Walden University
ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2020

The Influence of Attachment on Learning Dispositions of Nontraditional Community College Students

Kristen E. Muleya
Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

 Part of the Psychology Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Kristen Muleya

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Jennifer Rounds-Bryant, Committee Chairperson, Psychology Faculty
Dr. Elisha Galaif, Committee Member, Psychology Faculty
Dr. Stephen Rice, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2020

Abstract

The Influence of Attachment on Learning Dispositions of Nontraditional Community College Students

by

Kristen Muleya

MA, Walden University, 2007

BS, Simpson College, 2003

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Teaching Psychology

Walden University

November 2020

Abstract

Nontraditional students constitute the majority of college students in the United States, yet compared to traditional students obtaining a bachelor's degree, they are disproportionally at risk of not completing community college. Most research consists of traditional college students as participants. Research is needed on attachment styles and learning dispositions of nontraditional students to understand the needs for academic success. The purpose of this quantitative nonexperimental study was to investigate the differences between 174 nontraditional community college students' attachment style (independent variable) and their behavioral learning dispositions (dependent variables). Attachment theory served as the theoretical foundation for this study. This study examined 3 behavioral learning disposition elements and attachment style among nontraditional community college students. The ANOVA model contained the independent variable of attachment styles along with behavior score representing the dependent variables. The results of this study did not show significant differences among the 4 attachment styles (secure, anxious, dismissive-avoidant, and fearful-avoidant) in the 3 behavioral learning dispositions (examination preparation, quality of attention, and giving priority to studies). The results of this study can influence positive social change by giving community colleges a better understanding of factors related to maladaptive behavioral learning dispositions in nontraditional students and by guiding community colleges in how to best assist students in counteracting these maladaptive practices.

The Influence of Attachment on Learning Dispositions of Nontraditional Community College Students

by

Kristen Muleya

MA, Walden University, 2007

BS, Simpson College, 2003

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Teaching Psychology

Walden University

November 2020

Dedication

For Jeriah and Kyah, who are equally my pride and joy.
Love you more, Mom

Acknowledgements

I would like to express my deep and sincere gratitude to my Chair, Dr. Rounds-Bryant for providing invaluable guidance throughout this research. It has been a great privilege and honor to complete my dissertation under her guidance.

With boundless love and appreciation, I would like to extend my heartfelt gratitude to the following:

To my mom who taught me the importance of education and perseverance. The many hours my mom worked with me to learn how to adapt to life with dyslexia is truly the reason I have accomplished my academic aspirations. My mother never gave up on me and taught me never to give up on myself.

To my Spanish brother Domingo and family, my Uncle Rick and Aunt Patti, and my great-cousin Jeff and family, who all gave me the chance to return to school when I would not have been financially able to without their support. I greatly appreciate their assistance and encouragement in completing my PhD.

To my students who I have and will continue to inspire. If I can do it, anyone can.

To my first-grade teacher, Mrs. Welsh, who in my presence, told my parents that I was slow and not to expect much from me because I was having difficulty reading. Teachers should never underestimate students' abilities.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

This study was designed to examine the differences between attachment styles, based on Bartholomew's (1990) theory of attachment styles, and behavioral learning dispositions among nontraditional college students. *Attachment styles* refers to chronic interpersonal styles that reflect people's general beliefs about themselves and others; these include beliefs about whether the self is worthy of care and affection and beliefs about whether other people are generally dependable and responsive (Feeney & Collins, 2015). *Behavioral learning dispositions* consist of the behavioral ways in which a learner engages in the learning process, such as preparing for exams, paying attention while studying and in class, and giving priority to studies (Larose & Roy, 1995). Nontraditional college students face many challenges on the way to graduation, such as increased learning and academic responsibilities, balancing obtaining an education with family and work life, and adapting to the school environment after an extended departure. Self-regulatory processes that occur in attachment and learning dispositions allow students to persist or disengage from goal pursuit when difficulties arise. Larose, Bernier, and Tarabusly (2005) found self-regulatory behavioral systems of both attachment styles and learning dispositions to be particularly important to college student academic success. Researchers have used attachment theory to understand social and emotional adaptation as individuals enter adulthood. Research has revealed that attachment is correlated with how students adapt to greater responsibilities in college (Berry & Kingswell, 2012; Konrath, Chopik, Hsing, & O'Brien, 2014; Larose et al., 2005; Wright, Perrone-

McGovern, Boo, & Vannatter White, 2014). Kahu (2013) found that as learning responsibilities increase during the transition to college, adaptive learning dispositions help college students cope with these stressors and help students stay focused in the classroom and while studying. Beauchamp, Martineau, and Gagnon (2016) found that attachment styles influence learning dispositions by guiding individuals' beliefs, emotional regulation, and behaviors in academic settings.

This study was inspired by gaps in the literature and the needs researchers have suggested being addressed in future research. For example, Larose et al. (2005) found an association between attachment and learning dispositions among traditional college students but suggested that future research include a more diverse population and more insecurely attached participants. This research was conducted using one of the most diverse student populations: nontraditional college students attending community college. This study can influence positive social change by examining a population that accounts for 85% of college students in the United States (Harms, 2013) and help community colleges understand the significance of including discussions of attachment styles and their effects on behavioral learning dispositions in college readiness courses. This chapter will include the background of attachment and learning dispositions in addition to the purpose, theoretical framework, nature of the study, assumptions, limitations, and delimitations of this study.

Background

Researchers have examined the significance of attachment in many areas of life. Recently, a major focus of attachment has been on exploring its relationship to academic

performance in the college setting. Larose et al. (2005) found that attachment security serves as a personal resource to protect against a reduction in learning dispositions. Larose et al. also found that insecurely attached students experienced deterioration in their learning dispositions in college. Beauchamp et al. (2016) were able to replicate Larose et al.'s (2005) finding that attachment styles have a discriminant effect on academic achievement. Beauchamp et al. found that students who were securely attached were more confident in their abilities, had greater motivation, and utilized more effective learning dispositions than students who had insecure attachment styles. Through their research, Beauchamp et al. were able to show that secure attachment fosters greater capabilities for coping with the demands of higher education, whereas dismissing attachment results in higher risks of academic difficulties. Konrath et al. (2014) also backed up Beauchamp's research by finding an increase in maladaptive coping styles for those students with an insecure attachment style. Berry and Kingswell (2012) examined the correlation between attachment styles, coping, and exam-related stress and found that avoidant attachment was related to reduced studying for exams. Hainlen, Jankowski, Paine, and Sandage (2015) studied whether stressor severity or adult attachment styles moderated the normative temporal sequence of coping processes. Hainlen et al. (2015) found that anxiously attached students were quick to become overwhelmed when faced with an extreme stressor and resorted to more chronic hyperactivating coping strategies as a result. Attachment avoidance was related to less social support seeking (Hainlen et al., 2015). Wright et al. (2014) examined the relationship between attachment styles,

perceived social support, and academic efficacy. Wright et al. found that secure attachment was positively correlated with increased levels of academic efficacy.

Many studies had recommendations for future research that were taken into consideration when constructing this study. Larose et al. (2005) stated that future researchers should replicate their study regarding attachment and learning dispositions using a larger sample with more insecurely attached participants. Konrath et al. (2014) and Berry and Kingswell (2012) recommended future research on categorizing adult attachment measure that divides attachment styles into four categories. Berry and Kingswell also stated that a more diverse sample should be used in future research, as they focused on traditional college students with a mean age of 21 years. McDermott et al. (2015) and Wright et al. (2014) also suggested that future researchers examine the association between attachment and learning dispositions in more detail and with marginalized student populations. Wright et al. (2014) also expressed the importance of a diverse sample, as their research findings could not be generalized to diverse populations of nontraditional students. The current study was designed to address this gap in the literature by focusing on nontraditional community college students in regard to behavioral learning dispositions and attachment styles.

Problem Statement

As students transition to college, they must take on greater responsibility for their learning and academic progress. Consequently, their learning dispositions in college can be important to their academic success, and research has shown a positive relationship between students' learning dispositions and academic performance (Beauchamp et al.,

2016; Nguyen, Rienties, Tempelaar, & Giesbers, 2016). Learning disposition allows researchers to understand how students' beliefs and approaches to school help students control and manage their learning, which can be crucial to academic success at the college level (Kahu, 2013). With the increased learning responsibilities that accompany attending college, students must exhibit positive learning dispositions to cope with stressors and stay focused to help ensure academic success (Kahu, 2013).

Researchers have used attachment theory (Bowlby, 1980) as a framework for understanding social and emotional adaptation as individuals transition to adulthood, and attachment theory can also help to understand how students adapt to the greater responsibilities of attending college. Researchers in educational psychology have applied attachment theory to education, and research shows a relationship between attachment styles and academic performance (Beauchamp et al., 2016; Kogut, 2016). For example, students' attachment styles can influence their learning dispositions by influencing their beliefs, emotional regulation, and behaviors in learning situations (Beauchamp et al., 2016). Additionally, Beauchamp et al. (2016) found that distress among traditional college students has developmental roots, pointing to the possible relationship between attachment styles and behavioral learning dispositions. Students' attachment styles can influence their learning dispositions by influencing their beliefs, emotional regulation, and behaviors in learning situations (Beauchamp et al., 2016).

Additionally, Larose et al. (2005) found correlations between attachment styles and behavioral learning dispositions among traditional college students. Specifically, they found that secure attachment styles were correlated with coping skills favorable for

healthy management of learning strategies, while insecure attachment styles were correlated with maladaptive coping skills, which had a negative impact on students' learning dispositions. Other studies have also revealed that insecure attachment styles are correlated with less adaptive forms of affect regulation and problem coping, which affects the cognitive resources available to process and retain study material (Berry & Kingswell, 2012; Konrach et al., 2014).

In research on attachment and learning dispositions, scholars have focused on traditional undergraduate college students, even though nontraditional students constitute 85% of college students in the United States (Harms, 2013). Therefore, more research is needed on the learning dispositions of nontraditional students (Wright et al., 2014). Although nontraditional students may be older than traditional students and may be returning to college, their behavioral learning dispositions may still be related to attachment styles because the developmental roots of attachment may continue to influence learning disposition during the academic transitional experiences even in individuals who have lived independently from their parents for some time (Beauchamp et al., 2016). To address the need for research on attachment styles and learning dispositions among nontraditional college students, I designed this study to examine nontraditional community college students' attachment styles and their behavioral learning dispositions as defined by three behavioral components: (a) examination preparation, (b) quality of attention, and (c) giving priority to studies.

Purpose of the Study

The purpose of this quantitative nonexperimental study was to investigate the differences between nontraditional community college students' attachment styles and their behavioral learning dispositions. Behavioral learning dispositions consist students' abilities in examination preparation, quality of attention, and giving priority to studies. Behavioral learning dispositions help explain the coping strategies students use in academic settings. The focus of this study on attachment styles and learning dispositions was on how attachment plays a role in behavioral learning dispositions in nontraditional community college students. Although Larose et al. (2005) completed a similar study, their research focused on traditional college students, had a low number of dismissing and anxious students, and only used one measure of learning dispositions, which all affected the validity of their results. This study furthers the insight begun by Larose et al. by broadening the sample population to include nontraditional community college students and using multiple measures of learning dispositions to understand how attachment may be connected to students' behavioral learning dispositions.

Research Questions

RQ1: Does the examination preparation element of behavioral learning dispositions, as measured by the test of reaction and adaptation to college (TRAC; Larose & Roy, 1995), differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the relationship scales questionnaire (RSQ; Bartholomew & Horowitz, 1991), among nontraditional community college students?

$H_0$1: The examination preparation element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A1: The examination preparation element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

RQ2: Does the quality of attention element of behavioral learning dispositions, as measured by TRAC, differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students?

$H_0$2: The quality of attention element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A2: The quality of attention element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

RQ3: Does the giving priority to studies element of behavioral learning dispositions, as measured by TRAC, differ by student attachment style (secure, anxious,

dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students?

$H_0$3: The giving priority to studies element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A3: The giving priority to studies element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

Theoretical Framework for the Study

The theoretical base for this study was Bartholomew and Horowitz's (1991) theory of attachment, which was founded on Bowlby's (1973) attachment theory. In 1973, Bowlby developed a theory that revolved around a person's relationship with caregivers. According to Bowlby's attachment theory, children develop mental representations of the self and others early in life that act as a guide for subsequent close or intimate relationships (Bowlby, 1973). These mental representations create either a secure attachment or insecure attachment in the child. Attachment theory stems from the evolutionary theory showing that attachment behaviors in infancy are regulated by an innate behavioral system that functions to promote safety and survival by maintaining proximity to a nurturing caretaker (Bowlby, 1980). The internal working model of attachment operates largely outside a person's awareness (Bowlby, 1973). As these

interactions with the caretaker form cognitive templates, they teach the individual how to regulate emotions (Nielsen et al., 2017).

To expand on the theoretical basis of attachment, in this study, I used Bartholomew and Horowitz's (1991) theory of attachment that categorizes attachment into four styles: (a) secure, (b) anxious, (c) fearful-avoidant, and (d) dismissing-avoidant. Bartholomew (1990) based this division on Bowlby's identified key features to working models of attachment: the model of self and the model of other. Each attachment style represents a theoretical ideal, or prototype, that people may approximate to varying degrees (Bartholomew, 1990). Bartholomew and Horowitz's (1991) theory of attachment provides a more detailed picture of attachment style differences in coping. Attachment theory provides a framework for understanding social and emotional adaptation in adulthood. Attachment styles developed to regulate affect in earlier relationships with caregivers have been found to have a bearing on how individuals cope with stressors later in life. Bowlby (1980) found that attachment becomes an individual's homeostatic mechanism for regulating distress that influences emotional regulation and functioning in adulthood.

Bandura (2000) believed that social cognition has an influential role in human behavior (Stajkovic et al., 2018). Bandura (2000) found that cognitive restructuring, regulation of emotions, and learning of new behaviors promote change. Cognitive factors play a role in determining what environmental events are observed, what meaning is conferred on them, what motivating power they have, and how the information is organized and preserved for future use (Bandura, 2000). Behavioral reactions are the

result of individual evaluations and interpretations of a given situation. Negative evaluation of the situation may lead to inappropriate behavioral reactions (Nielsen et al., 2017).

Social cognitions have self-regulative influences over individual functioning that motivates and regulates behaviors. Learning dispositions and attachment are based on self-regulative influences that stem from the interpretation of environmental factors. Students' attachment styles can influence their learning dispositions by influencing their beliefs, emotional regulation, and behaviors in learning situations (Beauchamp et al., 2016). Additionally, distress among traditional college students has developmental roots, suggesting a further relationship between attachment styles and behavioral learning dispositions. The learning dispositions of nontraditional students may be related to attachment styles because the developmental roots of attachment may continue to influence learning disposition during the academic transitional experiences, even in students who have lived independently from their parents (Beauchamp et al., 2016). This made a framework consisting of attachment theory appropriate for this study.

Nature of the Study

The nature of this study was a quantitative nonexperimental research design. Quantitative analysis has historically been used in the field of psychology to test objective theories by examining the differences between variables (Howell, 2013). I selected the nonexperimental research design to test for differences in behavior learning disposition by attachment style. There was no random assignment of participants into treatment and control groups. The assignment of participants to particular attachment

styles was determined through responses to the RSQ (Bartholomew & Horowitz, 1991). A nonexperimental, correlational design was deemed inappropriate because correlational and predictive analyses were not used. I used preestablished instruments to measure both attachment styles and behavioral learning dispositions. The RSQ was used to measure the independent variable, attachment styles, based on Bartholomew and Horowitz's (1991) four attachment style prototypes in accordance with positive and negative views of self and others. The RSQ measures four attachment styles: (a) secure, (b) anxious, (c) dismissive-avoidant, and (d) fearful-avoidant (Bartholomew & Horowitz, 1991). I used the TRAC (Larose & Roy, 1995) to measure the dependent variable learning dispositions. To explore the differences between behavioral learning dispositions by attachment styles, I used analysis of variance (ANOVA) for each research question.

Definition of Key Terms

The following terms are defined for use in this study.

Attachment: The formation of working models that guide emotional functioning in adulthood by dictating appraisal of current interpersonal situations and organizing rules and strategies for handling emotions and coping responses (Fraley et al., 2015).

Attachment styles: Chronic interpersonal styles that reflect people's general beliefs about themselves and others; these include beliefs about whether the self is worthy of care and affection and beliefs about whether other people are generally dependable and responsive (Feeney & Collins, 2015).

Behavioral learning dispositions: The way learners behaviorally engage in and relate to the learning process (Larose et al., 2005).

Examination preparation: The extent to which students use study skills, tutoring services, learning tools, and educational material to prepare for exams (Larose et al., 2005).

Giving priority to studies: The extent to which students prioritize the demands of studies above all else (Larose et al., 2005).

Quality of attention: The extent to which students sustain attention and engage in their studies, enabling the retention of essential material and elimination of irrelevant information (Larose et al., 2005).

Maladaptive coping: The active, purposeful process of responding to stimuli appraised as taxing or exceeding personal resources (Dawson et al., 2014).

Assumptions

In this study, I assumed that participants who volunteered for this study had no biases toward the study topic. I also assumed that participants responded to the survey in a truthful manner. To assist with this, confidentiality and anonymity were preserved by assigning participants numbers to represent their participation. I made this clear in the informed consent. The informed consent included a statement informing participants that their participation was completely voluntary, and they could cease to participate at any point during the study without ramifications, to assist in receiving truthful responses. I assumed that individuals who experienced insecurity did not refrain from participation. The intention of this study was to determine if differences exist between attachment and learning dispositions; therefore, despite the limitations of nonexperimental research, this method was appropriate for this study.

Scope and Delimitations

There is a debate among adult attachment researchers as to whether to measure attachment using categorical or dimensional models. Several attachment measurement tools exist that define attachment either way. In early research on adult attachment, researchers focused on defining attachment as categorical, but in the 1990s, taxometric methodology suggested a need for a dimensional measurement (Fraley et al., 2015). Although many recently created attachment measurements have focused on dimensional models, suggesting that attachment is more continuous in nature, many researchers continue to use the categorical model to measure attachment (Fraley et al., 2015). In this study, I emphasized Bartholomew's categorical approach to measuring attachment using four categories (secure, anxious, dismissive-avoidant, or fearful-avoidant) rather than the historically used three categories (secure, anxious, or avoidant) and used Bartholomew's relationship questionnaire measurement of attachment. This can be defined as both a delimitation and a limitation in this study. The scope and delimitation effects of the conflict between categorial and dimensional explanations of attachment can best be shown through the continued use of categorial methods of measuring attachment in current research.

The measures used in this study were self-report questionnaires, which may have influenced perceptual biases and the desire to provide socially desirable responses. I hoped to delimit this by minimizing its threat to validity by conceptualizing the results as a function of perception rather than an objective reality. The addition of qualitative methods can also assist in minimizing self-report bias. This study involves self-report

questionnaires that are retrospective in nature. This could be combated by the inclusion of qualitative methods, such as direct observation and daily detailed diary data. This study involved quantitative methods that examine the differences between attachment and behavioral learning dispositions. Therefore, as a delimitation, it is suggested that future studies use mixed methods to fully explore the nature of the differences between attachment and behavioral learning dispositions because in this study, I did not find significant differences between these two factors.

Nontraditional community college students were chosen as the target population due to the lack of research regarding attachment and learning dispositions among this population. However, in this study, I used students from only one community college in the state of Iowa, which can limit the generalizability of the findings. Most research focuses on traditional college students; however, the community college population is significantly higher than the traditional college population. To delimit the effects on generalizability of the findings, I included a larger portion of participants than Larose et al.'s (2005) previous study with 62 participants.

Limitations

In this study, I used Bartholomew and Horowitz's (1991) theory of attachment categorization instead of more recent theories of attachment in terms of dimensions, which could serve as a limitation. Fraley et al. (2015) found that differences in attachment are best conceptualized and measured using the dimensional model. Nonetheless, numerous current researchers still use the categorical method when explaining attachment because it is easier to measure and define. The fact that current

researchers use categorical methods when explaining attachment could minimize this as a limitation.

The TRAC and RSQ used in this study are self-report questionnaires. Self-report questionnaires are known to have influenced perceptual biases (Bartholomew & Horowitz, 1991; Larose & Roy, 1995). In addition, the desire to provide socially desirable responses still exists in self-report questionnaires. Self-report bias is a limitation for many studies using self-report measurements. In this research, I sought to address this limitation through recognizing that the results of these measures are due to individual perception rather than objective reality.

The use of self-report questionnaires that are retrospective in nature might tell more about participants' current behavioral learning disposition ideology rather than how their actual behavioral learning disposition may unfold in reality. This serves as a limitation to this study because both the TRAC and RSQ are retrospective in nature (Bartholomew & Horowitz, 1991; Larose & Roy, 1995). A mixed-method study would assist in combating this limitation but was not practical for use in this study. Further, I focused on nontraditional students at one community college in Iowa. This could limit the generalizability of the finding of this study. A broader study using multiple community colleges around the United States could prevent this limitation and is recommended in future studies.

Significance of Study

This study was unique as little research has been done with nontraditional community college students as participants, specifically in regard to learning dispositions

and attachment styles. The results from this study may assist in better understanding factors related to maladaptive behavioral learning dispositions in nontraditional students and guide community colleges in how to best assist students in counteracting these maladaptive practices. For traditional students, approaches that focus on self-efficacy, goal setting, confidence, and resilience have been found to enhance their learning dispositions (McDermott et al., 2015). Many community colleges require students to take a college readiness course that introduces students to college expectations and the campus environment, including strategies that promote and encourage success in college and in life. The findings from this study may positively impact students by assisting community colleges in understanding the importance of including discussions regarding attachment styles and how they can impact students' behavioral learning dispositions. Offering study skills, test-taking strategies, stress reduction, time management, and organizational skills (Berry & Kingswell, 2012) to nontraditional students with maladaptive learning dispositions can lead to social change by producing students who are successful in college and beyond.

Summary

To address the need for research on attachment styles and learning dispositions among nontraditional college students, I designed this study to examine nontraditional community college students' attachment styles and their behavioral learning dispositions. Attachment theory (Bartholomew & Horowitz, 1991) served as the theoretical foundation for this study. Attachment theory holds that working models are formed from interactions with caregivers during the first year of life that guide emotional functioning and dictate

appraisal of interpersonal situations and coping responses. Attachment theory helps researchers understand how earlier relationships with caregivers have bearing on how individuals cope with stressors later in life (Bartholomew & Horowitz, 1991). Attachment theory provides a framework for understanding social and emotional adaptation in adulthood, including learning in higher education (Beauchamp et al., 2016). The use of Bartholomew and Horowitz's (1991) division of attachment into four styles will provide a more detailed picture of attachment style differences on learning dispositions. Cognitive factors play a role in determining what environmental events are observed, what meaning is conferred on them, what motivating power they have, and how the information is organized and preserved for future use (Bandura, 2000). Behavioral reactions are the result of the individual evaluation and interpretation situations. Negative evaluation of situations may lead to inappropriate behavioral reactions (Nielsen et al., 2017). Social cognitions have self-regulative influences over individual functioning that motivates and regulates behaviors. Learning dispositions and attachment are based on self-regulative influences that stem from the interpretation of environmental factors.

A review of existing literature and how new research is suggesting an association between adult attachment and behavioral learning dispositions will be presented in Chapter 2. A detailed literature search strategy, including the use of electronic database searches and published books dating back to 1973, is discussed in Chapter 2. Research on key variables such as learning dispositions, attachment, and adult learners conclude this chapter.

Chapter 2: Literature Review

Introduction

This literature review establishes the need for continued research concerning adult attachment styles and behavioral learning dispositions among nontraditional students. Although this is a relatively new field of study in attachment research, the understanding of how attachment theory may affect learning dispositions can assist in the development of more adaptive forms of behavioral learning dispositions in an academic setting. Studies within the last decade have indicated that having an insecure attachment style can increase the risk for maladaptive behavioral learning dispositions (Beauchamp et al., 2016; Dawson et al., 2014; Kogut, 2015). However, these studies have only begun to touch on the significance that attachment styles have on the ability to effectively cope as a nontraditional student in the community college setting.

This literature review will include the formation and developing of the attachment theory, exploring the work of Bowlby (1973); Ainsworth, Blehar, Waters, and Wall (1978); and Bartholomew and Horowitz (1991) regarding attachment. This literature review includes recent research studies that show a gap in research. The measurement of attachment styles RSQ and learning dispositions TRAC are used in this study (Bartholomew & Horowitz, 1991; Larose & Roy, 1995). Lastly, a look at what is currently known about attachment and learning disposition, as well as a look at what needs to be known will conclude this chapter.

Literature Search Strategy

In this literature review, I examine the current empirical research on attachment theory and behavioral learning dispositions. A literature search was conducted digitally through electronic psychology databases PsycINFO and PsycARTICLES, as well as multidisciplinary databases such as EBSCO Discovery Service, Thoreau, and Google Scholar. The list of terms used to conduct the literature search included *attachment*, *adult attachment*, *learning dispositions*, *behavioral learning dispositions*, *academic success*, and *coping*. I obtained and reviewed articles for this study through digital versions and print versions of professional journals in addition to multiple books used to establish the foundation of the attachment theory. To understand the foundation of theories used in this study, I examined articles and books as far back as 1973. Most of the literature used in this study are dated between 2012 and 2018.

Theoretical Foundation

Attachment theory (Bartholomew & Horowitz, 1991) served as the theoretical foundation for this study. Attachment theory holds that working models are formed from interactions with caregivers during the first year of life that guide emotional functioning and dictate appraisal of interpersonal situations and coping responses. Attachment theory helps researchers understand how earlier relationships with caregivers have bearing on how individuals cope with stressors later in life (Bartholomew & Horowitz, 1991). Attachment theory provides a framework for understanding social and emotional adaptation in adulthood, including learning in higher education (Beauchamp et al., 2016).

The use of Bartholomew and Horowitz's division of attachment into four styles will provide a more detailed picture of attachment style differences on learning dispositions.

Attachment Theory

John Bowlby (1973) developed a theory that revolves around a person's relationship with caregivers and illustrates the underlying forces behind human interdependence. According to Bowlby's (1973) attachment theory, early in life children develop mental representations of the self and others that act as a guide for subsequent close or intimate relationships. These mental representations create either a secure attachment or an insecure attachment in children.

Parents' reactions to their child's distress develop a secure attachment by consistently providing affection and comfort (Nielsen et al., 2017). Mothers of securely attached infants rate higher on scales of sensitivity, acceptance, cooperation, and emotional accessibility (Nielson et al., 2017). When parents are unreliable in providing consistent affection and emotional comfort to a child, an insecure attachment can develop (Nielson et al., 2017). Mothers of insecurely attached infants tend to range from chaotic or inconsistent in their caretaking to rejection and maltreatment of the infant (Nielson et al., 2017).

Emotional well-being in adulthood, as in childhood, will depend in part on having an accessible attachment figure who can serve as a reliable safe haven in times of need (Feeney & Collins, 2015). Attachment theory was drawn from evolutionary theory, which proposes that attachment behaviors in infancy are regulated by an innate behavioral system that functions to promote safety and survival by encouraging the infant to

maintain close proximity to a nurturing caretaker (Bowlby, 1984). As these interactions with the caretaker form cognitive templates, they teach individuals how to regulate emotions and guide how individuals think of themselves in relation to others (Nielson et al., 2017). The basic functions of attachment will continue to operate across one's life span, thereby affecting any close relationships that develop (Bowlby, 1973). The internal working model of attachment also operates largely outside of one's awareness (Bowlby, 1973). Bowlby (1973) continued to propose that people who have unsatisfactory early life experiences with parents will also have difficulty establishing affectional bonds later in life due to feelings of insecurity.

After Bowlby's development of attachment theory, several others added to the complexities of this theory. In particular, researchers developed ideas regarding division of secure and insecure attachment that greatly affected people's work. Bowlby originally recognized that individual differences impact how children appraise accessibility of the attachment figure and how they regulate attachment behavior in response to threat; however, Ainsworth developed a formal understanding of these individual differences (Fraley et al., 2015).

Ainsworth provided the first empirical taxonomy of individual differences in attachment patterns and found that these differences correlated with infant-parent interactions in the home during the first year of life (Fraley et al., 2015). Ainsworth et al. (1978) took Bowlby's theory and divided attachment styles into three categories: (a) secure, (b) anxious-ambivalent, and (c) avoidant. Ainsworth based this division on a study in which infants were removed from their caretakers in strange situations and their

reactions to this separation were observed. In addition, the attachment style of the infant was related to the amount of interaction with the mother and the mother's sensitivity and responsiveness to the infant's needs and signals (Ainsworth et al., 1978). Ainsworth et al. (1978) identified those infants who were sociable and engaged in high levels of exploration as securely attached. Infants who were securely attached had more frequent and positively toned interactions during social play, were more sociable with unfamiliar adults, and had a more positive affect during free play (Nielson et al., 2017). In addition, securely attached infants had low levels of distraction and a low need for discipline (Nielson et al., 2017). The securely attached infants reacted differently than the insecurely attached infants did, but Ainsworth also noticed a difference in the reactions of those who were insecure. Some of them seemed to be anxious when the caretaker left and sought close contact with them upon return. Other infants avoided their caretakers altogether. From this observation, Ainsworth divided insecure attachment into avoidant attachment and anxious-ambivalent attachment. Those infants who were anxious-ambivalent displayed more anxious behaviors, such as crying and clinging, and anxious-ambivalent behaviors such as increased distractibility (Feeney & Collins, 2015). Those infants who were avoidant displayed more defensiveness and avoidance of close contact, in addition to hostility and noncompliance (Feeney & Collins, 2015).

Even though Ainsworth's division of attachment into three categories is commonly referenced when discussing attachment styles, attachment theorists were unable to classify all infants into the three attachment styles set forth by Ainsworth. Researchers have attempted to add a proposed fourth group, one named disorganized-

disoriented or the A-C group. The disorganized-disoriented proposed fourth attachment group was based on those infants who were confused and apprehensive in response to an approaching attachment figure (Feeney & Collins, 2015). They also recognized that these infants had a changeable and depressed affect (Feeney & Collins, 2015).

In 1991, Bartholomew and Horowitz created a further division of attachment styles into secure, anxious, fearful-avoidant, and dismissing-avoidant, and a theory dividing insecure attachment styles into four categories took on a firm format. Many attachment theorists have popularly adopted Bartholomew's four-group model since its creation. Bartholomew based these divisions on Bowlby's identified key features to working models of attachment: the model of self and the model of other. The model of self, also referred to as dependence, determines whether an attachment figure is judged to be the sort of person who, in general, responds to the calls for support and protection from the individual (Bowlby, 1973). The model of others, also known as avoidance, determines whether the self is judged to be the sort of person that others, particularly the attachment figure, respond to in a helpful way (Bowlby, 1973).

Much of Bartholomew and Horowitz's theory was based on a positive-negative continuum. At one end of the continuum, individuals can see themselves as worthy of love and attention, and at the other end, individuals see themselves as unworthy of love and attention (Bartholomew & Horowitz, 1991). In addition, on the positive end of the continuum, an individual can view others as available and caring or, on the negative end of the continuum, view others as rejecting, distant, or uncaring (Bartholomew & Horowitz, 1991). The view of self and others is derived from two underlying dimensions:

anxiety and avoidance. The levels of anxious attachment depend on the degree to which individuals view themselves as worthy or unworthy of love, and the degree to which the individual is worried about being rejected from others (Feeney & Collins, 2015). The perception of self and others causes individuals to direct their attention toward distress and to their attachment figures in a hypervigilant manner, causing an inhibition in the development of autonomy and self-confidence (Feeney & Collins, 2015).

The level of avoidant attachment is based on the degree to which individuals perceive others to be generally responsive or unresponsive and the degree to which individuals are comfortable with intimacy and dependency on others (Feeney & Collins, 2015). Individuals with avoidant attachment typically restrict their acknowledgement of distress and their attempts to seek comfort and support from others (Feeney & Collins, 2015). Based on Bartholomew and Horowitz's observations of how people saw themselves and others, they determined that avoidant attachment style actually consisted of two different forms: the fearful-avoidant and the dismissing-avoidant.

Secure attachment. Following the working models of attachment, Bartholomew and Horowitz (1991) concluded that securely attached individuals see themselves as relatively not distressed and see others as supportive. Individuals with a secure attachment are characterized by a good self-model and a good other model. They are comfortable with intimacy, are able to trust and depend on others, and have few self-doubts (Feeney & Collins, 2015). Individuals with secure attachment are low in both anxiety and avoidance, have a sense of worthiness (lovability), and view themselves as friendly, good-natured, and likable (Feeney & Collins, 2015). They have an expectation

that others are generally accepting and responsive, well-intentioned, reliable, and trustworthy (Feeney & Collins, 2015). A prototypical description of someone who has a secure attachment style is someone who would say, “It is relatively easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don’t worry about being alone or having others not accept me” (Bartholomew & Horowitz, 1991, p. 244).

Anxious attachment. Anxiously attached individuals view themselves as distressed, but view others as supportive (Bartholomew & Horowitz, 1991). This style is marked by high levels of anxiety and low levels of avoidance. They have a poor self-model in that they feel a sense of unworthiness (unlovability), believe that they are misunderstood, lack confidence, and feel underappreciated (Feeney & Collins, 2015). Anxious attachment is also marked by striving for self-acceptance by gaining acceptance of valued others; in other words, they have a positive other model (Feeney & Collins, 2015). These anxiously attached individuals depend on others for gauging their self-worth. When they receive attention, approval, and praise from others, their sense of self-worth is inflated (Feeney & Collins, 2015). When they receive criticism or rejection, an anxiously attached individual becomes overly sensitive to this and often overreacts (Feeney & Collins, 2015). Although individuals with anxious attachment generally see others as supportive, they also see others as unwilling to commit themselves to a permanent relationship due to issues that reside in the anxiously attached individual (Feeney & Collins, 2015). A prototypical description of someone who has an anxious attachment style is someone who would say,

> I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them. (Bartholomew & Horowitz, 1991, p. 244)

Dismissive-avoidant attachment. Dismissive-avoidant individuals view the self as not distressed and view others as unsupportive (Bartholomew & Horowitz, 1991). They have a good self-model and a poor other model marked by low levels of anxiety and high levels of avoidance. Although they see themselves as worthy of love, they tend to protect themselves against disappointment by avoiding close relationships and maintaining a sense of independence and invulnerability (Feeney & Collins, 2015). A prototypical description of someone who has a dismissive-avoidant attachment style is someone who would say, "I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me" (Bartholomew & Horowitz, 1991, p. 244).

Fearful-avoidant attachment. Fearful-avoidant individuals view the self as distressed and view others as unsupportive (Bartholomew & Horowitz, 1991). They have a poor self-model and a poor other model marked by high levels of anxiety and avoidance. Fearful-avoidant individuals have a sense of unworthiness (unlovability) and see themselves as suspicious, aloof, and skeptical (Feeney & Collins, 2015). They also have a general belief that others are basically unreliable or overly eager to commit themselves to relationships, but they do not view these relationships as permanent

(Feeney & Collins, 2015). A prototypical description of someone who has a fearful-avoidant attachment style is someone who would say,

> I am somewhat uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely or to depend on them. I sometimes worry that I will be hurt if I allow myself to become too close to others. (Bartholomew & Horowitz, 1991, p. 244)

Many refer to fearful-avoidant individuals as having a hardened heart, in that they will not allow others to become close to them for fear of being hurt.

Formation and Continuation of Attachment Styles

Researchers first developed attachment theories to explain why infants become attached to caregivers and emotionally distressed when separated (Feeney & Collins, 2015). The theories were based on an evolutionary-ethological approach in that attachment serves a biological function of promoting children's security and survival by maintaining their proximity to their nurturing caretaker (Bowlby, 1984). Therefore, the goal of attachment is for children to seek out physical proximity and to maintain felt security (Bowlby, 1984). The adaptive nature of attachment evolved through the process of natural selection in that those infants who were able to activate the caregiving system in their parents were more likely to survive (Bowlby, 1973). Attachment becomes the process by which bonds of affection are formed and broken (Bowlby, 1973, 1980).

This attachment system becomes so innate that it is a process that typically occurs at a subconscious level. It becomes activated when children are emotionally distressed and seek out their primary caregiver for protection (Nielsen et al., 2017). If children

receive constant care that is responsive to their needs, then they gain a sense of protection and develop a positive working model of themselves and others (Nielsen et al., 2017). If children receive inconsistent care, they see themselves or others negatively and tend to develop fewer positive models of interpersonal relationships (Nielsen et al., 2017).

The child's stress serves as a cue to begin searching for resources with which to confront challenges posed by the stressful situation (Dawson et al., 2014). The attachment that is formed acts as a rule that guides responses to emotionally distressing situations (Nielsen et al., 2017). Someone who is securely attached to their caregiver, when faced with a stressful situation, acknowledge the distress and turn to others for comfort and support. An avoidantly attached individual will restrict their willingness to acknowledge distress and seek support. Those who respond to distress by being hypersensitive to negative affect and display a heightened expression of distress typically are considered to have an anxious attachment style. It is thought the behavior occurs automatically once a particular attachment model is activated. For example, someone who has an insecure attachment will respond to stressors in a negative manner and this is then reinforced by the physiological stress responses (Hainlen et al, 2015). In addition, they have restricted capacities for self-soothing or empathy (Dawson et al., 2014). Depending upon the type of insecure attachment, an individual will either shut down emotionally when faced with stress or depend entirely on others to reduce their levels of stress.

Although the attachment system may have originally been adapted for ecology of infancy, research has shown that it continues to influence behavior, thoughts, and feelings

throughout one's life (Fraley et al., 2015). Simi and Matusitz (2016) stated that these behaviors are not simply limited to mother-infant relationships but transcends into all social relations and acts as a working model in how one handles situations. Working models of attachment reflect one's memories and beliefs that develop from early experiences with caregivers and are carried forward into new relationships, where they play an active role in guiding perceptions and behaviors (Feeney & Collins, 2015). In other words, those early interactions serve as a mental model, or template, for future interactions with others.

This template remains relatively stable, as it operates largely outside of one's conscious awareness (Bowlby, 1973; Feeney & Collins 2015). The activation of attachment styles occurs when a stressful event triggers the use of coping strategies. The template of how the individual should act behaviorally, emotionally, and cognitively to manage the demands imposed by the stressors comes into play. How the individual handles the stressor is learned through attachment experiences and the degree of distress experienced varies as a function of the individual's attachment style (Bowlby, 1973). The continuity of attachment styles is due primarily to the persistence of mental models of self and others, which is a central component to personality (Bowlby, 1980).

Attachment theory provides a framework for social and emotional adaptation in adulthood. Attachment styles that were developed to regulate affect in earlier relationships with caregivers have been found to have a bearing on how one copes with other stressors later in life. Bowlby (1980) found that attachment becomes an individual's

homeostatic mechanism for regulating distress that influences emotional, behavioral, and cognitive functioning in adulthood.

Literature Review Related to Key Variables

Learning Dispositions

The conceptualization of learning dispositions is difficult to examine precisely, as it is an embedded journey that utilizes the past, present, and future. Early in life, it becomes an aspect of establishing an identity and the desire to learn. Broido and Schreiber (2016) defined learner development as the way in which students grow, progress, or increase their developmental capabilities through enrollment in higher education. Learner development becomes a consequence of individual readiness and supportive environments (Broido & Schreiber, 2016). Learning dispositions are the result of learner development. Dispositions are relative enduring tendencies to behave in certain ways (Dowd et al., 2019). Therefore, learning dispositions are the tendencies that are consistent for the learner in how they approach different learning situations. Dowd et al. (2019) defined learning dispositions as habits of the mind that constitute students' characteristic orientation toward learning. They provide a way in which to understand individual differences in response to specific learning situations.

Research on student success is beginning to concentrate on characteristics of students beyond those of demographics to examine personal competencies in student success. The construct of dispositions provides a conceptual framework for learning that is malleable, whereas cognitive capabilities and demographics are fixed traits. Learning dispositions can change over time and can be improved with short-term instruction

(Dowd et al., 2019). With proper cognitive awareness, learning dispositions can be changed for the better (Nguyen et al., 2016). Learning dispositions affect a learner's future through skills and understanding necessary for being a competent learner. Competence in learning requires the dispositions necessary to acquire needed skills, the intention and desire to learn, and the knowledge management necessary for life-long learning (Buckingham Shum & Deakin Crick, 2012). Even the term disposition refers to an enduring tendency to behave in a certain way (Buckingham Shum & Deakin Crick, 2012).

Learning dispositions are defined as the ways in which learners engage in and relate to the learning process (Larose et al., 2005). Learning dispositions is often interchangeable with similar terms such as competence, style, approach, or capability (Buckingham Shum & Deakin Crick, 2012). The study of learning dispositions allows researchers to understand how students' beliefs and approaches to school help students control and manage their learning, which can be crucial to academic success (Kahu, 2013).

Early Research on Learning Dispositions and Attachment

An association between learning dispositions and attachment begins in infancy. Using Ainsworth's Strange Situation procedure, Matas, Arend, and Stoufe (1978) found that securely attached infants engaged in more imaginative and symbolic play and exhibited fewer frustration behaviors, non-task behaviors, and negative affect. Insecure toddlers were less enthusiastic, less effective, and showed less endurance during changing tasks than their secure counterparts (Matas et al., 1978). Matas et al. (1978) also

showed the continuity of the effects of attachment on behaviors and learning dispositions. From infancy to early childhood, those who were securely attached exhibited competent, more autonomous functioning (Matas et al., 1978).

Bus and van IJzendoorn (1988) completed a study also utilizing Ainsworth's Strange Situation procedure to measure attachment at 1.5 years old. They also used similar procedures for the older groups of 3.5 years old and 5.5 years old. Bus and van IJzendoorn found that attachment security at 1.5 years old was related to children's behaviors in problem-solving for months to years later. Insecure children developed less trust in their environment and themselves, so they were less able to cope with difficulties in problem-solving (Bus & van IJzendoorn, 1988). Bus and van IJzendoorn (1988) also found a positive relationship between preschooler's reading interests and attachment security. Secure preschoolers were found to engage in more spontaneous reading than their insecure counterparts (Bus & van IJzendoorn, 1988). The competence differences among attachment styles were found to grow larger during elementary years as well (Bus & van IJzendoorn, 1988).

Bowlby (1973) believed that developmental outcomes are the product of transactional processes between the environment and the evolving person. Teo et al. (1996) performed a 17-year longitudinal study of 174 children (93 boys and 81 girls) and utilized the Strange Situations procedure Ainsworth developed to examine attachment at 12 months and 18 months old. Teo et al. found that impulse control and internalizing behavioral problems in kindergarten and first grade were good predictors of later

intellectual achievement. Secure attachment developed in infancy was also found to be associated with higher math performance at the age of 16 (Teo et al., 1996).

Jacobsen, Edelstein, and Hofmann (1994) found that secure infants have more freedom to attend to their environment and engage in cognitive explorations, compared to insecure infants whose anxieties of the self and others interfere with their willingness to engage with their environment. In their longitudinal study of 121 urban children studied at ages 7, 9, 12, 15, and 17. At age 7, attachment styles were found to differ significantly with respect to self-confidence (Jacobsen et al., 1994). For children who had insecure-disorganized attachment styles, the risk of maladaptation at the school level was significantly higher than any other attachment style (Jacobsen et al., 1994). Jacobsen et al. also found that attachment security at age 7 was linked to higher grades throughout childhood. In elementary school, secure attachment is associated with the ability to successfully meet academic demands of school better than insecure attachment (Jacobsen et al., 1994). For ages 7 through 15, attachment classification was found to have a significant influence over all cognitive functions (Jacobsen et al., 1994). Jacobsen et al. also found that attachment styles have a significant effect on reasoning abilities from age 9 through age 17.

Learning Dispositions and Attachment Among Adult Learners

Learning dispositions have a close relationship with attachment in adulthood (Larose et al., 2005). This stems from the concept that all aspects of development are interdependent. Student's social, personal, and emotional development is "inextricably intertwined" with their academic-cognitive process (Broido & Schreiber, 2016, p. 66).

Research has shown a positive relationship between students' learning dispositions and academic performance (Beauchamp et al., 2016; Larose & Roy, 1995; Nguyen et al., 2016).

The quality of learning constitutes the functional and adaptive components that originate from attachment. Post-secondary academic success requires cognitively guided and self-regulated behavioral systems (Bowlby, 1973; Larose et al., 2005). The self-regulatory process that occurs in attachment and learning dispositions allows people to persist or disengage from goal pursuit when difficulties arise. Larose et al. (2005) found self-regulatory behavioral systems of both attachment styles and learning dispositions to be particularly important to college student academic success. Students who have strong self-regulating processes are more likely to achieve goals and experience greater life satisfaction (Mikulincer & Shaver, 2018). Self-regulatory failures lead to problems in self-regulated behavioral systems. As students transition to college, they must take on greater responsibility for their learning and academic progress, and must adjust their behavioral systems.

Psychosocial factors, such as attachment, have been shown to influence postsecondary student success (Fong, Acee, & Weinstein, 2018). Larose et al. (2005) found that secure attachment styles were correlated with coping skills favorable for healthy management of learning strategies. Simon, DiPlacido, and Conway (2019) also found that students who have a secure attachment are better able to think clearly when stressed, as they have more adaptive coping skills. Insecure attachment styles were correlated with maladaptive coping skills which had a negative impact of students'

learning dispositions (Larose et al, 2005). Other studies have also found that insecure attachment styles are correlated with less adaptive forms of affect regulation and problem coping, which affects the cognitive resources available to process and retain study material (Berry & Kingswell, 2012; Konrch et al., 2014). Simon et al. (2019) found that insecure attachment may explain why some students respond to stress by shutting down emotionally. Insecurely attached college students had a greater reliance on maladaptive emotion regulation strategies (Owens, Held, Hamrick, & Keller, 2018).

Mikulincer and Shaver (2018) found that students with high attachment anxiety tend to display hyperactivating strategies when faced with a stressor. They will seek out support even though believe they will be rejected or abandoned (Mikulincer & Shaver, 2018). Simi and Matusitz (2016) found that anxious students were more likely to describe themselves as lonely, having low self-assurance and perceiving stress more seriously. Others found anxiously attached classmates to be "excessively dramatic" to the point where it became distracting to others' learning (Simi & Matusitz, 2016, p. 94). Students with low abilities to gain self-control in times of stress may act in ways that are inflexible or conserving (Simi & Matusitz, 2016). These students may begin to panic, experience rapid speech, and demand reassurance from others as means to cope with the stressful situation.

Dismissive-avoidant students are not concerned with what other people think about them and take direction from others poorly (Simi & Matusitz, 2016). When faced with adversity, they are more likely to deny that the adversity ever occurred rather than seeking help (Simi & Matusitz, 2016). Students high in avoidant attachment respond to

stressful situations by adopting deactivating strategies and handling stressors on their own (Mikulincer & Shaver, 2018). Konrath et al. (2014) found that the dismissive-avoidant attachment style is prevalent among millennial college students. Konrath et al. (2014) justified these finding by stating that these students' parents may have dedicated more time to teaching their children how to find their own self-concept than educating them on how to care for others.

The American College Health Association (2013) found that many college students experience personal, interpersonal, and academic distress. College students who are exposed to stressful life events are prevalent, with 85-99% of students reporting having had at least one stressful event in their lifetime (Owens et al., 2018). Individuals experiencing stressful situations often rely on habitual methods of regulating emotions that were developed early in life, through their working model of attachment. However, these studies have only begun to touch on the significance that attachment styles have on one's ability to cope effectively in times of distress. There is a need for continued research concerning attachment styles formed in early childhood and their effects on learning dispositions at the college level.

Community colleges have a particular challenge of understanding the dynamic needs of their students that put them at-risk and that can serve to buffer against academic difficulty. Community colleges have a low rate of retention, with 40% of students dropping out during their first year, which adds to the importance of understanding personal characteristics that may put students at risk (Fong et al., 2018). Most research on community college students includes information regarding demographics, which are

difficult to change. Studying malleable variables, such as learning dispositions, can assist in meeting this need. Research has shown that traditional predictors of student success, such as test performance, account for only 25% of college achievement (Fong et al., 2018). The investigation into unexplained factors, such as learning dispositions and attachment styles, could be the key to unlocking student success in higher education. With community college students being at a greater risk of dropping out and having a lower rate of degree attainment than four-year students (Fong et al., 2018), the understanding of the association between learning dispositions and attachment is increasingly critical.

Fong et al. (2018) examined the implications of goal orientation on community college student achievement and persistence. They examined two facets of goal orientation, including performance goal orientation and mastery goal orientation. Performance goal orientation involves the demonstration of competence in relation to success and failure of others (Fong et al., 2018). Students with performance goal orientation seek approval from others through their achievements, and therefore prefer easier tasks to ensure this occurs (Fong et al., 2018). Mastery goal orientation focuses on developing a personal sense of competence about learning and understanding (Fong et al., 2018). Students with mastery goal orientation enjoy and persist when challenges occur and will utilize new problem-solving strategies (Fong et al., 2018).

Fong et al. (2018) conducted their study using 768 community college students who were enrolled for the first time. Nearly half of the participants were women, 74.6% were Hispanic, and 25.4% were Caucasian students. Fong et al. (2018) had participants

complete a paper-and-pencil survey during the first week of the semester. This first section of the survey contained questions regarding demographics, followed by the Goal Orientation Scale and Help-Seeking Scale (Fong et al., 2018). Persistence and student achievement were measured by enrollment status and participant GPA (Fong et al., 2018).

Fong et al. (2018) found that those with a high level of mastery goal orientation had the best academic performance and persistence in school. Fong et al. (2018) explained these findings by stating that having motivation oriented towards learning is the most influential for community college students. However, mastery goal orientation is ineffective if that is the only method of goal orientation a student has (Fong et al., 2018). Those participants found to be characterized as adaptive had goal orientations high in mastery goal orientation and moderate in performance goal orientation (Fong et al., 2018). Participants were deemed maladaptive in character if they had high degrees of performance goal orientation and low degrees of mastery goal orientation (Fong et al, 2018).

The study of Fong et al. (2018) showed a distinctive pattern of motivation and perseverance in the community college student population. Although their performance in school is critical to their motivation to continue to pursue their educational goals, community college students appear to need reassurance and validation of their efforts as well. Many community college students are first generation and nontraditional (Broido & Schreiber, 2016). They may have family depending on their success or are sacrificing financial stability and time with family to improve their education. Fong et al. (2018)

found that the validation and approval community college students pursue from others is an important component to motivate them to achieve and persist in community college, possibility due to the dependence of others in their success in school.

The findings from Fong et al. (2018) showed the need to further investigate the possible relationship between attachment styles and behavioral learning dispositions among community college students. Fong et al. (2018) described performance goal orientation as an ego orientation, closely linked to that of attachment. The need for approval from others was closely linked to the attachment theory, particularly those found to have an anxious attachment style or a fearful-avoidant attachment style. Fong et al. (2018) described mastery goal orientations with similarity to learning dispositions as well. Fong et al. (2018) provided the example of mastery goal orientation as a learning or task orientation. Student development of learning dispositions includes understanding their values, purpose, attachment, and competence (Broido & Schreiber, 2016).

Although this is a relatively new field of study in attachment research, the implications attachment theory may have on learning dispositions can assist in explaining how some students form maladaptive coping strategies that affect their academic performance. This research transcends previous research by adding the significance of studying an array of student populations. Because most research focuses solely on traditional college students in four-year educational institutions, the present study focused on nontraditional students at the community college level. This research extended the evidence that attachment relates to academic performance by separating it and examining what dispositions of learning are affected by attachment styles.

A study conducted by Lavy (2017) examined attachment theory and learning dispositions in group work among students in higher education, although Lavy used the term learning styles instead. Lavy sought to understand the role relationship-related personality traits plays on the efficacy of student learning. In particular, the Lavy study sought to find out what role attachment styles play on students' feelings and functioning in group work. Lavy hypothesized that individuals with an insecure attachment style would not benefit from learning groups and would exhibit poorer performance in group work (Lavy, 2017). Attachment anxiety was proposed to be negatively associated with instrumental functioning among students in groups and avoidant attachment was proposed to be negatively associated with socioemotional functioning in the group (Lavy, 2017). Both attachment styles were also proposed to be negatively associated with reported satisfaction from the group work and with the group-project final grade (Lavy, 2017).

The Lavy (2017) study was conducted with 244 students, including 95 men and 149 women, from six different higher-education institutions enrolled in undergraduate classes. The participants ranged from 19 to 39 years of age (Lavy, 2017). Participants completed the Experience in Close Relationships (ECR) questionnaire to measure attachment styles. To measure group member instrumental and socio-emotional functioning, Lavy used a questionnaire developed by Barry and Steward (1997). This 14-item questionnaire measured instrumental functioning based on seven items (Barry & Steward, 1997). Participants responded to each statement using a 1 (not at all) to 5 (very much) Likert-type scale. An example of the instrumental functioning statements is, "As a

member of a group, I worry about the quality of group performance" (Barry & Steward, 1997, p. 73). To measure socio-emotional functioning, the remaining seven items included statements such as, "As a member of a group, I try to resolve conflicts that arise between other group members" (Barry & Steward, 1997, p. 73).

The results of this study found that attachment anxiety and attachment avoidance were indeed negatively associated with students' self-reported instrumental functioning and socio-emotional functioning (Lavy, 2017). These results showed the relevance of attachment styles to students' perceptions of their group member abilities. The second hypothesis regarding students' satisfaction from group work had differing results. Students who had the anxious attachment style were found to report negative student satisfaction in group work, but was positively associated with group work grading (Lavy, 2017). The same was not found for students who fell into the avoidant attachment style, as no significant associations were found between group work satisfaction and group grading were found (Lavy, 2017).

Lavy (2017) proposed that the significant findings for students who were anxiously attached may be due to the different strategies underlying anxious and avoidant students' behaviors in groups. Anxiously attached students tend to be over-dependent and crave excessive amounts of reassurance from other group members, which is consistent with the general coping skills found with anxious attachment (Mikuliner & Shaver, 2018). Anxiously attached individuals have a positive other-model, in that they weigh their sense of self-worth based on interactions with others. The over-dependence and need for reassurance are a means of obtaining approval from group members and,

therefore, preventing their self-worth from deflating. Anxious individuals have a poor self-model, in that they cannot maintain their sense of self-worth on their own. On the other hand, avoidant students are more likely to avoid depending on others and seek to maintain distance from the group, which is also consistent with the general coping skills found with avoidant attachment (Mikuliner & Shaver, 2018). Avoidant individuals have a positive self-model, in that they do not depend on others for their sense of self-worth, but a poor other-model. Avoidant individuals tend to protect themselves from others through maintaining an element of invulnerability and independence.

The sources of discomfort in group work among the avoidant and anxious attachment styles in students may be different, but the outcomes are the same in that they both report lower self-assessments of their function as group members (Lavy, 2017). Lavy proposed that students with an insecure attachment style may object to group work projects as an evaluation method due to feeling that group work obscures their ability to demonstrate their skills and knowledge. The findings of the Lavy study are significant to this study, as it demonstrates that there is an association between attachment styles and students' functioning. In addition, the participants in the Lavy study were as old as 39 years of age, which indicated that there were nontraditional students participating in this study. The mean age of participants was 25.27, also indicating that at least half of the participants were older than traditional college students (Lavy, 2017).

The present study also builds upon findings from a study performed by Larose et al. in 2005. Larose et al. (2005) researched the impact attachment (the independent variable) has on learning dispositions (the dependent variable) during the transition to

college for traditional students obtaining their bachelor's degree. Larose et al. sought to show that insecure attachment (consisting of dismissing and anxious attachment styles) could have a negative impact on students' learning dispositions by activating the attachment system, and thus their usual maladaptive coping style. They proposed that anxious students may become overwhelmed socially and emotionally with college life and thus fail to meet academic demands of college. Larose et al. also proposed that dismissing students may seek to avoid the negative impact their attachment has by avoiding academic needs all together by failing to invest interpersonal resources into the academic experience.

Sixty-two Caucasian adolescents between ages 16 to 17 were randomly selected to engage in Larose et al.'s 2005 short-term longitudinal study of adjustment to college. All participants attended the same college and met at the end of high school and during the first semester of college (Larose et al., 2005). Participants completed the TRAC measure during other meetings and the Adult Attachment Interview (AAI) during the second meeting. Participant academic records were obtained from the end of high school and the first three semesters in college (Larose et al., 2005).

The findings from the AAI determined that 35 participants (56.5%) were classified as having a secure attachment, 17 participants (27.4%) had a dismissive-avoidant attachment, and 10 participants (16.1%) had an anxious attachment, with one student unclassified (Larose et al., 2005). Larose et al. (2005) found that secure adolescents differ from insecure adolescents on learning dispositions but found few significant differences between the two insecure groups. Larose et al. (2005) stated that

the lack of differences found among insecure groups may be due to the low number of dismissing and anxious students.

The general hypothesis of attachment security constituting a personal resource for adapting to college, and thus protecting these students from a reduction in learning dispositions, was found to be supported (Larose et al., 2005). Insecure students were found to have a deterioration of their learning dispositions (Larose et al., 2005). Anxious students were found to seek help from teachers less, spend less time preparing for examinations, and give less priority to their studies (Larose et al., 2005). Dismissive-avoidant students were found to decrease their examination preparation and attention in class, give less priority to their studies, have more difficulty seeking help from teachers, and have an overall poor academic performance in college (Larose et al., 2005).

Drawing from Fong et al. (2018), Lavy (2017) and Larose et al. (2005), the present study addresses several gaps in research. Fong et al. (2018) examined community college students but did not focus solely on nontraditional community college students as this study did. Fong et al. (2018) sought to understand the relationship between community college student retention and personality characteristics that are malleable in nature. To do so, Fong et al. examined students' goal orientation, specifically, their performance goal orientation and mastery goal orientation. Their research found that a small amount of performance goal orientation is beneficial for community college students' retention and success in school (Fong et al., 2018). Their reasoning for this is that community college students may need more reassurance and validation from others (Fong et al., 2018). Not only did the present study examine community college students,

it also focused on personality characteristics in relation to learning. Fong et al. utilized goal orientation to understand the relationship between attachment styles and student retention and success, this study utilized student dispositions toward learning to better understand the comparisons between attachment styles and learning dispositions.

Lavy (2017) examined the role relationship-related personality traits, including attachment styles, plays on the efficacy of student learning in relation to group work. Although their participants were mostly traditional students, the mean age was 25.27, indicating that some nontraditional college students were involved. The Lavy (2017) study was conducted at a four-year university, so the generalizability of its findings is not entirely effective when looking at community college students. Lavy (2017) found that insecure attachment was negatively associated with the functioning of students while participating in group work. Lavy (2017) also found out that students were less satisfied with group work as a while if they were anxiously attached, possibly due to the need of reassurance among those with an anxious attachment style. Although Lavy's (2017) research indicated an association between attachment styles and group work ratings, I sought to expand upon this to include behavioral learning dispositions in all aspects of education.

Several needed adjustments to the Larose et al. (2005) study were addressed in this research study as well. Larose et al. specifically addressed traditional students transitioning into a bachelor's program. In the present study the focus was on nontraditional students in a community college setting. Larose et al. used a measure for attachment that focused on childhood attachment for adults and only had three styles of

attachment in its division. The research in the present study used a measure attachment specifically examining attachment in adult relationships and dividing attachment into four styles. Larose et al.'s results lacked evidence of differences between insecure attachment styles due to insecure participant involvement. I addressed this gap in research by including more insecurely attached participants and a fuller understanding of attachment by evaluating it using four styles instead of three.

Despite the differences between this study and the Larose et al. study, the variables remain consistent. The RSQ measures attachment as one variable (attachment) with four possible nominal level categories (secure, anxious, dismissive-avoidant, and fearful-avoidant) (Bartholomew & Horowitz, 1991). The dependent variable was defined as three separate behaviors (examination preparation, quality of attention, and giving priority to students) with its own unique score, as measured by the TRAC (Larose & Roy, 1995). Each participant was assigned one attachment style from the RSQ as the independent variable and a separate score from the TRAC for each of the three behaviors as the dependent variables. In both studies the independent variable was attachment styles and the dependent variable was learning dispositions.

Summary and Conclusion

Although several studies of adult attachment styles have found significant associations of various cognitively guided and self-regulated behavioral processes, including behavioral learning dispositions, the understanding of these effects among nontraditional community college students is unknown (Beauchamp et al., 2016; Fong et al., 2018; Kahu, 2013; Larose et al., 2005; Lavy, 2017; Mikulincer & Shaver, 2018). To

address the need for research on attachment styles and learning dispositions, I examined the differences between nontraditional community college students' attachment styles and their behavioral learning dispositions as defined by three behavioral components: examination preparation, quality of attention, and giving priority to studies.

Chapter 3 presents the methodology used to study the research questions set forth in this chapter. The chapter includes discussion of the use of the RSQ as a valid means to measure attachment styles. The use of TRAC as a valid means to measure behavioral learning dispositions is also discussed. The chapter includes a description of the sample population, procedures, ethical considerations, measures, and analysis of the data.

Chapter 3: Research Method

Introduction

The purpose of this quantitative nonexperimental study was to investigate differences between nontraditional community college students' attachment styles and their behavioral learning dispositions. In this chapter, I identify and justify the research design I define the population of interest and sampling procedures. I calculated a power analysis to determine an appropriate sample size. I describe the data collection procedures and instrumentation. The chapter concludes with assumptions, limitations, delimitations, and ethical assurances.

Research Design and Rationale

This study followed a quantitative nonexperimental research design. Quantitative analysis has historically been used in the field of psychology to test objective theories through examination of numerical constructs (Howell, 2013). A nonexperimental design is appropriate when examining for differences by factors, when there is not a true experimental or control group (Bordens & Abbott, 2008). Unlike a true experimental study, this was also a nonexperimental cross-sectional study because the data were collected at one time.

A quantitative methodology is appropriate when testing for differences between numerically measurable variables (Howell, 2013). A qualitative design would be appropriate if examining the underlying perceptions of participants. For the purposes of this research, each of the variables of interest were statistically measurable. I selected a nonexperimental design to test for differences in behavior learning disposition by

attachment style. There was no random assignment of participants into treatment and control groups. The assignment of participants to particular attachment styles was determined through responses to the RSQ (Bartholomew & Horowitz, 1991). A quasi-experimental, correlational design was deemed not appropriate because correlational and predictive analyses were not used.

The independent variable corresponded to attachment style, which had four potential categories: (a) secure, (b) anxious, (c) dismissive-avoidant, (d) fearful-avoidant. The continuous dependent variable corresponded to learning disposition, as measured through TRAC (Larose & Roy, 1995). Each research question assessed an individual component of behavioral learning disposition: (a) examination preparation, (b) quality of attention, and (b) giving priority to studies.

Methodology

Population

The population of interest is nontraditional community college students. The inclusion criteria applied to a nontraditional student were identified by the National Center for Education Statistics and included (a) delayed enrollment into postsecondary education, (b) attends college part-time, (c) works full-time, (d) is financially independent for financial aid purposes, (e) has dependents other than their spouse, (f) is a single parent, or (g) does not have a high school diploma (Pelletier, 2010). The type of sampling used in this study was convenience. Participants who met at least one of the inclusion criteria for nontraditional students were considered for this study. Participants were enrolled at a community college in the Midwest due to the convenient nature of my being

employed as a psychology instructor there for 15 years. I sought a sample size of 180 participants.

Sampling and Sampling Procedures

I used a power analysis to calculate the minimum sample size required for the parametric analysis. G*Power 3.1.7 was used for the power analysis software (Faul, Erdfelder, Buchner, & Lang, 2014). Three univariate ANOVAs were conducted to address the research questions. Each ANOVA had one independent variable with four corresponding groups. The inputs included a medium effect size ($f = 0.25$), a power of .80, and a conventional significance level ($\alpha = .05$; Cohen, 1988). Using the aforementioned parameters, a minimum of 180 participants would be necessary for the data collection. This would approximate to 45 students in each of the four attachment groups. Due to the nonmanipulative nature of the independent variable, I did not anticipate that there would be equal numbers of participants in the groups.

Recruitment, Participation, and Data Collection

The initial research step was to contact the college's urban campus provost to set up a face-to-face meeting. During this meeting, I introduced my study and the recruiting procedures. Preliminary approval from the community college was obtained. A letter of agreement was drafted stipulating the nature of the research prior to this meeting and the provost signed it. I followed ethical precautions requirements set forth by the community college, and I obtained Walden University Institutional Review Board (IRB) approval #10-15-19-0100535 to conduct the study using the standards and procedures set forth by the university.

To obtain the sample of participants using the convenience method, provosts and psychology professors at the community college announced the study to students via flyers, emails, and postings on Blackboard. Interested participants met at least one of the inclusion criteria of nontraditional students, which were included in all announcements. All announcements also included the website link for interested participants to access the survey so no direct contact with participants was required. The survey was delivered online through Survey Monkey. The survey could be completed from any device that had Internet access and participants were permitted to complete this survey at any time.

This survey included the informed consent, demographic questionnaire, the RSQ, and the TRAC measure, in this order (Bartholomew & Horowitz, 1991; Larose & Roy, 1995). Each step of the survey was presented on separate pages and participants were required to complete the previous step before moving to the next step. Access to the survey remained open until 180 participants completed all four steps. Data were collected through Survey Monkey and uploaded to SPSS Version 24.0 for Windows for analysis.

I provided each participant with a detailed informed consent form prior to beginning the survey. The informed consent form stated that the study was voluntary and participants could withdraw at any time. Information about the study's background, risks, benefits, and approximate time needed to complete the survey was included. The form contained contact information should participants have questions or concerns. The participant sample was derived from students who completed the informed consent.

Demographic characteristics, such as gender, age, ethnicity, and education, were collected. However, no identifying information, such as name, phone number, or address,

was recorded. Every participant was provided a confidential numerical identifier. Participants had the opportunity to withdraw from the survey at any point and their survey responses would not be used in the analysis. There was no follow-up with the participants after they completed the survey.

Instrumentation and Operationalization of Constructs

This study made use of preestablished instruments to measure both attachment styles and behavioral learning dispositions. The RSQ measured attachment (independent variable) with four possible nominal level categories (secure, anxious, dismissive-avoidant, fearful-avoidant; Bartholomew & Horowitz, 1991). The dependent variable is defined as three separate behavioral learning dispositions: examination preparation, quality of attention, and giving priority to studies. Each dependent variable had its own unique score, as measured by the TRAC (Larose & Roy, 1995). Through completion of the survey questionnaires, each participant was assigned one attachment style from the RSQ as the independent variable and a separate score from the TRAC for each of the three behaviors as the dependent variables. An ANOVA was used to test for differences in behavior learning disposition scores by attachment style.

This study builds upon findings from a study performed by Larose et al. in 2005. Larose et al. (2005) researched the impact attachment (the independent variable) has on learning dispositions (the dependent variable) during the transition to college for traditional students obtaining their bachelor's degree. Participants completed the TRAC measure during other meetings and the AAI during the second meeting.

I addressed several necessary adjustments to the Larose et al. (2005) study in this research study. Larose et al. specifically addressed traditional students transitioning into a bachelor's program. This study focused on nontraditional students in a community college setting. Larose et al. used a measure for attachment that focused on childhood attachment for adults and only had three styles of attachment in its division. In the present study, I used a measure attachment specifically examining adult attachment in adult relationships and divides attachment into four styles. Larose et al.'s results lacked evidence of differences between insecure attachment styles due to the limited insecure participant involvement in their study. This gap in research was addressed in the present study by including more insecurely attached participants and a fuller understanding of attachment by evaluating it using four styles instead of three. Despite the differences between this study and the Larose et al. study, the variables remain consistent.

Demographics. The survey questionnaire consisted of a demographic questionnaire and two previously validated survey instruments. The demographic questionnaire inquired about participant's age, gender, sexual orientation, race/ethnicity, relationship status, living situation, student status (part-time or full-time), and income range. The questions were all recorded in a multiple-choice format.

Relationship Scales Questionnaire. The RSQ was used to record each student's attachment style. The RSQ, created by Bartholomew and Horowitz (1991), measures four attachment style prototypes in accordance with positive and negative views of self and others based on the Relationship Questionnaire also created by Bartholomew and Horowitz. It also includes concepts from Hazan and Shaver's (1987) attachment measure

and Collins and Read's (1990) Adult Attachment Scale. The RSQ consists of 30 short statements, which participants respond to on a 5-point Likert scale (1 = not at all, 5 = very much). Based on the responses to the survey items, there are four subscales of attachment: secure (e.g., "I find it easy to get emotionally close to others"), anxious (e.g., "I want to be completely emotionally intimate with others"), fearful-avoidant (e.g., "I worry that I will be hurt if I allowed myself to become too close to others"), and dismissive-avoidant (e.g., "I prefer not to have other people depend on me"). Questions 6, 9, and 28 are reverse coded. While there are individual, interval-level scores for each of the subscales the instrument takes the highest score which represents the attachment style for each student. The factor of attachment is then treated as a nominal level variable.

The RSQ is public domain and may be used without prior permissions (Simon Fraser University, 2019). The retest reliability of the RSQ ranged from 0.78 to 0.54 and the correlation coefficients of RSQ ranged from 0.61 to 0.41 (Dereli & Karakus, 2011). The internal consistency of anxiety and avoidance was obtained in the range of 0.90 to 0.85 (Shvil, Krauss, & Midlarsky, 2013). Additional studies confirmed the four-factor structure of the survey. Exploratory factor analysis verified that 48.73% of the cumulative variance could be explained by the four-factor structure (Pehrabad et al., 2016). The four-prototype, two-dimensional attachment model has been validated and applied most extensively to young adults and community members (Bartholomew & Horowitz, 1991). The scale has established predictive validity with perceived-stress and perceived social support (Khodarahimi, Hashim, & Mohd-Zaharim, 2016).

Test of Reactions and Adaptation in College. The TRAC (Larose & Roy, 1995) was used to measure learning dispositions. I used only the behavioral component of this measure, as it addresses coping issues with five behavioral components: examination preparation (EP; e.g., "When I take an exam, I have studied all of the relevant materials; 6 items), quality of attention (QA; e.g., "While studying, I have too many other things on my mind to fully concentrate on the task"; reverse coded, 6 items), seeking help from the teacher (SHT; e.g., "I hesitate to ask for help from my teacher when I need to have something cleared up"; reverse coded, 5 items), assistance from peers (AP; e.g., "When I'm sure that I do not understand a problem or an idea, I ask other students for help as soon as possible"; 4 items), and giving priority to studies (GP; e.g., "I have difficulty dedicating a lot of time and energy to academic success"; reverse coded, 4 items). The items were answered on a 7-point Likert scale (1 = never; 7 = always). For the purposes of this study, three of the subscales were used: examination preparation, quality of attention, and giving priority to studies. The TRAC has been found to have acceptable internal consistency, as well as good construct, concurrent, and predictive validity (Larose et al., 2005). Cronbach's alpha for examination preparation ranged from .74 to .76. Cronbach's alpha for quality of attention ranged from .74 to .76. Cronbach's alpha for giving priority to studies ranged from .67 to .68. A confirmatory factor analysis verified the fit indices fell within the range for acceptable fit (Larose & Roy, 1995). The TRAC has also established predictive validity in regards to success and quality of learning experiences in college (Larose & Roy, 1995). Each of the variables were measured continuously.

Data Analysis Plan

I uploaded the data into SPSS Version 24.0 for Windows. First partial responses and outliers were examined for the sample. Participants who did not respond to a majority of the survey were deleted from the sample. In addition, outliers were calculated through use of standardized values, or *z*-scores. Once I obtained the final sample, descriptive statistics were examined for the demographics, independent variables, and dependent variables. Frequencies and percentages were used to explore the trends of the nominal level variables. Means and standard deviations were calculated to describe the continuous level variables. The following research questions were addressed:

RQ1: Does the examination preparation element of behavioral learning dispositions, as measured by the test of reaction and adaptation to college (TRAC; Larose & Roy, 1995), differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the relationship scales questionnaire (RSQ; Bartholomew & Horowitz, 1991), among nontraditional community college students?

$H_0$1: The examination preparation element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A1: The examination preparation element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

RQ2: Does the quality of attention element of behavioral learning dispositions, as measured by TRAC, differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students?

$H_0$1: The quality of attention element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A1: The quality of attention element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

RQ3: Does the giving priority to studies element of behavioral learning dispositions, as measured by TRAC, differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students?

$H_0$1: The giving priority to studies element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A1: The giving priority to studies element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious,

dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

To address the research questions, I conducted three one-way ANOVAs. An ANOVA is an appropriate statistical tool when assessing for differences in an interval-level variable between groups (Tabachnick & Fidell, 2013). The independent variable, attachment style, was measured by the RSQ and had four potential categories: secure, anxious, dismissive-avoidant, fearful-avoidant (Bartholomew & Horowitz, 1991). The continuous dependent variable corresponded to learning disposition. Each research question measured an individual component of behavioral learning disposition: examination preparation, quality of attention, and giving priority to studies.

Prior to analysis, I tested the assumptions of normality and homogeneity of variance. Normality assess that there is a bell-shaped distribution for each dependent variable. To test the normality assumption, a Kolmogorov-Smirnov test was conducted for examination preparation, quality of attention, and giving priority to studies. Homogeneity of variance tests that there is equal spread in the dependent variables, respective of the groups of the independent variable. To test the homogeneity of variance assumption, Levene's test were run for each dependent variable by attachment style.

After I checked the assumptions, the F test was used to make the overall determination of whether significant differences exist by groups. Statistical significance was evaluated at the generally accepted alpha level, $\alpha = .05$. Post-hoc analyses were performed to further examine the potential differences.

Threats to Validity

Internal Validity

Several limitations exist within the scope of the current research. Because quantitative methodologies focus on numerical constructs, it is possible to examine research questions and hypotheses in formats that quantify statistical significance and differences between the variables. However, in such studies it is not possible to explore the perceptions and experiences of the subjects. The richness of data analysis within a qualitative study was traded for a level of statistical significance that a difference exists between the variables. Within a cross-sectional study, there is not a threat for statistical regression. Respondents may not always be truthful in their responses to surveys. Participants were notified of the voluntary nature of the study and the confidentiality of their responses.

External Validity

Threats to external validity correspond to limitations of the research that can affect the generalization of the findings. If parametric assumptions are not met for the ANOVAs, normality and homogeneity of variance, there is a threat for statistical conclusion validity. If the sample size is too small, a type II error could exist in the interpretation of the findings. Nonparametric statistical analysis, such as Kruskal-Wallis tests, were used as alternatives. With the use of convenience sampling, selection bias could potentially cause issues with generalizability. I applied caution when interpreting the findings and did not automatically extrapolate to the greater population.

Ethical Procedures

I obtained permission from a community college in the Midwest to use the student population as a sample. All required ethical procedures for this institution were followed during the study. After approval from the Walden University IRB, I began the recruitment process. The IRB process verified that the data collection and analysis steps were following ethical guidelines. Every participant was provided a consent form that outlined the purpose of the study and their roles in the data collection. Participants had the opportunity to withdraw from participation at any point during the process. I did not record any sensitive data such as name, email address, phone number, or address. Each participant was provided a confidential numeric identifier. Following the closing of data collection, I closed the online survey link. The data were downloaded into Excel and SPSS Version 25.0 for Windows. The data were stored securely on a password protected hard drive. Following a period of five-years, I will delete the data from the hard drive.

Summary

The purpose of this quantitative nonexperimental study was to investigate the differences between nontraditional community college students' attachment styles and their behavioral learning dispositions. In this chapter, the selection of a quantitative, nonexperimental research design was justified. The population of interest and sampling procedures were identified. A power analysis was used to calculate an appropriate sample size for the statistical analysis. The data collection procedures and instrumentation were delineated. The threats to validity and ethical considerations are described. The next chapter will present the findings of the data analysis.

Chapter 4: Results

Introduction

The purpose of this quantitative nonexperimental study was to investigate the relationship between nontraditional community college students' attachment styles and their behavioral learning dispositions. To examine these variables, I developed the research questions so that each behavioral learning disposition was examined in relation to attachment styles. The behavioral learning dispositions were (a) examination preparation, (b) quality of attention, and (c) giving priority to studies. Attachment styles were defined by Bartholomew (1990) as secure, anxious, dismissive-avoidant, and fearful-avoidant. Research questions in this study specifically asked if there was a difference between the behavioral learning dispositions and the attachment styles. In this chapter, I present and describe the findings of the data collection and analyses.

First, the data collection steps are summarized, and the sample size is finalized. I outline the frequencies and percentages used to describe the trends in the nominal-level variables, such as demographics and attachment styles. I present the means and standard deviations calculated and explored for the TRAC instrument (Larose & Roy, 1995). In addition, Cronbach's alpha test of internal consistency, used to examine for the scales, is discussed. To address the three research questions, three ANOVAs were conducted to examine for differences in behavioral learning dispositions by attachment style. Statistical significance was evaluated at the generally accepted level, $\alpha = .05$.

Data Collection

The data collection process for this research took approximately 5 months. A total of 263 participants met the inclusion criteria for being a nontraditional community college student and consented to participate in the study. Among these cases, 180 participants completed both the TRAC and the RSQ. Potential outliers were examined through calculation of standardized values, or z-scores (Tabachnick & Fidell, 2013). None of the participants had outlying scores; therefore, the final sample size for the study consisted of 180 students. The a priori power analysis calculated for this study determined that a minimum of 180 participants would be necessary, which is exactly what was used.

Demographics

The sample consisted of 55 male students (30.6%), 119 female students (66.1%), four transgender students (2.2%), and two students who identified as other (1.1%). College student ages were predominantly in the 18–24-year-old range (n = 71, 39.4%) and the 25–34-year old range (30.6%). A majority of the sample consisted of Caucasian participants (n = 107, 59.4%). Most of the participants had some college experience (n = 84, 46.7%). Table 1 presents the frequencies and percentages of the demographics.

Table 1

Frequency Distribution of Demographics

Demographics	n	%
Gender		
Male	55	30.6
Female	119	66.1
Transgender	4	2.2
Other	2	1.1
Age		
18–24 years old	71	39.4
25–34 years old	55	30.6
35–44 years old	34	18.9
45–54 years old	10	5.6
55–64 years old	7	3.9
65 years and older	3	1.7
Race		
Caucasian	107	59.4
African American	38	21.1
Asian or Pacific Islander	19	10.6
Hispanic	38	21.1
Native American	11	6.1
Other	10	5.6
Education		
GED	22	12.2
High school diploma	38	21.1
Some college	84	46.7
Associate degree	12	6.7
Bachelor's degree	22	12.2
Graduate degree	2	1.1

Note. Percentages for race exceed 100% because participants could indicate multiple responses.

Relationship Satisfaction Questionnaire

The subscales of the RSQ were calculated as secure, anxious, dismissive-avoidant, and fearful-avoidant (Bartholomew & Horowitz, 1991). The scale with the highest score for each participant represented their predominant attachment style. Given that it was possible for scores to be equal between attachment styles, there was a group of ties. The participants were distributed between secure (n = 33, 18.3%), anxious (n = 30, 16.7%), dismissive-avoidant (n = 54, 30.0%), fearful-avoidant (n = 46, 25.6%), and ties for attachment style (n = 17, 9.4%). For the inferential analyses used to address the research questions, the group of ties was not included. Table 2 presents the frequencies and percentages for the RSQ attachment styles.

Table 2

Frequency Distribution for Attachment Style

RSQ Attachment Style	n	%
Secure	33	18.3
Anxious	30	16.7
Dismissive-avoidant	54	30.0
Fearful-avoidant	46	25.6
Ties	17	9.4

Test of Reaction and Adaption to College Questionnaire

The TRAC consisted of three subscales: examination preparation, quality of attention, and giving priority to studies (Larose & Roy, 1995). The scores were computed through an average of six items for each scale. Examination preparation scores ranged from 2.33 to 7.00, with M = 4.88 and SD = 1.05. Quality of attention scores ranged from 1.83 to 7.00, with M = 4.65 and SD = 1.08. Giving priority to studies scores ranged from

1.80 to 2.25, with $M = 5.12$ and $SD = 1.15$. The Cronbach alpha for the three scales met the acceptable threshold ($\alpha \geq .70$), which indicates acceptable internal consistency. Table 3 presents the findings of the descriptive statistics for the behavioral learning disposition scales.

Table 3

Descriptive Statistics for Behavioral Learning Dispositions

Variable	n	Min	Max	M	SD	Number of items	α
Examination preparation	180	2.33	7.00	4.88	1.05	6	.90
Quality of attention	180	1.83	7.00	4.65	1.08	6	.79
Giving priority to studies	180	2.25	7.00	5.12	1.15	6	.78

Results

Assumption Testing

Prior to running the ANOVAs, the assumptions of normality and homogeneity of variance were tested for examination preparation with a Kolmogorov-Smirnov test and Levene's test, respectively. The Kolmogorov-Smirnov test compares the test data to a theoretical normal distribution (Field, 2013). Significance indicates that the data significantly differ from a normal distribution. The findings of the Kolmogorov-Smirnov test for examination preparation ($p = .083$) and quality of attention ($p = .200$) were not statistically significant, indicating that the assumption of normality was met for these variables. The findings of the Kolmogorov-Smirnov test for giving priority to studies ($p = .002$) was statistically significant, indicating that the assumption of normality was not met for this variable. Howell (2013) stated that distributions of data with 50 or more

cases tend to approximate toward normality. Therefore, the violation of the Kolmogorov-Smirnov test for giving priority to studies was not problematic for the study.

Levene's test verifies whether the spread of the data significantly differs between the groups of the independent variable. The finding of Levene's tests were not significant for examination preparation (p = .176), quality of attention (p = .982), and giving priority to studies (p = .138), indicating that the assumption for homogeneity of variance was met for all three variables.

ANOVAs

RQ1: Does the examination preparation element of behavioral learning dispositions, as measured by the test of reaction and adaptation to college (TRAC; Larose & Roy, 1995), differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the relationship scales questionnaire (RSQ; Bartholomew & Horowitz, 1991), among nontraditional community college students?

$H_0$1: The examination preparation element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A1: The examination preparation element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

To address RQ1, I conducted an ANOVA to examine for differences in the examination preparation element of behavioral learning dispositions by student attachment style. The independent grouping variable corresponds to student attachment style: secure, anxious, dismissive-avoidant, fearful-avoidant. The continuous dependent variable corresponds to the examination preparation element of behavioral learning dispositions, as measured by the TRAC (Larose & Roy, 1995).

The findings of the ANOVA were not statistically significant, $F(3, 159) = 2.20$, $p = .091$, $\eta^2 = .040$, suggesting that there were not significant differences in examination preparation by attachment style. The findings of the ANOVA are presented in Table 4. Table 5 and Figure 1 presents the means of examination preparation scores by attachment style.

Table 4

ANOVA for Examination Preparation by Attachment Style

	F(3, 159)	p	η2
Attachment style	2.20	.091	.040

Table 5

Means for ANOVA for Examination Preparation by Attachment Style

RSQ attachment style	n	M	SD
Secure	33	5.28	0.88
Anxious	30	4.71	1.05
Dismissive-avoidant	54	4.78	1.17
Fearful-avoidant	46	4.80	0.95

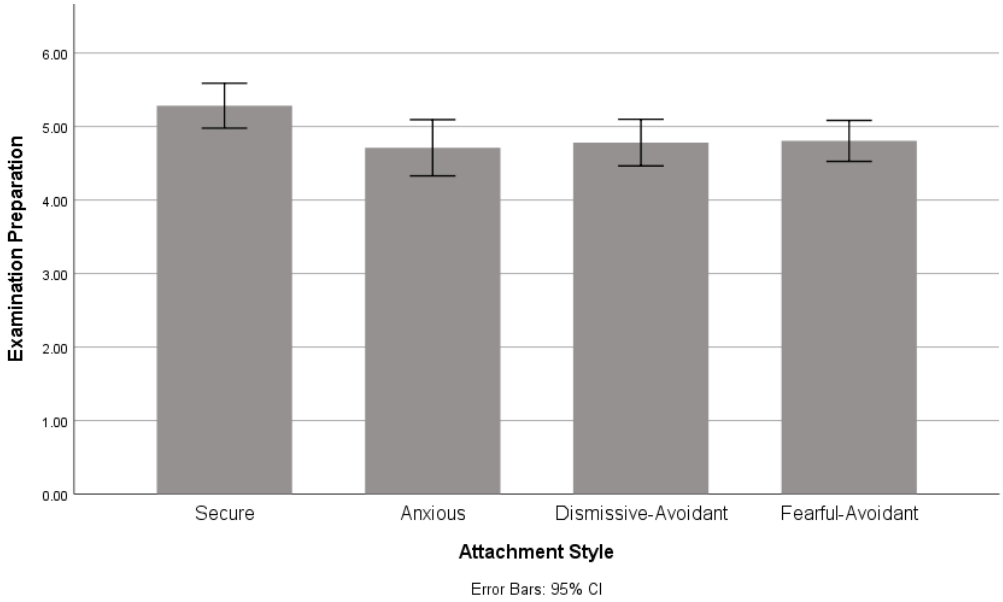

Figure 1. Bar chart for examination preparation scores by attachment style.

RQ2: Does the quality of attention element of behavioral learning dispositions, as measured by TRAC, differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students?

$H_0$1: The quality of attention element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A1: The quality of attention element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

To address RQ2, I conducted an ANOVA to examine for differences in the quality of attention element of behavioral learning dispositions by student attachment style. The independent grouping variable corresponds to student attachment style: secure, anxious, dismissive-avoidant, fearful-avoidant. The continuous dependent variable corresponds to the quality of attention element of behavioral learning dispositions, as measured by the TRAC (Larose & Roy, 1995). The findings of the ANOVA were not statistically significant, $F(3, 159) = 2.44$, $p = .067$, $\eta 2 = .044$, suggesting that there were not significant differences in quality of attention by attachment style. The findings of the ANOVA are presented in Table 6. Table 7 and Figure 2 presents the means of quality of attention scores by attachment style.

Table 6

ANOVA for Quality of Attention by Attachment Style

	$F(3, 159)$	p	η^2
Attachment style	2.44	.067	.044

Table 7

Means for ANOVA for Quality of Attention by Attachment Style

RSQ attachment style	*n*	*M*	*SD*
Secure	33	4.87	1.11
Anxious	30	4.45	1.07
Dismissive-avoidant	54	4.82	1.07
Fearful-avoidant	46	4.35	1.07

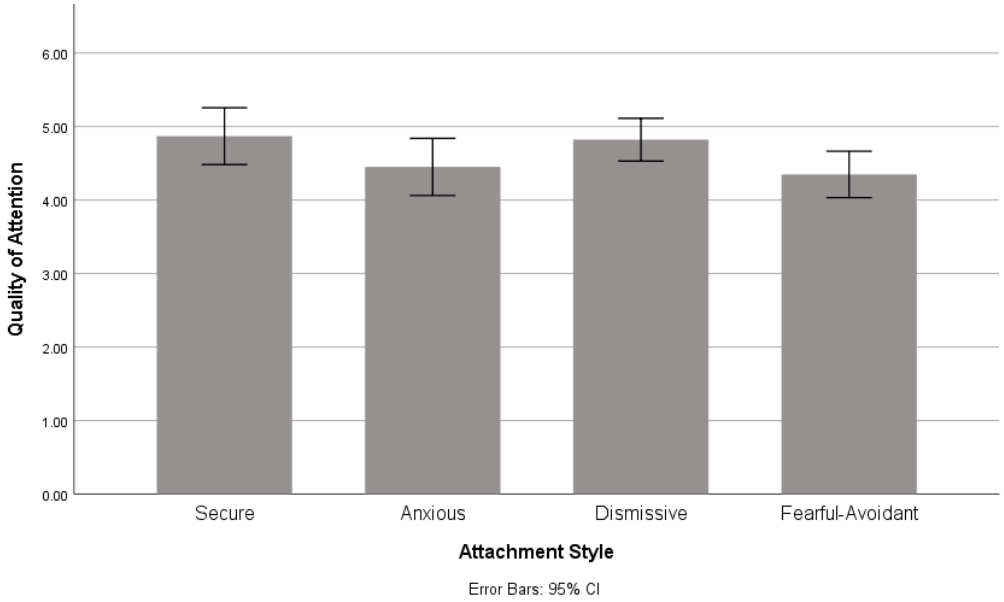

Figure 2. Bar chart for quality of attention scores by attachment style.

RQ3: Does the giving priority to studies element of behavioral learning dispositions, as measured by TRAC, differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students?

$H_0$3: The giving priority to studies element of behavioral learning dispositions, as measured by TRAC, does not differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

H_A3: The giving priority to studies element of behavioral learning dispositions, as measured by TRAC, does differ by student attachment style (secure, anxious, dismissive-avoidant, fearful-avoidant), as measured by the RSQ, among nontraditional community college students.

To address RQ3, I conducted an ANOVA to examine for differences in the giving priority to studies element of behavioral learning dispositions by student attachment style. The independent grouping variable corresponds to student attachment style: secure, anxious, dismissive-avoidant, fearful-avoidant. The continuous dependent variable corresponds to the giving priority to studies element of behavioral learning dispositions, as measured by the TRAC (Larose & Roy, 1995).

The findings of the ANOVA were not statistically significant, $F(3, 159) = 2.24$, $p = .086$, $\eta^2 = .041$, suggesting that there were not significant differences in giving priority to studies by attachment style. The findings of the ANOVA are presented in Table 8. Table 9 and Figure 3 presents the means of giving priority to studies scores by attachment style.

Table 8

ANOVA for Giving Priority to Studies by Attachment Style

	$F(3, 159)$	p	η^2
Attachment style	2.24	.086	.041

Table 9

Means for ANOVA for Giving Priority to Studies by Attachment Style

RSQ attachment style	*n*	*M*	*SD*
Secure	33	5.36	1.11
Anxious	30	4.69	1.31
Dismissive-avoidant	54	5.22	1.00
Fearful-avoidant	46	4.99	1.18

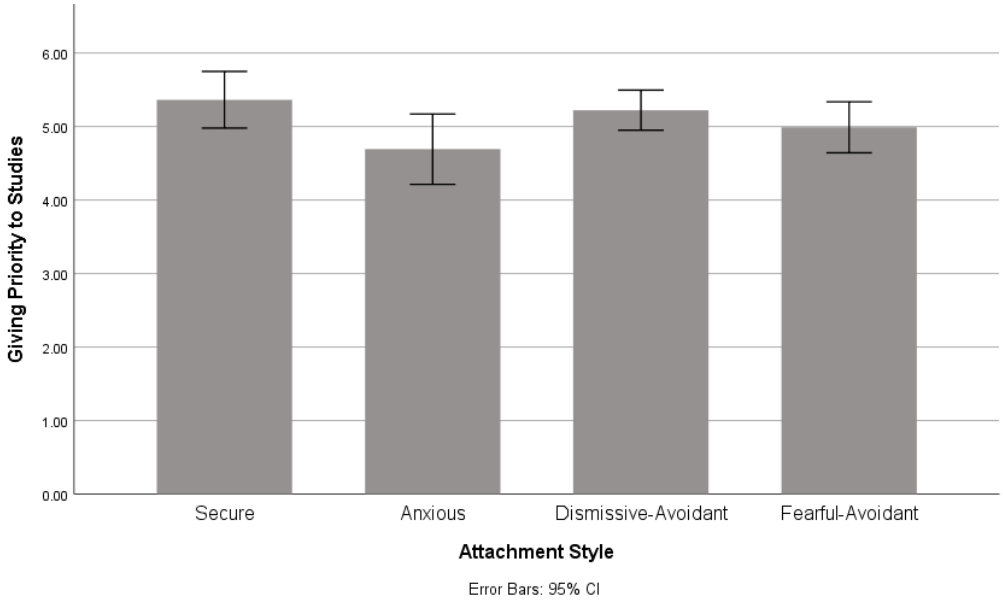

Figure 3. Bar chart for giving priority to studies scores by attachment style.

Summary

The purpose of this quantitative nonexperimental study was to investigate the relationship between nontraditional community college students' attachment styles and their behavioral learning dispositions. In this chapter, I presented and described the findings of the data collection and analyses. First, the data collection steps were summarized, and the sample size was finalized. I presented the frequencies and percentages used to describe the trends in the nominal-level variables and attachment styles. Means and standard deviations were calculated and explored for the TRAC (Larose & Roy, 1995). Cronbach's alpha test of internal consistency met the acceptable threshold for the three scales.

For RQ1, the findings of the ANOVA were not statistically significant, suggesting that there were not significant differences in examination preparation by attachment style. The secure group had slightly higher examination preparation scores in comparison to the

anxious group, the dismissive-avoidant group, and the fearful-avoidant group. For RQ2, the findings of the ANOVA were not statistically significant, suggesting that there were not significant differences in quality of attention by attachment style. The fearful-avoidant group had slightly lower quality of attention scores in comparison to the secure group and the dismissive-avoidant group. For RQ3, the findings of the ANOVA were not statistically significant, suggesting that there were not significant differences in giving priority to studies by attachment style. The anxious group had slightly lower giving priority to studies scores in comparison to the secure group and the dismissive-avoidant group. In the next chapter, I will continue examining the findings of the data analysis. The findings will be connected to the existing literature. I will provide limitations and suggestions for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Nontraditional community college students are disproportionately underrepresented in research, yet this student population is the largest college population in the United States and is at the greatest risk of not completing their terminal degree (Fong et al., 2018). I designed this study to examine the difference between attachment styles and behavioral learning dispositions among nontraditional community college students. Behavioral learning dispositions included the student-level components of examination preparation, quality of attention, and giving priority to studies. Behavioral learning dispositions help explain the coping strategies students use in academic settings; however, the relationship between attachment and learning dispositions was largely unknown in nontraditional community college students. The present study involved a quantitative nonexperimental research design, and the ANOVA model contained the independent variable of attachment styles coded as one attachment style along with one particular behavior score representing the dependent variables. The purpose of this quantitative nonexperimental study was to investigate the differences between nontraditional community college students' attachment styles and their behavioral learning dispositions to yield information to develop and improve community college readiness classes and help students complete their terminal degrees.

Responses to the RSQ and the TRAC questionnaire from a sample of 180 nontraditional community college students were analyzed and findings revealed there were no statistical differences at the .05 significance level between the attachment styles

and the behavioral learning dispositions of examination preparation, quality of attention, and giving priority to studies. Chapter 5 includes an interpretation of the findings in relation to previous research and a discussion of study limitations. The chapter also includes a discussion of the recommendations for further research and the implications for practice and social change.

Interpretation of the Findings

The first research question focused on differences in attachment styles based on the behavioral learning disposition of examination preparation. There are multiple reasons a marginal significance may have been found. Nontraditional students tend to be older and have lived independently from their parents for some time (Beauchamp et al., 2016). Therefore, the influence attachment has on learning dispositions may not be relevant. Attachment theory may not present the best explanation for learning dispositions in nontraditional community college students.

Another explanation for the lack of significance could be the nature of attachment in this study. This study examined attachment styles in general, not necessarily when the participant's attachment style was activated. Although participants may have an overall attachment style, the maladaptive behaviors that result from that attachment style may lay dormant in participants when they are not faced with a relationship stressor. When faced with a stressor that threatens their stability or security within a relationship, people's attachment styles become activated and they respond in a way appropriate to their attachment style (Ainsworth et al., 1978; Feeney & Collins, 2015). The insignificant

results may be due to participants' attachment style maladaptive behaviors being inactive at the time of the study.

An examination of the means indicated that the secure group had slightly higher examination preparation scores in comparison to the anxious group, the dismissive-avoidant group, and the fearful-avoidant group. Larose et al. (2005) found similar results in that securely attached participants improved their examination preparation, whereas the insecurely attached participants declined in their examination preparation. Simon, DiPlacido, and Conway (2019) also found that students who have a secure attachment are better able to think clearly when stressed due to more adaptive coping skills. Secure attachment permits individuals to use affective coping skills during times of stress. In general, those who have a secure attachment style tend to not become preoccupied with feelings of insecurity, thereby permitting them time and energy to focus on tasks at hand, such as preparing for exams. Owens, Held, Hamrick, and Keller (2018) also found that insecurely attached college students had a greater reliance on maladaptive emotional regulation strategies.

The second research question focused on differences in attachment styles and the behavioral learning disposition of quality of attention. The findings of this study showed that there was not significant difference between attachment styles and participants' quality of attention. This may be due to the same factors found in the first research question in that attachment theory may not provide the best explanation for differences in quality of attention among nontraditional community college students or that the

attachment styles were not active at the time of study, resulting in dormant maladaptive coping skills.

Comparisons found that the fearful-avoidant group had slightly lower quality of attention scores in comparison to the secure group and the dismissive-avoidant group. The fact that the fearful-avoidant group had lower quality of attention scores could be explained by the element of anxiety found in that attachment style. The fear of insecurity and abandonment may be causing this population to focus on those insecurities, whereas the dismissive-avoidant group does not dwell on insecurities and, instead, dismisses them faster than those who have a fearful-avoidant attachment style. Simon et al. (2019) found that insecure attachment may explain why some students respond to stress by shutting down emotionally, which could explain why dismissive-avoidant students did not experience the negative effects emotions could have on students' ability to pay attention to their studies. Larose et al. (2005) found that students' quality of attention for all insecure attachment styles were lower than that for secure attachment styles. This study found that students who are secure and who are dismissive-avoidant both scored higher rates of quality of attention, which differs from what Larose et al. (2005) found, but would be consist with the coping skills found in dismissive-avoidant attachment styles.

The third research question was designed to examine the differences between attachment styles and the behavioral learning disposition of giving priority to studies. Again, the ANOVA revealed no statistically significant differences in giving priority to studies by attachment style. The results of this study may be hindered by both the

inadequacy of the attachment theory explaining differences in giving priorities to studies and in the possible lack of an active attachment system in participants during this study.

Comparisons revealed that the anxious group had slightly lower giving priority to studies scores in comparison to the secure group and the dismissive-avoidant group. Larose et al. (2005) found that students who were anxiously attached and dismissive-avoidantly attached both scored lower than securely attached students in giving priority to studies. The present study revealed that those who were anxiously attached scored even lower than those who were dismissive-avoidantly attached. These results point to the fact that those who have a secure attachment style have more adaptive coping skills during times of distress, and may respond to stress in learning situations more adaptively. Mikulincer and Shaver (2018) and Simon et al. (2019) also found that students with high attachment anxiety tend to display hyperactivating strategies and be emotionally reactive when faced with a stressor. The anxious group having lower scores in giving priority to studies could be the result of maladaptive coping skills where they become preoccupied with a stressor, permitting less time and energy to focus on adaptive learning dispositions. Anxious students are more likely to describe themselves as having low self-assurance and perceiving stress more seriously (Simi & Matusitz, 2016). Students with low ability to gain self-control during times of stress may panic and demand reassurance from others, all of which could explain why they are less able to give priority to studies due to their focus being on obtaining reassurance (Simi & Matusitz, 2016).

One of the differences in this study compared to similar studies in the past is that this study had far more insecurely attached individuals (n = 147, 81.7%) than securely

attached individuals (n = 33, 18.3%). The present study had participants who fell in the dismissive-avoidant group (n = 54, 30.0%), anxious group (n = 30, 16.7%), fearful-avoidant group (n = 46, 25.6%), and who were tied in their attachment styles (n = 17, 9.4%). The study also had more participants (n = 180) compared to the Larose et al. study (n = 62). Larose et al. (2005) had 56.5% (n = 35) of its participants fall in the securely attached group, 27.4% (n = 17) in the dismissive-avoidantly attached group, and 16.1% (n = 10) in the anxiously attached group. Larose et al. did not use an attachment assessment tool that divided attachment into four groups, so there are no results for the fearful-avoidant group. The fact that this study had more insecurely attached participants gives greater insight into the differences between each insecure attachment style. Although the findings of this study were similar to that of Larose et al., the distinctions between the insecure attachment styles resulted in slightly different findings. The greater population of insecurely attached participants could have helped emphasize differences that were not found in the smaller population of the Larose et al. study.

Students who scored higher on their ability to pay attention, prepare for exams, and give priority to their studies all fell within the secure attachment style. Social cognitions have self-regulative influences over individual functioning that motivates and regulates behaviors. Behavioral reactions are the result of the individual evaluation and interpretation situations. Securely attached participants' evaluation of the educational environment and behavioral skills needed to be successful in that environment were not negatively influenced by emotional concerns within their relationships.

Attachment theory postulates that an individual's sense of security within his or her environment is influenced by the attachment they have to close others. Those who develop a secure attachment with close others feel more secure in their environment and are able to adapt to their environment more readily than those who do not develop a secure attachment. In this study, I found that students who had a secure attachment style held higher scores on all three behavioral learning dispositions. The development of an insecure attachment style can leave individuals preoccupied with their need for security. This study found that individuals who were anxious or fearful-avoidant in their attachment styles scored lower in quality of attention and giving priority to studies, suggesting that there could be a correlation between these attachment styles and their ability to effectively cope in the learning environment due to their preoccupation with security.

Limitations of the Study

A limitation of this study is the lack of generalizability to the United States population. The participants of this study were students at one community college found in the Midwest region of the United States. This limited geographic region means that the findings of this study may be significant among Midwest students, but not necessarily other regions of the country.

The self-report questionnaires used in this study also present another limitation. Self-report questionnaires include some degree of subjectivity, or self-report bias, because they rely on personal views; additionally, participants may be tempted to provide socially desirable, rather than honest, responses. Wright, Perrone-McGovern, Boo, and

Vannatter White (2014) explained that the desire to provide socially desirable responses was a limitation in their study as well. Although I recommended that participants complete the self-report questionnaires at a time and location of their choosing and to do so in private, it is not clear whether participants followed these recommendations. This study also sought to delimit its threat to validity by conceptualizing the results as a function of perception rather than an objective reality. Unfortunately, there was no certain way to ensure perceptual biases and socially desirable responses were not given by participants. It is recommended that future studies expand on the results found from this study by using qualitative methods.

The study included examination of attachment styles and behavioral learning dispositions based on participants' past recollections, which may not be reflective of reality. The study was not designed to examine current situations nor ensure that the attachment system was activated. When people experience a relationships stressor that threatens their sense of security in that relationship, the attachment system becomes activated and the coping styles associated with their attachment style can become overly apparent. If this research had focused on attachment styles when they were activated due to a current relationship stressor, the maladaptive behaviors could have transcended more into their learning dispositions. The results could have differed if the participants' attachment system was activated at the time of research rather than just relying on participants' attachment systems in general.

Recommendations

Future studies should use a broader nontraditional community college student population so that the findings can be generalized to the actual population found in the United States. Including other regions than just the Midwest can assist in ensuring better generalizability. This study was performed at an urban area community college as well. Although the results of this study may be more representative of an urban population, the size of the urban area was small, approximately 200,000 people, compared to many large cities in the United States (U.S. Census Bureau, 2018). I recommend that future studies include urban and rural populations and that the urban populations include large cities of more than 200,000 people.

Future researchers should consider measuring behavioral learning dispositions only when the attachment system is activated. The general attachment style of participants was helpful in understanding the results in an everyday manner, but the results of the attachment styles could have more of an impact on behavioral learning dispositions when the participants are currently experiencing an activated attachment system. The attachment theory proposes that the coping skilled used by people can be more significant in times of distress (Feeney & Collins, 2015). Although I designed the present study to examine general attachment styles based off participants' retroactive reflection, it did not ensure that attachment systems were activated when completing the TRAC (Larose & Roy, 1995). Ensuring attachment systems are activated could also ensure statistically significant at the .05 significance level. Longitudinal research

designed to collect attachment data over time, with multiple data collection points, could help explain changes in attachment styles and the dynamics of learning dispositions.

I also recommend that future studies focus on the fearful-avoidant attachment style in relation to behavioral learning dispositions. The addition of the fearful-avoidant attachment style can help explain attachment influences on someone who has both anxious and avoidant tendencies. This study found that participants who fell within the fearful-avoidant attachment group had the poorest quality of attention compared to the other attachment styles. This could indicate that the challenges of having both anxious and avoidant attachment qualities can lead to greater maladaptive coping skills. Future researchers should further examine the significance of the fearful-avoidant attachment style in relation to learning dispositions to see if the results of this study can be replicated.

Implications

Practice

The results of this study can assist in better understanding factors that are related to maladaptive behavioral learning dispositions in nontraditional students and guide community colleges in how to best assist students in counteracting these maladaptive practices. Many community colleges require students to take a college readiness course that introduces students to college expectations and the campus environment, including strategies that promote and encourage success in college and in life. Approaches such as self-efficacy training, goal setting, confidence, and resilience could be added to their college readiness courses to counter affect maladaptive practices.

The findings from this study may positively impact students by assisting community colleges in understanding the importance of including discussions regarding attachment styles and how they can impact students' behavioral learning dispositions at an organizational level. Offering study skills, test-taking strategies, stress reduction, time management, and organizational skills (Berry & Kingswell, 2012) to nontraditional students with maladaptive learning dispositions could lead to social change by producing students who are successful in college and beyond at an individual and societal level.

Policy

Based on the findings that there was no significance between attachment and learning dispositions at the standard .05 significance level, this could indicate that attachment theory may not be the best theory to explain maladaptive coping strategies in nontraditional community college students. Hopefully this research study inspires others to examine coping theories that could best explain the challenges students are facing in regard to their learning dispositions. The adaptive strategies learned early in life through attachment may also not be related to the adaptive strategies found in adulthood educational settings.

The lack of significance at the .05 level could also point to the importance of examining attachment theory and learning dispositions in students when their attachment system is activated. A broad understanding of attachment styles may be helpful, but to truly examine the significant effects of attachment on learning, it would be best to explore attachment when students' coping skills are in use. The activation of the

attachment system may increase the use of maladaptive coping skills for students who have insecure attachment styles.

Social Change

This study can have a positive social change at the organizational, individual, and society levels. At the level of society, the importance of understanding how students develop maladaptive learning dispositions could impact the number of students successfully completing their terminal degrees. As nontraditional community college students make up the majority of college students (Harms, 2013) and the majority of students who do not complete their degrees (Fong et al., 2018), it is critical that researchers focus on this population.

Students' social, personal, and emotional development is "inextricably intertwined" with their academic-cognitive process (Broido & Schreiber, 2016, p. 66). Studying malleable variables, such as learning dispositions, can assist in understanding how intertwined development and academic success may be. Research has shown that traditional predictors of student success, such as test performance, account for only 25% of college achievement (Fong et al., 2018). Studying learning dispositions allows researchers to understand how students' beliefs and approaches to school help students control and manage their learning, which can be crucial to academic success at the college level (Kahu, 2013). With the increased learning responsibilities that accompany attending college, students must exhibit positive learning dispositions to cope with stressors and stay focused to help ensure academic success (Kahu, 2013). The

investigation into unexplained factors, such as learning dispositions and coping skills, could be the key to unlocking student success in higher education.

Conclusion

Previous research focused on traditional college students, leaving out the group of nontraditional college students which dominates the amount of college students in the United States. The focus on traditional college students provided an incomplete view of how attachment styles impacts behavioral learning dispositions. This study was designed to gain insight into the impact of attachment styles on behavioral learning dispositions. Specifically, the purpose of this study was to examine differences between secure, anxious, dismissive-avoidant, and fearful-avoidant in relation to three behavioral learning dispositions: examination preparation, quality of attention, and giving priority to studies. This study showed that those who have a secure attachment style have better adaptive skills when it comes to examination preparation, quality of attention, and giving priorities to studies. Future researchers can use the findings of this study to further examine the differences in attachment styles and the implications these differences may have on students' adaptive behavioral learning dispositions and subsequent success in completing their terminal degrees.

References

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum.

American College Health Association. (2013). *American College Health Association-National College Health Assessment II: Reference group executive summary. Spring 2013*. Hanover, MD.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (2000). Social-cognitive theory. *Encyclopedia of Psychology*, *7*, 329–332. doi:10.1037/10522-140

Barry, B., & Stewart, G. L. (1997). Composition, process, and performance in self-managed groups: The role of personality. *Journal of Applied Psychology*, *82*, 62–78. doi:10.1037/0021-9010.82.1.62

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, *7*, 147–78. doi:10.1177/0265407590072001

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*(2), 226–244. doi:10.1037/0022-3514.61.2.226

Beauchamp, G., Martineau, M., & Gagnon, A. (2016). Examining the link between adult attachment style, employment, and academic achievement in first semester higher education. *Social Psychology of Education*, *19*, 367–384. doi:10.1007/s11218-015-9329-3

Berry, K., & Kingswell, S. (2012). An investigation of adult attachment and coping with exam-related stress. *British Journal of Guidance & Counseling*, *40*(4), 315–325. doi:10.1080/03069885.2012.685861

Bordens, K. S., & Abbott, B. B. (2008). *Research design and methods: A process approach* (7th ed.). Boston, MA: McGraw-Hill.

Bowlby, J. (1973). *Attachment and loss: Separation*, *anxiety*, *and anger* (Vol. 2). New York, NY: Basic Books.

Bowlby, J. (1980). *Attachment and loss* (Vol. 3). New York, NY: Basic Books.

Bowlby, J. (1984). *Attachment and loss: Attachment* (Vol. 1, 2nd ed.). New York, NY: Basic Books.

Broido, E. M., & Schreiber, B. (2016). Promoting student learning and development. *New Directions for Higher Education*, *2016*(175), 65–74. doi:10.1002/he.20200

Buckingham Shum, S., & Deakin Crick, R. (2012). Learning dispositions and transferable competencies: Pedagogy, modelling and learning analytics. *Proceedings of the 2nd International Conference on Learning Analytics & Knowledge.* New York, NY: ACM Press

Bus, A. G., & van IJzendoorn, M. H. (1988). Mother-child interactions, attachment and emergent literacy: A cross-sectional study. *Child Development*, *59*(5), 1262–1272. doi:10.2307/1130489

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). St. Paul, MN: West Publishing Company.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship

quality in dating couples. *Journal of Personality and Social Psychology*, *58*, 644–663. doi:10.1037/0022-3514.58.4.644

Dawson, A. E., Allen, J. P., Marston, E. G., Hafen, C. A., & Schad, M. M. (2014). Adolescent insecure attachment as a predictor of maladaptive coping and externalizing behaviors in emerging adulthood. *Attachment & Human Development*, *16*(5), 462–478. doi:10.1080/14616734.2014.934848

Dereli, E., & Karakus, O. (2011). An examination of attachment styles and social skills of university students. *Electronic Journal of Research in Educational Psychology*, *9*(24), 731–734. doi:10.25115/ejrep.v9i24.1464

Dowd, J., Thompson, R., Schiff, L., Haas, K., Hohmann, C., Roy, C., … Price, R. (2019). Student learning dispositions: Multidimensional profiles highlight important differences among undergraduate stem honors thesis writers. *Cbe-Life Sciences Education*, *18*(2), 28. doi:10.1187/cbe.18-07-0141

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2014). G*Power Version 3.1.9 [Computer software]. Retrieved from http://www.gpower.hhu.de/en/html

Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review*, *19*(2), 113–147. doi:10.1177/1088868314544222

Field, A. (2013). *Discovering statistics using SPSS* (4th ed.). Thousand Oaks, CA: Sage Publications.

Fong, C. J., Acee, T. W., & Weinstein, C. E. (2018). A person-centered investigation of achievement motivation goals and correlates of community college student

achievement and persistence. *Journal of College Student Retention: Research, Theory, & Practice*, *20*(3), 369–387. doi:10.1177/1521025116673374

Fraley, R. C., Hudson, N. H., Heffernan, M. E., & Segal, N. (2015). Are adult attachment styles categorical or dimensional? A taxometric analysis of general and relationship-specific attachment orientations. *Journal of Personality and Social Psychology*, *109*(2), 354–368. doi:10.1037/pspp0000027

Hainlen, R. L., Jankowski, P. J., Paine, D. R., & Sandage, S. J. (2015). Adult attachment and well-being: Dimensions of differentiation of self as mediators. *Contemporary Family Therapy*, *38*(2), 172–183. doi:10.1007/s10591-015-9359-1

Harms, B. (2013). *2013 adult students TALK* [PowerPoint Presentation]. Retrieved from https://www.wku.edu/delo/marketing/documents/stamats-study.pdf

Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*(3), 511–524. doi:10.1037/0022-3514.52.3.511

Howell, D. C. (2013). *Statistical methods for psychology* (8th ed.). Belmont, CA: Wadsworth Cengage Learning.

Jacobsen, T., Edelstein, W., & Hofmann, V. (1994). A longitudinal study of the relation between representations of attachment in childhood and cognitive functioning in childhood and adolescence. *Developmental Psychology*, *30*(1), 112–124. doi:10.1037/0012-1649.30.1.112

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, *38*(5), 758–773. doi: 10.1080/03075079.2011.598505

Kogut, E. (2016). Adult attachment styles, self-efficacy, and casual attributional style for achievement-related failures. *Learning and Individual Differences*, *50*, 64–72. doi: 10.1016/j.lindif.2016.07.001

Khodarahimi, S., Hashim, I.H.M. and Mohd-Zaharim, N., 2016. Attachment Styles, Perceived Stress and Social Support in a Malaysian Young Adults Sample. *Psychologica Belgica*, 56(1), pp.65–79. doi: 10.5334/pb.320

Konrath, S. H., Chopik, W. J., Hsing, C. K., & O'Brien, E. (2014). Changes in adult attachment styles in American college students over time: A meta-analysis. *Personality and Social Psychology Review*, *18*, 326–348. doi: 10.1177/1088868314530516

Larose, S., Bernier, A., & Tarabulsy, G. M. (2005). Attachment state of mind, learning dispositions, and academic performance during the college transition. *Developmental Psychology*, *41*(1), 281–289. doi: 10.1037/0012-1649.41.1.281

Larose, S., & Roy, R. (1995). Test of reactions and adaptation in college (TRAC): A new measure of learning propensity for college students. *Journal of Educational Psychology*, *87*(2), 293–306. doi: 10-1007/s10734-016-0006-z

Lavy, S. (2017). Who benefits from group work in higher education? An attachment theory perspective. *Higher Education*, *73*(2), 175-187. doi: 10.2307/1128221

Lee, S. & Lee D. K (2018). What is the proper way to apply the multiple comparison test? *Korean Journal of Anesthesiology*, *71,* 353-360.

Matas, L., Arend, R. A., & Sroufe, L. A. (1978). Continuity in adaptation in the second year: The relationship between quality of attachment and later competence. *Child*

Development, *49*, 547–556. doi: 10.2307/1128221

McDermott, R. C., Cheng, H., Wright, C., Browning, B. R., Upton, A. W., & Sevig, T. D. (2015). Adult attachment dimensions and college student distress: The mediating role of hope. *The Counseling Psychologist*, *43*(6), 822–852. doi: 10.1177/0011000015575394

Mikulincer, M., & Shaver, P. R. (2018). *Attachment patterns in adulthood: Structure*, *dynamics*, *change* (2nd ed.). New York, NY: Guilford Press.

Nguyen, Q., Rienties, B., Tempelaar, D. T., & Giesbers, B. (2016). What learning analytics-based prediction models tell us about feedback preferences of students. *Quarterly Review of Distance Education*, *17*(3), 13–33.

Nielsen, S. K., Lønfeldt, N., Wolitzky-Taylor, K. B., Hageman, I., Vangkilde, S., & Daniel, S. F. (2017). Adult attachment style and anxiety - The mediating role of emotion regulation. *Journal of Affective Disorders, 218*, 253–259. doi: 10.1016/j.jad.2017.04.047

Owens, G., Held, P., Hamrick, L., & Keller, E. (2018). The indirect effects of emotion regulation on the association between attachment style, depression, and meaning made among undergraduates who experienced stressful events. *Motivation and Emotion*, *42*(3), 429–437. doi: 10.1007/s11031-018-9688-0

Pehrabad, S. I., Mashadi, A., Tabibi, Z., & Gharavi, M. M. (2016). Psychometric properties of relationship scales questionnaire in Iranian female students. *Department of Psychology, 4*(1), 43-50.

Pelletier, S. G. (2010). Success for adult students. *Public Purpose*, 2–6. Retrieved from

https://www.aascu.org/uploadedFiles/AASCU/Content/Root/MediaAndPublications/PublicPurposeMagazines/Issue/10fall_adultstudents.pdf

Shvil, E., Krauss, H., & Midlarsky, E. (2013). The experienced self and other scale: A technique for assaying the experience of one's self in relation to other. *Journal of Methods and Measurement in the Social Sciences, 4*(2), 1-20. doi: 10.2458/v4i2.17934

Simi, D., & Matusitz, J. (2016). Native American students in U.S. higher education: A look from attachment theory. *Interchange*, *47*, 91–108. doi: 10.1007/s10780-015-9256-4

Simon, H., DiPlacido, J., & Conway, J. (2019). Attachment styles in college students and depression: The mediating role of self differentiation. *Mental Health & Prevention*, *13*, 135–142. doi: 10.1016/j.mhp.2019.01.011

Simon Fraser University (2019). Frequently Asked Questions- Psychology Members' Site. Retrieved from http://members.psyc.sfu.ca/labs/kim_bartholomew/attachment/frequently_asked_questions?

Stajkovic, A. D., Bandura, A., Locke, E. A., Lee, D., & Sergent, K. (2018). Test of three conceptual models of influence of big five personality traits and self-efficacy on academic performance: A meta-analytic path-analysis. *Personality and Individual Differences*, *120*, 238–245. doi: 10.1016/j.paid.2017.08.014

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Allyn and Bacon.

Teo, A., Carlson, E., Mathieu, P., Egeland, B., & Sroufe, L. A. (1996). A prospective longitudinal study of psychosocial predictors of achievement. *Journal of School Psychology*, *34*, 285–306. doi: 10.1016/0022-4405(96)00016-7

United States Census Bureau (2018, July 1). Quick Facts: Des Moines City, Iowa. Retrieved April 13, 2020 from https://www.census.gov/quickfacts/desmoinescityiowa.

Wright, S. L., Perrone-McGovern, K. M., Boo, J. N., & Vannatter White, A. (2014). Influential factors in academic and career self-efficacy: Attachment, supports, and career barriers. *Journal of Counseling & Development*, *92*, 36–46. doi: 10.1002/j.1556-6676.2014.00128.x

Appendix A: TRAC Permissions

[redacted]

Fri 2/8/2019 2:45 PM

RE: TRAC Assessment Permission

Dear Kristen, feel free to use with my permission the english version of the TRAC. You will find the questionnaire and relevant papers in the attached documents.

Sincerely!

[redacted] PhD
Directeur du DESS en enseignement collégial (par intérim)
Département d'études sur l'enseignement
et l'apprentissage
[redacted]
Québec (Québec) G1V 0A6
[redacted]

Appendix B: [redacted] Community College Preliminary Permission

[redacted] PhD
[redacted]@[redacted].edu

Tuesday 05/14/2019 3:50PM

RE: [redacted] Dissertation

Hello Kristen;

You will need formal [redacted] IRB approval prior to conducting your research. To that end, I have preliminarily reviewed your proposal. It looks to be an interesting study!

I am attaching the [redacted] IRB Proposal for you to complete and attach your Walden IRB approval along with samples of your solicitation flyers and Informed Consent as well as the developed survey instruments.

Please return the completed proposal when you are ready.

[redacted], Ph.D
Office of Institutional Effectiveness
[redacted]