THE RELATIONSHIP BETWEEN PERCEPTION OF BARRIERS AND LIFE SATISFACTION AS MEDIATED BY COPING EFFICACY

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DEDICATION

I dedicate this dissertation to my daughter, Ayla. You are the highlight of my every day and the sweetest distraction amid life's challenges. No matter what heights I reach in my professional or personal pursuits, nothing will ever compare to the privilege of being your mother.

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ABSTRACT

This study examined the relationship between life satisfaction and perception of educational and career-related barriers. Perceived barriers threaten career development and can subsequently enhance negative appraisals of personal worth and ability. Coping efficacy, an individual's belief or confidence in their ability to manage and overcome challenging or stressful situations, was evaluated as a mediator of this relationship among a sample of 208 undergraduate college students.

The findings of this study suggest a significant negative relationship between the perception of barriers and life satisfaction, which indicates that individuals with higher levels of perceived barriers endorsed lower life satisfaction and vice versa. Additionally, individuals with higher coping efficacy exhibited higher life satisfaction, and those with lower coping efficacy endorsed higher perceptions of barriers. Contrary to expectations, coping efficacy did not mediate the relationship between the perception of barriers and life satisfaction. Implications for research, practice, and theory are discussed. Increased understanding of the relationship among coping efficacy, perceived barriers, life satisfaction, and career development will facilitate the creation of more effective interventions and inform targeted approaches for working with clients.

KEYWORDS: Coping Efficacy, Life Satisfaction, Career Barriers, Academic Barriers, Perception of Barriers, Life Satisfaction, College Students

TABLE OF CONTENTS

Page

ABSTRACT vi

LIST OF TABLES x

LIST OF FIGURES xi

CHAPTER

I. INTRODUCTION 1

Statement of the Problem 5

Significance of the Problem 5

Historical Context 6

Perception of Barriers 9

Life Satisfaction 16

Coping Efficacy 21

Coping Efficacy and Mediation 25

Purpose of the Study 27

Significance of the Study 28

II. REVIEW OF RELEVANT LITERATURE 29

Perception of Barriers 29

Life Satisfaction 34

Coping Efficacy as a Mediator 38

Relationship Between Constructs 43

Perception of Barriers and Life Satisfaction 43

Coping Efficacy and Perception of Barriers 46

Coping Efficacy and Life Satisfaction 57
Goals of the Study 62
Research Questions 63
III. RESEARCH METHODOLOGY 65
Research Design 65
Participants 66
Measures 69
Demographic Questionnaire 70
The Perception of Barriers Scale 70
The Coping with Barriers Scale 75
The Satisfaction with Life Scale 82
Procedure 85
Data Analyses 87
IV. RESULTS 91
Preliminary Results 92
Data Screening 92
Reliability of Measured Variables 96
Bivariate Correlations 97
Multivariate Analysis of Variance 99
Mediation Analysis 99
V. DISCUSSION 103
Review of Research Questions 103
Findings 106

Perceived Barriers and Life Satisfaction.....106
Coping Efficacy and Life Satisfaction.....108
Perceived Barriers and Coping Efficacy.....108
Coping Efficacy as a Mediator 109
Limitations 114
Implications for Research 117
Implications for Practice 126
Implications for Theory 128
Conclusion 129
REFERENCES 130
APPENDICES
A. Recruitment Email 169
B. Demographic Questionnaire.....170

LIST OF TABLES

Table		Page
I.	Demographic Characteristics of Participants	68
II.	Descriptive Statistics of Scales	97
III.	Pearson Bivariate Correlations, Internal Consistency, Means, and Standard Deviations	98

LIST OF FIGURES

Figure Page

1. Proposed Mediation Model for the Relationship between the Perception of Barriers and Life Satisfaction as Mediated by Coping Efficacy.....63
2. Mediation Analysis of Perception of Barriers, Coping Efficacy, and Life Satisfaction: Unstandardized Beta Coefficients.....102
3. Mediation Analysis of Perception of Barriers, Coping Efficacy, and Life Satisfaction: Standardized Beta Coefficients.....103

CHAPTER I

INTRODUCTION

A key focal point of counseling psychology is rooted in fostering societal growth via academic and career development. Accordingly, there has been a noticeable connection between proposed career development theories and advocacy for change, sociopolitical advancements, and enhanced educational opportunities. These movements, coupled with technological advances, have created a workforce, labor market, relational, and economic landscape that constantly adapts and changes.

Career development is particularly pertinent during college and is typically a central concern for students. The academic path that one chooses to pursue can have lasting impacts on many aspects of their future, including their future career, economic stability, social mobility, psychological well-being, and overall life satisfaction. College students are also particularly susceptible to the perception of barriers in this critical life stage, which can be attributed to many factors associated with being in an environment where one is likely to encounter a variety of new personal and academic challenges, such as newfound independence, living away from support systems, a lack of self-efficacy,

poor time management, or experiences of discrimination (Chao, 2012; Rickinson, 1998; Roberti et al., 2006).

Counseling psychology has had a long-standing interest in scientific explorations of life satisfaction due to its potential to promote optimal functioning for clients and inform effective counseling interventions. This desire to maintain mental health and an overall sense of well-being is paramount during such a transitional life stage that often forces individuals to confront novel barriers. Working is a central aspect of life as it provides a means of survival, and we spend a significant amount of time throughout our lifespan engaging in work. There are numerous career and educational barriers that an individual may experience, including financial issues, lack of ability, sexism, racism, role conflict, and lack of confidence. Such experiences can hinder career development, and, ultimately, barriers to education and career can significantly influence one's life trajectory. The social, cultural, and political contexts that control access to work have been largely ignored in vocational psychology and career theories (Blustein et al., 2005; Mejia-Smith & Gushue, 2017; Peterson & González, 2000; Richardson, 2012). Understanding how perceived education and career barriers shape career decisions and career paths is vital due to the substantial role of work in our lives.

Perception of barriers refers to one's beliefs about potential conditions that may hinder the pursuit of their goals. Perceived barriers are argued to exert a more significant influence over career behavior than actual barriers (Swanson & Woitke, 1997). The existing literature demonstrated the importance of perceived barriers concerning vocational and educational realizations (Creed et al., 2009; Kenny et al., 2003; Lent,

Brown, & Hackett, 2002; Luzzo & McWhirter, 2001; McWhirter, 1997; Swanson & Tokar, 1991b). Perception of barriers influences mental health and factors associated with employment and overall life satisfaction (Tate et al., 2015). Furthermore, the degree to which a barrier will impact is contingent on how one appraises said barrier and their ability to negotiate it successfully (Lent et al., 2000). Thus, the perception of barriers is innately related to coping efficacy, which refers to an individual's belief in their ability to overcome perceived barriers successfully.

Coping efficacy has the potential to minimize distress when navigating challenges throughout life. Whereas encountering personal and environmental challenges and having a heightened perception of barriers might put an individual's well-being at risk, the ability to overcome such difficulties may actually enhance one's life satisfaction either directly or indirectly through goal-directed progress and satisfaction in other domains (Bandura, 1993; Diener et al., 1999; Flores et al., 2020; Gloria et al., 2005; Lent et al., 2005; Sheu et al., 2016). Subsequently, the ability to overcome such difficulties may enhance one's life satisfaction (Diener et al.; Lent et al., 2005; Sheu et al.).

Currently, there is limited literature examining the extent to which such positive factors might impact perceived education and career barriers in relation to life satisfaction. The extant literature has demonstrated the inverse relationship between higher perceived career and education barriers and life satisfaction (Arellano-Morales et al., 2016; Castellanos et al., 2018; Haar et al., 2014; Lent et al., 2014; Piña-Watson et al., 2014), but the precise role that coping efficacy plays in mediating this relationship remains unclear. It is anticipated that increased understanding of these complex

relationships the variables employed in this study will inform more effective and targeted approaches for interventions. This research sought to draw upon the coping efficacy and career development literature to further understand the influence of coping efficacy on the perception of barriers and overall well-being.

The purpose of this dissertation is to put forward a study investigating the mediating effects of coping efficacy on the relationship between life satisfaction and perceived barriers. Chapter I introduces theoretical and empirical literature on perceived educational and career-related barriers, life satisfaction, and coping efficacy. The second chapter will critically review empirical studies on perceived barriers, life satisfaction, and coping efficacy, and the relationships between these constructs. Gaps in the literature will be identified and a rationale for conducting this investigation will be provided. The third chapter outlines the research methodology, including research design, participants, data collection measures, procedure, and data analysis. The fourth chapter will present the results of the empirical component of the present study. The final chapter will present the conclusions of the present study and highlight the meaning and relevance of the research findings.

The following sections will provide historical context, discuss the role of the perception of barriers in relation to educational pursuits and career development, highlight the importance of coping efficacy for overcoming perceived barriers, the potential mediating role of coping efficacy, examine the relationship between constructs briefly, and reiterate the purpose of the current study.

Statement of the Problem

Empirical research has demonstrated that the perceived educational and career barriers can hinder career development and well-being. College students are in a unique transition stage that often involves novel challenges and a heightened perception of barriers. Given that perceived barriers may impede goals and, subsequently, have the potential to affect psychological well-being and life satisfaction adversely, it is essential to explore the relationship between perceived barriers and life satisfaction further (Piña-Watson et al., 2014; Rogers et al., 2012). While college and university campuses often provide services to assist students with difficulties, these efforts may not be meeting the students' needs. It is critical to understand what kinds of barriers they are facing and how to address them effectively. The present study seeks to examine the role of coping efficacy in this established relationship between life satisfaction and the perception of barriers.

Significance of the Problem

The extant literature has definitively demonstrated that the resources currently available to college students are not adequately addressing the many unique and multifaceted barriers that are likely to be present (Freeman et al., 2016; Lent et al., 2000; Shadle et al., 2017). There is a lack of awareness and understanding regarding perceived barriers encountered by college students, how perceived education and career barriers affect well-being, and effective methods to address career and educational obstacles, provide support, and promote student coping. Furthermore, said methods vary a considerable amount between settings and individuals. There are numerous types of

barriers one may encounter, and individual considerations related to personal identity and multicultural factors that inform which approach is most appropriate. As a result of providing a more comprehensive understanding of perceived education and career barriers and the relationship between barriers and life satisfaction, it is more feasible to developing practical interventions for college students struggling with well-being, coping, or encountering barriers. Identification of issues pertinent to college students will provide further opportunities to enhance student success through outreach and targeted academic and career interventions and minimize adverse outcomes associated with perceived barriers.

Historical Context

Social justice advocacy served as a driving force behind early empirical work in vocational psychology (Mallinckrodt et al., 2014). This advocacy work can be traced back to Frank Parsons' (1909) pioneering effort to provide vocational counseling and advocate for individuals who were likely to encounter barriers to vocational aspirations (Jones, 1994). Parsons offered vocational guidance to disenfranchised populations, especially the working class and immigrants, primarily in urban areas (Gelso & Fretz, 2001). In fact, numerous early studies pertaining to vocational psychology concerned individuals from low socioeconomic backgrounds and the working class (Parsons; Richardson, 1993; Savickas, 1999; Smith, 1983). Despite this initial focus, there was a significant shift in the populations studied in vocational psychology following World War II (Blustein et al., 2005). The focus shifted to clients who generally were educated to some extent and had a choice in the educational and career goals they pursued (Blustein

et al.). The working world is arguably one context where social injustices and inequities are most visible (Blustein, 2001).

Historically, many groups of people were prevented from obtaining an education based on their race, gender, or social class. Given that education typically serves as a precursor for vocational pursuits, this hindered even the possibility of engaging in meaningful work and negated the majority of the population's career development. Even though most people were not able to utilize work as a vehicle for their interests, values, or talents, perception of career barriers did not garner much attention within the field of vocational psychology until the literature began to explore the career development of women (Swanson et al., 1996; Swanson & Woitke, 1997). Scholars brought attention to women's tendency to achieve less than what they were capable of in the working world. Specifically, the research sought to determine an explanation for the restriction in women's career aspirations and was primarily interested in the role career barriers potentially played in explaining the gap in the career development of women (Lent et al., 2000).

Barriers can create diverging paths in educational pursuits and, in turn, the college-to-work transition (Blustein et al.). Blustein et al. utilized social analysis and critiques from several schools of theory and scholarship, including critical psychology (Fox & Prilleltensky, 1997; Prilleltensky & Nelson, 2002; Sloan, 2000), social work (Pinderhughes, 1983; Solomon, 1987), community psychology (Rappaport, 1987; Sarason, 1974), and liberation psychology (Freire, 1984; Hollander, 1997; Martín-Baró, 1994), to inform their understanding of how people actualize vocational aspirations. The

authors asserted that the opportunity for satisfaction within the realm of work is situated within a socioeconomic hierarchy. According to this interpretation, some individuals are inherently more likely to gain access to resources and be afforded the privilege of being able to make occupational choices based on their exposure to a broader array of possible options (Blustein et al.). Their counterparts on the lower end of the socioeconomic hierarchy are naturally more inclined to perceive a more significant number of barriers due to the uneven distribution of resources within the opportunity structure. For instance, a White cisgender, heterosexual male from higher socioeconomic status and with parents who both received college educations is likely to have more access to resources than someone who is a Black, Latino, or Native American, whose parents did not attend college, and is in a lower socioeconomic status (Carter & Cook, 1992; Helms, 2003; Jarjoura et al., 2002; Richardson, 1993). Individuals within the same socioeconomic hierarchy have vastly different experiences maintained through systemic issues, unfair distribution of resources, inadequate support systems, and the institutional structure of opportunities. Gaining access to resources within one's environment is often critical for shaping vocational aspirations by exploring and developing interests, values, and abilities (Blustein et al.). The contrast between the types and amounts of barriers and supports encountered varies significantly between individuals but consistently favors those with more privileged identities. It is critical to acknowledge that there is an unfair playing field and examine how access to such resources—or lack thereof—plays a significant role throughout our lifespan, including career development, educational and career

opportunities, development of interests, perceived education and career barriers, self-efficacy, financial means, mental health, and overall satisfaction.

Research in vocational psychology in more recent years reflects the widespread recognition of the social and economic issues of the 21st century and how they interact with career development. The demand for skilled workers who could adapt to a rapidly changing labor market coupled with societal pressures provided a need for a more diverse workforce. Moreover, acknowledging restrictions on career choice and the uneven distribution of resources encouraged us to confront the existing social inequities exhibited in education and careers. This shift has led to a significant increase in research aiming to address underserved populations' vocational issues and incorporate more social justice-based interventions and practices. Another notable outcome in this shift of attention within the field was the realization that the root of many career and educational problems is systemic and structural issues and, subsequently, advocacy that encouraged psychologists to utilize their positions to enact social and policy change (Blustein et al., 2005; Herr, 1996; Herr, 2003; McClure, 1996; Watts, 2000).

Perception of Barriers

Perception of barriers refers to one's beliefs about potential conditions that may hinder the pursuit of their goals. The concept of barriers is defined as "events or conditions, either within the person or in their environment, that make career progress difficult" (Swanson & Woitke, 1997, p. 434). Academics and researchers throughout the field have widely adopted Swanson and Woitke's definition of barriers. It has an obvious appeal due to its assertion that barriers represent both environmental (e.g., sexism,

social/family influences, discrimination) and intrapersonal (self-efficacy, self-concept) factors that impede career development (Crites, 1969). It can be challenging to differentiate between such factors because they are often intertwined and frequently coincide (Swanson & Woitke). Subsequently, researchers have often viewed and addressed environmental and intrapersonal factors as conceptually equivalent in the past (Lent et al., 2000).

The inherent difficulty of distinguishing between types of barriers and determining how to classify them, especially when there is overlap, has been widely acknowledged throughout the literature. For instance, Swanson and Tokar (1991a) explored the types of career barriers perceived by college students and gender differences in their perception of career-related barriers. The results demonstrated that college students undoubtedly perceive barriers. Moreover, individuals reported multiple types of perception of career-related barriers that were not easily categorized or distinguishable as either external or internal. Empirical research has shown that when college students are asked to identify factors that deterred them in the implementation of their career choice options, they indicated a wide variety of reasons, which were often a combination of contextual (e.g., role conflicts, lack of support systems, financial concerns) and intrapersonal (e.g., ability limitations, personal adjustment difficulties, lack of confidence) factors (Lent et al., 2002). These findings are consistent with Swanson and Woitke's (1997) assessment of career barriers and highlight the importance of considering how barriers are classified and the overlap between types of barriers.

While there is no singular system to distinguish types of barriers, several classifications for types of barriers have been proposed (Crites, 1969; Farmer, 1976; Harmon, 1997; Swanson & Tokar, 1991b; Urbanaviciute et al., 2016). Crites described two types of barriers—external frustrations (e.g., wages, discrimination in the workplace) and internal conflicts (e.g., motivation to achieve, self-concept). Urbanaviciute et al. asserted external barriers environment-focused, contextual factors such as (e.g., employment restrictions, financial problems, family demands). In contrast, internal barriers are person-focused (e.g., motivation or interest in pursuing career goals, perceived lack of ability). Variations of this internal-external dichotomy have been commonly employed throughout the literature to describe types of barriers (Creed et al., 2004; Lent et al., 2000; McWhirter et al., 2007). Swanson and Tokar (1991b) asserted that this internal-external dichotomy was not adequate for categorizing barriers. Specifically, the authors suggested that while internal barriers were relatively simple to identify, external barriers provided more difficulty as they could manifest from either the person or the environment. In order to circumvent this issue, Swanson and Tokar (1991b) proposed three barrier clusters—attitudinal (e.g., attitudes toward work, self-concept), social-interpersonal (e.g., multiple role conflict), and interactional (e.g., discrimination). Subsequent research provided modest support for this classification of barriers among university students (Swanson & Tokar, 1991a).

The term perception of barriers implies that the barriers one encounters or anticipates they will experience are not necessarily substantiated or based on reality but instead formed by personal beliefs (Albert & Luzzo, 1999). For example, an individual

could believe that they are unqualified for a particular job. Thus, their perceived lack of qualifications would serve as a potential career barrier regardless of whether their assessment is accurate. Perceived barriers are argued to exert a greater influence over career behavior than actual barriers (Swanson & Woitke, 1997). Moreover, whether a barrier will have an impact is contingent on how one appraises said barrier (Lent et al., 2000). The existing literature has demonstrated the importance of the perception of educational and career-related barriers in regard to vocational and educational realizations (Creed et al., 2009; Kenny et al., 2003; Lent et al.; Luzzo & McWhirter, 2001; McWhirter, 1997; Swanson & Tokar, 1991a).

There is a wide range of types of barriers one may encounter that vary by situation and factors specific to the individual. The current study examines the perceived educational and career-related barriers encountered by college students. Specifically, perceived career-related barriers investigated were sex discrimination and ethnic discrimination and the perceived educational-related barriers examined included perceived lack of ability, lack of fit, lack of interest, financial issues, and family attitudes.

Financial concerns can act as a barrier across life domains and are influenced by a variety of factors, such as culture and societal influences. More frequently, prospective employers require individuals to have a college education as a baseline requirement to even be considered for the position. This is particularly true for higher-paying occupations and careers that have more formalized professional requirements for training. Findings of the income and employment data have repeatedly demonstrated that individuals who have completed higher education are more likely to be employed and

earn more money (Mahnken, 2019). People with college degrees are not only less likely to struggle with unemployment but also are more equipped to handle uncertainty in the economy, such as a recession. Despite the potential benefits of higher education, it is becoming less accessible primarily due to a lack of affordability. College enrollment has risen steadily since the 1970s; however, it has been on the decline in recent years. The most obvious reason for the decline in enrollment is that the tuition rates have dramatically increased, leading many to question whether a college degree is worth the time and money involved. According to the college board, college tuition in the United States in 2019-2020 demonstrated an increase from the previous year and had notable variations based on the institution and classification of the student. Specifically, the average tuition was $36,880 for private non-profit four-year colleges; for four-year public colleges, the average tuition was $10,440 for in-state tuition or $26,820 for out-of-state tuition. These figures do not account for room and board, which the college board reported is approximately $11,250, or additional expenses associated with enrollment, such as textbooks. The issue of enrollment is likely to be further amplified by COVID-19, concerns associated with attending school during a pandemic, and further questions regarding whether the benefits outweigh the cost. Social class and financial means play a significant role in individual career paths. The perception of economic limitations to educational pursuits and career development is rational, given the current economic climate.

Individuals who are unable to afford college are faced with the dilemma of choosing not to go to college, possibly negating their career goals, or enrolling in college

and accruing student loans and debt. Students who are experiencing elevated financial stress are likely to exhibit less college engagement (Boatman & Long, 2016; Nora et al., 2006), poor academic performance (Baker & Montalto, 2019), lack of goal commitment (Nora et al.), and reduced persistence (Cabrera et al., 1992). High levels of financial concerns are also associated with reducing credit hours, requiring additional time to complete a degree, and an increased likelihood of dropping out of school (Dwyer et al., 2013; Joo et al., 2008; Robb et al., 2012). Concern about debt has been identified as a significant predictor of well-being (Rogers et al., 2012). Additionally, concern about debt has the potential to generate feelings of anxiety and overall stress, which in turn have a negative impact on overall life satisfaction (Morra et al., 2008).

In multiple studies using samples of medical students, debt was identified as a source of anxiety and stress and influenced well-being and career choices (Morra et al., 2008; Shariati et al., 2007). Financial concerns and loan debt can have a plethora of consequences aside from financial stress and economic impact. Individuals tend to limit their career choices based on the financial cost of obtaining the necessary training and education. In addition, Rothstein and Rouse (2011) found that education debt resulted in lawyers who had recently graduated pursuing employment at private companies with higher pay than in the nonprofit sector or public interest work. Rogers et al. (2012) investigated environmental and personal variables that might predict well-being among medical students, a population that is arguably more likely to face psychological strain and a demanding academic workload. The authors found that well-being was

significantly and negatively correlated with a variety of perceived career and education-related barriers.

Perception of barriers varies greatly between individuals both in terms of their actual assessment of barriers that might be encountered as well as the type of barriers. Given the potential for perceived barriers to restrict career options and the capability to make career decisions, it is ubiquitous how such perceptions of educational and career-related barriers might impede the pursuit of goals and successful achievement of ambitions (Lent et al., 1994). When goals are impeded, one is likely to anticipate difficulty navigating an obstacle or dealing with failing to obtain a goal. Likewise, the hindrance of goals is argued to greatly impact sense of well-being and satisfaction with life (Lord et al., 2010).

Individuals often experience the intersection of multiple types of barriers concurrently. For instance, several factors were identified as predictors of both career satisfaction and life satisfaction by men in the nursing profession, including the perception of gender-related work barriers, gender role conflict, self-efficacy in regard to job skill, and social support (Rochlen et al., 2009). This suggests that males who perceived less gender discrimination possessed greater task-specific self-efficacy, had greater social support, and reduced role conflict were more like to be satisfied with their work and life as a whole.

Perceived barriers are recognized as a key variable in Social Cognitive Career Theory and, subsequently, an integral component of the numerous models that have been developed based on the theory (Lent et al., 2008). Several studies have since explored the

relationships between contextual variables (i.e., social support and perception of barriers), self-efficacy, outcome expectations, interests, and goals in an attempt to validate the career choice model (Inda et al., 2013; Lent et al., 2005; Lent et al., 2008). These studies, which were conducted with large samples of university students, demonstrated that social support and perceived barriers (i.e., the contextual variables in the career choice model) are related both directly and indirectly to goals via interests, self-efficacy, and outcome expectations (Garriott et al.; Inda et al., 2013; Lent et al., 2008; Lent et al., 2011).

Life Satisfaction

In this section, a brief overview and definition of both subjective well-being and life satisfaction will be provided. Life satisfaction serves as a central variable in the present research. However, it is pertinent to discuss both of these terms, given that they are frequently used interchangeably throughout the existing literature and are closely related. The factors that influence levels of life satisfaction and the stability of the construct will be discussed.

One of the primary goals across humankind, regardless of culture or background, is achieving happiness. While the concept of happiness is considered an essential part of our existence, the term itself is comprehensive and does not have a singular, consensual definition. Subsequently, the literature utilizes subjective well-being, an area of scientific interest, to conduct empirical research on happiness (Diener, 1984). Subjective well-being comprises the primary outcome variable in the current study, life satisfaction, as well as positive affect and negative affect (Andrews & Withey, 1976). Given the frequent

use of subjective well-being and life satisfaction interchangeably throughout the existing literature, it is pertinent to discuss both terms within this chapter.

While the existing literature, media, scholars tend to equate subjective well-being and happiness, subjective well-being is considered the primary affective component of happiness (Cloninger & Zohar, 2011; Machado et al., 2015; Ryff et al., 2004). Subjective well-being includes two broad elements—affective appraisal and cognitive appraisal. Affective appraisal describes one's emotional experience (Kashdan, 2004). For instance, individuals with a higher level of subjective well-being experience intense positive states (e.g., inspiration, excitement, and hope) on a regular basis and a lack of negative states (e.g., distress, guilt, hostility, and fear). Cognitive appraisal refers to one's overall life satisfaction and includes satisfaction with various life domains, such as career, relationships with friends, personal development, and romantic relationships (Diener et al., 1999).

The concept of subjective well-being is comprised of three components—positive affect, negative affect, and life satisfaction (Andrews & Withey, 1976). Life satisfaction is the cognitive-judgmental aspect of subjective well-being, while the remaining components describe the emotional, affective aspects. Counseling psychology has had a long-standing interest in scientific explorations of subjective well-being and its components due to their potential to influence optimal functioning for clients and inform effective counseling interventions. Affective and cognitive components are interrelated since there is a tendency for emotional experiences to inform judgments about one's satisfaction (Tov & Diener, 2013). While the tripartite structure of subjective well-being

originally proposed by Diener (1984) has been widely utilized in the literature with a consensus among scholars that positive affect, negative affect, and life satisfaction are vital for examining affective reactions and global life evaluations. Despite this general agreement regarding the components, the structural conceptualization of subjective well-being remains a highly debated topic and, subsequently, numerous models and frameworks have been proposed throughout the course of time to explain the internal organization (Busseri & Sadava, 2011). It is evident that the components of subjective well-being are not fully independent; however, the research has shown several notable distinctions, including variations in how they relate to other variables and stability over time (Pavot & Diener, 1993a). There are several instruments that assess all components of subjective well-being simultaneously, but generally, separate measures are utilized to examine the two affective components and life satisfaction (Busseri & Sadava).

Gamble and Gärling (2012) examined the differences between the constructs of life satisfaction, happiness, and affect among college students. The authors suggested that the key distinction between happiness and life satisfaction was that happiness is shaped by goal attainment and situationally derived, while life satisfaction generally remains stable over time. Despite several distinguishable characteristics between happiness, well-being, and life satisfaction, they are often used interchangeably throughout the literature. Life satisfaction, in general, is often used as a measure of overall psychological well-being (Diener et al., 1985). In addition, it has been asserted that happiness is contingent on one's satisfaction with life as a whole (Tatarkiewicz, 1976). It is widely agreed that understanding the processes and precursors of well-being, including the subjective well-

being component of life satisfaction, informs the evaluation of happiness and is vital for counseling psychology and implementing interventions. It has been conceptualized that subjective well-being is a primary indicator of optimal human functioning and, therefore, is deemed an important goal by both scholars and the general public on a personal and societal level (Diener, 2000; Keyes, 2005; Ryan & Deci, 2001; Seligman, 1991; Seligman & Csikszentmihalyi, 2000).

There are varying definitions of life satisfaction, which are grounded in schools of thought, perception, situation, culture. In order to explore the relationship between life satisfaction, coping efficacy, and perceived career and educational barriers, it is necessary to establish a set definition of life satisfaction. This section explores definitions in the extant literature, highlights the commonalities, and provides the definition of life satisfaction that was utilized for the current study.

The meaning of the term life satisfaction has evolved with ongoing research. Shin and Johnson (1978) described it as “a global assessment of a person's quality of life according to his chosen criteria" (p. 478). Dutch happiness and life satisfaction expert Veenhoven (2015) asserted that it is *“the degree to which a person evaluates the overall quality of his or her present life-as-a-whole positively”* (p.6). Pavot and Diener (1993a) stated that life satisfaction is an internal, subjective assessment of life quality by an individual determined by a set of specific standards that the individual sets for themselves.

Although there is no singular, agreed-upon definition, there have been numerous proposed over the years that appear to possess a common thread. Specifically, they tend

to share the same underlying notion that life satisfaction is the overall feelings one has regarding their life. This implies that life satisfaction is not based on a specific domain or moment in time but on a global evaluation. It is more likely to reflect long-term appraisals of satisfaction than affective components, which are often based on immediate factors (Pavot & Diener, 1993b). Life satisfaction can be influenced by persistent and stable life circumstances (Diener & Biswas-Diener, 2002). However, major, and immediate events, such as unemployment or the loss of a loved one, are most likely to produce the most effects on one's evaluation (Lucas et al., 2004). Life satisfaction allows for judgments to be formulated that take into consideration prior experiences as well as expectations for the future. Gamble and Gärling (2012) suggested that life satisfaction remains stable over time for adults. Many factors, such as adverse life experiences, socioeconomic status, education, and health, impact assessments of life satisfaction. These factors are likely to have a greater influence when experienced during one's formative years, and life satisfaction is considered to stabilize considerably for individuals by adolescence and into adulthood (Diener et al., 1985; Pavot & Diener, 2008).

Empirical research has demonstrated the relationship between satisfaction outcomes, such as job satisfaction and life satisfaction, and affective or personality variables, such as positive affect and extroversion (Diener & Lucas, 1999; Watson & Naragon, 2009). Despite the vast research and interest in this relationship, personality and affective variables are considered to be more stable and, thus, less suited for targeted interventions. Therefore, it is pertinent to extend the satisfaction literature by examining

variables that are more responsive to interventions and provide the ability to enhance an individual's life satisfaction. There is an evident relationship between personality and well-being, but Lent and Brown (2006; 2008) proposed a model of satisfaction that includes person-cognitive, environmental, and behavioral aspects that are more responsive to interventions. Accordingly, interventions would include forming more constructive expectations of outcomes related to one's efforts, attaining resources within their environment, and making progress towards educational and occupational goals (Sheu et al., 2016).

This study utilized a global evaluation of satisfaction with life as the definition. This definition was selected because it is consistent with the meaning and questions of the Satisfaction with Life Scale (SWLS; Diener et al., 1985) used in the current study. Furthermore, this research incorporated empirical research on both well-being and life satisfaction, given that life satisfaction is frequently viewed as a measure of psychological well-being, and the terms are often used interchangeably (Diener et al.).

Coping Efficacy

In this section, you will find a concise explanation and meaning of both self-efficacy and coping efficacy. Although coping efficacy is a significant variable in the current study, it is essential to understand both concepts because of their interconnectedness. Outcomes related to coping efficacy will be reviewed. To conclude this section, coping efficacy's role as a mediator will be discussed.

Self-efficacy beliefs refer to "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances"

(Bandura, 1986, p. 391). In other words, self-efficacy is one's belief in their ability to perform specific tasks or obtain a certain goal (Lent et al., 2000). Self-efficacy is a central component of Social Cognitive Career Theory (SCCT; Lent et al., 1994; 2000) and has been the focus of extensive research. Bandura (1989) indicated that self-efficacy beliefs are the most fundamental and ubiquitous mechanism of personal agency. Furthermore, self-efficacy beliefs are established and modified through personal performance accomplishments, vicarious learning, social persuasion, and psychological states and reactions (Bandura, 1994). While the SCCT model is often utilized to inform our knowledge of what might be expected from an individual's career development process, self-efficacy has been found to be particularly predictive of the career development process among college students (Betz & Voyten, 1997; Diegelman & Subich, 2001; Feldt & Woelfel, 2009).

Self-efficacy has garnered significant attention throughout the research and appears particularly useful for both understanding and supporting career development among students. The existing literature has examined a wide variety of types of self-efficacy, including school-to-career transitions self-efficacy (Alliman-Brissett et al., 2004), math self-efficacy (Ferry et al., 2000; Lent et al., 2001; Turner et al., 2004), career decision making self-efficacy (Alliman-Brissett et al.; Fouad et al., 2009; Quimby & O'Brien, 2004), career planning and exploration self-efficacy (Alliman-Brissett et al.), and research self-efficacy (Byars-Winston et al., 2015; Tate et al., 2015). Research has shown that science and math self-efficacy serve as strong predictors of math achievement and grades, further demonstrating the essential role of self-efficacy beliefs (Hackett &

Betz, 1989; Lent et al., 1991; Mau, 2003). There has been a call for additional research concerning coping with barriers self-efficacy or coping efficacy (Lent et al., 2000).

Coping efficacy is a form of self-efficacy and serves as a key variable in the present research. Coping efficacy refers to an individual's belief or confidence in their ability to successfully manage and overcome challenging or stressful situations. It is a type of self-efficacy that specifically relates to coping strategies and skills. Coping efficacy can influence how people approach difficult situations, how they respond to stress, and their ability to maintain resilience in the face of adversity (Lent et al., 2001). Self-efficacy beliefs and coping efficacy are distinct constructs despite being conceptually related. Whereas self-efficacy is task-specific and concerns an individual's perceived confidence in their ability to successfully perform a certain task, coping efficacy pertains to environmental and situational demands that potentially interfere or impede their performance (Bandura, 1994). There is an interplay between these constructs as well. For example, research has found that coping efficacy is influenced by a perceived lack of self-efficacy, and, subsequently, coping efficacy was predictive of avoidance of academic activities pertaining to math/science (Hackett & Betz, 1989). Coping efficacy is often studied in the context of stress and coping research and has been found to be an important factor in determining how individuals respond to and cope with stressful events.

Coping efficacy influences both behavior and emotional reactions, such as anxiety and stress reactions in response to adverse or novel situations (Bandura, 1994; Byars-Winston & Fouad, 2008). Bandura (1997) posited that possessing strong personal

efficacy in the ability to overcome challenges contributes to one's success and degree of perseverance far more than one's belief that one is capable of demonstrating mastery within a specific subject or task. This suggests that while content-specific self-efficacy is an important construct and is well established as a predictor of various educational and career-related variables, additional research concerning coping efficacy is warranted to gain further understanding of choice and performance-related outcomes. Furthermore, coping efficacy is predictive of choice behaviors and future intentions (Hackett & Betz, 1989; Hackett & Byars, 1996; Luzzo, 1996; McWhirter et al., 1998; Swanson & Tokar, 1991b).

Coping efficacy is considered to be an essential variable for understanding how the environment and individuals interact to influence career development and, specifically, the relationship between career satisfaction and perceived barriers (Lent et al., 2000). Previous research has shown a relationship between high levels of coping efficacy and increased career and academic goals (Lent et al., 2003; Lent et al., 2010). Such findings further highlight the importance of coping efficacy in the career development process and the prediction of future goal intentions.

It is imperative to examine coping efficacy because of the potential confounding effects it may exert in the assessment of barriers. Research has shown a tendency for participants to endorse minimal perception of barriers in studies concerning career barriers (Lease, 2006; Lent et al., 2003; Lent et al., 2001). Subsequently, some researchers have questioned whether assessments of perceived barriers measure coping efficacy as well (Lent et al., 2000; Lent et al., 1996). Swanson et al. hypothesized that

how an individual responds to assessments of barriers includes consideration of whether they will encounter the barrier and if they perceive themselves as able to successfully navigate the barrier. This would suggest that perception of barriers might be lower due to high coping efficacy rather than not anticipating barriers. For instance, if individuals perceive themselves as being able to negotiate or cope with certain environmental conditions or situations, then they would be less likely to identify them as a barrier. Examining this interplay highlights how inquiring about the degree to which a barrier would hinder their progress could potentially confound how individuals perceive a certain barrier and their confidence in their ability to cope with it.

Coping Efficacy and Mediation

Originally, SCCT posited that self-efficacy served as a moderator for potential barriers (Hackett, 1995). Previous studies have demonstrated a direct, negative relationship between barriers and self-efficacy (Lent et al., 2005; Lent, Brown, Brenner, et al., 2003; Lent, Brown, Nota, et al., 2003; Quimby & O'Brien, 2004; Smith, 2001; Turner et al., 2004). Quimby and O'Brien found that lower levels of career decision-making and academic self-efficacy were predicted by higher levels of perceived career barriers. In addition, the authors found that social support contributed to the prediction of self-efficacy more than perception of barriers. This finding suggests that individuals may be less likely to develop career interests and feel confident in their ability to achieve career goals depending on the number of barriers they encounter and may be more likely to perceive barriers as their self-efficacy decreases (Kirkland, 2010; Quimby & O'Brien).

These findings led researchers to propose a need to modify SCCT and consider how mediated models could explain the relationship between career goals and contextual barriers. SCCT posits that contextual barriers and supports moderate the relationship between interests to career goals (Lent et al., 2001). However, there is minimal research to support this hypothesis. Moreover, prior findings suggest that barriers are indirectly related to goals through self-efficacy rather than directly as suggested by SCCT (Lent, Brown, Brenner, et al., 2003; Lent, Brown, Nota, et al., 2003; Lent et al., 2001; Smith, 2001). Smith found that the relationship between the range of careers considered and the perceived likelihood of encountering career barriers was mediated by career self-efficacy.

Similar to the previous finding regarding other types of self-efficacy, coping efficacy has been found to mediate the relation of perceived barriers to choice goals in studies comprised of college students (Byars-Winston & Fouad, 2008; Lent et al., 2001; Lent et al., 2005; Lent et al., 2003). Perrone et al. (2004) identified coping efficacy as a mediator between vocational outcomes and perceived barriers to career goal attainment. Specifically, coping efficacy was found to mediate the relation between career outcome expectations and perceived barriers to career goal attainment among college graduates, which provided additional support for the potential for coping efficacy to serve as a buffer.

Further research is warranted to determine whether these findings are generalizable to college students who are encountering new challenges and are likely to perceive more barriers. As coping efficacy has been shown to be related to contextual variables in prior research, it is reasonable to deduce that a significant relationship

between coping efficacy and perceived barriers exists. Moreover, consideration of the role of coping efficacy among college students would provide further insight into mitigating the undesirable impacts of barriers. This research is important and serves to contribute to the field because it increases our understanding of coping self-efficacy as a mediator between life satisfaction and the perception of educational and career-related barriers.

Purpose of the Study

This research sought to obtain further knowledge of career development and general well-being among college students in an urban setting. Specifically, this study aimed to address related deficits in the literature and better understand the interplay between perceived educational and career-related barriers, coping efficacy, and life satisfaction. Furthermore, the current research tested for mediation effects of coping efficacy on the relationship between life satisfaction and the perception of educational and career-related barriers. Understanding coping efficacy and perceived education and career barriers as they relate to career development will facilitate the creation of more effective interventions and inform targeted approaches for working with clients. For instance, colleges could implement programs that identify students who are at risk of being adversely affected by barriers and provide resources to help them manage potential perceived barriers. Also, if it is found that coping efficacy has an effect on the relationship between perception of educational and career-related barriers and life satisfaction, it is possible that an intervention could be designed to increase coping efficacy and thereby weaken the impact of perceived barriers, the ability of said barriers

to constrain choice goals or led to negative career outcomes, and, ultimately, enhance psychological functioning.

Significance of the Study

The goal of this research is to better ascertain the relationship between perceived educational and career-related barriers and life satisfaction. This study filled a gap in the literature in that it assessed for mediation effects of coping efficacy on the relationship between perceived educational and career-related barriers and life satisfaction. Moreover, the results provide information concerning perceived barriers that college students experience across multiple domains, the interplay between barriers and life satisfaction, and the role of coping efficacy in both overcoming perceptions of career and educational barriers and general well-being. The findings of this investigation deliver guidance for educators, therapists, and students regarding a wide range of academic and career barriers, the impact of sociocultural factors, and how coping efficacy may serve to influence academic success, career development, and life satisfaction.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

This literature review aims to provide an overview of the theoretical and empirical literature related to the perception of barriers, coping efficacy, and life satisfaction. Furthermore, additional support for the aims of this dissertation, which are to (a) better understand the relationship between perceived educational and career-related barriers, coping efficacy, and life satisfaction, (b) address gaps in the literature, and (c) test for mediation effects of coping efficacy on the relationship between life satisfaction and the perception of educational and career-related barriers are provided. This chapter reviews research on the relationships between the three key constructs of this dissertation (i.e., coping efficacy, life satisfaction, and perception of barriers). Gaps in the existing literature are identified. This chapter concludes by presenting the goals of the current study and detailing the research questions guiding this dissertation.

Perception of Barriers

Determining whether to pursue further education, selecting an academic major, and, ultimately, choosing a career is one of the most important decisions an individual will make during the course of their lifetime. Perceived barriers can affect numerous domains of one's life and have long-lasting, detrimental consequences. For instance,

perceived racial discrimination has been found to be related to adverse physical and mental outcomes (Landrine & Klonoff, 1996). In a sample of 153 African Americans, 100% reported experiencing racial discrimination during their lifetime, and 98.1% indicated they had experienced it within the past year. The results demonstrated that the perceived barrier of racial discrimination was strongly related to behaviors detrimental to health (i.e., cigarette smoking) and psychiatric symptoms, especially low self-esteem or feelings of inadequacy and stress-related somatic symptoms. Numerous barriers can be encountered that may hinder career development. In the present research context, perception of barriers refers to perceived challenges in attaining a chosen academic major or career path.

Prior research focused on career development and conceptualizing perceived barriers (Lent, Brown, Talleyrand, et al., 2002; Swanson & Tokar, 1991b; Swanson & Woitke, 1997; Urbanaviciute et al., 2016). Lent and colleagues (2002) utilized a qualitative methodology to investigate the perceived influences of college students' selection and implementation on career choices. Two semi-independent research teams conducted the study at the following locations among students (N = 31) enrolled in higher education. The sample population at Site 1 was composed of 19 students attending a large university located near a metropolitan area, of whom 14 were female, and five were male. The mean age was 22.21 years (SD = 2.12; age range of 19 to 26 years. Participants included 12 identified as European American, three as Asian American, two as African American, one as Hispanic American, and one as multiracial. The class divisions represented in the study were nine graduate students, four seniors, four juniors,

one sophomore, and one first-year student. The graduate students were enrolled in their first semester of student personnel or counseling studies; the undergraduate students were majoring in technical/scientific fields (n = 6), social sciences (n = 3), and fine arts (n = 1). Site 2 was at a small technical college near the inner city with a student body comprised mainly of individuals from low socioeconomic backgrounds and first-generation college students (N = 12). The sample included six females and six males; six identified as European American, two as Hispanic American, and four as African American. The mean age was 25.50 years (SD = 9.26; age range of 18 to 50 years). The class divisions represented in the sample were one senior, three juniors, four sophomores, and four first-year students. In terms of academic major, five participants were majoring in medical assisting, four in computer systems, two in business administration, and one in accounting. Participants completed a demographics survey and engaged in a structured interview to identify perceived bases for career choice, factors that deterred or enabled their choice implementation, and the methods they employed to cope with such choice implementation barriers (Lent, Brown, Talleyrand, et al., 2002).

The results indicated that disinterest and ability considerations, negative expectations about work conditions, negative social/family influences, excessive academic requirements, gender barriers, financial restraints, and lack of exposure or familiarity with the option were reasons for rejecting career choices. Participants from the university indicated that financial concerns as the primary choice impediment. Other impediments reported included ability considerations, personal (nonability) difficulties (e.g., depression, time management, issues adjusting to college), negative family/social

influences, role conflicts, work conditions, negative work/education experiences, and excessive academic requirements. While participants at Site 2 identified all of the choice impediments mentioned by participants at Site 1, the primary choice impediment reported by participants at the technical college was personal (nonability) difficulties. The remaining choice impediments were similar to those identified at Site 1, except for two new categories (i.e., life events and perceived lack of exposure to skill development relevant to career). In sum, this study provided evidence suggesting that experiences relevant to work and personal factors (e.g., interests) were salient factors in selecting a career choice. In contrast, contextual factors (e.g., social support and financial restraints) were frequently cited as barriers to the implementation of choice (Lent, Brown, Talleyrand, et al., 2002).

The United States population is becoming increasingly diverse. Subsequently, the ethnic and racial composition of colleges and universities and new entrants to the labor force has shifted. Expanding on the research suggesting that a disproportionate level of perceived barriers is associated with marginalized identities, Luzzo (1993) studied the career development of undergraduate students from a cross-cultural perspective. The sample population was comprised of 375 students from a large California state university, of whom 237 (63.2%) were female, and 138 (36.8%) were male, with an age range of 18 to 23 years (M = 19.48, SD = 1.54). The majority of participants were either sophomores or first-year students. Five ethnicities were represented in the sample: African Americans (n = 26), Hispanics (n = 49), Caucasian Americans (n = 207), Filipinos (n = 37), and Asian Americans (n = 56). The ethnic composition of the sample was representative of

the campus population. Participants were administered a demographic survey, a measure to assess the perceived barriers, and an index to assess their social class. Two coders categorized responses to the perception of barriers survey into one of four categories based on related empirical investigations (Luzzo, 1995; Swanson & Tokar, 1991b). The categories included financial barriers (e.g., lack of adequate funding), ethnic identity barriers (e.g., teachers giving differential treatment based on student's ethnic background, racial discrimination), study skills barriers (e.g., lack of basic skills education, difficulty maintaining good study habits), and family-related barriers (e.g., finding childcare for children, maintaining a work-life balance).

Results of the study demonstrated statistically significant ethnic differences in perceived barriers to their past and future career development. In terms of the barriers that impacted participants' prior career development, two statistically significant ethnic differences were found. While ethnic identity barriers were cited in less than 5% of Caucasian Americans, 13.5% of Filipinos, 22.4% of Hispanics, and 25% of Asian Americans, over 42% of African Americans reported having experienced ethnic identity barriers in their career development. In addition, a statistically significant relationship between the perception of past financial barriers and ethnicity was demonstrated. Nearly 20% of African Americans, 20% of Caucasian Americans, and more than 28% of Hispanics cited overcoming such barriers. In contrast, less than 10% of Asian Americans and Filipinos perceived financial concern as a previously encountered barrier. Regarding perceptions of future barriers to career development, two statistically significant ethnic differences were found. Filipinos and Asian Americans are expected to face study skills

barriers significantly more than Caucasian Americans, African Americans, and Hispanics.

Furthermore, less than 10% of Filipinos, Asian Americans, and Caucasian Americans reported a perception of ethnic identity barriers in the future versus nearly 35% of African Americans and more than 20% of Hispanics. Luzzo's (1993) study underscores the importance of enhancing our awareness and knowledge of ethnicity's role in career development. The current study will provide additional research into the vocational needs of a diverse student population and how perceived educational and career-related barriers impact educational endeavors and career decision-making.

Life Satisfaction

Life satisfaction is associated with a wide range of positive and negative outcomes. There is evidence of a strong link between physical health, longevity, and life satisfaction (Diener & Chan, 2011). Research has demonstrated that the potential risk of mortality is significantly lower for individuals who exhibit a high level of life satisfaction than for individuals with low levels of life satisfaction (Lyyra et al., 2006; Xu & Roberts, 2010). Similar results were found in a meta-analysis, demonstrating that life satisfaction was linked to reduced mortality within samples of otherwise healthy individuals and reduced cardiovascular mortality (Chida & Steptoe, 2008). Shirom et al. (2011) found that life satisfaction predicted diabetes even when controlling for known behavioral and physiological precursors. Life satisfaction and sleep difficulties have also been negatively correlated (Brand et al., 2010). Individuals dissatisfied with their lives are more prone to experiencing health problems in general (Erdogan et al., 2012). On the other hand, life

satisfaction is related to improved physical health and reduced long-term health issues (Siahpush et al., 2008). These findings suggest that life satisfaction plays a role in both health and longevity.

The link between career development and life satisfaction is undisputable (De Cuyper & De Witte, 2006a, 2006b, 2008; Diener et al., 1999; Jones, 2006; Hirschi, 2011; Ojeda et al., 2011). Research has demonstrated a relationship exists between job satisfaction and life satisfaction throughout the research; however, the direction of the relationship is uncertain (De Cuyper & De Witte, 2006a, 2006b, 2008; Diener et al., 1999; Jones; Judge & Hulin, 1993; Judge & Watanabe, 1993). It has been suggested that individuals with higher levels of life satisfaction can find more satisfaction within the work domain and that increased job satisfaction is reflected in the overall assessment of satisfaction with life (Diener et al., 1999; Judge & Hulin; Judge & Watanabe). Life satisfaction is related to numerous career-related variables, including vocational identity (Hirschi), unemployment (Ervasti & Venetoklis, 2010; Pittau et al., 2010), self-efficacy (Ojeda et al.), organizational commitment (De Cuyper & De Witte, 2006a, 2006b, 2008; Rode et al., 2007), job security (Erdogan et al., 2012; Silla et al., 2009), job satisfaction (De Cuyper & De Witte, 2006a, 2006b, 2008), turnover intentions (De Cuyper & De Witte, 2008), and job performance (De Cuyper & De Witte, 2006b, 2008). These findings suggest that individuals more satisfied with life will likely experience more career success.

In recent years well-being concerning work has gained attention in vocational psychology. This research has stimulated discussions of the interaction of work outcomes

with satisfaction and specific individual characteristics. This idea was further explored by examining the meta-analytic associations between life satisfaction, domain satisfaction, and various personality aspects (Heller et al., 2004). The findings demonstrated moderate to strong relationships between life satisfaction and various domain satisfactions, including social, job, health, and marriage. However, there were only minimal associations between domain satisfaction (Heller et al.). This finding suggests that the relationship between domain satisfaction and life satisfaction is not readily explained from a top-down perspective and is more consistent with the idea of different domain satisfactions, each exerting influence independently over life satisfaction.

Moreover, the results supported a bidirectional relationship between overall life satisfaction and domain satisfaction (Heller et al.). The bidirectional relationship suggests that individuals who generally feel satisfied with life are likely to be satisfied with other domains, such as work. Similarly, individuals who obtain satisfaction within various domains they value are more likely to be satisfied with their life (Singley et al., 2010). The results fit with Lent and Brown's (2008) assertion that although environmental conditions and personality traits may serve as sources of satisfaction, there are still opportunities to enhance work satisfaction and, in turn, life satisfaction. Furthermore, this finding is consistent with the view that working is not only necessary but also serves an essential role in psychological health (Blustein, 2008; Fassinger, 2008; Fouad & Bynner, 2008). Working has been identified consistently as a critical factor in fostering social relationships, promoting well-being, enhancing the sense of connectedness, improving economic growth, and serving as a vehicle for individual accomplishment and general

satisfaction (Blustein, 2006; 2008; 2013; Blustein et al., 2005; Brown & Lent, 2005; Richardson, 1993).

Empirical research has demonstrated the relationship between satisfaction outcomes, such as job and life satisfaction, and affective or personality variables, such as positive affect and extroversion (Diener & Lucas, 1999; Hackett & Byars, 1996). Despite the extensive research and interest in this relationship, personality, and affective variables are considered to be more stable and, thus, less suited for targeted interventions. Therefore, it is pertinent to extend the satisfaction literature by examining variables that are more responsive to interventions and provide the ability to enhance an individual's life satisfaction. There is an evident relationship between personality and well-being but Lent and Brown (2006; 2008) proposed a model of satisfaction that includes person-cognitive, environmental, and behavioral aspects that are more responsive to interventions. Accordingly, interventions would include forming more constructive expectations of outcomes related to one's efforts, attaining resources within their environment, and progressing toward educational and occupational goals (Sheu et al., 2016).

The relationship between life satisfaction and educational outcomes is apparent. For example, in a study utilizing a sample of 176 Mexican American college students, findings suggested that individuals who perceive more educational barriers report lower levels of life satisfaction (Piña-Watson et al., 2014). In addition, statistically significant relationships between life satisfaction and a wide array of education-related variables have been found, including academic expectations, satisfaction with educational

experiences, self-efficacy, student engagement, academic self-efficacy, perceived goal progress, college retention after controlling for initial grade point average, academic performance, and school-related stress (Antaramian, 2015; Duffy et al., 2012; Frisch et al., 2005; Gloria, Castellanos, Lopez, et al., 2005; Gloria, Castellanos, & Orozco, 2005; Ojeda et al., 2011; O'Sullivan, 2011; Renshaw & Cohen, 2014; Suldo et al., 2008). In addition, studies conducted among college students have demonstrated that higher levels of life satisfaction are related to higher grade point averages (Antaramian, 2017; Howell, 2009; Rode et al., 2005). Moreover, in a study with a sample of Mexican American women, individuals who had achieved their academic goals reported being more satisfied with life (Ojeda et al.). These findings highlight the importance of academics regarding overall satisfaction and suggest that life satisfaction and various education-related variables have a reciprocal relationship.

Coping Efficacy as a Mediator

In a study to expand and validate the career choice model (Lent, 2005) based on SCCT, the paths between variables in the career choice model (i.e., social support, barriers, and goals) along with a specific type of self-efficacy—coping efficacy—among 215 undergraduate students were assessed (Fort & Murariu, 2018). The primary aim was to explore the utilization of the career choice model with the inclusion of coping efficacy. The secondary aim was to investigate whether the paths varied by gender. The sample population comprised 62 male and 153 female first-year students studying the arts, psychology, law, literature, or art history at a southern France university. The mean age of the sample was 20.5 years (SD = 2.5; age range of 18 to 26 years). Previous research

validating the career choice model had primarily focused on students in science, technology, engineering, and math disciplines where women are typically underrepresented and, therefore, this study filled a gap in the literature by providing a glimpse into the role of gender within the model among students in fields of study where males are traditionally underrepresented. Fort and Murariu administered the POB Scale (Luzzo & McWhirter, 2001), the CWB Scale (Luzzo & McWhirter, 2001), a measure of educational goals, and a measure of perceived social support. The authors used hierarchical regression, mediation, and moderation analyses to analyze the data. The results demonstrated a statistically significant path between coping efficacy and goals.

Furthermore, the findings demonstrated that coping efficacy fully mediated the relationship between barriers and goals and partially mediated the relationship between social support and goals. As hypothesized, there were no gender differences. The study concluded that further research is needed to replicate the findings with individuals studying various disciplines and, ideally, with larger samples, so structural equation modeling would be better suited for statistical analyses.

Thompson (2013) investigated the relationship between college outcome expectations and career barriers (i.e., experiences with personal and systemic classism, general ethnic discrimination, and perceived social status) among Native Americans enrolled in postsecondary school. Additionally, coping efficacy was examined as a mediator for the relationships between these variables. The sample population comprised 121 Native Americans from 70 different tribes, of whom 94 identified as female, 26 as male, and one as transgender. Data were collected from 38 different institutions located

across the United States. The mean age of the sample was 29.21 years (*SD* = 9.12 years). The class divisions represented in the study were 14.0% first-year students, 16.5% sophomores, 15.7% juniors, 13.2% seniors, 9.9% fifth-year students, and 28.1% six-year or beyond students (2.5% did not respond). The majority of participants identified as heterosexual (81.9%) and reported being lower middle class (*n* = 60). Thirty participants reported their family income as less than $30,000. Participants identified several avenues for funding tuition, including scholarships (55.4%), loans (23.1%), and personal payments (5.0%). The sample comprised students pursuing various academic fields, with over 75 majors reported. Participants were administered a measure of college outcome expectations to assess individual perceptions of outcomes associated with obtaining a college education. While there was no single measure of perceived barriers in the study, several instruments were administered that were closely related and were employed to assess specific types of perceived barriers—experiences with classism, general ethnic discrimination, and differential status identity. The measure of differential status identity was utilized to examine perceptions of personal social status compared to the social status of the average American citizen. It included subscales on social power, social prestige, economic resources for basic needs, and economic resources for amenities (e.g., material possessions and leisure activities). Finally, Thompson administered the CWB scale (Luzzo & McWhirter, 2001) to assess the perceived ability to cope with barriers.

Results demonstrated that individuals with higher perceived social status exhibited greater coping efficacy. Lower college outcome expectations were found to be related to lower coping efficacy. The findings demonstrated that coping efficacy had a

statistically significant negative relationship with ethnic discrimination classism and general ethnic discrimination. The relationship between experiences with classism and perceived social states to college outcome expectations was fully mediated by coping efficacy. Contrary to the author's expectation, ethnic discrimination was not significantly related to college outcome expectations. Thompson (2013) offered that this surprising finding may reflect that underserved populations do not necessarily struggle more with career development than their more privileged counterparts and highlight the role of coping efficacy that may help mitigate the impact of barriers and educational and vocational outcomes.

To better understand the relationships between coping efficacy, role strain, life role salience, and life satisfaction, Perrone and Civiletto (2004) utilized a sample of 125 adults from a midwestern state who held multiple life roles (i.e., home and family, worker, community member, leisure, student). The sample comprised 44 men and 81 women involved in a larger, longitudinal study of career and life development among individuals in the top 5% of their high school graduating class. The mean age of the sample was 28.9 years (age range of 28 to 30 years). Regarding racial composition, 93% of participants were Caucasian, 3% were Asian American, 2% were African American, 1.3% were Native American, and 0.7% were Latino/a. In addition, participants represented numerous occupational fields, 36% had children, and 71% were married. The authors administered the SWLS (Diener et al., 1985), a measure to assess life role salience, a measure to assess job-family role strain, and a self-report coping inventory to assess coping efficacy. Role strain refers to the barrier arising from role conflict and role

stress. Perrone and Civiletto noted that previous research has found role strain to be associated with coping efficacy. This variable is relevant to the current study because perceived barriers, a central variable examined, is a broad term encompassing various barriers, including role strain.

One-way analyses of variance demonstrated no significant gender differences for the variables. The results of the path analysis indicated that role strain had a statistically significant negative relationship with coping efficacy. This association suggests that individuals with high role strain levels exhibited lower coping efficacy. However, coping efficacy was significantly positively related to life satisfaction. This finding indicates that individuals with greater coping efficacy endorse higher levels of life satisfaction.

Moreover, role strain was not directly related to life satisfaction but was indirectly related to life satisfaction via coping efficacy. These findings support coping efficacy as a mediator for the relationship between the perceived barrier of role strain and life satisfaction. Despite this investigation's invaluable groundwork for the current study and its overall contribution to coping efficacy, life satisfaction, and barriers to scholarship, several limitations exist. Specifically, the sample size was moderate, consisting solely of academically talented individuals likely to experience fewer barriers and had limited diversity. Therefore, the present investigation attempts to fill these gaps through a larger, more diverse sample that will likely endorse a more comprehensive array of barriers. Moreover, this study includes a broad measure of perceived barriers that extend knowledge beyond just role strain.

Relationship Between Constructs

Thus far, the constructs of perceived educational and career-related barriers, coping efficacy, and life satisfaction have been introduced. Life satisfaction and perception of barriers have been studied separately with coping efficacy. However, no studies can be located on life satisfaction as an outcome variable with coping efficacy and perception of barriers. College students encounter unique experiences pertinent to their career development and, thus, life satisfaction and overall well-being. Previous literature has focused on coping efficacy, life satisfaction, and perceived barriers. Surprisingly, these constructs have not been thoroughly examined together, nor has the mediating role of coping efficacy. There is an insufficient understanding of the relationship among these variables, and much work remains to be done to gain insight into how they interact. Accordingly, the present study sought to address the deficit in understanding the relationship between perceived barriers, coping efficacy, and life satisfaction.

Perception of Barriers and Life Satisfaction

Perceived barriers can thwart the achievement of the pursuit of goals by restricting career options and the capability to make career decisions (Lent et al., 1994). Perceived barriers threaten career development and can subsequently enhance negative appraisals of personal worth and ability. Accordingly, it is argued that well-being and satisfaction are negatively affected when goals are hindered (Lord et al., 2010).

Rogers et al. (2012) investigated environmental and personal variables that might predict well-being among medical students. This population is more likely to face psychological strain and a demanding academic workload. In this study, the sample

population comprised 755 (498 females and 257 males) at 11 medical schools across all of the states/territories of Australia. Participants ranged in age from 18 to 57 (M = 24.6 years; SD = 5.5). The racial composition of the sample was predominately Caucasian. Regarding class divisions represented, the sample included students completing year two (n = 19), year three (n = 251), year four (n = 281), year five (n = 73), and year six (n = 31) of medical school. Bivariate correlations found a statistically significant positive correlation between well-being, as measured by the World Health Organization Well-Being Index (WHO-5; World Health Organization, 1998; as cited by Rogers et al.) and the following attributed to extraversion (.23), conscientiousness (.17), professional expectations (.16), and lifestyle expectations (.11). Furthermore, well-being was significantly and negatively correlated with neuroticism (-.30), academic stress (-.45), career barriers (-.23), concern about debt (-.22), and gender/identify as male (-.09). There was no association between well-being and agreeableness, openness, age, or year level in medical school.

A hierarchical multiple regression analysis was conducted to test the relationship between the environmental and person predictors and the outcome variable, well-being. The results showed that the person variables of extraversion, conscientiousness, agreeableness, neuroticism, professional expectations, and lifestyle expectations predicted 15.8% of the variability in well-being. Furthermore, the environmental variables of academic stress, career barriers, and concern about debt accounted for an additional 12.7% of the variance. Thus, the variables utilized in this regression analysis accounted for 28.5% of the total variance in well-being. Academic stress, an educational

barrier, emerged as the strongest predictor of well-being. The results pertaining to personality and well-being replicated the findings from previous studies. Specifically, a statistically significant negative relationship between neuroticism and well-being and a positive relationship between extraversion, conscientiousness, and well-being was demonstrated. Rogers et al. (2012) suggested that individuals with high levels of the trait neuroticism are inclined to experience distress, and exhibiting overly adverse emotional reactions is likely detrimental to one's overall well-being. Individuals with high levels of extraversion are more prone to seek social support and are considered happier than peers with less elevated levels of extraversion. Highly conscientious people are generally achievement-driven, vigilant, and committed. In other words, personality traits likely influence how the individual appraises and responds to various situations and challenges encountered during their medical studies and, subsequently, their overall psychological well-being. Concern about debt emerged as another key statistically significant individual predictor of well-being. This finding provides insight into how perceived barriers, such as financial concerns, have the potential to influence well-being and life satisfaction and vice versa.

To address the gap in the literature regarding men in gender-nontraditional occupations, Rochlen et al. (2009) examined factors predictive of gender-related work barriers, work satisfaction, and life satisfaction among men in the nursing profession. The racial composition of the sample was predominately Caucasian (79%), followed by Hispanic/Latino (6.3%), Asian American/Pacific Islander (5.7%), African American (2.9%), Native American (1.1%), multiracial (less than 1%), and participants who fell

into other categories (4.0%). The majority of participants made roughly $50,000 to $100,000 per year (57.7%), were heterosexual (68.6%), and were married/separated (47%) or single (36.6%). Participants reported a wide array of years working in nursing, ranging from 0 to 48 years. The sample predominately reported working part-time (84%) and was primarily registered nurses (60%; the remaining participants were licensed practical nurses or vocational nurses, certified nurse specialists, nurse practitioners, military nurses, or others). Participants completed measures of social support, gender-related work barriers, work satisfaction, gender role conflict, and life satisfaction, which were assessed using the SWLS (Diener et al., 1985). Contrary to the hypothesis, the results demonstrated that male nurses were mainly similar to their male counterparts in gender-traditional occupations. The relationship between higher levels of gender-related work barriers and lower levels of life satisfaction was statistically significant. Findings suggested that the variables in this study accounted for a large proportion (40%) of the variance in life satisfaction. Accordingly, the results suggested that men in the nursing profession who assessed their job skills less positively experienced more gender role conflict regarding work and family relations, perceived more significant gender-based barriers in the workplace, and received less support from their significant other, reported lower levels of satisfaction with life.

Coping Efficacy and Perception of Barriers

Perceived barriers can potentially hinder career and education-related goals, but Bandura (1997) suggested that the impact might be less detrimental for individuals with solid efficacy in coping with obstacles. Coping efficacy is innately related to the

perception of barriers, as it refers to one's belief that one will be able to navigate perceived barriers. High levels of coping efficacy allow individuals to overcome barriers they encounter successfully or anticipate encountering (Hackett & Byars, 1996). Accordingly, individuals with greater coping efficacy are more likely to persevere and achieve their career goals when faced with obstacles (Lent et al., 2000). Empirical data has consistently demonstrated a negative relationship between perceived barriers and coping efficacy among college students (Byars-Winston & Fouad, 2008; Cadaret et al., 2017; Castellanos et al., 2018; Flores et al., 2020; Fort & Murariu, 2018; Lopez & Ann-Yi, 2006; Luzzo & McWhirter, 2001; Mejia-Smith & Gushue, 2017; Perrone et al., 2004). Coping efficacy can provide insights into how college students behave when confronted with barriers.

Byars-Winston and Fouad (2008) investigated math/science goals among 227 undergraduate students as influenced by parental involvement, perceived career barriers, and coping efficacy. Results demonstrated parental involvement's direct and indirect impact on outcome expectations and goals. The findings highlight the importance of distal and contextual factors in the career development of college students. Coping efficacy was found to have a statistically significant negative relationship with the perception of barriers. Moreover, coping efficacy served as a mediator between perceived career barriers and goals. The findings suggest that coping efficacy plays an essential role in academic self-efficacy and goals and, subsequently, has the potential to influence one's overall career trajectory.

Flores et al. (2020) assessed the life satisfaction of Latino/a undergraduate students in engineering majors with a sample of 342 participants. The findings demonstrated statistically significant relationships between high coping efficacy and life satisfaction. Conversely, low levels of coping efficacy were related to high perceived barriers. Moreover, the study provided longitudinal data indicating that increased perceived barriers were associated with decreased coping efficacy. Results from this study are relevant for informing effective interventions and understanding how this relationship between the variables evolves.

Fort and Murariu (2018) investigated the paths between variables in the career choice model (i.e., social support, barriers, and goals) and coping efficacy among 215 undergraduate students in France. There was a statistically significant negative relationship between barriers and coping efficacy. Coping efficacy fully mediates the relationship between barriers and goals and partially mediates the relationship between social support and goals. The sample was unique from previous empirical studies on coping efficacy and barriers as it comprised undergraduate students within fields of study where men are typically underrepresented as opposed to previous samples of students from science, technology, engineering, and mathematics majors. Therefore, the results demonstrated no gender differences and further support the importance of coping efficacy for career development and perception of barriers regardless of gender.

Lopez and Ann-Yi (2006) examined career indecision concerning perceived career barriers, perceived social supports, coping efficacy, and career decision-making self-efficacy among three ethnic/racial groups (i.e., African American, Hispanic, and

White), with a sample of 359 female, undergraduate students at a large, urban university. The authors asserted that the conceptual overlap between these predictor variables warranted further examining their collective contribution to career indecision and clarifying their unique interrelationships.

Moreover, Lopez and Ann-Yi (2006) echoed Lent et al. (2003) in stating that perceptions of culturally and ethnically diverse women potentially have distinct effects on decision-making processes and, thus, deserve further empirical attention. The findings demonstrated that African American women perceived significantly more career barriers than their Hispanic or White counterparts. Furthermore, the results provided evidence that coping efficacy incrementally increased the predictive ability of perception of barriers regarding career indecision. These results highlight the critical role of coping efficacy in career development and, per the call made by Lent et al. (2003), the necessity to assess coping efficacy and perceived barriers separately. Accordingly, independent measures for coping efficacy and perceived educational and career-related barriers were employed in this dissertation research.

Luzzo and McWhirter (2001) investigated the relationship between perceived educational and career-related barriers and coping efficacy among women and ethnic minorities in a sample of 286 undergraduate students. The authors argued that perceived barriers would play a particularly heightened role in the career development of women and ethnic minorities. The findings indicated that women and ethnic minorities perceived more career and educational barriers than their European American counterparts. Moreover, ethnic minorities displayed more perceived educational barriers and lowered

coping efficacy than the European Americans in the study. This further highlights the need to study coping efficacy to understand the career development of individuals who encounter discrimination, are from disenfranchised communities, or are experiencing heightened barriers.

Mejia-Smith and Gushue (2017) explored the relationships among career decision-making self-efficacy, perceived career barriers, ethnic identity, coping efficacy, and acculturation among 357 Latina/o college students. The results demonstrated a direct negative association between perceived career barriers and coping efficacy. These findings suggest that one's belief in their ability to cope with barriers contributed to perceptions of fewer barriers to reaching their career goals. Additionally, the results indicated that coping efficacy was a stronger predictor of the perception of career barriers than career decision-making efficacy. The role of coping efficacy as a buffer between acculturation and perceived barriers was highlighted and further supported the importance of coping efficacy for understanding career development.

Perrone et al. (2004) examined the relationships between social support, barriers, coping efficacy, and outcome expectations among 113 academically gifted college graduates. The findings indicated a statistically significant negative relationship between perceived barriers to career goal attainment and coping efficacy. Both direct and indirect—via coping efficacy—the relationship between perceived barriers to career goal attainment and career outcome expectations was demonstrated. Thus, individuals with more perceived barriers to career goal attainment reported lower estimates of goal attainment and general outcome expectations. This relationship was partially mediated by

coping efficacy. The findings provide insight into how coping efficacy relates to career attainment and are consistent with SCCT. Furthermore, career barriers had a statistically significant negative relationship with coping efficacy, and coping efficacy exhibited a statistically significant positive relationship with career outcome expectations. The results suggest that coping efficacy has the potential to foster more positive career outcome expectations even when an individual perceives elevated levels of career barriers.

Expanding on the Social Cognitive Career Theory research, Mejia-Smith and Gushue (2017) conducted an exploratory study to examine the SCCT tenets, particularly the influence of self-efficacy, acculturation, and ethnic identity. The sample population was composed of 357 college students from either a 4-year university, 2-year college, community college, or "other" type of college in the United States, of whom 69% were female, and 31% were male. The mean age of the sample was 22 years (*SD* = 5.72; age range of 18 to 63 years). In terms of ethnic composition, 26% were Hispanic, 23% were Latina/o, 16% were Mexican, 14% were Mexican American, 6% were Caribbean (i.e., Puerto Rican, Cuban, or Dominican), 5% were Chicana/o, 5% mixed ethnicity (e.g., Costa Rican/Puerto Rican, Mexican American/Puerto Rican, Mexican/Guatemalan), 3% South American (i.e., Colombian, Peruvian, or Venezuelan), and 2% Central American (i.e., Salvadoran, Costa Rican, or Nicaraguan). The majority reported being second-generation (51%). Participants were administered measures of coping efficacy assessed by the CWB scale (Luzzo & McWhirter, 2001), ethnic identity, career decision-making self-efficacy, acculturation level, and perceived barriers, which was assessed using a revised version of the POB Scale (McWhirter, 1997).

Mejia-Smith and Gushue (2017) investigated the relationship among coping efficacy, career decision-making self-efficacy, acculturation, ethnic identity, and perceived career barriers using two path models. The proposed models were found not to fit the data, and accordingly, adjustments were made based on modification indices and theoretical considerations. Results demonstrated a direct negative relationship between self-efficacy expectations and perceived career barriers. These findings suggest that confidence in one's ability to cope with barriers and complete career-specific tasks contributes to perceptions of barriers. The role of acculturation and ethnic identification on perceived barriers was mediated by career decision-making self-efficacy. Furthermore, coping efficacy was a stronger predictor of perceived barriers than career decision-making self-efficacy.

Novakovic and Gnilka (2015) investigated the relationship between gender, perceptions of career barriers, coping efficacy, and positive and negative dispositional affect. Specifically, the authors examined whether coping efficacy and gender moderated the relationship between both perceptions of career barriers and positive and negative dispositional affect among 294 undergraduate students. The sample population comprised 99 male and 195 upper-level female students from a large, midwestern university in the United States. The mean age of the sample was 21.24 years (age range of 18 to 24 years). The class divisions represented in the study were 1.0% sophomores, 23.5% juniors, 58.8% seniors, and 16.7% fifth-year students. The racial composition of the sample was predominately non-Hispanic White (61.4%), followed by non-White Hispanic (12.9%), non-Hispanic Asian or Asian American (8.8%), non-Hispanic Black or African American

(6.1%), multiracial (6.1%), other (3.3%), and Hawaiian or other Pacific Islander (1.4%). Novakovic and Gnilka administered the modified version of the POB (McWhirter, 1997) career-related barriers subscale, the CWB (Luzzo & McWhirter, 2001) coping with career barriers subscale, and a measure of dispositional affect. The authors found several statistically significant relationships using two hierarchical regression analyses and a series of ANOVAs.

Statistically significant differences in perceived barriers were demonstrated for both race and gender, with non-Hispanic Black/African American and non-White Hispanic participants reporting significantly higher perceptions of career barriers than non-Hispanic White participants and women reporting significantly higher perceptions of career barriers than men. Gender differences were also found in how coping efficacy moderated the relationship between perceptions of career barriers and positive dispositional affect. Perceptions of career barriers were significantly predicted by negative dispositional affect. Thus, perceptions of career barriers increased as their levels of negative dispositional affect increased. There were no statistically significant gender differences in the perceptions of career barriers associated with the interaction between coping efficacy and negative dispositional affect. The results demonstrated that coping efficacy moderated the relationship between positive dispositional affect and perceptions of career barriers; however, this relationship's direction differed for men and women. Higher levels of coping efficacy were significantly associated with lower perceived barriers for men who reported high levels of positive affect.

In contrast, women who reported high levels of positive affect did not have statistically significant decreases in the perception of barriers with increased levels of coping efficacy. For men with lower levels of positive affect, there were no statistically significant changes in perceptions of career barriers associated with increased coping efficacy. Women who reported lower levels of positive dispositional affect exhibited statistically significant decreases in their perceptions of career barriers when coping efficacy increased. Novakovic and Gnilka (2015) asserted that the gender differences found were likely due to how women and men view career barriers differently. Specifically, they hypothesized that women view career barriers as impenetrable and persist despite coping abilities and positive affect.

Both coping efficacy and perceived barriers within the work and educational domains have been frequently explored topics within vocational psychology. However, minimal studies had examined the complex way coping efficacy functions when in conjunction with said barriers (Lent et al., 2003). Therefore, the information gleaned from studies examining the relationship between these variables provides invaluable insight. For example, Perrone et al. (2004) investigated the hypothesized relationships among supports of and perception of barriers to goal attainment regarding career and family goals. Specifically, their model sought to assess for mediating effects of coping efficacy and social support on the relationship between career outcome expectations and perceived barriers. The sample included 113 college graduates (72 women and 41 men) involved in a larger, longitudinal study further to understand academically talented individuals' career and life development. The data for this study was collected during the

13th annual survey, and all participants were between the ages of 30 and 32. The authors noted that family and career development are generally viewed as particularly salient in the early thirties since individuals at this stage tend to desire a sense of security, are often becoming more established in their career paths, and are increasingly likely to either have children or be open to the idea of expanding their family (Perrone et al.).

The authors utilized a qualitative approach with open-ended questions to examine family and career goals, barriers to family and career goals, and supports of family and career goals. Barriers to career goals were assessed with McWhirter's global question of barriers from the POB Scale (McWhirter, Perceived barriers to education and career: Ethnic and gender differences, 1997). Participants were also administered a modified version of the global barriers question from the POB Scale that stated, "there are many barriers that will make it difficult for me to achieve my family goals" to assess barriers to family goals. Similarly, coping efficacy was assessed with an item from the POB Scale and a modified version of the item to assess coping efficacy for family goals that stated, "I will be able to overcome any barriers that stand in the way of achieving my family goals." The authors administered the Social Support Questionnaire (Sarason et al., 1987) to assess social support. Finally, a single-item scale was constructed to evaluate outcome expectations. Specifically, this was designed to assess an individual's belief that the desired outcome would be produced due to their behavior. The wording of this item was then modified to allow for the assessment of both family outcome expectations and career outcome expectations.

Perrone et al. (2004) extended the research on career development by examining the relationship among barriers to coping efficacy, goal attainment, and career outcome expectations. Moreover, this study sought to determine how coping efficacy mediated the relationship between career barriers and career outcome expectations. A test of mediation was conducted, and the path analysis results s indicated that career barriers were related to career outcome expectations both directly and indirectly through coping efficacy. Thus, coping efficacy exerted a partial mediating effect. These findings suggest that career barriers negatively relate to career outcome expectations. Therefore, the more perceptions of career barriers one has, the lower their career outcome expectations will be. In addition, coping efficacy exhibited a negative relationship to perceived career barriers and a positive relationship to career outcome expectations. These findings are significant for the present study as they support the relationship between the perception of barriers and coping efficacy and underscore how they influence outcomes. Furthermore, these results indicate that high levels of coping efficacy may help mitigate the negative impact of perceived barriers. These findings highlight the critical role of coping efficacy and its importance concerning supports, barriers, and goal attainment, as indicated within Social Cognitive Career Theory (Lent et al., 2000).

Coping efficacy acts as a potential safeguard against perceived barriers. Perceived barriers preventing particular accomplishments or tasks may be less harmful to individuals with greater coping efficacy (Bandura, 1997). Thus, individuals with high levels of coping efficacy are more inclined to exert effort to overcome the perception of

barriers and achieve their goals. In addition, coping efficacy can aid one's successful navigation of an expected barrier or obstacles, such as racism (Hackett & Byars, 1996).

Coping Efficacy and Life Satisfaction

The relationship between perceived barriers and life satisfaction was highlighted above and provided a basis for understanding the relationship between these constructs and coping efficacy. Based on the existing research establishing the relationship between life satisfaction and perception of barriers coupled with knowledge of the indisputable relationship between coping efficacy and perceived barriers, it is reasonable to conclude that coping efficacy will also exhibit a relationship with life satisfaction. Coping efficacy has the potential to minimize the perception of barriers and subsequently lead to improved physiological functioning, psychological functioning, and overall life satisfaction.

Work is suggested to influence overall life satisfaction through multiple avenues, including the impact of one's working environment (Demerouti et al., 2000; Rice, 1984). Rice et al. (1985) developed a conceptual model that asserted working conditions exert influence over life satisfaction by the changing characteristics of the environment (e.g., hours, workplace safety, stress) or the person (e.g., energy level, mood changes). Since coping efficacy reflects an individual's perceived ability to negotiate aspects of the situation that hinder performance, one could argue that those with a high sense of coping efficacy would be more successful when confronting issues in their work environment and, as a result, be more likely to endorse higher levels of life satisfaction.

Byars-Winston and Fouad (2008) asserted that coping efficacy affects not only an individual's behavior but also their emotional reactions, "especially related to anxiety and stress reactions to unfamiliar or potentially aversive situations" (p. 427). Thus, individuals with higher coping efficacy are less likely to experience heightened stress and anxiety levels than those with low coping efficacy due to the belief that they will be able to achieve their goal or complete the task and their increased likelihood to preserver when faced with challenges. Mental health influences life satisfaction, and those who experience negative emotional states less frequently are likely to be more satisfied with life.

Previous studies demonstrated that life satisfaction is associated with mental health. Life satisfaction has repeatedly been found to have a statistically significant negative correlation with various psychological disorders, including depression (Lapierre et al., 2007; Lopez & Ann-Yi, 2006; Shaw & Gupta, 2001). Chang and Sanna (2001) identified dissatisfaction with life as a predictor of suicidal ideation. Conversely, life satisfaction promotes psychological functioning and provides a buffer against depression, anxiety, suicidal ideation, and other psychological disorders (Park, 2004).

In a study to assess the utility of the Social Cognitive Model of Well-Being, Lee and Flores (2019) explored the model within the context of work among women engineers. The authors utilized structural equation modeling to examine the relationship between the indirect and direct effects of environmental supports and barriers on job and life satisfaction via sociocognitive variables (e.g., positive affect, self-efficacy, work conditions, and goal progress). The sample included 348 women engineers, all employed

and working within the field for at least one year. The mean age of the sample was 35.82 years (*SD* = 10.34; age range of 22 to 65 years). Regarding racial composition, 255 participants identified as White, 30 as Asian American, 11 as Latina, 13 as African American, 11 as Asian international, seven as multiracial, two as European international, and three as "other." Participants represented numerous engineering fields, including mechanical engineering, engineering physics, electrical and computer engineering, civil engineering, aerospace engineering, and chemical engineering. More than 40% of the sample (*n* =135) reported having children (ranging in age from 1 to 34 years). Most participants were married (*n* = 183), 88 were single, 36 were partnered, and nine were divorced. The sample was highly educated, with 22.8% having a bachelor's degree, 17.63% having a master's degree, and 16.72% having a doctoral degree. Lee and Flores administered the SWLS (Diener et al., 1985), a measure of affective traits, a measure of job satisfaction, a measure of goal progress, a measure of coping efficacy, a measure of task-specific self-efficacy, a measure of work conditions, and a measure of environmental supports and barriers in engineering work settings.

The results demonstrated that overall, the Social Cognitive Model of Well-Being was a good fit for the data and that the predictors within the model accounted for a significant amount of the variance in both life satisfaction (54%) and job satisfaction (63%). According to our current study, life satisfaction had a statistically significant positive relationship with coping efficacy and a statistically significant negative relationship with environmental barriers. Correspondingly, coping efficacy exhibited a statistically significant negative relationship with environmental barriers. Significant

paths were found from positive affect to barriers, self-efficacy, environmental supports, job, and life satisfaction. Moreover, the path from job satisfaction to life satisfaction was also statistically significant. While the results did not find a direct path from self-efficacy to job satisfaction, an indirect relationship was demonstrated via work conditions. The finding that an indirect relationship exists suggests that women engineers who were more confident in their ability to manage their work perceived their working conditions to be more favorable and reported greater job satisfaction. The study demonstrated that positive affect and job satisfaction are directly related to life satisfaction. These findings are generally consistent with Lent et al. (2011); however, a significant path from goal progress to life satisfaction was not found. This finding suggests that the life satisfaction of women engineers might be influenced more directly by job satisfaction and positive affect than goal progress.

Wright et al. (2017) examined the relationships between self-efficacy variables, attachment, and life satisfaction among 583 undergraduate students. In particular, the authors were interested in how different attachment styles (i.e., anxious attachment and avoidant attachment) influence life satisfaction indirectly and directly via the mediating self-efficacy variables of coping efficacy and career decision self-efficacy. The sample population was comprised of 33.3% male and 66.7% female students from a university located in the Rocky Mountain region of the United States. The mean age of the sample was 19.4 years (SD = 2.85). The class divisions represented in the study were 66.7% of first-year students, 18.6% of sophomores, 10.8% of juniors, and 3.9% of seniors. The racial composition of the sample was predominately White (74.3%), followed by

Hispanic (12.9%), African American (4.8%), Asian American (3.4%), and participants who fell into other categories (4.3%), and those who did not report ethnicity (0.2%). The following instruments were administered: the SWLS (Diener et al., 1985), the Coping Self-Efficacy Scale (Chesney et al., 2006), a measure of career decision self-efficacy, and a measure of attachment containing anxious and avoidant attachment subscales. The model proposed within the study integrated SCCT and attachment theory to explain the relationships among attachment style, life satisfaction, coping efficacy, and career decision self-efficacy. Using structural equation modeling, Wright et al. demonstrated that both avoidant and anxious attachment negatively affected coping efficacy and career decision self-efficacy. However, the self-efficacy variables positively affected life satisfaction among undergraduate students. Therefore, coping efficacy and career decision self-efficacy fully mediate the relationship between the different types of attachment and life satisfaction. Coping efficacy explained more of the variance in the model (20.4%) than career decision self-efficacy (11.1%). The results showed that coping efficacy had a more significant direct effect on life satisfaction out of the self-efficacy variables.

Lui et al. (2016) utilized a sample of 722 (376 females, 346 males) Chinese university students to examine core self-evaluations and coping styles as mediators of the relationship between well-being and social support. The ages of participants ranged from 17 to 24 years, with a mean of 19.68 years (*SD* = 1.12). The sample was administered the SWLS (Diener et al., 1985) and measures to assess perceived social support, core self-evaluations, coping style, and positive and negative affect. Life satisfaction exhibited a

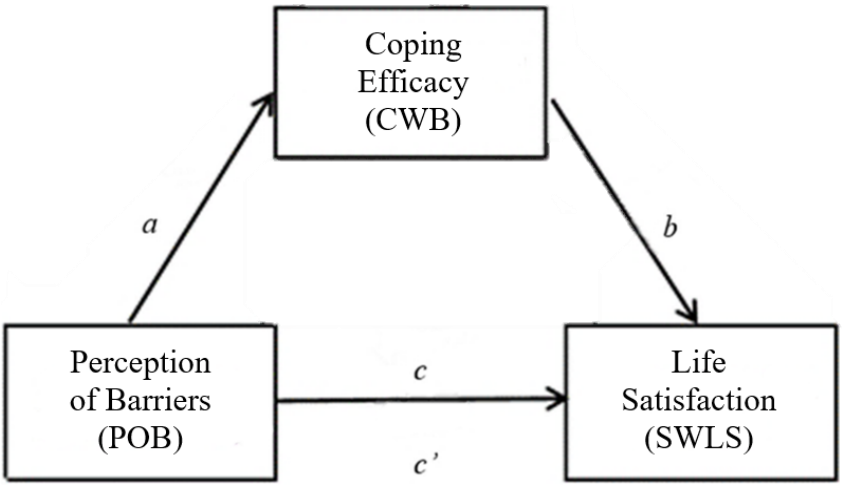
statistically significant positive correlation with social support, positive coping, and core self-evaluations. In addition, core self-evaluations and coping styles partially mediated the relationship between social support and life satisfaction. These results suggest that higher levels of social support enhanced self-evaluations, including self-efficacy, and subsequently enhanced life satisfaction. Moreover, social support decreased the harmful effects of coping on life satisfaction. This finding suggests that students with more social support were more likely to develop positive coping and less likely to develop negative coping, thus, reporting higher levels of life satisfaction.

Goals of the Study

This study will (a) examine the relationship between perceived career and educational barriers, coping efficacy, and life satisfaction and (b) test for mediation effects of coping efficacy on the relationship between perceived educational and career-related barriers and life satisfaction. The sample will consist of students currently attending universities in the United States located in an urban area.

Figure 1

Proposed Mediation Model for the Relationship between the Perception of Barriers and Life Satisfaction as Mediated by Coping Efficacy



Note. This figure demonstrates the proposed mediation model utilized in the current study to explore the relationship between the perception of barriers, life satisfaction, and coping efficacy.

Research Questions

To explore, confirm, and clarify the relationship among the variables discussed above, the following research questions will guide this dissertation:

1. What is the relationship between the perception of barriers and life satisfaction?

   Hypothesis 1. Perceived barriers are expected to be negatively associated with life satisfaction.

2. What are the relationships between coping efficacy, perception of barriers, and life satisfaction?

   Hypothesis 2a. Coping efficacy is expected to be positively associated with life satisfaction.

Hypothesis 2b. Coping efficacy is expected to be negatively associated with perception of barriers.

3. Does coping efficacy mediate the relationship between perception of barriers and life satisfaction?

Hypothesis 3. Coping efficacy is predicted to mediate the relationship between perception of barriers and life satisfaction.

CHAPTER III

RESEARCH METHODOLOGY

Chapter three of this dissertation provides an overview of the study's research methodology. This section begins with a summary of the research design. Second, the characteristics of the participants involved in the study are described. Third, the measures utilized in this study are discussed. Fourth, data collection and the procedure are reviewed. Lastly, this chapter concludes by presenting the plan for data analysis.

Research Design

This study employed a non-experimental research design. This design allowed for exploring the variables of interest and their interrelationships without the researcher actively manipulating the independent variables (Heppner et al., 2016). Specifically, mediation analysis was employed to explore the relationships between the participants' coping efficacy, as measured by the Coping with Barriers scale (CWB Scale; Luzzo & McWhirter, 2001), perceived educational and career-related barriers, as measured by the Perception of Barriers scale (POB Scale; Luzzo & McWhirter, 2001), and life satisfaction, as measured by the Satisfaction with Life Scale (SWLS; Diener et al., 1985).

In addition, this design provided the study with quantitative data that assessed the trends of the participants on scales administered within the questionnaires.

The target population for this study was undergraduate students enrolled in universities located in the United States. This empirical investigation utilized a battery of questionnaires consisting of self-report instruments, which have been widely employed in empirical studies assessing the constructs being studied in the current study. The instruments have demonstrated acceptable reliability and validity.

Participants

Only undergraduate students were asked to participate in this research. Therefore, this study solely comprised college students attending universities in the northeast United States. Participants were initially recruited via email at public urban universities. A follow-up email was utilized to ensure an adequate sample size. In addition, participants were entered into a raffle for a gift card as an incentive for participation.

A total of 268 individuals began or completed the survey. Respondents needed to meet the inclusion criteria to participate. Individuals needing to meet inclusion criteria were identified and excluded from continuing the survey. The inclusion criteria were as follows: a minimum age of 18 years old, classified as an undergraduate student, enrolled in a college or university in the United States, and willing to participate in this study. The final sample consisted of 208 undergraduate students attending a college or university located in the northeast United States in urban areas, of whom 173(83.2%) identified as female, 25 (12%) identified as male, 12 (5.8%) identified as nonbinary, 2 (1%) identified as a transwoman, 1 (0.5%) identified as a transman, and 1 (0.5%) identified as gender

fluid. Participants ranged in age from 18 to 41 (M = 20.84 years; SD = 3.83). The sample comprised undergraduate students, of whom 103 (49.3%) were enrolled at Cleveland State University, 64 (30.6%) at the University of Akron, 40 (19.1%) at the University of Cincinnati (19.1%), and 1 (0.5%) at Kent State University. Recruitment emails were only sent to students currently enrolled in a course at three public urban universities in Ohio (i.e., University of Cincinnati, Cleveland State University, and the University of Akron). However, the final sample included a fourth university due to a participant who was taking classes at more than one university (e.g., an affiliate school) identifying Kent State University as their current enrollment institution.

The racial composition of the sample was predominately White/European-American/Caucasian (76.9%), followed by multiracial (7.2%), African American/Black (4.8%), Asian (4.3%), Middle Eastern/Arab (3.8%), Hispanic/Latino/a (1%), Biracial (0.5%), Native American (0.5%), and Native Hawaiian/Pacific Islander (0.5%). The class divisions represented in the study were 56 (26.9%) first-year students, 52 (25%) sophomores, 52 (24%) juniors, and 48 (23.1%) seniors. The majority of participants identified as heterosexual (68.8%), followed by queer (17.8%), pansexual (4.3%), pansexual/bisexual (1.9%), lesbian (1.9%), and asexual (1.4%). Additionally, there were several unique sexual identifications reported, as shown in Table 1. Regarding sampling, all participants were recruited via email. See Table 1 for a summary of participant demographic data.

Table 1

Demographic Characteristics of Participants

	n	%
Gender		
Female	173	83.2
Male	25	12
Non-binary	12	5.8
Transwoman	2	1
Transman	1	0.5
Gender fluid	1	0.5
Race		
White	160	76.9
Multiracial	15	7.2
Black	10	4.8
Asian	9	4.3
Middle Eastern/Arab	8	3.8
Hispanic/Latino/a	2	1
Biracial	2	1
American Indian/Native American	1	0.5
Native Hawaiian/Pacific Islander	1	0.5
Sexual Orientation		
Heterosexual	143	68.8
Queer	37	17.8
Pansexual	9	4.3
Bisexual/Pansexual	4	1.9
Lesbian	4	1.9
Asexual	3	1.4
Asexual/Demisexual	1	0.5
Gay/Lesbian/Queer	1	0.5
Asexual/Panromantic	1	0.5
Asexual/Aromantic	1	0.5
Bi-romantic	1	0.5
Asexual/Queer	1	0.5
Lesbian/Queer	1	0.5
Queer/Pansexual	1	0.5
U.S. origin [a]	17	8.2

Table 1 Cont.

	n	%
College or University		
Cleveland State University	103	49.3
University of Cincinnati	40	19.1
University of Akron	64	30.6
Kent State University	1	0.5
Academic classification		
Freshman	56	26.9
Sophomore	52	25
Junior	52	25
Senior	48	23.1
Relationship status		
Committed relationship	86	41.3
Single	85	40.9
Dating	26	12.5
Married	9	4.3
Friends with benefits	1	0.5
Registered domestic partnership/civil union	1	0.5
Free or reduced lunch in high school [a]	150	72.1
English first language [a]	14	6.7

Note. N = 208. Participants ranged in age from 18 to 41 (M = 20.96 years; SD = 4.19).

[a] Reflects the number and percentage of participants answering "yes" to this question.

Measures

The following measures were employed within this study: a demographic questionnaire that will gather self-report data, the SWLS (Diener et al., 1985), the CWB Scale (Luzzo & McWhirter, 2001), and the POB Scale (Luzzo & McWhirter, 2001).

Demographic Questionnaire

A brief demographic questionnaire was administered to gather participant data via an online survey format. The demographic questionnaire was utilized to assess participants' age, gender, sexual orientation, race/ethnicity, native language, parent(s) level of education, year in college, degree being sought, relationship status, country of origin, parents' country of origin, the number of people in their household, and highest household educational level (e.g., less than high school, high school, college, graduate degree).

The Perception of Barriers Scale

The POB Scale is a 32-item scale measuring respondents' perceived barriers to achieving their educational and career aspirations. The original POB scale was a 24-item scale developed by McWhirter (1997) to assess perceived educational and career-related barriers high school students believed they were likely to encounter. Career barriers examined were sex discrimination and ethnic discrimination. Educational barriers investigated included perceived lack of ability, lack of fit, lack of interest, financial issues, and family attitudes. In addition, this version comprised eight items addressing potential ethnic discrimination and gender discrimination in one's future career (e.g., "In my future job, I will probably have a harder time getting hired than people of the opposite sex" and "In my future job, I will probably experience negative comments about my racial/ethnic background"); 9 items addressing barriers that would prevent one from attending college (e.g., "If I didn't go to college, it would be because of family attitudes about college"); 5 items addressing barriers that one would potentially encounter while

attending college (e.g., “If I do go to college, I will probably experience money problems”); and two items addressing perceived barriers and one’s ability to overcome said barriers. The author administered the original POB to 1,159 high school students from nine southwestern high schools. The sample consisted of 580 females and 559 males who were juniors and seniors. The majority of the sample was Mexican American/Chicano (41.9%) and Caucasian (48.2%). The internal consistency for the original POB, as measured by Cronbach’s alpha reliability coefficient was .87 (McWhirter).

The original POB Scale (McWhirter, 1997) was modified considerably for use with college students, which resulted in the current form of the scale. The POB Scale (Luzzo & McWhirter, 2001) is commonly used with university samples and was employed in the current study. The POB comprises two subscales—the Career-Related Barriers and the Educational Barriers subscale. The Career-Related Barriers subscale contains the eight original POB items addressing ethnic and gender discrimination barriers in one’s future career and an additional three items addressing childcare per McWhirter’s (1997) suggestion. Respondents are given the stem “In my future career I will probably experience . . .” followed by each career barrier and asked to indicate the degree that they think the statement is true. The authors substantially modified the Educational Barriers subscale to be suitable for a college population and encompass a more comprehensive range of barriers. The format was altered to present the barrier first, followed by the stem “currently a barrier to my educational aspirations.”

Additionally, the nine items about barriers that could thwart engagement in postsecondary education included in the original scale were eliminated since the scale would target individuals already enrolled in college. Five items from the original scale addressing money problems, family problems, lack of intelligence, negative family attitudes, and not fitting in were retained. Moreover, 16 new items were added to the subscale based on recommendations from McWhirter (1997). Two items were added concerning children (e.g., childcare concerns, desire to have children); one item was added addressing relationship concerns; two items were added on gender-related educational issues; four items were added regarding role models and environmental support; two items were added concerning ethnicity; and five items were added about inadequate preparation for postsecondary education, not knowing how to study well, lack of confidence, having to balance working while attending school, and lack of financial support. Participants are presented with the sentence stem, "In my future career, I will probably…" for the Career-Related Barriers subscale and instructed to respond to each completed sentence. The Educational Barriers subscale instructs participants to respond to phrases followed by the stem "…currently a barrier to my educational aspirations." Respondents are asked to indicate whether they think each statement would be true for them using a 5-point Likert-type scale ranging from *strongly agree* (5) to *strongly disagree* (1). Ratings for items 1 to 11 are summed for a Career-Related Barriers subscale score to form one score (number) ranging between 11 to 55, and items 12 to 32 are summed for an Educational Barriers subscale score ranging between 20 and 100. Higher scores on the subscales reflect the perception of more barriers within that domain. A total

score can be obtained by summing item ratings on both subscales, with scores ranging from 32 to 160. The higher the respondent's score, the greater their perception of educational and career-related barriers. Sample items include: "In my future career, I will probably experience negative comments about my racial/ethnic background (such as insults or rude jokes)," "In my future career, I will probably have difficulty finding work that allows me to spend time with my family," and "Lack of support from my "significant other" to pursue education is currently a barrier to my educational aspirations."

The POB has demonstrated stability and homogeneity (Luzzo & McWhirter, 2001). The internal consistency, as measured by Cronbach's alpha reliability coefficient, was .90 for the total scale. Cronbach's alpha coefficients of .86 for the Career-Related Barriers subscale and .88 for the Educational Barriers subscale were obtained. A randomly selected subsample was utilized to obtain test-retest reliability during a two-month interval. The results demonstrated moderate to strong test-retest stability, yielding a stability coefficient of .78 for the POB total scale scores and stability coefficients of .72 for the Career-Related Barriers subscale and .68 for the Educational Barriers subscale (Luzzo & McWhirter). Cronbach alpha scores indicated good internal consistency, α =.82 among French first-year university students (Fort & Murariu, 2018); α = .86 among college students with traditional STEM majors (Gnilka & Novakovic, 2017); α = .90 among college students at a midsized Southern university (Lindley, 2005); α = .91 among students at a large urban university, large rural university, and small private liberal arts college (Metz et al., 2009); α = .89 among upper-level college students (Novakovic & Gnilka, 2015); and α = .97 among students at a mid-Atlantic research university (Raque-

Bogdan et al., 2013). Furthermore, both subscales demonstrated good internal consistency, α = .86 for the Career-Related Barriers subscale and α = .89 for the Educational Barriers subscale (Lindley, 2005); α = .94 for the Career-Related Barriers subscale and α = .96 for the Educational Barriers subscale (Raque-Bogdan et al., 2013); and α = .90 for the Career-Related Barriers subscale and α = .92 for the Educational Barriers subscale among psychology college students (Wright et al., 2014).

Lopez and Ann-Yi's (2006) research in the United States supported the convergent and divergent validity of the POB (Luzzo & McWhirter, 2001). The study assessed the influences of social support and perceptions of career barriers, career decision-making self-efficacy beliefs, and barrier-related coping beliefs to predict career indecision amongst college women belonging to three racial/ethnic groups. The sample included 359 female students from a large Southwestern urban university. Participants ranged in age from 18 to 53 (*M* = 24.15 years; *SD* = 6.27). The majority of the sample were seniors (37%) and juniors (41.5%). The sample was ethnically diverse, with Caucasian (42.2%), Hispanic (24.7%), and African American (19.2%) individuals. As measured by Cronbach's alpha reliability coefficient, the internal consistency for the Career-Related Barriers subscale was α = .87, α = .92, and α = .90 for Caucasian, African American, and Hispanic participants, respectively. The internal consistency for the Educational Barriers subscale was α = .86, α = .91, and α = .89 for Caucasian, African American, and Hispanic participants. There was a positive correlation between the POB subscales and the Career Decision Scale (CDS; Osipow et al., 1987), a measure of difficulties with career decisions and exploration for Latino, Caucasian, and Hispanic

women. Convergent validity indicated that the POB and the CDS measured similar constructs. Additionally, the POB subscales were negatively correlated with the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; Betz et al., 1996). The results provide evidence for the reliability and validity of the POB.

The Coping with Barriers Scale

The CWB Scale is a 28-item scale based on self-report data. It is intended to assess individuals' efficacy for coping with and overcoming potential barriers to obtaining their educational and career goals. The measure was designed for use with college students and served as a companion piece to the modified POB Scale (Luzzo & McWhirter, 2001). Accordingly, the CWB Scale parallels most items on the modified POB Scale. The CWB comprises two subscales—the Coping with Career-Related Barriers and the Coping with Educational Barriers subscale. The subscales incorporated all 21 Educational Barriers items and 7 of the 11 Career-Related Barriers items from the modified POB Scale (Luzzo & McWhirter). The four items that were ultimately not utilized for the construction of this scale were related to career barriers—two assessing ethnic discrimination and two assessing gender discrimination. Luzzo and McWhirter's rationale for excluding these items was based on their assertion that the Coping with Educational Barriers subscale items were more readily quantifiable and directly relevant to respondents' current life circumstances than the Coping with Career-Related Barriers subscale items.

The Coping with Career-Related Barriers subscale consists of the first 7 items of the CWB Scale (Luzzo & McWhirter, 2001). Respondents are asked to indicate their

degree of confidence in their ability to successfully overcome each of the potential career barriers presented. Sample items include: “Negative comments about my racial/ethnic background (insults, jokes),” “Difficulty getting time off when my children are sick,” and “Difficulty finding work that allows me to spend time with my family.” Items 8 through 28 form the Coping with Educational Barriers subscale and ask respondents to indicate their degree of confidence in their ability to successfully overcome each of the potential educational barriers listed. Sample items include: “Negative family attitudes about college,” “Not having enough confidence,” and “Having to work while I go to school.” Respondents are asked to indicate their degree of confidence using a 5-point Likert-type scale ranging from highly confident (5) to not confident at all (1). Ratings for items 1 to 7 are summed for a Coping with Career-Related Barriers subscale score to form one score (number) ranging between 7 to 35, and items 8 to 28 are summed for a Coping with Educational Barriers subscale score ranging between 21 and 105. Higher scores on the subscales reflect greater confidence in one’s ability to overcome barriers within that domain. A total score can be obtained by summing item ratings on both subscales, with scores ranging from 28 to 140. The higher the respondent’s score, the greater their confidence is in their coping efficacy.

The CWB Scale has demonstrated reliability and validity in numerous research studies and was initially demonstrated by Luzzo and McWhirter (2001) in a study that assessed sex and ethnic differences in perceived career-related and educational barriers, as well as sex and ethnic differences in coping efficacy for such barriers among college students. The sample comprised 286 first-year college students (59% women and 41%

men) at a small southern university in the United States. The participants ranged in age from 16 to 38 years, with a mean age of 18.7 years (*SD* = 2.0). The sample was representative of the student body's ethnic group membership, with the majority identifying as European American (89%) and African American (7%). The CWB was constructed based on the modified POB Scale (Luzzo & McWhirter) and was subject to parallel assessments and subsequent revisions, thus, further enhancing the construct validity of the instrument. The POB Scale has proven stability and homogeneity (Luzzo & McWhirter). The internal consistency, as measured by Cronbach's alpha reliability coefficient, was .88 for the Coping with Career-Related Barriers subscale and .93 for the Coping with Educational Barriers subscale. Test-retest reliability for the instrument was obtained over a two-month period. The test-retest stabilities for both subscales were moderate, yielding stability coefficients of .49 for the Coping with Educational Barriers subscale and .50 for the Coping with Career-Related Barriers subscale. The results showed that, as expected, career-related POB was significantly greater for women. Furthermore, women and men were found to have similar confidence levels in their ability to cope with potential barriers. However, ethnic minority students reported significantly lower career-related coping efficacy than their European American counterparts.

Cronbach alpha scores indicated good internal consistency, α =.91 among French first-year university students (Fort & Murariu, 2018); α = .96 among college students at a midsized Southern university (Lindley, 2005); α = .94 among students at a large urban university, large rural university, and small private liberal arts college (Metz et al., 2009);

α = .87 among Native American students (Thompson, 2013); α = .99 among students at a mid-Atlantic research university (Raque-Bogdan et al., 2013); and α = .98 among college freshman at a mid-Atlantic university (Raque-Bogdan & Lucas, 2016). Furthermore, both subscales demonstrated good internal consistency, α = .91 for the Coping with Educational Barriers subscale (Cadaret et al., 2017); α = .93 for the Coping with Career-Related Barriers subscale and α = .95 for the Coping with Educational Barriers subscale (Lindley, 2005); α = .92 for the Coping with Educational Barriers subscale (Novakovic & Gnilka, 2015); α = .98 for the Coping with Career-Related Barriers subscale and α = .99 for the Coping with Educational Barriers subscale (Raque-Bogdan et al.); and α = .93 for the Coping with Career-Related Barriers subscale and α = .89 for the Coping with Educational Barriers subscale (Tate et al., 2015).

Evidence of construct validity of the CWB has been supported by convergent validity in the following studies (Lopez & Ann-Yi, 2006; Raque-Bogdan & Lucas, 2016; Tate et al., 2015). Convergent validity has been supported by statistically significant positive correlations between the CWB Scale and the Graduate Education Self-Efficacy Scale (GESES; Williams, 2004), an instrument that measures perceived social, academic, and research self-efficacy levels. A study of 170 Ronald E. McNair Postbaccalaureate Achievement Program participants explored the influence of coping efficacy, family influence, and graduate school self-efficacy on pursuing graduate school among underrepresented first-generation, low-income college students (Williams). The results showed that the GESES was significantly and positively correlated with the CWB scale. Specifically, Tate et al. found that the GESES academic subscale was correlated

significantly and positively with the Coping with Career-related Barriers subscale (r = .32, p < .01) and Coping with Educational Barriers subscale (r = .48, p < .01); the GESES research subscale was correlated significantly and positively with the Coping with Career-related Barriers subscale (r = .28, p < .01) and Coping with Educational Barriers subscale (r = .42, p < .01); and the GESES social subscale was correlated significantly and positively with the Coping with Career-related Barriers subscale (r = .36, p < .01) and Coping with Educational Barriers subscale (r = .41, p < .01).

Raque-Bogdan and Lucas (2016) found bivariate correlations between one's coping efficacy and related support and self-efficacy variables supporting convergent validity when studying 2,106 (1,026 women, 1,066 men, four individuals who self-identified transgender, and 10 did not respond) incoming undergraduate students at a mid-Atlantic United States university. The participants had a mean age of 17.9 years old (SD = .44). Of the participants. The majority were Caucasian (61.8%) and Asian (14.4%). Results demonstrated correlations between CWB overall score and career-related parental support (r = .43, p < .001) as measured by the Career-Related Parent Support Scale (CRPSS; Turner et al., 2003), which assesses the extent parents provide their children with career modeling, instrumental assistance, career-related emotional support, and verbal encouragement. Moreover, the CWB and the College Self-Efficacy Inventory (CSEI; Solberg et al., 1993) were positively and significantly correlated (r = .35, p < .001).

Lopez and Ann-Yi's (2006) research examining career indecision in three racial/ethnic groups of college women supported the convergent and divergent validity of

the CWB (Luzzo & McWhirter, 2001). The sample comprised 359 female undergraduate students (176 Caucasian, 103 Hispanic, and 80 African American) from a large urban university. Participants ranged in age from 18 to 53 (M = 24.15 years; SD = 6.27). The majority were juniors (41.5%) and seniors (37%). The Coping with Career-Related Barriers subscale was significantly and positively correlated with a measure of support, the People in My Life Scale (PIML; Neemann & Harter, 1986); r = .26, p < .01 for Caucasian participants and r = .34, p < .01 for Hispanic participants. The Coping with Educational Barriers subscale was positively and significantly correlated to the PIML; r = .35, p < .01 for Caucasian participants, r = .47, p < .01 for Hispanic participants, and r = .51, p < .01 for African American participants. The Coping with Career-Related Barriers subscale was significantly and positively correlated with the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; Betz et al., 1996); r = .25, p < .01 for Caucasian participants, r = .44, p < .01 for Hispanic participants, and r = .41, p < .01 for African American participants. The Coping with Educational Barriers subscale was positively and significantly correlated to the CDMSE-SF; r = .49, p < .01 for Caucasian participants, r = .45, p < .01 for Hispanic participants, and r = .52, p < .01 for African American participants. Furthermore, discriminant validity was assessed using POB and career indecision measures. Lopez and Ann-Yi found significant negative bivariate correlations between the CWB subscales and the POB subscales (Luzzo & McWhirter, 2001). There was a significant, negative correlation between the CWB subscales and the Career Decision Scale (CDS; Osipow et al., 1987), a measure of difficulties with career decisions and exploration, with statistically significant respective correlations (r = -.28 to

-.54, $p < .01$) across the CWB subscales for each racial/ethnic group. The results provide evidence for the reliability and validity of the CWB.

Additional studies have provided further support for the discriminant validity of the CWB scale. Cadaret et al. (2017) conducted a study to examine the relationship between academic self-efficacy and stereotype threat and the influence of coping efficacy on educational barriers. The sample consisted of 211 women who had declared a major in a STEM field, with a mean age of 20.72 years (SD = 2.92). Of the participants involved, the majority were sophomores (27.5%) and juniors (24.6%). The results showed that CWB Scale was significantly and negatively correlated with the Stigma Consciousness Questionnaire (SCQ; Pinel, 1999), a measure of one's expectation that they will be stereotyped despite any of their actual behavior (r = -.39, $p < .01$). The authors also demonstrated that the Stereotype Vulnerability Scale (SVS; Spencer, 1994) was significantly and negatively correlated with CWB (r = -.20, $p < .01$). Thompson (2013) investigated the relationship between college outcome expectations and career barriers as mediated by coping efficacy. The sample included 121 students attending 38 different institutions in the United States and representing 70 different Native American tribes, of which 94 were women, 26 were men, and one identified as transgender. The participants had a mean age of 29.21 years (SD = 9.12). The majority of the sample was six years or beyond in their education pursuits (28.1%) and sophomores (16.5%). The results demonstrated a statistically significant and negative correlation between the Differential Status Identity scale (DSIS; Brown et al., 2002), a measure of perceived social status, and the CWB Scale were significantly and negatively correlated (r = -.35, $p < .01$).

The Satisfaction with Life Scale

The SWLS was developed to measure individual life satisfaction based on global cognitive judgments. It self-administered instrument comprised of 5 items. The SWLS is a widely used measure of life satisfaction available in the public domain. Life satisfaction has been defined as "a global assessment of a person's quality of life according to his chosen criteria" (Shin & Johnson, 1978, p. 478). Diener (1984) emphasized the importance of acknowledging that one's satisfaction with their current state depends on a comparison with a set of specific standards that the individual sets for themselves. Thus, what facets are integrated into how individuals judge their satisfaction with life are subjective and not predetermined criteria deemed important by the researcher. The SWLS aims to assess an individual's subjective, internal assessment of their life satisfaction rather than their satisfaction within various life domains such as health or finances (Pavot & Diener, 1993a). This approach allows respondents to incorporate and weigh these domains accordingly to determine their overall summary of life satisfaction.

Several authors of the original scale generated 48 items to explore well-being and life satisfaction (Diener et al., 1985). This set of items was constructed based on the guiding theoretical principle that life satisfaction is determined by a judgment made by the individual of their life compared to self-determined standards. Item characteristics were examined to inform an assessment of the content validity. Initial factor analyses revealed the following three factors: negative affect, positive affect, and life satisfaction. Items on affect were removed, and items from the life satisfaction factor with loadings

less than .60 were eliminated. The remaining 10 items were decreased due to semantic similarity to reduce redundancies resulting in 5 items (Diener et al.).

The SWLS has been tested with diverse populations (e.g., college students, incarcerated individuals, abused women, older adults, individuals with physical disabilities, psychotherapy clients, individuals receiving inpatient care for alcohol abuse, and elderly caregivers of demented spouses). The average time to complete the SWLS is 1 to 2 minutes (McDowell, 2010). Respondents are asked to indicate their agreement with the five statements using the following 7-point Likert-type scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Neither Agree nor Disagree; 5 = Slightly Agree; 6 = Agree; 7 = Strongly Agree. Higher scores indicate higher life satisfaction. Example items include: “So far I have gotten the important things I want in life” and “If I could live my life over, I would change almost nothing.” The responses are summed to form one score (number) ranging between 5 to 35. The higher the respondent’s score, the higher their life satisfaction is based on global cognitive judgments. Individuals with scores between 31 to 35 are considered *extremely satisfied* with life, scores between 26 to 30 are *satisfied* with life, scores between 21 to 25 are *slightly satisfied* with life, a score of 20 is *neutral*, scores between 15 to 19 are *slightly dissatisfied* with life, scores between 10 to 14 are *dissatisfied* with life, and scores between 5 to 9 are *extremely dissatisfied* with life. Research has shown that respondents from western countries are more inclined to rate their well-being as more significant than the neutral point on various measures (Andrews & Withey, 1976; Veenhoven, 1984).

Diener et al. (1985) conducted three studies to provide the initial validation of the SWLS. Study 1 aimed to examine the psychometric properties of the SWLS. The authors administered the SWLS in study 1 to 176 undergraduate students and then readministered the instrument to 76 of those students two months later. The sample of 176 undergraduate students yielded an alpha coefficient of .87, and a two-month test-retest correlation coefficient of .82. Diener and colleagues utilized principal axis factor analysis to investigate the interitem correlation matrix. The number of factors that would be extracted was based on a scree plot of eigenvalues. A single factor that accounted for 66% of the variance in the measure emerged when utilizing this criterion. Results of both this study and subsequent research, including studies employing the English-language version and translations of the SWLS into Dutch and French, are consistent with the previous findings by Diener et al. and have provided evidence for a single-factor solution and indicate that the SWLS measures a single dimension (Arrindell et al., 1991; Blais et al., 1989; Diener et al.; Pavot et al., 1991).

The validity and reliability of the instrument have been empirically tested and supported in numerous studies (Arrindell et al., 1991; Blais et al., 1989; Chwalisz et al., 1988; Diener et al., 1985; Frisch et al., 1992; George, 1991; Magnus et al., 1993; Pavot & Diener, 1993a; Pavot et al., 1991; Vitaliano et al., 1991; Yardley & Rice, 1991). Coefficient alphas from these studies ranged from .79 to .89, and item-total correlations ranged from .51 to .80, thus indicating high internal consistency. Subsequent test-retest reliability was demonstrated with coefficients of .84 for one month, .64 over two months,

.50 over 10 weeks, and .54 over four years, indicating moderate temporal stability and is consistent with previous findings by Diener et al. (1985).

Numerous studies have examined the convergent validity of the SWLS and explored its relation to other clinical measures. Pavot and Diener (1993a) presented 15 convergent validity coefficients from nine studies ranging from .45 to .82. Blais et al. (1989) found a strong negative correlation ($r = -.72$, $p = 0.001$) between the SWLS and the Beck Depression Inventory (Beck et al., 1961). Arrindell and Ettema (1986) reported the SWLS to be significantly negatively correlated with all eight symptom dimensions of the Dutch version of the Symptom Checklist-90 (SCL-90-R; Derogatis, 1977), including general psychological distress ($r = -.55$), depression ($r = -.55$), and anxiety ($r = -.54$). Lucas et al. (1996) reported correlations ranging from .3 to .52 between the SWLS and positive affect and correlations ranging from -.26 to -.48 between the SWLS and negative affect as measured by the PANAS scales (Watson et al., 1988). These results demonstrate that the SWLS does not merely measure negative affect due to its correlation with the unique subscales of this measure, which are uncorrelated. Diener et al. (1985) reported correlations between the SWLS and the Bradburn scale (Bradburn, 1969) on both the positive affect scale were .50 and .51, and the negative affect scale were -.37 and -.32; correlations with Cantril's ladder scale were .62 and .66, and correlations with Ryff's Scales of Psychological Well-being were .58.

Procedure

University students were recruited via email and announcements from professors. Prior to conducting the study, department chairs were contacted from all academic

departments at the University of Cincinnati, Cleveland State University, and the University of Akron. The purpose of this outreach was to assess the level of willingness among faculty members to promote student participation in the study. Faculty members willing to allow access to their students were provided with the survey link and instructions. The email request consisted of the following components: a request for participation, a description of the study, detailed directions, and a web address link where participants can access the online survey and questionnaire. The emailed link allowed participants to complete the survey at their leisure. The survey was administered through an Internet-based survey service (Qualtrics) and kept confidential. The survey consisted of a battery of self-report questionnaires and was expected to take approximately 30 minutes to complete. The order in which the measures were presented was randomized to control for order effect. Participants were offered the option to submit an email address for a chance to win one of three $25 Amazon.com gift cards.

This research study was conducted with the approval of the university ethics committee. Before the study's survey portion, the purpose, benefits, and risks associated with participating in the research were explained to respondents. The participants were informed that their personal information would not be attached to their survey data, and survey data would be secured on separate encrypted databases. In addition, participants were made aware that their participation was entirely voluntary and that there would not be any consequences for choosing not to participate or failing to complete all of the items.

Participants were exposed to subjectively minimal risk. No known social or physical risks were associated with participating in this study. The risks were equivalent to the risks consistent with daily living. Following the informed consent process, the survey instruments reported under the measures section were presented randomly. Lastly, participants were given a "Thank You" message to notify them that the survey was completed. After data were collected from a sufficient number of participants, data analyses commenced.

Data Analyses

Prior to data analysis, data were screened for outliers and missing data. Furthermore, data were checked for violations of normality and multicollinearity. Listwise deletion, which refers to the omission of participants with any missing data, often negatively affects the sample size and potentially biasing in samples with multiple missing data or is due to more than trivial missingness (Schafer & Graham, 2002). Available item analysis, otherwise known as pairwise deletion or pairwise inclusion, is preferable for the current study because it utilizes the available data for analysis and only excludes missing data points for analyses that would directly involve the missing data points (Parent, 2013). Data were screened for outliers using +2.0 and -2.0 as criteria. Skewness should be less than an absolute value of 2.0 in magnitude. Kurtosis statistics are considered abnormal if the absolute value exceeds 7.0 (Hahs-Vaughn, 2017). The VIF and tolerance statistics were reviewed to examine multicollinearity. Tolerance is calculated as $(1 - R^2/\text{k})$, and potential multicollinearity issues are suggested by values close to zero (.10 or less is recommended). VIF, or variance inflation factor, is the

reciprocal of tolerance. Multicollinearity is indicated by VIF values greater than 10 (Hahs-Vaughn, 2017). Statistical procedures were conducted following data collection utilizing the Statistical Program for Social Sciences (SPSS). This research utilized an alpha level of .05 for all significance tests as a standard for rejecting the null hypothesis. Descriptive statistics for all items measured and collected within the battery of instruments were assessed.

The likelihood of a Type 1 error was reduced by running a multivariate analysis (MANOVA) instead of multiple univariate analyses. A MANOVA is best suited for situations with two or more dependent variables. Accordingly, a MANOVA was utilized to investigate demographic variables of age, gender, and ethnicity and dependent variables of perceived barriers, coping efficacy, and life satisfaction. In addition, this analysis allowed for intercorrelations among variables to be explored while examining group differences.

Mediation analysis was conducted to investigate coping efficacy's direct and indirect effects on the relationship between perceived barriers and life satisfaction. Mediation proposes that an independent variable (perception of barriers) affects a dependent variable (life satisfaction) via an intervening variable or mediator (coping efficacy) (Preacher & Hayes, 2008).

Multiple approaches have been proposed to assess the mediation effect, including widely used, classic techniques like Sobel's test (1982) and the causal steps approach proposed by Baron and Kenny (1986), as well as bootstrapping techniques in more recent years (Bollen & Stine. 1990; MacKinnon et al., 2007; Preacher & Hayes, 2008). Yuan

and Mackinnon (2014) proposed a robust bootstrapping technique based on median regression to address non-normality and issues with heteroscedasticity. The authors found that bootstrapping managed type 1 error rates at acceptable levels, regardless of the distribution having heavy tails, but not robust to heteroscedasticity. Ng and Lin (2016) provided further insight into bootstrapping techniques when non-normal error distribution and failure to meet the assumptions of homoscedasticity. The authors demonstrated that bootstrapping was acceptable despite non-normality reducing power, especially if there are no issues with heteroscedasticity. Therefore, bootstrapping was employed in the current study and will be discussed further in the mediation analysis section.

The PROCESS 4.1 Macro of Hayes (2022) was utilized for data analysis. Consistent with recommendations made by Hayes, bootstrapping techniques were employed to test the indirect effect and account for any skewed data. Bootstrapping utilizes a non-parametric approach and makes no assumptions regarding the sample distribution. Through bootstrapping, data is resampled with replacement numerous times—typically 5,000 resamples (Preacher & Hayes, 2004). This method allows for the indirect effect to be computed for each one of these samples and creates an empirically generated sampling distribution. Since the indirect effect will not be completely equal to the mean of the bootstrapped distribution, PROCESS automatically generates bias-corrected confidence intervals (BC CI). This distribution provides a vehicle to determine a confidence interval, a *p-value,* or a standard error. Bootstrapping differs from other approaches because it does not require the assumption that *a* and *b* are not correlated. Thus, the product of *a* path and *b* path will be divided by the *c* path to analyze the amount

of variance explained by the mediating variable (Preacher & Hayes). According to Kenny (2015), full mediation occurs when the mediating variable accounts for at least 80% of the variance in the relationship between the predictor and outcome variables. Percentiles in the distribution of bootstrap estimates were utilized to establish the endpoints of the confidence interval and standardized (Hayes, 2022). The confidence intervals are utilized to assess the significance of the indirect effect and subsequently inform the mediation model as a whole. As bias-corrected bootstrapping is not contingent on the assumption of normality of the sampling distribution, this method is suitable to be utilized with a smaller sample size (Preacher & Hayes, 2008).

CHAPTER IV

RESULTS

This dissertation investigated the relationships among perceived career and educational and career-related barriers, coping efficacy, and life satisfaction. Chapters I and II reviewed the theoretical and empirical literature on these constructs, while Chapter III discussed the research methodology guiding the study. Over the course of this chapter, the results of the empirical component of the study will be presented. A brief overview of the structure Chapter IV follows will be discussed.

The first section of this chapter describes the methods utilized for data cleaning and preparation. Next, information on screening the data for statistical anomalies, outliers, and distributional assumptions is discussed, and results from preliminary analyses are reported. Next, descriptive statistics, the reliability of all instruments employed in the study, and correlations among study variables are presented. In addition, demographic data for participants included in the final sample will be presented, including distributions by gender, racial/ethnic background, sexual orientation, relationship status, native language, and academic classification. Finally, results from

primary analyses addressing the research questions and hypotheses guiding this empirical study will be reported.

Preliminary Results

Data Screening

The results of the original data collection yielded 268 participants. Data were gathered from the online questionnaire these participants accessed between October 7, 2021, and January 9, 2022. Data were then cleaned, and missing data analysis was conducted for the 268 participants based on the guidelines articulated by Hair and colleagues (2010). Each individual participant was provided with informed consent to participate in the research study before answering any survey items. The first step in the data screening process was to include only individuals who consented to participate in the current study. Two participants did not consent to the study and were subsequently excluded from data analysis.

The second step in the data screening process was to identify participants who did not meet the inclusionary criteria for the study. Inclusionary criteria in the present research were current enrollment in a college or university, attending a school located in the United States, and classification as an undergraduate student. In addition, all participants were of a minimum age of 18 years old.

Participants self-identified their academic classification and were given the option to select multiple responses. Individuals who selected "Other" as one of their responses were encouraged to provide a written response specifying their academic classification (see Appendix B for demographic survey items). Participants who selected freshman,

sophomore, junior, or senior and did not select multiple academic classifications were included in the study. Twenty-three individuals (8.6% of the total) were removed from the dataset because they did not identify their academic classification as undergraduate students currently enrolled in a college or university in the United States. Specifically, six participants were removed due to not being enrolled in a college or university. One participant was excluded from the data analysis because they were enrolled in a college or university outside the United States. Participants who selected graduate students as their academic classification were excluded from the survey (n = 5). Eleven participants selected "Other." Of those 11 participants, seven participants provided additional written responses. These responses were: "College Credit Plus student," "CCP student," "Ccp student," "Senior in high school CCP student," "Post Bacc premed," "Post-Bacc," and "Ph.D. Candidate." The remaining four participants who selected "Other" did not offer further clarification. These participants were ultimately excluded due to the uncertainty of whether they were classified as undergraduate students and the subsequent possibility of inappropriately skewing results.

Missing Data. The third step in the data screening process involved identifying missing data points, which were found in 27 (10% of the total sample) cases. Of those 27 cases, some exhibited item-level missing data, scale-level missing data, or incomplete responses. Specifically, 10 participants were removed because they only completed the study's consent form but none of the study's measures, while six participants were excluded because they only filled out the demographic questionnaire but none of the study's measures. Eleven participants were excluded due to omitting 30% or more of the

data within the assessed dependent variables (Hair et al., 2010). These participants were excluded from further analyses as the missing data were relatively large for them, which accounted for approximately 11% of participants who met the inclusion criteria but still needed to complete the survey. Since the survey items were forced responses, participants were required to respond to each question to complete the questionnaire, and thus, those who skipped one or more total scales were excluded from further analyses. Overall, 216 participants of the remaining 243 cases had no missing data.

Outliers. Scale and subscale range, means, standard deviations, skewness, kurtosis, and coefficient alpha levels are displayed in Table 2. Data were screened for univariate outliers using *Z*-scores. Univariate outliers are detected through identification of *z*-scores equal to or greater than the standardized absolute value cut-off of +3.29 or -3.29, $p < .001$ (Tabachnick & Fidell, 2007). Two participants were removed due to an elevated z-score on the Coping with Career-Related Barriers Subscale.

A Mahalanobis distance statistic was calculated for each observation in the dataset to determine if there were any multivariate outliers with the probabilities against $p < .001$ (Hair et al., 2010). Six multivariate outliers were identified and excluded from the analysis using this criterion.

Normality. Data were further evaluated for normality by examining the skewness and kurtosis of the variables. Skewness and kurtosis values that fall outside the range of -2.0 to +2.0 suggest a violation of normality (Hahs-Vaughn, 2017). Accordingly, variables from this study were examined for skewness and kurtosis utilizing this criterion. The descriptives function in SPSS was employed to evaluate all variables in the study for

skewness and kurtosis. The skewness for the perception of barriers, coping efficacy, and life satisfaction scales ranged from -.350 to .211. Next, the kurtosis of the data was examined. The kurtosis statistic ranged from -.112 to -.616 for these variables. The variables in the current study all produced values within the threshold of +/-2.0, indicating that the variables were not skewed or kurtotic. (See Table 2).

Nevertheless, further inspection via a Kolmogorov-Smirnov test indicated that scores on the SWLS do not follow a normal distribution, $D(208) = 0.092$, $p < .001$. Weston and Gore (2006) recommend inspecting the distribution of each observed variable to test for skewness and normality within the sample. Histograms and Normal Probability Plots (P-P) were employed to further evaluate each indicator variable's skewness further. Further review of these visuals confirmed that data were not skewed for the measures.

Multicollinearity. The data were evaluated for multicollinearity through several procedures, including bivariate correlations, collinearity diagnosis, tolerance, and variance inflation factor. Multicollinearity has the potential to decrease the statistical significance of an independent variable. Furthermore, multicollinearity can lead to significant standard errors, which increases the likelihood of a Type II error (Allen, 1997).

Variance Inflation Factor (VIF) values and tolerance values were calculated to examine levels of collinearity between predictors. Tolerance is calculated as $(1 - R^2/k)$, and potential multicollinearity issues are suggested by values close to zero (.10 or less is recommended). VIF values less than 10 suggest acceptable levels of collinearity between

predictors (Hahs-Vaughn, 2017). In the current study, tolerance values were above .10, and VIF values were less than 10, suggesting no problems with collinearity between predictors. None of the procedures yielded results that suggest multicollinearity.

Weston and Gore (2006) suggest that bivariate correlations be employed to check for multicollinearity and note that bivariate correlations of $r = .85$ or greater are problematic. Accordingly, the cut-off of $r = .85$ was employed in the present analysis.

Reliability of Measured Variables

Table 2 presents descriptive statistics of the scales included in this study, including the means, standard deviations, ranges, Cronbach's alphas, skewness, and kurtosis. Internal consistency was measured using the Cronbach's alpha reliability coefficient for each scale. All measured variables in the present study demonstrated adequate reliability ($\alpha > .70$). The Cronbach's alpha reliability coefficient typically ranges from 0 to 1, with Cronbach's alpha coefficients closer to 1, indicating greater internal consistency of the items within the scale. According to recommendations from George and Mallery (2010), a Cronbach's alpha coefficient of .90 or above is considered excellent, .80 or above is considered good, .70 or above is considered acceptable,.60 or above is considered questionable, and .50 or above is considered poor. Using this criterion, alpha values below .50 are unacceptable, and alpha values of .70 or above suggest adequate reliability. The POB scale demonstrated excellent internal consistency, $\alpha = .91$. The CWB scale also demonstrated excellent internal consistency, $\alpha = .92$. Cronbach's Alpha for the SWLS was $\alpha = .83$. Thus, the measures of perceived barriers,

coping efficacy, and life satisfaction in the present study demonstrated acceptable reliability.

Table 2

Descriptive Statistics of Scales

	Range		*M*	*SD*	Alpha	Skewness	Kurtosis
	Possible	Actual					
CWB	28-140	55-135	109.39	16.70	.92	-.34	-.21
POB	32-160	32-132	75.13	20.43	.91	.20	-.13
SWLS	5-35	8-35	23.00	6.31	.83	-.36	-.62

Note. Total $N = 208$. CWB = Coping with Barriers Scale; POB = Perception of Barriers Scale; SWLS = Satisfaction with Life Scale.

Bivariate Correlations

Pearson correlation coefficients were computed to assess the linear relationship between coping efficacy, perception of barriers, and life satisfaction and test for multicollinearity. The results demonstrated a positive correlation between life satisfaction and coping efficacy, $r(206) = .30$, $p < .001$. Thus, hypothesis 2a was supported for the sample included in the current study. The statistically significant correlation between the variables suggests a medium positive relationship between coping efficacy and life satisfaction. The relationship between perceived barriers and coping efficacy was statistically significant, $r(206) = -.52$, $p < .001$. The statistically significant correlation between the variables suggests a strong negative relationship between coping efficacy

and perception of barriers. A statistically significant, strong negative relationship was also found between life satisfaction and perceived barriers, $r(206) = -.52$, $p < .001$. These correlation results suggest that the perceptions of educational and career-related barriers were significantly related to life satisfaction and coping efficacy for undergraduate students. Specifically, the negative correlation coefficient suggests that coping efficacy and life satisfaction decrease when the perception of barriers increases and vice versa. These findings are consistent with the hypothesized relationships between the variables. Thus, support was found for hypothesis 1 (i.e., the expectation of a negative association between perceived barriers and life satisfaction), and hypothesis 2b (i.e., the expectation of a negative association between perceived barriers and coping efficacy) were supported. Pearson correlations between the study variables are reported in Table 3.

Table 3

Pearson Bivariate Correlations, Internal Consistency, Means, and Standard Deviations

	1.	2.	3.	α
1. Coping efficacy	—			.92
2. Perceived barriers	-.52**	—		.91
3. Life satisfaction	-.51**	.28**	—	.83
M	109.39	75.13	23.00	
SD	16.70	20.43	6.31	

Note. $N = 208$.
$^{*}p < .05$. $^{**}p < .01$

Multivariate Analysis of Variance

A Multivariate Analysis of Variance (MANOVA) was conducted to examine the confounding effects of demographic variables on the study variables. A MANOVA was conducted instead of running multiple univariate analyses to minimize the likelihood of a Type 1 error. In addition, the per-comparison alpha level was fixed to .001 to reduce the likelihood of a Type 1 error. The results demonstrated that the demographic variables of sexual orientation, racial identity, receiving free lunch in high school, and gender did not significantly impact the study's variables of coping efficacy, perception of barriers, and life satisfaction.

Mediation Analysis

SPSS and the PROCESS 4.1 Macro of Hayes (2022) were employed for data analysis in the current study. Consistent with recommendations made by Hayes, bootstrapping techniques were utilized to assess the indirect effect. Bootstrapping makes no assumptions regarding the sample distribution and utilizes a non-parametric approach. The data is resampled with replacement numerous times through bootstrapping—typically 5,000 resamples (Preacher & Hayes, 2004). This method allows for the indirect effect to be computed for each one of these samples and creates an empirically generated sampling distribution. PROCESS automatically generates bias-corrected confidence intervals (BC CI) since the indirect effect will not completely equal the mean of the bootstrapped distribution. This distribution provides a vehicle to determine a confidence interval, a *p*-value, or a standard error. Bootstrapping differs from other approaches because it does not require the assumption that a and b are not correlated. Thus, the

product of a path and b path is divided by the c path to analyze how much variance is explained by the mediating variable (Preacher & Hayes). The potential shortcoming of Baron and Kenny's (1986) proposed causal steps method is eliminated by PROCESS. Subsequently, the current study elected to employ PROCESS for data analysis.

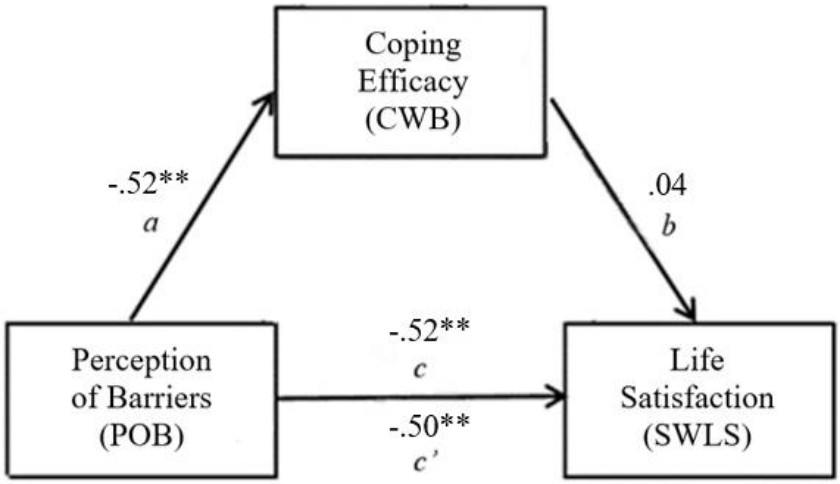
A mediation analysis was employed using model 4 in PROCESS 4.1 Macro of Hayes (2022) with 5,000 bootstrap samples and 95% confidence intervals. The initial causal variable was the perception of barriers, the mediating variable was coping efficacy, and the outcome variable was life satisfaction. Results are reported as unstandardized regression coefficients. The total effect of perceived barriers on life satisfaction was statistically significant, c = -0.161, t(206) = -8.759, p = .001. This total effect score means that for every one-unit increase in perceptions of barriers, there will be a decrease in coping efficacy output by .161. Perceived barriers statistically significantly predicted the mediating variable coping efficacy, a = -0.427, t(206) = -8.779, p = .001. These findings suggest that a one-unit increase in perceptions of barriers will result in a .427 decrease in coping efficacy. Coping efficacy did not statistically significantly predict life satisfaction when controlling for perceived barriers, b = 0.014, t(206) = 0.511, p = 0.610. The estimated direct effect of perceived barriers on life satisfaction, controlling for coping efficacy, was c' = -0.155, t(206) = -7.192, p = .001. Life satisfaction was statistically significantly predicted from perceived barriers and coping efficacy, with $R^2_{adjusted}$ = .272 and F(2, 205) = 38.354, p = .001. The indirect effect, ab, was -0.006 95% CI [-.0295, .0174] and was not statistically significant as zero was in this range. Therefore, it is unlikely that the indirect effect was different from 0. Therefore, coping

efficacy is not a significant mediator between perceived barriers and life satisfaction. Thus, hypothesis 3 was not supported. The results are reported in Figure 2 and Figure 3 (unstandardized and standardized).

Figure 2

Mediation Analysis of Perception of Barriers, Coping Efficacy, and Life Satisfaction:

Unstandardized Beta Coefficients

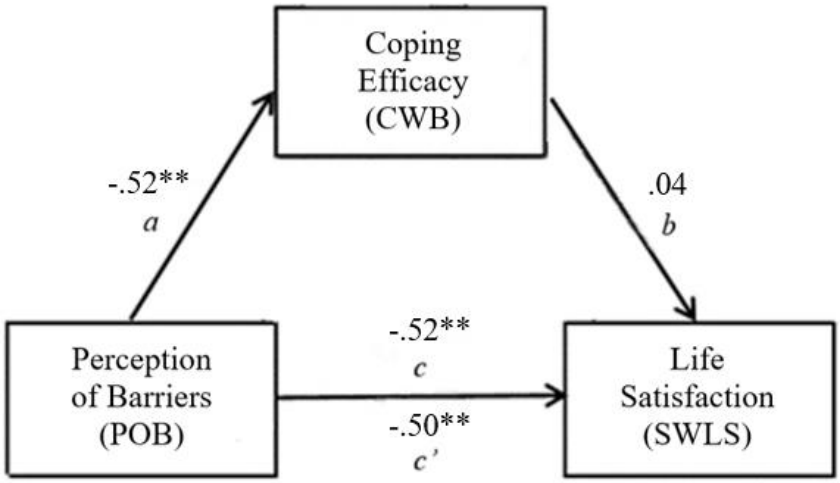


Note. Simple mediation model with unstandardized regression coefficients for the relationship between perception of barriers and life satisfaction as mediated by coping efficacy. *$p < .01$, ** $p < .001$.

Figure 3

Mediation Analysis of Perception of Barriers, Coping Efficacy, and Life Satisfaction:

Standardized Beta Coefficients



Note. Simple mediation model with standardized regression coefficients for the relationship between perception of barriers and life satisfaction as mediated by coping efficacy. *$p < .01$, ** $p < .001$.

CHAPTER V

DISCUSSION

The present investigation utilized quantitative methodology to enhance our understanding of career development and well-being among college students. This research sought to understand better the interplay between perceived educational and career-related barriers, coping efficacy, and life satisfaction. First, a brief overview of the research questions and hypotheses guiding the present study will be reviewed. Second, the investigation results and the relevance and meaning of the findings will be discussed. Third, the implications of the study will be considered. Fourth, the limitations of the current study will be addressed. Finally, recommendations for future research also highlight the ways these findings may serve to extend and potentially guide further empirical endeavors. Lastly, the paper concludes with a brief synopsis of the present study.

Review of Research Questions

The extant research on life satisfaction and perception of barriers has demonstrated relationships with coping efficacy separately. Moreover, empirical research has repeatedly highlighted an inverse relationship between higher perceived career and education barriers and life satisfaction (Arellano-Morales et al., 2016; Castellanos et al., 2018; Haar et al., 2014; Lent et al., 2014; Piña-Watson et al., 2014). Surprisingly, these constructs have not been thoroughly examined in the current literature, nor has the mediating role of coping efficacy. There is minimal data regarding the relationship

among them despite theoretical grounding, empirical support, and increased acknowledgment of the importance of each construct. This research sought to draw upon the coping efficacy and career development literature to understand further the influence of coping efficacy on the perception of barriers and overall well-being.

The purpose of this study was to (a) obtain further knowledge of career development and general well-being among college students, (b) clarify the relationship between perceived educational and career-related barriers, coping efficacy, and life satisfaction, and (c) assess the effect of coping efficacy in a mediation model. Accordingly, the relationship between perceived educational and career-related barriers, life satisfaction, and coping efficacy were explored utilizing statistical analyses.

The following three research questions guided this investigation. The first research question investigated the relationship between perceived barriers and life satisfaction. Perceived barriers can thwart the achievement of the pursuit of goals and, subsequently, can enhance negative appraisals of personal worth and ability (Lent et al., 1994). Therefore, it is argued that well-being and satisfaction are negatively impacted when perceived barriers are encountered, and goals are hindered (Lord et al., 2010). The second research question focused on the relationships between coping efficacy, perception of barriers, and life satisfaction. Based on the existing research establishing the relationship between life satisfaction and perception of barriers coupled with knowledge of the inherent relationship between coping efficacy and perceived barriers, it is reasonable to conclude that coping efficacy will also exhibit a relationship with life satisfaction (Arellano-Morales et al., 2016; Castellanos et al., 2018; Haar et al., 2014;

Lee & Flores, 2019; Lent et al., 2014; Luzzo & McWhirter, Piña-Watson et al., 2014; Rochlen et al., 2009). Coping efficacy has the potential to minimize the perception of barriers and subsequently lead to improved physiological functioning, psychological functioning, and overall life satisfaction. Lastly, the third research question sought to determine whether coping efficacy mediates the relationship between the perception of barriers and life satisfaction.

Findings

Perceived Barriers and Life Satisfaction

The first research question of the study sought to explore the relationship between perceived educational and career-related barriers and life satisfaction. This study posited that perception of educational and career-related barriers would negatively affect life satisfaction. The findings of this study demonstrate a statistically significant, negative correlation between the perception of barriers and life satisfaction. In other words, when the perception of barriers increases, life satisfaction decreases, and vice versa. This finding aligns with the hypothesized relationship. Thus, hypothesis 1 was supported. These results are congruent with previous research that demonstrated a negative correlation between perceived barriers and life satisfaction (Arellano-Morales et al., 2016; Castellanos et al., 2018; Haar et al., 2014; Lee & Flores, 2019; Lent et al., 2014; Piña-Watson et al., 2014; Rochlen et al., 2009; Rogers et al., 2012). Perception of educational and career-related barriers encompasses a variety of challenges one may encounter. Accordingly, prior research that provided the groundwork for this hypothesized association sometimes involved a specific type of perceived barrier, such as

racism, difficulty maintaining a work-life balance, gender role beliefs, academic stress, social support, and challenges directly related to cultural views or identity. A study with a sample comprised of Latino male immigrants that perceived racism—a type of perceived barrier—was inversely associated with life satisfaction (Arellano-Morales et al., 2016). Another study with Latino male undergraduate students, conducted by Castellanos et al. (2018), demonstrated that perception of barriers negatively predicted well-being. The association between perception of barriers and life satisfaction has been found repeatedly throughout the literature, including a study conducted by Haar et al. (2014) that found low levels of work-life balance were negatively associated with life satisfaction when using a sample of seven distinct cultures. Rogers et al. (2012) found that debt concerns significantly predictor medical students' well-being. The negative association between life satisfaction and perceived barriers has been replicated in studies involving the more general construct of perceived barriers and specific types of barriers. The findings in the current study indicated that undergraduate students who perceived themselves as less likely to experience barriers related to their education and career reported higher levels of life satisfaction. Causality cannot be determined because of the cross-sectional nature of this investigation and the use of correlational design. Therefore, it is uncertain whether the diminished well-being or dissatisfaction with life endorsed more significant perceived barriers. Contrariwise, anticipating that they are more likely to experience educational and career-related barriers could contribute to lower life satisfaction.

Coping Efficacy and Life Satisfaction

The second research question sought to clarify the relationship between coping efficacy and perception of barriers and life satisfaction. Specifically, it was hypothesized that coping efficacy would be positively associated with life satisfaction and negatively associated with perceived barriers. In the present study, coping efficacy demonstrated a significant, positive association with life satisfaction. Furthermore, the findings of this study suggest that individuals with higher levels of coping efficacy exhibit higher life satisfaction. Thus, the results supported hypothesis 2a. This finding is consistent with previous research illustrating a positive relationship between coping efficacy and life satisfaction (Flores et al., 2020; Lee & Flores, 2019; Lent, Taveira, & Sheu, 2008; Lui et al., 2016; Perrone & Civiletto, 2004; Wanzer et al., 2009; Wright et al., 2017). Furthermore, the present study provides evidence for the importance of coping efficacy in promoting positive life outcomes, including life satisfaction, among college students.

Perceived Barriers and Coping Efficacy

As expected, coping efficacy demonstrated a significant, negative association with the perception of educational and career barriers. In other words, individuals with low levels of coping efficacy had higher perceptions of barriers. The current study's findings supported hypothesis 2b, i.e., the expectation of a negative association between perceived barriers and life satisfaction.

This result is similar to previous findings suggesting a direct, negative relationship between barriers and self-efficacy (Lent et al., 2005; Lent, Brown, Brenner, et al., 2003; Lent, Brown, Nota, et al., 2003; Quimby & O'Brien, 2004; Smith, 2001;

Turner et al., 2004). Luzzo and McWhirter (2001) investigated the relationship between perceived educational and career-related barriers and coping efficacy among women and ethnic minorities in a sample of undergraduate students. Ethnic minorities displayed more perceived educational barriers and lowered coping efficacy than the European Americans in the study. Mejia-Smith and Gushue (2017) explored the relationships among career decision-making self-efficacy, perceived career barriers, ethnic identity, coping efficacy, and acculturation among Latina/o college students. The results demonstrated a direct negative association between perceived career barriers and coping efficacy. Finally, Byars-Winston and Fouad (2008) investigated math/science goals among a sample of undergraduate students as influenced by parental involvement, perceived career barriers, and coping efficacy. Coping efficacy was found to have a statistically significant negative relationship with the perception of barriers. The findings of the present research contribute to the existing literature that has demonstrated the relationship between coping efficacy and perceived barriers.

Coping Efficacy as a Mediator

The final research question guiding this study concerned the role of coping efficacy in the relationship between the perception of barriers and life satisfaction. Contrary to Hypothesis 3, the results from this investigation demonstrated that coping efficacy did not mediate the relationship between the perception of barriers and life satisfaction. This result is an unexpected deviation from previous literature on the role of coping efficacy and life satisfaction.

A possible suggestion for understanding this outcome could be the sample endorsing high life satisfaction and coping efficacy, thus minimizing potential variation within the sample. Scores on the coping efficacy measure indicated that the sample generally endorsed high levels of coping efficacy, as evidenced by the mean item rating on the CWB Scale. Specifically, the mean item rating on the CWB Scale, which measures coping efficacy on a 5-point Likert scale, was 3.9. This suggests that participants consistently reported confidence in their ability to overcome obstacles in their future careers and educational pursuits.

Whereas coping efficacy was reasonably high in the present sample, their perceptions of barriers were somewhat low. The POB Scale average item rating, as measured using a 5-point Likert scale, was 2.35. The POB rating average suggests that, on average, participants disagreed that they were currently experiencing barriers to their educational aspirations and did not anticipate encountering future career barriers. Unfortunately, there needs to be more research on the distribution of college students' ratings on the Perception of Barriers Scale (POB).

The total mean score for the SWLS was 4.47 (rated on a 7-point Likert scale), which suggests respondents were relatively satisfied with life. Accordingly, the sample endorsed relatively high life satisfaction, regardless of perceived barriers and coping efficacy. The average SWLS rating in the present investigation may speak to the generally high functioning of the sample. Prior research has found that the distribution of college students' ratings on life satisfaction is typically positively skewed, meaning that most students report relatively elevated levels of life satisfaction. For example, a study by

Diener, Emmons, Larsen, and Griffin (1985) found that the mean score on the SWLS among a sample of college students was 23.1 out of a possible 30 points, indicating relatively high levels of life satisfaction. The study also found that only 7% of the students in the sample reported low life satisfaction (i.e., scores below 16), while the vast majority reported moderate to high life satisfaction. Other studies have similarly found that college students report relatively high levels of life satisfaction on the SWLS, although there is still significant variability in individual scores.

It should be noted, however, that the distribution of scores on the SWLS may vary depending on the specific sample and context and that some studies have found lower levels of life satisfaction among specific subgroups of college students (e.g., those with mental health issues or academic difficulties). Nevertheless, previous findings regarding SWLS rating distribution among college students suggest that while the sample in the present study endorsed high life satisfaction, it is similar to what previous research suggests. Furthermore, the nonsignificant mediation could have resulted from the need for more variance in responses and generally high functionality of the sample rather than inaccuracies in the theoretical conceptualization guiding the model.

A possible explanation for this finding might be that the model is not correctly arranged. For example, life satisfaction might lead to the perception of barriers instead of the proposed model with life satisfaction as the outcome. In addition, there may have been other confounding variables, such as perceived support variables or specific types of perceived barriers, which could have contributed to the relationship.

Another explanation for the lack of expected relationships within the mediation model could be publication bias. Publication bias refers to journals' tendency to publish studies that report statistically significant results. Suppose previous studies on this topic found significant results but were not published due to their lack of significance. In that case, the current study's nonsignificant findings may not reflect the genuine relationship between these variables. As researchers, it is natural to aspire to uncover significant findings seen as groundbreaking or valuable contributions to the field. Frequently nonsignificant findings are not published or overshadowed by the focus on minor significance within the data. While the findings of this mediation model were not ideal, it is equally important to report on nonsignificant results as it contributes to our overall knowledge.

The instruments used in the current study may have contributed to the insignificant findings. One possible issue with the instruments utilized is examining broad constructs, such as the instrument utilized to assess the perception of barriers comprised items that assessed multiple types of perceived educational and career barriers rather than examining a specific type of barrier, such as lack of family support or financial concerns. The POB Scale was appealing due to its ability to address various perceived barriers. However, the broad nature of the items could have helped in-depth exploration of the unique experiences of undergraduate college students attending urban colleges. In general, participants appeared to perceive few barriers. In addition, the measure did not address barriers perceived by the sample.

Furthermore, certain items were less relevant to the participants in this study. For example, it is notable that items with the lowest mean ratings included childcare concerns, lack of support from a significant other, and concerns about ethnic background, whereas the most frequently endorsed barriers related to financial concerns. Given that most participants were Caucasian (75.2%), unmarried (95.3%), and did not present as nontraditional students, it is reasonable to conclude that specific barriers were not as relevant to the current sample.

The findings of this dissertation were consistent with some aspects of SCCT but also highlighted the ongoing need for theoretical clarification. The present study supported relationships between the SCCT variables coping efficacy and perception of barriers. The results demonstrated a significant, negative association between coping efficacy and perception of educational and career-related barriers. This finding is consistent with SCCT and previous research examining barriers and self-efficacy (Lent et al., 2005; Lent, Brown, Brenner, et al., 2003; Lent, Brown, Nota, et al., 2003; Quimby & O'Brien, 2004; Smith, 2001; Turner et al., 2004). Coping efficacy did not mediate the relationship between perceived barriers and life satisfaction; however, this result still adds insight regarding SCCT and the interplay of variables within the models.

Moreover, this result was disappointing but also consistent with the current literature, which has conflicting explanations regarding the role of coping efficacy and its interplay with social cognitive variables. Given that this study is the first to examine the mediation effects of coping efficacy on the relationship between perceived barriers and life satisfaction and there is limited research on these variables within the model, how

coping efficacy may influence life satisfaction and perceived barriers was informed by other studies involving similar constructs and widely accepted theoretical explanations provided as a component of the SCCT framework. Further research is needed to understand the role of coping efficacy in relation to the perception of barriers and life satisfaction.

Limitations

While this dissertation study contributes to our knowledge of the interplay between the perception of career and educational barriers, life satisfaction, and coping efficacy among undergraduate college students, it is not without limitation. Survey measures were presented in a random order in order to minimize the order effect. However, the online survey was constructed so that participants were forced to answer every item in the measure to continue to the next. Despite the intention of implementing this approach, it likely impacted the completion of data as it did not allow for utilization of available item analysis, otherwise known as pairwise deletion or pairwise inclusion with missing data. This method is recommended to include available data and exclude missing data points for analyses. However, since the missing data were relatively large for a select number of participants and there were not any partially completed measures or responses, the participants were excluded those cases were excluded entirely.

This study was designed and intended to include a sample of undergraduate students enrolled in university or four-year college located in an urban area. Students attending college in an urban area potentially encounter different barriers than their counterparts in more rural or suburban areas, such as the availability of affordable

housing, the ability to meet the needs of students with more significant variation in academic readiness, financial concerns, and the accessibility of institutional supports and initiatives to address the needs of diverse student populations that are both targeted and specific students with varying backgrounds, cultures, and identities. Due to the nature of Internet-based recruitment strategies and employing an online survey, participants were restricted to those with computer access. Moreover, responses may have been influenced by their environment. The data collected was based on self-report; thus, there is the potential that participants were not being genuine when responding, misunderstood, or dishonest. Selection bias is another possible limitation of this study. Since participation was voluntary, individuals who engaged in the survey may have been more comfortable discussing barriers and coping and facing fewer barriers than students who did not choose to participate. The extent to which students who opted to participate in the study differ from other undergraduate college students is uncertain.

The sampling method was another limitation of this study. The results indicated that specific barriers were largely unexperienced by the sample, such as childcare concerns and being treated differently due to their ethnic/racial background. Participants' lack endorsement on these items could reflect the concerns specific to this college sample, homogeneity, or indicate that the measure needed to assess barriers they perceive. The majority of the sample identified as female (80.5%), heterosexual/straight (65.3%), and White/European American/Caucasian (75.2%). As a result of recruitment procedures, the participants were restricted to individuals with computer access who checked their student email and were enrolled in a class with a professor willing to

disseminate the recruitment email. Subsequently, a small portion of the student body was utilized in the sample. The ratio of individuals sampled to the student body raises concerns about the generalizability of this study's findings to other undergraduate students attending colleges in urban areas.

It is important to acknowledge the limitations of the sample used in this study, particularly regarding its demographic composition. The sample consists of 83.2% female participants and 68.8% heterosexual participants, which may not be representative of the general population. This could limit the generalizability of the findings to broader populations. Additionally, the small proportion of male participants (5.8%) in the sample may limit the ability to make gender-based comparisons and draw conclusions about male experiences. Future research should aim to recruit a more diverse sample in terms of gender and sexual orientation to enhance the generalizability of the findings.

Employing a non-experimental research design is a limitation of the present research. Due to the correlational design, causal statements could not be made, and results only reflect the relationships between variables instead of causality. Subsequently, internal validity may have been compromised. An experimental design would have provided more insight and allowed more opportunities for the relationship between study variables to be evaluated using a control group.

Overall, this dissertation study provides valuable insights into the relationships between the perception of barriers, coping efficacy, and life satisfaction among undergraduate college students. However, it is essential to be cognizant of the limitations and consider them when interpreting the results. Additionally, the limitations of this study

provide opportunities for future research to build upon the findings and address the gaps in knowledge.

Implications for Research

The findings of the present study have several implications for future research. The results provided insight into the relationships among variables and highlighted the need for further clarification. It is essential to conduct further research to replicate and extend the findings of this study, especially considering that this is the first study to examine the role of coping efficacy on the relationship between perceived barriers and life satisfaction among college undergraduate students in the United States. Future research should establish causal relationships between these variables and consider potential mediators or moderators of these relationships.

Future research should build upon these findings and address the gaps in our knowledge. For example, future studies could utilize available item analysis to include available data while only excluding missing data points for analyses to minimize the impact of missing data and avoid the disadvantages of using forced response survey items. Additionally, to enhance the generalizability of findings, future research could include a more diverse sample of undergraduate students, including those attending colleges in suburban and rural areas with different ethnic/racial backgrounds, gender identities, and sexual orientations. The use of multiple recruitment strategies, such as in-person recruitment and targeted social media ads, could be employed to increase the diversity of the sample. Moreover, future studies could employ experimental designs to explore the causal relationships between the variables of interest. Experimental studies

could establish more substantial internal validity and support the development of interventions and programs that effectively promote coping efficacy, reduce perceived barriers, and enhance life satisfaction among undergraduate students.

Life satisfaction and perception of barriers are frequently discussed throughout extant literature. They are included in prominent vocational psychology theories, and numerous studies have examined the association between these variables. Nonetheless, there has not been an empirical investigation that has established the causal link between perceived barriers and life satisfaction. The lack of investigation into this causal link is shocking, given the widespread use of the mentioned theoretical frameworks as crucial components. Most studies have used correlational or cross-sectional designs, making it difficult to determine causality. Future research should focus on theoretical clarification and seek to determine the causal relationship. It is also possible that the relationship between perceived barriers and life satisfaction is mediated or moderated by other variables, which will be discussed more in depth below. Future research using experimental or longitudinal designs may shed light on the causal nature of this relationship.

There are several potential moderating variables that could be considered when examining the relationship between perceived barriers and life satisfaction. One potential moderating variable is social support (Cohen & Willis, 1985; Erdogan et al., 2012). It is possible that social support could moderate the relationship between perceived barriers and life satisfaction by buffering the negative effects of perceived barriers on life satisfaction (Lu et al., 2018). For example, individuals who perceive high levels of social

support may be more resilient in the face of perceived barriers and may experience less negative impact on their life satisfaction. Another potential moderating variable is coping style. It is possible that coping style could moderate the relationship between perceived barriers and life satisfaction by influencing the effectiveness of an individual's coping strategies. For example, individuals who engage in more adaptive coping strategies may experience less negative impact on their life satisfaction when faced with perceived barriers. Additionally, personality traits, such as resilience or optimism, may also moderate the relationship between perceived barriers and life satisfaction (Cunningham & De La Rosa, 2008; Hartley, 2011). These variables could impact the extent to which perceived barriers impact an individual's life satisfaction by influencing their ability to cope with challenges and maintain a positive outlook. The availability of resources, such as financial or institutional support, may also moderate the relationship between perceived barriers and life satisfaction. Individuals who have access to resources that help them overcome perceived barriers may be less negatively impacted on their life satisfaction compared to those who do not have access to such resources. Moreover, environmental factors, such as institutional support, could also be a potential moderating variable as students who perceive their college to provide adequate support and resources may feel better equipped to cope with barriers and may report higher life satisfaction than those who do not have such support. Finally, cultural factors, such as collectivism versus individualism, could also be considered as potential moderating variables. Cultural values can influence an individual's beliefs and attitudes about coping with barriers and life satisfaction, and studying these variables can provide insight into cross-cultural

differences in the relationships between these variables (Lu et al., 2018). Further research using experimental or longitudinal designs could help identify these and other potential moderating variables and provide insights into how they affect the relationships between coping efficacy, perceived barriers, and life satisfaction among college students.

Future research should also employ measures with strong psychometric properties and demonstrate a good fit with the theoretical constructs studied to ensure theoretical clarity and validity. In addition, researchers should intentionally select measures that align with established career development theories. Employing more theoretically driven measures may better capture these constructs and ensure that future research is rigorous and meaningful by increasing the data's reliability and validity and producing robust and generalizable results to broader populations.

The findings in this study indicate that the proposed mediating variable, coping efficacy, did not significantly explain the relationship between the perception of barriers and life satisfaction. Coping efficacy not acting as a mediator in the relationship could be due to several reasons, such as a weak or nonexistent relationship between the mediating variable and the independent variable or other confounding variables that were not accounted for in the analysis. It is important to note that a nonsignificant mediation result does not necessarily mean no relationship between the independent and dependent variables. It simply means that the proposed mediating variable does not account for the relationship between the two variables. Future research may consider alternative mediators, re-evaluate the theoretical framework, and elaborate on how these variables may interact within the proposed framework.

There are many avenues for future research regarding coping efficacy and its role in the relationship between perceived barriers and life satisfaction among undergraduate college students. Findings could provide valuable insights into how educational institutions and policymakers can better support student success and create a more inclusive learning environment. Given the broad nature of the constructs explored in the present study, future research should investigate specific components of these variables or closely related constructs to understand better how students navigate challenges and achieve positive outcomes. By exploring specific types of barriers, coping, and related variables, researchers can better understand the unique challenges faced by different student populations and develop targeted interventions and support strategies that promote the success of all students.

Coping efficacy is a critical aspect of student success, and understanding the factors that contribute to effective coping can inform interventions and support strategies for those who face challenges. Several variables suggested to contribute to coping efficacy in college students can be studied to understand coping efficacy better. One such variable is resilience, the ability to adapt and bounce back from adversity (Tugade & Fredrickson, 2004). Research could explore how resilience is developed and contributes to coping efficacy in the face of barriers. Self-efficacy, or the belief in one's ability to succeed, is another crucial variable that could be studied (Lent et al., 2000; Williams et al., 2010). Understanding how self-efficacy is developed and related to coping efficacy could inform interventions to boost self-confidence and motivation. Social support is also critical in helping students to build coping skills (Brissette et al., 2002; Chao, 2011; Fort

& Murariu, 2018; Perrone et al., 2004). Research could explore the distinct types of support that are most effective, including peer support, institutional resources, and familial support. It may also be valuable to study the role of coping styles or the behavior patterns that individuals use to cope with stress in coping efficacy (Cohen & Wills, 1985). Research could explore how coping styles, such as problem-focused, emotion-focused, and avoidant, relate to coping efficacy and overall well-being in college students (Endler & Parker, 1990). Findings could provide insight into which coping styles are most effective and how they can be promoted in students. It is also essential to consider the role of institutional resources in coping efficacy and in helping students overcome perceived barriers and build coping skills. Research could examine how access to resources such as counseling services, academic advising, and career support relate to coping efficacy and overall well-being in college students (Gall et al., 2000). This line of inquiry could inform policy and programmatic changes that create a more supportive environment for all students and promote a more inclusive and equitable learning environment.

Another avenue for future research is to focus on elucidating the most effective coping techniques for college students. Studies examining coping techniques include exploring variables such as mindfulness, peer support, engagement in therapy, or coping styles. Moreover, future research could investigate how technological advancements and changing sociocultural landscapes may impact students' coping strategies, how support is obtained, and sources of support. Such studies could explore the role of social media use concerning perceived barriers, self-esteem, social comparison, and life satisfaction.

When studying perceived barriers, future research should investigate the specific types of barriers perceived and their impact on students' ability to achieve their academic and personal goals. For example, perceived barriers, such as financial concerns, lack of confidence, gender-role conflict, racial or ethnic discrimination, gender discrimination, lack of family support, and low self-esteem, can significantly impact a student's success (Arellano-Morales, 2016; Dwyer et al., 2013; Fort & Murariu, 2018; Inda et al., 2013; Luzzo & McWhirter, 2001; Novakovic & Gnilka, 2015; Rochlen et al., 2009). Therefore, future research could delve deeper into these specific barriers to identify the extent to which they affect students and what interventions can effectively address them. For example, examining the role of mentoring programs or interventions focused on building self-confidence could provide valuable insights into how institutions can support students facing such barriers. Additionally, researchers could explore the impact of financial support, such as scholarships, grants, and other financial aid options, on college students' perceived barriers and academic success to inform interventions (Perna & Titus, 2005).

Studying variables related to life satisfaction can provide valuable insights into the factors that contribute to an individual's overall well-being. Some critical variables that may be studied include social support, coping strategies, personality traits, income and financial stability, health and physical well-being, employment status and job satisfaction, and cultural factors. Other variables studied concerning well-being include mindfulness, which involves being present in the moment and non-judgmentally aware of one's thoughts and feelings (Brown & Ryan, 2003), and positive psychology interventions that aim to increase positive emotions and promote well-being (Sin &

Lyubomirsky, 2009). Additionally, personality traits, such as extraversion and conscientiousness, have been linked to well-being outcomes, with individuals who score higher in these traits tending to report higher well-being levels (DeNeve & Cooper, 1998). Future research could examine the role of cultural values, societal norms, and individualism versus collectivism in assessing life satisfaction. Culture can influence individual beliefs and attitudes about life satisfaction, and studying these variables can provide insight into cross-cultural differences in life satisfaction (Diener & Suh, 2000). Finally, research should consider whether coping efficacy or perceived barriers relate to life satisfaction through specific paths, such as academic or goal attainment (Lent & Brown, 2008).

Qualitative research has the potential to provide deep insights into complex social phenomena and the lived experiences of individuals. Accordingly, future qualitative investigations could be meaningful for exploring subjective experiences, behaviors, and beliefs and inform our understanding of the meaning and context behind these phenomena. The qualitative methodology could allow researchers to elucidate students' perceptions of environmental issues and barriers and explore ways to promote sustainable behaviors and academic policies. Furthermore, this approach could play a role in advancing social justice. By cultivating a space for difficult dialogues concerning perceived barriers and career development among college students, clinicians and policymakers could obtain more detailed information and utilize the responses to inform their understanding and be better equipped to advocate for student rights, accommodations, and overall well-being.

Qualitative research is beneficial to gain insight regarding perceptions of barriers among this particular college population and identify perceived barriers less commonly mentioned in the literature. Through qualitative methods such as interviews, focus groups, or ethnographic observation, researchers could gain a deeper understanding of the experiences of undergraduate students and their perceptions of barriers regarding coping efficacy and their overall well-being. For instance, researchers could employ questions to explore their experiences with perceived barriers and how they have maintained positive life satisfaction despite these experiences. By engaging in in-depth conversations, researchers could gain a more nuanced and contextualized understanding of the complex relationship between perceived barriers and life satisfaction among undergraduate students. This research could inform interventions and support strategies to help individuals maintain positive life satisfaction and enhance their well-being despite perceived barriers.

College students often face multiple barriers intertwined with their race, gender, sexuality, socioeconomic status, and other identities. The qualitative methodology could offer a lens to investigate the intersection of different social identities and how these intersecting identities shape the experiences and perceptions of college students. Future research could explore how intersecting identities impact perceived barriers to college success and how colleges can better support students considering multifaceted and complex identities.

More research is needed to confirm and expand on its findings. Continued research in this area can help promote student success and well-being in college. Overall,

the findings of this study underscore the importance of considering both internal and external factors when examining career development and life satisfaction among college students and suggest that enhancing coping efficacy may be a promising strategy for overcoming perceived barriers and achieving greater satisfaction in both personal and professional domains.

Implications for Practice

The findings from this study offer several important practice implications for professional counselors. Practitioners should be mindful of students' perceptions of barriers and strive to identify clients who are at risk of experiencing heightened barriers or is struggling to overcome obstacles. Counselors can use screening tools or assessments to identify clients who may be at risk of being adversely affected by perceived barriers to education and career development. This can help them provide targeted interventions and resources to help these clients manage potential barriers more effectively.

The results highlight the interplay between perceived education and career-related barriers and coping efficacy. Clinicians should continue to cultivate client well-being through targeted and individualized approaches. Counselors can design interventions that aim to increase clients' coping efficacy and help them manage perceived barriers more effectively. For instance, cognitive-behavioral techniques could be employed in session to help clients identify and challenge negative thoughts and beliefs that may be contributing to their perceived barriers.

Colleges could implement programs that identify students who are at risk of being adversely affected by perceived barriers to education and career development. This may

include students from underrepresented or marginalized backgrounds, students with disabilities, or students with limited resources. Once at-risk students are identified, colleges could provide resources to help them manage potential perceived barriers. This may include counseling services, career development workshops, or mentorship programs.

Clinicians often encounter clients expressing concerns related to career development and their personal goals. It is important to cultivate a space that encourages clients to feel understood and validate their experiences. Practitioners can work with clients to set and achieve career goals that are consistent with their values, interests, and skills. This can help clients feel more empowered and in control of their career development, which in turn can enhance their life satisfaction and psychological functioning.

Furthermore, counselors are in a unique position to advocate for institutional change within colleges and other educational settings. Due to power dynamics, individual concerns, and a variety of other restraints, students may not feel comfortable advocating for themselves. Practitioners should use this research to support student success and reduce perceived barriers to education and career development. This can include lobbying for more funding for student support services, increasing access to career counseling and resources, and promoting diversity and inclusivity in educational programs. In sum, these practice implications can help counselors develop more effective interventions for clients who may be struggling with perceived educational and career barriers, developing coping skills, self-efficacy beliefs, and their overall mental health.

Overall, this study aimed to contribute to the understanding of the relationship between perceived educational and career-related barriers, coping efficacy, and life satisfaction. The research questions were designed to examine the individual relationships between these constructs and the potential mediating role of coping efficacy. The findings of this study can have implications for individuals, career counselors, and educational institutions in promoting career development and well-being among college students.

Implications for Theory

This dissertation study's findings supported some aspects of the Social Cognitive Career Theory (SCCT), particularly in the relationships between coping efficacy and perception of barriers. The results indicated a negative association between coping efficacy and perception of educational and career-related barriers, which aligns with previous research on self-efficacy and barriers. However, the study did not find evidence for the mediation effect of coping efficacy on the relationship between perceived barriers and life satisfaction, highlighting the need for further theoretical clarification in this area.

Although the lack of mediation was disappointing, it is partially unexpected given the conflicting explanations regarding the role of coping efficacy and its interplay with social cognitive variables. As this study is the first to examine the mediation effects of coping efficacy on the relationship between perceived barriers and life satisfaction, further research is needed to understand better how coping efficacy may influence life satisfaction and perceived barriers.

The findings of this dissertation provide valuable insights into the SCCT model and highlight the need for further theoretical development and empirical research in this area. It is essential for future studies to explore the complex relationships between coping efficacy, perception of barriers, and life satisfaction and to consider other potential mediating or moderating variables that may play a role in these relationships. Overall, this investigation adds to the existing vocational psychology literature and growing research on SCCT. Moreover, the findings highlight the need for continued theoretical refinement and empirical investigation to entirely understand the complex relationships between variables within the model.

Conclusion

In summary, the present study aimed to examine the relationship between perceived career and educational barriers, coping efficacy, and life satisfaction and test for mediation effects of coping efficacy on the relationship between perceived educational and career-related barriers and life satisfaction. The findings demonstrated hypothesized relationships between coping efficacy, perception of barriers, and life satisfaction. However, contrary to expectations, coping efficacy did not mediate the relationship between perceived barriers and life satisfaction. Further research is needed to understand these relationships and how coping efficacy fits into the model.

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APPENDIX A

Recruitment Email

Hello,

You are invited to participate in a research study (IRB# FY2021-246). The study is investigating the relationship between coping efficacy, perceived barriers, and life satisfaction among college students.

Participants would be required to complete a brief survey that takes approximately **11 minutes**. Participation in this study is voluntary and confidential. Please note that in order to participate, you must be an **undergraduate student** in the US and **18 years of age or older**.

Participants will be eligible for three $25 Amazon gift cards with the provision of a valid email address.

To participate, click the following hyperlink:
https://csufull.qualtrics.com/jfe/form/SV_4VDqhlvh1YTOfA2

APPENDIX B

Demographic Questionnaire

Please answer the following questions to help us understand a little better who is participating in our study.

Please indicate your current age. _____

Are you currently enrolled in a college or university?
- ☐ Yes
- ☐ No

Is the college or university located in the United States?
- ☐ Yes
- ☐ No

Please specify the name of the college or university you attend. _____

Please select the state where the college or university is located.
- ☐ Alabama
- ☐ Alaska
- ☐ Arizona
- ☐ Arkansas
- ☐ California
- ☐ Colorado
- ☐ Connecticut
- ☐ Delaware
- ☐ District of Columbia
- ☐ Florida
- ☐ Georgia
- ☐ Guam
- ☐ Hawaii
- ☐ Idaho
- ☐ Illinois
- ☐ Indiana
- ☐ Iowa
- ☐ Kansas
- ☐ Kentucky
- ☐ Louisiana
- ☐ Maine
- ☐ Maryland

- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Puerto Rico
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- U.S. Virgin Islands
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming

What is your current academic classification?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student
- Other (please specify) _____

What is your country of origin? _____

What was your parent's country of origin? _____

What was your second parent's country of origin? _____

What is your native language? _____

Which of the following education levels comes closest to what you have achieved?

- ☐ Not Applicable
- ☐ Some High School
- ☐ High School or GED
- ☐ Some College or Current Student
- ☐ College Degree (BA, BS, or Equivalent)
- ☐ Some Graduate School or Currently Enrolled
- ☐ Graduate Degree (MA, MS, PhD, or Equivalent)

What was your parent's highest level of education completed?

- ☐ Not Applicable
- ☐ Some High School
- ☐ High School or GED
- ☐ Some College or Current Student
- ☐ College Degree (BA, BS, or Equivalent)
- ☐ Some Graduate School or Currently Enrolled
- ☐ Graduate Degree (MA, MS, PhD, or Equivalent)

What was your second parent's highest level of education completed?

- ☐ Not Applicable
- ☐ Some High School
- ☐ High School or GED
- ☐ Some College or Current Student
- ☐ College Degree (BA, BS, or Equivalent)

- ☐ Some Graduate School or Currently Enrolled
- ☐ Graduate Degree (MA, MS, PhD, or Equivalent)

What is your academic major? _____

Which of the following terms comes closest to how you describe your gender? Check all that apply.

- ☐ Female/Woman
- ☐ Male/Man
- ☐ Transman
- ☐ Transwoman
- ☐ Non-Binary
- ☐ Other (please specify) _____

Which of the following racial groups comes closest to how you identify yourself? Check all that apply.

- ☐ African American/Black
- ☐ Asian
- ☐ American Indian/Native American
- ☐ Hispanic/Latino/a
- ☐ Middle Eastern/Arab
- ☐ White/European-American/Caucasian
- ☐ Native Hawaiian/Pacific Islander
- ☐ Other (please share below) _____

\Which of the following terms comes closest to how you describe your sexual orientation? You may use as many words as necessary.

- ☐ Gay
- ☐ Lesbian
- ☐ Bisexual
- ☐ Queer
- ☐ Pansexual
- ☐ Heterosexual/Straight
- ☐ Other (please share below) _____

Which of the following comes closest to your current relationship status? Check all that apply.

- ☐ Single
- ☐ Dating
- ☐ In a committed relationship

- Registered domestic partnership, civil union, or reciprocal beneficiary
- Married
- Divorced/Separated
- Other (please specify) _____

Did you receive free or reduced lunch in high school?

- Yes
- No

How many people are in your household? _____