of the variance in first-year GPA…” (p. 546). Antonio and Gema (2019) studied 80 students enrolled in a course at a Spanish Business School. Their experiential learning activity was a class project, and they measured grades on the experiential learning project in comparison with exam grades and found a statistically significant positive relationship ($r = 0.523, r^2 = 0.124$).

In consideration of the above research, I hypothesize the following:

*Hypothesis 2: Participation in Experiential Learning Activities has a positive effect on GPA.*

**Academic Psychological Capital / Experiential Learning and Academic Performance**

The basis for my argument regarding the moderating effect of experiential learning comes from two theories; 1) Social Cognitive Theory (SCT) and 2) Broaden and Build Theory.

*Social Cognitive Theory (SCT)*
Social Cognitive Theory (SCT) was first introduced as Social Learning Theory (Bandura, 1977) but was revised and renamed Social Cognitive Theory (SCT) in 1986 (Bandura, 1986). This theory presents three important insights into learning: 1) we learn from direct experiences, and through observation, 2) our environment, our internal factors, and our behavior are reciprocally related to each other, and 3) self-efficacy is an important internal factor (Bandura, 1977). Experiential learning activities provide students with all three of these important components of learning, and self-efficacy is one of the individual constructs in the composite construct of Psychological Capital. I argue that all four of the individual components of PsyCap are a part of Bandura’s internal factors. SCT helps to explain the proposed relationship between Academic Psychological Capital Experiential Learning and Academic Performance as through Participation in Experiential Learning activities the student is presented with the opportunity to learn through direct experiences and observation, thus resulting in learning and increased Academic Performance but also an increase in internal factors like Psychological Capital.

**Broaden and Build Theory**

B. L. Fredrickson (1998) introduced the broaden-and-build theory, which “… states that certain discrete positive emotions – including job, interest, contentment, pride, and love – although phenomenologically distinct, all share the ability to broaden people’s momentary thought-action repertoires and build their enduring personal resource, ranging from physical and intellectual resources to social and psychological resources” (B. L. Fredrickson, 2001, p. 219). She argues that these feelings of positivity can lead over time to increased emotional well-being and greater resilience. Barbara L. Fredrickson (2004) stresses that positive emotional states build personal resources that can be called upon when necessary, such as when presented with
difficult situations to help a person overcome those situations. She distinctly mentions the construct of resilience, which is contained in the composite construct of Psychological Capital.

Martínez et al. (2019, p. 1049), discussing the Broaden and Build Model, state that “… positivity broadens people’s thought-action repertoires so that they can expand their perspective and consider more diversified goals and a wider range of courses of action. In contrast, negativity narrows one’s perspective to tried-and-true paths, excluding viable but perhaps more creative and venturesome approaches. In addition, positivity facilitates the development (building) of additional physical, social, and psychological resources, which can be drawn upon in times of challenge or negativity”. University students face numerous challenges throughout the university careers, especially as they approach graduation and embarking upon their careers.

It is, therefore, essential that educators seek to build up a student’s positive psychological resources to enable them to more effectively navigate the challenges that invariably will be placed in front of them (Martínez et al., 2019). These experiential learning activities act to expand the mind of the student and will foster positivity leading to increased emotional well-being, which, based on these theories, will, in turn, lead to improved Academic Performance and also an increase in internal factors like Psychological Capital.

Social Cognitive Theory and Broaden-and-Build Theory support a reciprocal relationship between Academic Psychological Capital and Participation in Experiential Learning Activities and the positive relationship between both constructs and Academic Performance. Additionally, they support the moderating effect of Experiential Learning on the relationship between Academic PsyCap and Academic Performance. Therefore, I hypothesize the following:

Hypothesis 3: The positive effect of Academic Psychological Capital on GPA is moderated by student Participation in Experiential Learning Activities. Lower Participation in
Experiential Learning will attenuate the effect on GPA, and higher participation accentuates the effect on GPA.

Research Model

![Diagram showing the relationship between Academic PsyCap, Participation in Experiential Learning, and Academic Performance / GPA with hypotheses H1, H2, and H3.]

Figure 5. Research Model

Methodology

Sample and Procedure

I conducted this study at a regional university located in the south. The intended study participants were juniors and seniors enrolled in the College of Business, a population of approximately 750 students. To reach this audience, I contacted all the professors teaching 300/400 level business courses in the College of Business at the University of North Alabama, asking them to invite their students to participate in this research study. They had the option to incentivize the students by providing the opportunity to earn extra credit. The students were informed of the purpose of the study and voluntarily participated by completing the anonymous online survey embedded in their course, designed to assess levels of Academic Psychological Capital, GPA, and Participation in ten different Experiential Learning activities. The Qualtrics
report showed that 740 surveys were completed, but six of those lacked informed consent and were prematurely closed. Sixty-two surveys were marked incomplete by Qualtrics as the students stopped answering questions before completing all of the PsyCap questions, and 100 surveys were prematurely closed when the student answered that they had already completed the survey. The time to complete the survey was also investigated. The average time that it took for the researcher to complete the survey was approximately three minutes (173.75 seconds), so it was determined that any student completing the survey in less than that amount of time might not have taken the survey seriously. Nineteen survey responses were removed based on the analysis of the time taken to complete the survey. Another check was done on the reverse coded items, and upon investigation, it was determined that four people had straight-lined the survey giving all 6’s (highly agree) but they selected 1’s (highly disagree) on the reverse coded questions, so their survey results were removed as well. Lastly, two surveys submitted by graduate students were removed from the sample, resulting in 547 survey results to analyze, resulting in data from 72% of the total target population of 750 junior and senior students enrolled in the College of Business.

**Measures**

*Academic Psychological Capital*

Academic Psychological Capital was measured using a modification of the 24-item Psychological Capital Questionnaire (F. Luthans, 2007; F. Luthans et al., 2007) adapted by (B. C. Luthans et al., 2014; B. C. Luthans et al., 2012) to be relevant to students and school work. This adapted measure has been shown to be both reliable and valid in previous research studies, with a Cronbach’s α measures of 0.90, 0.89, 0.93, and 0.93 (B. C. Luthans et al., 2014; B. C. Luthans et al., 2012; K. W. Luthans et al., 2016). The PsyCap score was determined by
computing the mean value as instructed in the Psychological Capital Questionnaire (PCQ) Manual (F. Luthans, Avolio, & Avey, 2014). While the Overall Psychological Capital Questionnaire was available from Mind Garden, the Academic adaptation was not, so I emailed Dr. Fred Luthans. He gladly provided me with the adapted Psychological Capital Questionnaire (PCQ), measuring Academic Psychological Capital. Sample questions included:

- “I feel confident contributing to discussions about strategies on my school work.”
- “At the present time, I am energetically pursuing my school work goals.”
- “I usually manage difficulties one way or another concerning my school work.”
- “When things are uncertain for me with regards to my school work, I usually expect the best.”

The internal consistency reliability of the instrument was Cronbach’s $\alpha = 0.928$ for this study, which is consistent with prior literature.

**Academic Performance**

Academic Performance was measured by self-report. The student selected their GPA as of the end of the prior term from a list of possible GPA’s ranging from 4.0 to below 2.0, on the anonymous survey.

**Participation in Experiential Learning Activities**

Participation in Experiential Learning activities was measured by asking a series of questions pertaining to a student’s Participation in Experiential Learning activities at The University of North Alabama; specifically, study abroad trips, student or professional clubs or organizations, competitions, internships, professional certifications, badges, and research presentations.
**Demographic Variables**

The following descriptive questions were asked:

- Age, based on age brackets of 18-20, 21-23, 24-27, 27-29, and 30 and older
- How many hours they typically work per week at a job
- How many hours they typically spend each week on school work
- If they live on campus
- Gender
- Full or Part-time Status
- Domestic or International Student
- Major Discipline
- Highest education level attained by any parent

**Extra Credit**

The students had the opportunity to connect to a secondary, detached survey to enter their names and course numbers. This information was then sorted by course number and provided to the individual course professors for use in giving extra credit if they offered that to their students for participation in my survey.

**Research Findings**

The study sample was almost evenly split between female (N=310; 56.8%) and male (N=235; 43.0%) with one person preferring not to answer the question. The majority of the students were full-time (N=495; 90.8%), domestic (N=463; 85.7%), living off-campus (N=423; 77.9%), between the ages of 21 – 23 (N=312; 57.4%). It is also interesting to note that the majority of students had a parent with at least some college education (N=474; 76.0%). The study included participants from all major disciplines offered in the University’s College of
Business with the largest percentage of the participants in Management (N=163; 30.0%), followed by Accounting and Business Law (N=127, 23.3%). The majority of the students reported that they worked at least 5 hours a week (N=395; 72.5%).

**Table 1. Age and Gender Breakdown**

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>130</td>
<td>23.9%</td>
<td>Female</td>
<td>310</td>
<td>56.8%</td>
</tr>
<tr>
<td>21-23</td>
<td>312</td>
<td>57.4%</td>
<td>Male</td>
<td>234</td>
<td>43.0%</td>
</tr>
<tr>
<td>24-26</td>
<td>38</td>
<td>7.0%</td>
<td>Non-Binary</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>27-29</td>
<td>21</td>
<td>3.9%</td>
<td>Prefer not to answer</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>30 and older</td>
<td>43</td>
<td>7.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2. Major Disciple Breakdown**

<table>
<thead>
<tr>
<th>Major Disciple</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting and Business Law</td>
<td>127</td>
<td>23.3%</td>
</tr>
<tr>
<td>Computer Science</td>
<td>29</td>
<td>5.3%</td>
</tr>
<tr>
<td>Economics</td>
<td>5</td>
<td>0.9%</td>
</tr>
<tr>
<td>Finance</td>
<td>34</td>
<td>6.3%</td>
</tr>
<tr>
<td>Information Systems</td>
<td>35</td>
<td>6.4%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>21</td>
<td>3.9%</td>
</tr>
<tr>
<td>Management</td>
<td>163</td>
<td>30.0%</td>
</tr>
<tr>
<td>Marketing</td>
<td>69</td>
<td>12.7%</td>
</tr>
<tr>
<td>Major outside College of Business</td>
<td>58</td>
<td>10.7%</td>
</tr>
<tr>
<td>Non-degree seeking student – No Major Declared</td>
<td>3</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

**Table 3. Highest Parental Education Breakdown**

<table>
<thead>
<tr>
<th>Highest Parent Education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No School Diploma</td>
<td>20</td>
<td>3.7%</td>
</tr>
<tr>
<td>High School Diploma or GED</td>
<td>111</td>
<td>20.4%</td>
</tr>
<tr>
<td>Some College</td>
<td>135</td>
<td>24.8%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>164</td>
<td>30.1%</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>95</td>
<td>17.4%</td>
</tr>
<tr>
<td>Doctorate or Professional Degree</td>
<td>20</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

**Table 4. Number of Hours Worked and Studied Breakdown**

<table>
<thead>
<tr>
<th>Hours Worked</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Hours Studied</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>150</td>
<td>27.5%</td>
<td>Less than 5 hours</td>
<td>38</td>
<td>7.0%</td>
</tr>
<tr>
<td>5 – 10 hours</td>
<td>22</td>
<td>4.0%</td>
<td>5 – 10 hours</td>
<td>185</td>
<td>34.0%</td>
</tr>
<tr>
<td>11 – 15 hours</td>
<td>37</td>
<td>6.8%</td>
<td>11 – 15 hours</td>
<td>127</td>
<td>23.3%</td>
</tr>
<tr>
<td>16 – 20 hours</td>
<td>74</td>
<td>13.6%</td>
<td>16 – 20 hours</td>
<td>84</td>
<td>15.4%</td>
</tr>
<tr>
<td>21 – 25 hours</td>
<td>56</td>
<td>10.3%</td>
<td>21 – 25 hours</td>
<td>46</td>
<td>8.5%</td>
</tr>
<tr>
<td>26 – 30 hours</td>
<td>64</td>
<td>11.7%</td>
<td>26 – 30 hours</td>
<td>39</td>
<td>7.2%</td>
</tr>
<tr>
<td>31 – 35 hours</td>
<td>32</td>
<td>5.9%</td>
<td>31 – 35 hours</td>
<td>13</td>
<td>2.4%</td>
</tr>
</tbody>
</table>
Table 4. Continued

<table>
<thead>
<tr>
<th>Hours Worked</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Hours Studied</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 – 40 hours</td>
<td>55</td>
<td>10.1%</td>
<td>36 – 40 hours</td>
<td>4</td>
<td>0.7%</td>
</tr>
<tr>
<td>&gt; 40 hours</td>
<td>55</td>
<td>10.1%</td>
<td>&gt; 40 hours</td>
<td>8</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Table 5. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Gender</th>
<th>On/Off Campus</th>
<th>Full/Part Time</th>
<th>GPA</th>
<th>Academic PsyCap</th>
<th>Participated in EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>544</td>
<td>546</td>
<td>543</td>
<td>545</td>
<td>546</td>
<td>547</td>
<td>547</td>
</tr>
<tr>
<td>Mean</td>
<td>2.15</td>
<td>1.44</td>
<td>1.22</td>
<td>1.09</td>
<td>3.23</td>
<td>4.36</td>
<td>.65</td>
</tr>
<tr>
<td>SD</td>
<td>1.075</td>
<td>.507</td>
<td>.415</td>
<td>.289</td>
<td>.519</td>
<td>.704</td>
<td>.476</td>
</tr>
<tr>
<td>Min</td>
<td>18-20</td>
<td>1 – Female</td>
<td>1 – On Campus</td>
<td>1 Full-time</td>
<td>Under 2.0</td>
<td>1.583</td>
<td>1.90</td>
</tr>
<tr>
<td>Max</td>
<td>30 +</td>
<td>4 Prefer not to answer</td>
<td>2 – Off Campus</td>
<td>2 – Part-time</td>
<td>4.0</td>
<td>4.364</td>
<td>4.00</td>
</tr>
</tbody>
</table>

*Note: See Appendix B for an explanation of how Age, Gender, On/Off Campus, and Full/Part Time are coded.

Hypothesis 1 Analysis

*Hypothesis 1: Academic Psychological Capital has a positive effect on GPA.*

The first hypothesis investigates the overall model of Academic PsyCap and Academic Performance. As indicated in the literature review, prior studies have shown a significant positive relationship between these constructs. This study agrees with those previous findings, and as such, provides support for hypothesis 1.

This study found a statistically significant positive correlation between Academic PsyCap and GPA ($r = .190$, $p < .01$). Regression analysis shows that 3.6% of the variance in GPA is accounted for by Academic PsyCap ($R^2 = .036$), as shown in Table 6.

Table 6. Regression

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic PsyCap -&gt; GPA</td>
<td>.190</td>
<td>.036</td>
<td>.034</td>
<td>.510</td>
</tr>
</tbody>
</table>
Hypothesis 2 Analysis

*Hypothesis 2: Participation in Experiential Learning Activities has a positive effect on GPA.*

The second hypothesis investigates the overall model of Participation in Experiential Learning and Academic Performance. As indicated in the literature review, prior studies have shown a significant positive relationship between these constructs. This study agrees with those previous findings, and as such, provides support for hypothesis 2.

The majority of students surveyed indicated participation in one or more activities (N = 358; 65.45%), with most participating in none, one, or two activities, as shown in Table 7.

**Table 7. Participation Intensity**

<table>
<thead>
<tr>
<th>Experiential Learning</th>
<th># of Students</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activities</td>
<td>189</td>
<td>34.55%</td>
</tr>
<tr>
<td>One Activity</td>
<td>160</td>
<td>29.25%</td>
</tr>
<tr>
<td>Two Activities</td>
<td>99</td>
<td>18.10%</td>
</tr>
<tr>
<td>Three Activities</td>
<td>48</td>
<td>8.78%</td>
</tr>
<tr>
<td>Four Activities</td>
<td>28</td>
<td>5.12%</td>
</tr>
<tr>
<td>Five Activities</td>
<td>13</td>
<td>2.38%</td>
</tr>
<tr>
<td>Six Activities</td>
<td>3</td>
<td>0.55%</td>
</tr>
<tr>
<td>Seven Activities</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Eight Activities</td>
<td>1</td>
<td>0.18%</td>
</tr>
<tr>
<td>Nine Activities</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ten Activities</td>
<td>6</td>
<td>1.10%</td>
</tr>
</tbody>
</table>

Based on the above analysis of participation, the three or more activities were all grouped, resulting in four categories of participation, none, one, two, and three or more, as shown in Table 8.

**Table 8. Participation Intensity Categorization**

<table>
<thead>
<tr>
<th>Experiential Learning</th>
<th># of Students</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activities</td>
<td>189</td>
<td>34.55%</td>
</tr>
<tr>
<td>One Activity</td>
<td>160</td>
<td>29.25%</td>
</tr>
<tr>
<td>Two Activities</td>
<td>99</td>
<td>18.10%</td>
</tr>
<tr>
<td>Three or More Activities</td>
<td>99</td>
<td>18.10%</td>
</tr>
</tbody>
</table>
An analysis of variance (ANOVA) was conducted using the participation intensity categories listed in Table 8, and the results showed a statistically significant positive relationship between Participation in Experiential Learning and GPA $F(3,542) = 8.968, p < .01)$. This relationship was investigated further by conducting post-hoc analysis using a Tukey’s test. The analysis showed that there was a significant difference between a student participating in no activities versus one, two or three or more activities. There were no statistically significant differences between participating in one, two, or three or more activities, as shown in Table 9.

Table 9. Tukey’s Test on Categorized Participation in Experiential Learning and GPA

<table>
<thead>
<tr>
<th>(I) Categorize_Intensity</th>
<th>(J) Categorize_Intensity</th>
<th>Mean Difference</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>-.179*</td>
<td>.006</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>-.229*</td>
<td>.002</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>-.291*</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>-.050</td>
<td>.867</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>-.112</td>
<td>.313</td>
</tr>
</tbody>
</table>

*Mean difference is significant at 0.05 level

The Tukey’s Test suggested that the significant factor is not the intensity of their participation but rather if they participated or not. Therefore, further analysis, using an independent samples t-test, was conducted showing a statistically significant difference in means between not participating (N = 188, Mean GPA = 3.09, SD = .554) and participating in one or more activities (N=358, Mean GPA = 3.31, SD = .482); $t(544) = 4.682, p < .01$. Regression analysis shows that 4.2% of the variance in GPA is accounted for by Participation in Experiential Learning ($R^2 = .042$) as shown in Table 10.

Table 10. Hypothesis 2 Regression Model

<table>
<thead>
<tr>
<th>Participation in EL -&gt; GPA</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.205</td>
<td>.042</td>
<td>.040</td>
<td>.508</td>
</tr>
</tbody>
</table>
Hypothesis 3 Analysis

Hypothesis 3: The positive effect of Academic Psychological Capital on GPA is moderated by student Participation in Experiential Learning Activities. Lower Participation in Experiential Learning will attenuate the effect on GPA and higher participation accentuates the effect on GPA.

The third and final hypothesis investigates the interaction effect of Participation in Experiential Learning on the relationship between Academic PsyCap and Academic Performance. Adding the interaction term into the regression equation resulted in a non-significant moderation result, Academic PsyCap * Participation in Experiential Learning with GPA (p = .919), as shown in Table 11. Therefore, hypothesis 3 is not supported.

Table 11. Coefficients for Interaction Effect

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized B</th>
<th>Coefficients Std. Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.575</td>
<td>.214</td>
<td>12.026</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Academic PsyCap</td>
<td>.120</td>
<td>.050</td>
<td>.163</td>
<td>2.421</td>
<td>.016</td>
</tr>
<tr>
<td>Participated in Experiential Learning</td>
<td>.175</td>
<td>.276</td>
<td>.160</td>
<td>.633</td>
<td>.527</td>
</tr>
<tr>
<td>Interaction</td>
<td>.006</td>
<td>.063</td>
<td>.027</td>
<td>.102</td>
<td>.919</td>
</tr>
</tbody>
</table>

Removing the interaction term from the model resulted in both Academic PsyCap and Participation in Experiential Learning being significant predictors of GPA, explaining 7.0% of the variance in GPA, as shown in Table 12.

Table 12. Multiple Regression Model without Interaction

<table>
<thead>
<tr>
<th>Academic PsyCap, Participation in EL -&gt; GPA</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>.265</td>
<td>.070</td>
<td>.067</td>
<td>.501</td>
<td></td>
</tr>
</tbody>
</table>

Exploratory Statistical Analysis

In an effort to determine if there was a variable in the data set that was causing the small effect size, the following demographic variables were dichotomized and entered into a multiple regression model in addition to Academic PsyCap and Participation in Experiential Learning.
Age Group – Age 18-23 and Age 24 and up
Hours Worked Group – 20 or less and greater than 20
Hours Studied Group – 20 or less and greater than 20
Parent Education Group – No school diploma and high school diploma versus College
Major Discipline Group – Technical Disciplines versus Non-Technical Disciplines

Management & Marketing were classified as Non-Technical while the rest of the major disciplines were coded as Technical.

The resulting regression model, as shown in table 13, provides some interesting observations, discussed below.

**Table 13. Exploratory Regression Model**

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic PsyCap, Participation in EL, Age Group, Parent_Education_Group, Technical_Non_Group, Hours_Work_Group, Hours_Study_Group-&gt; GPA</td>
<td>.342</td>
<td>.117</td>
<td>.106</td>
<td>.490</td>
</tr>
</tbody>
</table>

**Table 14. ANOVA**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>17.147</td>
<td>7</td>
<td>2.450</td>
<td>10.183</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>129.416</td>
<td>538</td>
<td>.241</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 15. Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized B</th>
<th>Coefficients Std. Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.532</td>
<td>.139</td>
<td></td>
<td>18.262</td>
<td>.000</td>
</tr>
<tr>
<td>Academic PsyCap</td>
<td>.143</td>
<td>.030</td>
<td>.195</td>
<td>4.702</td>
<td>.000</td>
</tr>
<tr>
<td>Participating in EL</td>
<td>.159</td>
<td>.045</td>
<td>.146</td>
<td>3.506</td>
<td>.000</td>
</tr>
<tr>
<td>Age Grouping</td>
<td>-.200</td>
<td>.056</td>
<td>-.150</td>
<td>-2.396</td>
<td>.056</td>
</tr>
<tr>
<td>Parent Education Grouping</td>
<td>.095</td>
<td>.050</td>
<td>.079</td>
<td>1.911</td>
<td>.056</td>
</tr>
<tr>
<td>Technical / Non-Technical Group</td>
<td>-.040</td>
<td>.043</td>
<td>-.038</td>
<td>-2.396</td>
<td>.056</td>
</tr>
<tr>
<td>Hours Worked Grouping</td>
<td>-.040</td>
<td>.044</td>
<td>-.038</td>
<td>-9.08</td>
<td>.364</td>
</tr>
<tr>
<td>Hours Study Group</td>
<td>.053</td>
<td>.054</td>
<td>.041</td>
<td>.972</td>
<td>.331</td>
</tr>
</tbody>
</table>

This exploratory model predicts 11.7% of the variation in GPA with Academic PsyCap, Participation in Experiential Learning, Age Grouping, Parent Education Grouping, and Technical
versus Non-Technical Grouping all statistically significant. It is interesting to note that younger students, 18-23 (N=444, 81.3%), had statistically significant higher mean GPA’s (Mean GPA = 3.27, SD = .509) in comparison to ages 24 and up (mean GPA = 3.05, SD = .524), p<.01. Students with parents with college education (N=414, 75.8%), have statistically significant higher GPA’s (Mean GPA = 3.26, SD = .507) in comparison with parents with no college education (Mean GPA = 3.15, SD = .545), p<.05. Lastly, those majoring in more technical programs, had higher GPA’s (Mean GPA = 3.31, SD = .497) in comparison with non-technical programs (Mean GPA = 3.17, SD = .529), p<.01.

Discussion and Conclusion

The results from hypothesis 1, support the findings from prior research, in that there is a statistically significant relationship between Academic PsyCap and Academic Performance, measured by GPA. The effect size, while small, is also consistent with prior research. There are many other variables that influence Academic Performance, measured by GPA, that were not considered in this study. However, many of these other factors are not malleable. It is possible that the statistically significant finding regarding the relationship between Academic PsyCap and Academic Performance is a valuable finding as this is a malleable factor. The interventions to improve Academic PsyCap, such as the PCI micro-intervention, studied by F. Luthans et al. (2006), would be easy to implement in existing courses and would require no additional outlay of capital; therefore, university administrators might consider implementing them.

The findings regarding hypothesis 2, the effect of Participation in Experiential Learning on GPA is notable in that there is a statistically significant effect of participating in just one activity, and it explains 4.2% of the variance in GPA. There was a significant difference between no participation and participation in at least one experiential learning activity. However, the
effect on GPA of participating in more than one experiential learning activity was not found. Therefore, if students are encouraged to participate in just one experiential learning activity during their tenure at the university, this has the potential to improve their Academic Performance. These results are an argument for expanding these opportunities as much as possible and providing an objective incentive for students.

Lastly, the findings regarding hypothesis 3, no moderating effect of experiential learning on the relationship between Academic PsyCap and Academic Performance sheds light that, while both Academic PsyCap and Participation in Experiential Learning Activities have a statistically significant effect on Academic Performance, they do not interact to accentuate the effect on Academic Performance. Apparently, Participation in Experiential Learning only has a direct effect, so there is no need to stimulate increasing participation to strengthen the benefit of PsyCap on Academic Performance.

The implications of this study for research is that it adds to the expanding body of knowledge of Academic PsyCap, Academic Performance, and Participation in Experiential Learning activities. The study results serve to confirm the results of previous studies on the relationship of Academic PsyCap and Academic Performance and it expands the research on Participation in Experiential Learning and Academic Performance. This studies novel finding that there is not a statistically significant effect of participating in more than one Experiential Learning activity is of notable importance.

There are a few important implications of this study with reference to practice, in terms of the implications for university administrators, professors, students and parents.

While the effect size on Academic Performance, measured by GPA, is small for both Academic PsyCap and Participation in Experiential Learning, the statistical significance of this
finding is important as institutions of higher learning seek to differentiate themselves, increase their impact, and improve the success of their students during college and after graduation. A 2014 Gallup Poll found that student experiences at an institution of higher learning are much more impactful than the type of institution attended.

“...the study found that support and experiences in college had more of a relationship to long-term outcomes for these college graduates. For example, if graduates recalled having a professor who cared about them as a person, made them excited about learning, and encouraged them to pursue their dreams, their odds of being engaged at work more than doubled, as did their odds of thriving in all aspects of their well-being. And if graduates had an internship or job in college where they were able to apply what they were learning in the classroom, were actively involved in extracurricular activities and organizations, and worked on projects that took a semester or more to complete, their odds of being engaged at work doubled as well.” (Ray & Kafka, 2014, pg. 1)

Interventions to develop Academic PsyCap and encouragement to participate in Experiential Learning activities are both investments that universities can make in the lives of their students that will pay dividends, possibly small in the short term, but potentially exponential in the long term. Considering the small effect size, it may not be advisable for universities to invest in particularly costly activities to develop Academic PsyCap or costly experiential learning activities. Rather, universities should concentrate on activities that do not require a considerable outlay of time and/or money. Also, these results provide support for increasing opportunities for online students to participate in experiential learning as well. It is encouraging to note the new online opportunities for students to participate in experiential learning activities that have come from our mandated stay-at-home situation due to Covid-19. I am aware of a few online sales competitions for students to participate near the end of Spring 2020. I would encourage university administrators and professors to continue these opportunities and expand them even once students return to campus. There are many students who cannot travel due to a multitude of situations, and these online opportunities would allow
them to be included. I highly recommend the addition of an online component to student clubs, live streaming of club meetings, adding a virtual component to university events, adding virtual study abroad opportunities that might include virtual tours and virtual interaction experiences utilizing technology. I would also encourage the development of badges showing proficiency in performance in a virtual environment, such as a Virtual Teams Badge. Partially due to these results, I have decided to seek to establish an online student chapter of the Project Management Institute (PMI).

In addition to expanding experiential learning opportunities, I recommend universities consider purchasing automated tools to not only assist in tracking student engagement in experiential learning but also to encourage it. For example, Presence has an application that allows the university to gamify involvement in experiential learning (Presence, 2018) and Portfolium, integrates with the Canvas learning management system to keep records of student achievements beyond the classroom (Instructure, 2019).

This study also has implications for college students and their parents. Despite the small effect size, it is my belief that many college students would quickly take advantage of opportunities if they were aware of the potential impact on their Academic Performance. It has been my experience that students will do anything other than spend more time studying to improve their Academic Performance. Therefore, I believe this study will result in student awareness of the potential benefits of improving Academic PsyCap and Participation in Experiential Learning activities, especially if more opportunities to participate in Experiential Learning activities are more readily available to them.
Lastly, the implications of this study results for parents is that this knowledge should motivate parents to encourage and support their students in taking advantage of these opportunities.

**Future Studies and Limitations**

This study does not include the data necessary to test the level of effect PsyCap and Participation in Experiential Learning would have on GPA considering a student’s level of cognitive ability and their socio-economic status, but this is a logical next step in this analysis. The use of scales to measure these constructs could be added to the measure of Academic PsyCap and Participation in Experiential Learning to study this effect.

Another additional study that logically follows this study is to take a longitudinal approach investigating the relationship of Psychological Capital and Participation in Experiential Learning on Academic Performance, preferably using an objective measure of GPA rather than self-report. Ideally, one would measure levels of Academic PsyCap at the start of their college career, and then measure levels of Academic PsyCap, Participation in Experiential Learning and objective GPA upon admission to the College of Business (typically immediately prior to their junior year), and lastly upon graduation. This data would provide insight into the question of growth in Academic PsyCap throughout their tenure at the university, their Participation in Experiential Learning, and their Academic Performance. This data could also be correlated with student retention to determine if there is a relationship on a student’s Academic PsyCap and Participation in Experiential Learning and their continuation of studies at the university.
REFERENCES


APPENDICES
### Appendix A: Reliability Measure of Academic Psychological Capital Measurement

<table>
<thead>
<tr>
<th>Study</th>
<th>Authors</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Impact of Business School Students’ Psychological Capital on Academic Performance (2012)</td>
<td>B. C. Luthans, K. W. Luthans, S. M. Jensen</td>
<td>0.90</td>
</tr>
<tr>
<td>Building the Leaders of Tomorrow: The Development of Academic Psychological Capital (2014)</td>
<td>B. C. Luthans, K. W. Luthans, J. B. Avey</td>
<td>0.89 to 0.93</td>
</tr>
<tr>
<td>A positive approach to management education</td>
<td>K. W. Luthans, B. C. Luthans, N. F. Palmer</td>
<td>0.93</td>
</tr>
<tr>
<td>The relationship between academic PsyCap and student engagement (2016)</td>
<td>K. W. Luthans, B. C. Luthans, N. F. Palmer</td>
<td>0.93</td>
</tr>
</tbody>
</table>
## Appendix B: Code Book for Variables

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>On/Off Campus</th>
<th>Full/Part Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>1</td>
<td>On Campus</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>2</td>
<td>Off Campus</td>
</tr>
<tr>
<td>3</td>
<td>Non-binary</td>
<td></td>
<td>Full/Part Time</td>
</tr>
<tr>
<td>4</td>
<td>Prefer not to answer</td>
<td>1</td>
<td>Full-Time</td>
</tr>
<tr>
<td>5</td>
<td>Prefer not to answer</td>
<td>2</td>
<td>Part-Time</td>
</tr>
</tbody>
</table>