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College of Counselor Education & Supervision

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Tammison Rene Smith

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Walden University
2019

Abstract

Using the Identity Capital Model to Understand Master's Counseling Students' Program Retention

by

Tammison Rene Smith

MS, Avila University, 1996

BGS, University of Kansas, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Counselor Education and Supervision

Walden University

August 2019

Abstract

Master's education is a quickly growing area of higher education that provides students higher lifetime earnings and lower levels of unemployment. Despite the benefits, the little research conducted over the past 20 years, using institutional, programmatic, and sociological student factors (e.g., age, race, and financial status) has had minimal success creating a universal model to understand what promotes the retention and graduation of master's students. Côté's identity capital model (ICM) holds that interactions of both sociological and agentic capital aid in the development of an individual's identity. While cultural capital is essential for building the foundation of identity, it is agentic capital that develops a strong sense of self, providing the ability to shift successfully between social contexts while remaining committed to life path goals despite inherent obstacles. The purpose of this study was to apply Côté's identity capital model to predict CACREP counseling and counseling psychology master's students' (n = 88) retention in their academic programs when the sociological factors of age and personal funding contributions were held constant. Using a quantitative, nonexperimental, survey study design, full-time students, in good standing, not enrolled in an online program completed the Multi-Measure Agentic Personality Scale20 assessment to measure the agentic characteristics of the ICM. The logistic regression analysis did not yield significant results, but data mining to discover data patterns did suggest future directions for research. A clearer understanding of the factors that promote retention could encourage institutions to create appropriate programmatic efforts to increase students' academic goal achievement and support their improved psychological well-being.

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Dedication

To my mom. She was my first and best support system. From her I learned a fascination for language, a passion for helping, and a joy in curiosity. She sacrificed everything for me, and I have no regrets over any path I took as her daughter. I do regret that she is not physically standing beside me today to see this moment. Her spirit is always present.

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Chapter 1: Introduction to the Study

Introduction

Master's education is a relatively recent addition to the long history of higher education, but one that is rapidly growing. According to an enrollment and graduation survey by the Council of Graduate Schools (CGS, 2017a), 84% of new graduate school enrollment in 2016 was in master's programs. The first Master in Business Administration program was established in 1908, and in 2016 these programs accounted for the largest share, nearly 22%, of the master's program graduates and had the highest increase in new enrollment (CGS, 2017a; Glazer-Raymo, 2005).

The expansion of master's programs has positive outcomes for academic institutions, students, and society. Alstete (2014) found that master's degree-granting universities were in better financial health than those granting only bachelor's degrees. Glazer-Raymo (2005), in a definitive book on master's education, explained that master's students often require less investment of institutional and faculty resources compared to doctoral students while still being charged higher graduate tuition. Master's level classes often have larger student-to-faculty ratios than doctoral classes, and master's students do not require the intensive research mentoring of doctoral students (O'Brien, 1992).

The need for individuals with more specialized education is becoming increasingly clear. The Royal Bank of Canada (RBC, 2018) assembled a team of qualitative researchers who spent over a year interviewing employees, students, and organizations to understand the current state of the employment marketplace as well as how globalization and the increased use of technology have shifted the current economy

from industrial to knowledge-based. As Glazer-Raymo (2005) pointed out, as professions have become more global, competitive, and entrepreneurial, boundaries that once divided the creation and production of knowledge have become more flexible. Master’s programs quickly and cost-effectively produce credentialed individuals with discipline-specific information, intellectual dexterity, and technological prowess capable of working across field confines to advance knowledge (Glazer-Raymo, 2005). Individuals without key competencies, such as critical thinking, decision-making, technological proficiencies, adaptability, flexibility, and people skills, will lack the ability to pivot quickly with the rapidly changing job market (Briscoe & Hall, 2006). A master’s degree is a relatively short-term investment that can help improve a student’s career opportunities and increase their lifetime earnings (CGS, 2013). Individuals with master’s degrees tend to earn more over their lifetime and face less unemployment than those with lower levels of education (O’Brien, 1992).

Despite the benefits to educational institutions, students, and society, master’s education has been of little interest to higher education researchers (Gordon, 2016). Unlike at the undergraduate level, minor effort has been expended to track master’s students’ degree progress, and little research has been conducted to understand the factors that promote their persistence, retention, and graduation (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). Still, the consequences of master’s students’ attrition are just as devastating as they are of that of doctoral or undergraduate students, including loss of wages, accumulation of student loan debt, and negative emotional impacts (Albertini, Kelly, & Matchett, 2011; Cohen, 2012). An institution with a high master’s

student drop-out rate may suffer lower rankings, poor reputation scores, reduced enrollment, loss of student tuition dollars, federal bans on student loan access, reduced federal funding, compromised financial outcomes, and eventual program dissolution (Delen, 2010; Gordon, 2016).

The counseling field is a good example of a profession where master's education is central to the health of the field and its contribution to society. For example, Duenow, Kobernick, Sohre, and Wallgren (2017) estimated that nearly 17,000 additional mental health and substance abuse professionals would be needed by 2025 to meet the needs of the U.S. population. And counselor educators take seriously the ethical responsibility of ensuring that master's counseling program graduates are qualified practitioners to help fill this societal need (Swank & Smith-Adcock, 2014). Counselor educators are ethically bound to serve in the role of gatekeeper to admit into programs students capable of completing training, as well as mandated to assist students who evidence difficulties during training, to ensure students are competent and ethical as counselors upon graduation (Glance, Fanning, Schoepke, Soto, & Williams, 2012; Rust, Raskin, & Hill, 2013). Failure to uphold gatekeeping responsibilities can lead to decreased student persistence and ultimately means the field of counseling unfulfills the established ethical responsibility to mentor and retain students with the capacity to develop as effective counselors. However, little research has been undertaken to understand the retention, persistence, and graduation of counseling master's students. Rather, the majority of counselor education literature has focused on at-risk and impaired students; yet, the need to understand retention of counseling master's students is clear. Current 3-year

graduation rates for Council for Accreditation of Counseling and Related Educational Programs (CACREP) curriculums are approximately 35%, lower than other mental health professions and far lower than STEM master's or MBA programs (CACREP, 2018a; CGS, 2013; Council on Social Work Education [CSWE], 2016). Despite the lower graduation numbers and the clearly articulated ethical mandate to mentor capable students, there has been only one study in the past 5 years examining master's students in good standing satisfaction with their programs (Jensen, Doumas, & Midgett, 2016; Swank & Smith-Adcock, 2014). This gap in understanding and research on retention leaves master's in counseling students at risk, potential clients unserved, and the field itself lacking in skilled practitioners; therefore, understanding factors that foster retention and promote programmatic efforts to increase persistence is essential.

The few general master's retention models that do exist rely heavily on conceptualizing external student factors, such as social engagement, or social capital traits, such as socioeconomic status or gender (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). One alternative to these views is considering how retention is fostered through identity development. Ragelienė (2016) reviewed multiple theories on identity and found that the concept had been defined as: finding a fitting social environment where it was possible to create meaningful relationships, learning self-exploring behavior, asking questions about the self, or gaining an understanding of expected social roles and behaviors. Côté (1996, 1997, 2002, 2016) proposed the identity capital model (ICM)that stated that individuals develop a sense of self by establishing a coherent intrapersonal view of themselves scaffolded onto social or cultural factors. The

social factors (i.e., gender, social skills, and group membership) lay the groundwork that help to build agentic characteristics (i.e., sense of purpose, locus of control, and self-esteem), which eventually become the dominant forces in helping an individual shape a life path and navigate inevitable obstacles (Côté, 2002, 2016).

The purpose of this study was to examine if the agentic capital described by Côté (1996, 1997, 2002, 2016) is predictive of retention intentions when social factors established in the literature are held constant. If a master's program could understand the connection between personal identity traits and retention, programmatic and curricular enhancements could be developed to aid counselor educators in strengthening master's students' important intrapersonal characteristics, promoting retention and graduation efforts. The results of my study will contribute to positive social change by offering CACREP counselor educators additional information with which to design programs that adhere to ethical training responsibilities, foster student-centered retention management plans, cultivate personal and employment skill development for students, and increase the availability of effective mental health providers for communities.

In this chapter, I briefly review the history of retention literature with an emphasis on the limited master's student retention studies and explore the ICM as the theoretical framework for this study. Additionally, I discuss the study purpose, problem statement, research problem and hypothesis, and definition of terms as well as review the limitations, assumptions, and delimitations of the study. Finally, I briefly describe the significance and implications for social change I perceive for my study.

Background

Researchers have been interested in understanding the retention of higher education students for almost 80 years (Demetriou & Schmitz-Sciborski, 2011). There are long-standing and influential theories of undergraduate retention, but graduate education retention has received far less attention (Cohen, 2012; Gordon, 2016). Master's education is the fastest growing segment of the higher education market, but it is the least studied area in terms of retention and graduation (CGS, 2013).

Study of Undergraduate Student Retention

The earliest institutions of higher education in the United States were reserved for a select group of wealthy families, and therefore, retention and degree completion were of no concern (Demetriou & Schmitz-Sciborski, 2011). However, in the late 1800s governmental policy changes increased access to higher education for a larger population while societal changes raised demand for educated workers (Aljohani, 2016). These changes transformed how higher education institutions approached the business of education and led to an interest in retention (Demetriou & Schmitz-Sciborski, 2011).

Undergraduate retention has been a subject of increasing interest and study since McNeely's 1938 study of student academic mortality (Demetriou & Schmitz-Sciborski, 2011). Numerous models of undergraduate retention have been developed over the years, but the first and most influential of these is Tinto's (1975) student departure model. Tinto proposed that students' enrollment decisions were influenced by their struggles with academics, their inability to resolve educational and occupational goals, and their failure to engage and integrate with the intellectual and social life of the institution. In Tinto's

model, student integration into social and academic systems was vital for successful retention.

In the early 1980s, Bean (1980, 1986) proposed a model similar to Tinto's but with more focus on students' psychological processes and the external pressures (e.g., family financial needs or work commitments) that are beyond the scope of an institution's influence. For Bean, it was the interaction between students' social and academic engagement, psychological processes, and external factors that influenced their enrollment decisions (Burrus et al., 2013). While Tinto's model was criticized for its weak applicability to diverse populations, Bean's model has shown promise with community college students, distance learners, and adult learners (Bean & Metzner, 1985; Brown, 2002; Stahl & Pavel, 1992).

Study of Graduate Student Retention

More recently, higher education researchers have used undergraduate retention theories to model retention in graduate students. Master's students have been of less interest than doctoral programs and students, and only in the last 15 years have the two groups been considered as unique populations (Gordon, 2016). Bair and Haworth (2005) conducted a meta-synthesis of 118 doctoral retention studies and determined that attrition and retention rates varied widely depending on the field of study, program, departmental culture, and institution. Unlike previous studies of undergraduate populations, a general retention range could not be calculated from the results of the studies because doctoral programs varied widely in their departmental cultural approach and student professional indoctrination (Bair & Haworth, 2005). The results of their meta-synthesis reinforced the

problem with attempting to apply institutional-based undergraduate retention models to graduate students who are tied to the social and academic function of their departments and programs rather than institutional norms (Lovitts, 2001). Other theories of doctoral retention have focused on: (a) social and academic integration, but with an emphasis on the unique academic demands of doctoral students; (b) the concept of sense of belonging; and (c) the value of faculty engagement and mentoring in fostering academic success (Lovitts, 2001; Tinto, 1993; Vaquera, 2004).

Despite over 8 decades of research on undergraduate retention and a recent focus on factors that lead to doctoral student persistence, master's education has been largely ignored in the search for retention models (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). Barry and Mathies (2011) pointed out that between 1988–2009 nearly 87% of the new graduate program enrollment was in master's programs; however, research during the same period was almost exclusively on doctoral students. Cohen (2012) hypothesized that the lack of interest in researching retention of master's students might stem from the mistaken belief that their academic persistence is ensured since master's students are older, more motivated, career-driven, and face a less difficult academic path than doctoral students. Barry and Mathies proposed that institutions have little interest in understanding the retention of master's students because, compared to doctoral students, they offer less return on investment of faculty and institutional resources in meeting the teaching and research needs of the academy.

Most of the limited retention research on master's students has, in general, been highly field specific, population limited, or method focused (CGS, 2013). For example,

retention literature has focused on enrollment decisions of population-specific groups, such as female (Müller, 2008); international (Van Nelson, Nelson, & Malone, 2004); nontraditional (Brus, 2006); or online students (Patterson & McFadden, 2009). Researchers in the fields of nursing and athletic training have conducted studies to understand the retention needs of their students (Beauvais, Stewart, DeNisco, & Beauvais, 2014; Bowman, Mazerolle, Pitney, Dodge, & Hertel, 2015; Gazza & Hunker, 2014; Mathis, 1993). Jensen et al. (2016) used a qualitative method to examine the satisfaction of master's counseling students in a first-year social integration program. However, beyond Jensen et al., there have been no counseling specific studies and no cross discipline, population, institution, and teaching method studies that have investigated a generalizable model of master's student retention.

In an early study on the subject of graduate retention, Girves and Wemmerus (1988) searched for a single model to explain the academic persistence of both doctoral and master's students. However, what emerged from the study results were two unique models, one for doctoral students and another for master's students. For master's students, program grades and enrollment status predicted degree progress, while for doctoral students, their involvement with their program was vital to their retention (Girves & Wemmerus, 1988). This was one of the first studies to indicate that doctoral students and master's students persisted in their programs for different reasons.

Barry and Mathies (2011) tracked the academic progress of nearly 4,000 master's students from a variety of academic programs over 3 years using university records. The author's found that master's students evidenced a developmental pattern different from

doctoral students. The results of the academic record analysis also showed that standardized admissions scores did not correlate to graduation, part-time students were less likely to be retained, time to graduation was improved for students receiving graduate assistantships, and older students were less likely to graduate (Barry & Mathies, 2011).

After surveying nearly 400 master's students from a large Northwestern university, Cohen (2012) found that students who were younger, more academically involved, and more committed to the program were more likely to persist. Cohen equated commitment to the program with self-efficacy. It was the characteristic of self-efficacy, Cohen hypothesized, that allowed students who retained in their programs to overcome obstacles that forced other students to drop-out.

Encouraged by the success of a large-scale project to understand the retention of doctoral students, the CGS (2013) undertook a pilot study, the *Completion and Attrition in STEM Master's Programs*. First-year, graduating, and nonpersisting students from 191 science, technology, engineering, and math (STEM) master's programs and master's in business admiration (MBA) programs were surveyed to gather data on their experiences (CGS, 2013). The results of their study indicated that older students tended to leave programs at a higher rate than younger students. Additionally, students listed motivation and nonfamilial financial support as highly important factors contributing to their success (CGS, 2013).

Gordon (2016) conducted 14 qualitative interviews with master's students from two midsouth public universities. Three core traits emerged as important to master's

students' persistence: graduate faculty support, self-motivation, and peer support (Gordon, 2016). Self-motivation was what master's students identified as the trait they needed most to continue in their programs, they expected in themselves and peers, that allowed them to persist past obstacles, and that defined the value they assigned peer relationships (Gordon, 2016).

As can be seen by this brief review, the literature on the factors that assist master's students in persisting in their programs is limited and inconsistent. However, several factors did repeatedly appear: student age, financial support, and motivation. Older students seem to retain with less frequency than younger students (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012). Students with limited access to external sources of financial aid who pay for their education through private and personal sources appear to persist at lower levels (Barry & Mathesis, 2011; CGS, 2013). Students value an internal driving force to achieve their goals, expect the same characteristics in those they appreciate as peers, and use this personal trait to persist in overcoming the inevitable obstacles inherent in graduate education (CGS, 2013; Cohen, 2012; Gordon, 2016). The goal of this study was to add to the limited research on master's student retention by examining how previously identified sociological and intrapersonal factors could be integrated using an identity development theory to increase understanding of counseling master's student retention.

Problem Statement

Master's education is a rapidly evolving and quickly growing area of higher education adapting to meet the needs of the job market (Gordon, 2016). As Glazer-

Raymo (2005) observed, “The master’s degree has the capacity to continually evolve as a highly adaptable and affordable credential” (p. 25). Over 25 years ago, O’Brien (1992) attributed the rapid growth of master’s programs to the influx of midcareer changing or reentry students looking to improve their professional skills and credentials. Leicht and Fennell (2001) reported on shifts in the labor market that were impacting workers. They found that flatter organizational hierarchies; decreased permanent workforces; extensive use of project or contract work; and more organizations relying on technology to conduct business had increased the value of knowledgeable, flexible, and adaptable individuals (Leicht & Fennell, 2001). Glazer-Raymo (2005) argued that in such an uncertain and demanding marketplace, master’s programs offered students the best opportunity for future career potential. In some fields, such as counseling, occupational therapy, or accounting, postbaccalaureate education is required for professional licensure, while in fields such as public policy or human resources, a master’s degree offers increased salary and professional opportunities, and in other disciplines, such as education and athletic training, a shift is occurring requiring entry-level professionals to obtain a master’s degree (Cohen, 2012; Glazer-Raymo, 2005). Individuals with a master’s degree have lower levels of unemployment and higher lifetime earnings (CGS, 2013). The connection between the job market and master’s education is also evident in the student population. Master’s students tend to be slightly older than either doctoral students or professional students (National Center for Educational Statistics [NCES], 2010). Master’s students are more often married, have dependents, and work full-time compared with either doctoral or professional students (Glazer-Raymo, 2005; NCES, 2010). In a survey of master’s

students in STEM master's and MBA programs, the CGS (2013) found that career advancement or new employment opportunities were the top reasons listed for enrollment.

Because master's students are most often pursuing their degrees as means of improving careers and are frequently making significant personal and financial sacrifices for the opportunity, attrition from a program can have far-reaching implications. For example, a master's student who reduces work hours to attend school and takes out student loans to finance the program is losing income while accruing debt (Glazer-Raymo, 2005). If the student does not complete the program there is no increased employment or salary opportunities to offset the loss of income and help resolve the accumulated debt (Gordon, 2016). Albertini et al. (2012) noted that students who drop out of programs are often left with the emotional burden of a sense of failure and guilt. A clear understanding of what factors promote retention of master's students is important to ensure this growing population is well served.

Liles and Wagner (2010) in their paper on linking master's student performance assessment to learning outcomes based on the CACREP Standards noted, "Student retention continues to be an important responsibility for counselor educators, and Section I.P of the Standards reiterates this notion" (p. 3). One of the key ethical obligations of counselor educators is to serve as gatekeepers ensuring that students become highly trained and skilled professionals (Glance et al., 2012). This gatekeeper role functions to protect the well-being of students' potential clients as well as the future of the profession (Swank & Smith-Adcock, 2014). However, currently a shortage of mental health

providers exists worldwide and in the United States (Duenow et al., 2017). Twenty percent of rural areas of the United States currently lack adequate mental health services, and by 2025 it is anticipated nearly 17,000 more mental health providers will be needed, while over a million more providers are needed to fill the service gap worldwide (Duenow et al., 2017). To help bridge this social gap, it is clear that the concern regarding counseling student retention expressed by Liles and Wagner (2010) is well founded. However, recent 3-year graduation rates for CACREP master's in counseling programs have been in the 30% range, well below STEM master's (60%) or MBA (86%) graduation levels and somewhat below social work graduation levels (48%; CACREP, 2018a; CGS, 2013; CSWE, 2016).

Retention work within the field of counseling has mostly focused on assisting students exhibiting problematic behaviors to resolve issues but more broadly could be defined as counselor educators acting in the best interest of the general student body to foster retention (Glance et al., 2012; Liles & Wagner, 2010). While research has been conducted to examine what might predict problematic behavior on admission and ways to address issues during training, only one study has linked students' experiences with retention in master's programs (Glance et al., 2012; Jensen et al., 2106; McCaughan & Hill, 2015). Clearly, given the professional mandates about training, the ethical importance of retaining quality students in counseling master's programs, the societal need for well-trained counselors, and the growing desire within the field to understand the trajectory of master's programs, identifying factors influencing and promoting retention is important.

In 2009, the CGS (2013) launched the *Completion and Attrition in STEM Master's Programs* pilot study to try and facilitate a better understanding of retention and attrition in master's education. In the literature review, the authors' noted uncovering a sizable body of literature exploring doctoral student retention issues but discussed only four studies from 1988–2009 focused on master's students. None of these studies had an inclusive focus but rather they were discipline, population, or institution specific. Two additional studies were discussed that examined broader populations, but these studies were completed in Canada and Australia. The Canadian report concluded by recommending better collection of master's retention data, improved tracking of students' progress, and educating faculty and staff about factors that encourage students' program completion (CGS, 2013). O'Brien (1992), recognizing the tremendous growth in master's programs, reviewed what limited demographic statistics were available in hopes of understanding the population more fully. The author concluded with a call for a national collection of master's student data and research on factors that influence master's student retention. These calls to action are still being echoed 25 years later (CGS, 2013; Cohen, 2012; Gordon, 2016). My goal was to contribute the results of my study to the highly limited master's student retention literature by using the ICM to examine factors that influence master's student retention.

Purpose of the Study

The purpose of this quantitative, nonexperimental, survey study was to use the ICM to ascertain if agentic characteristics can predict counseling master's students' retention in their program when the sociological factors of age and personal funding

contributions were held constant. Student age and personal funding contributions emerged from the review of the limited master's retention literature as factors that influence persistence (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012). These factors are analogous to the ICM sociological component and were used as covariates in the study. After I reviewed the limited master's student retention literature, I found intrinsic motivation as another influence on retention (CGS, 2013; Cohen, 2012; Gordon, 2016). Motivation is a concept similar to the agentic characteristics of the ICM (Cook & Artino Jr, 2016). Both motivation and the agentic characteristics create a drive to achieve, construct for the individual a purpose, and help the person navigate barriers (CGS, 2013; Cohen, 2012; Côté, 1997, 2002; Gordon, 2016). Agency, as defined by the ICM, was used as an independent variable in this study, while intent to persist was the dependent variable.

Research Question and Hypothesis

Research Question: Do the agentic factors of the identity capital model (i.e., purpose, locus of control, self-esteem, and ego strength) predict the retention of master's counseling students while controlling for age and personal financial contribution?

H_0: The agentic factors of the identity capital model (i.e., purpose, locus of control, self-esteem, and ego strength), as measured by the MAPS20, do not predict the retention of master's counseling students, as measured by continued enrollment in their program, while controlling for age, as reported on the demographic questionnaire, and personal funding contributions, as measured by total amount of personal funds contributed to educational costs in an academic period.

H_a: The agentic factors of the identity capital model (i.e., purpose, locus of control, self-esteem, and ego strength), as measured by the MAPS20, do predict the retention of master's counseling students, as measured by continued enrollment in their program, while controlling for age, as reported on the demographic questionnaire, and personal funding contributions, as measured by total amount of personal funds contributed to educational costs in an academic period.

Theoretical Framework

Côté (1996, 1997, 2002) developed the ICM to help explain how sociological and intrapersonal factors interact to cultivate an individual's identity. Sociological or cultural capital consists of tangible resources, such as social class, gender, ethnicity, academic credentials, material possessions, knowledge of accepted social behavior, and strong social skills (Côté, 1996, 1997, 2002, 2016), while intrapersonal or agentic capital consists of a set of intangible resources including assets, such as ego strength, an internal locus of control, self-esteem, a sense of purpose in life, social-perspective taking, critical thinking abilities, cognitive reasoning abilities, and moral reasoning abilities (Côté, 1996, 1997). However, Côté (2002, 2016) made the case, supported by research, that in modern society the value of social identities is tenuous. The instability of and disillusionment with current social organizations means that the power and worth of the identities assigned by these social institutions is of diminishing value and influence (Côté, 2016). Agentic characteristics, on the other hand, are more stable, helping an individual create a consistent and robust identity and providing a foundation for withstanding the contextual transitions of modern society (Côté, 1997, 2002, 2016).

Theoretical Foundation of ICM

The ICM is rooted in the split between the constructivist and social constructionism philosophies (Côté, 2016). Constructivist theory proposes that the entire influence for meaning-making lies within the individual, while strong social constructionism promotes the idea that all forces influencing human meaning-making exist in the social context outside of human agency to act upon them (Somerville & Bengtsson, 2002). In designing the ICM, Côté (1996, 1997, 2002, 2016) rejected both traditional constructivism and strong social constructionism and rather sought to design a social psychological model of identity development that recognized both agentic and social influences on individuals' identify formation process.

Philosophy of Late Modernity

Underlying the ICM are the philosophical assumptions of late modernity (Côté, 1996, 1997, 2002; Giddens, 1991). Sociologists have proposed different theories to explain the variety, importance, and impact of social changes on individuals in society (Dawson, 2010). Giddens (1991) argued that globalization, technology, and the erosion of established structures and institutions have destabilized traditional sources of guidance and support. According to Giddens, in late modernity, normal developmental milestones and transitions have become less predictable leaving individuals in charge of plotting their life courses (Côté, 1996, 1997, 2002). In late modernity, individuals have the ability to make choices about their actions, are accountable for the outcomes, and ultimately carry the responsibility for the identity constructed from this process (Côté, 1996, 1997, 2002; Giddens, 1991).

Individualized Life Paths

Building on Giddens's (1991) work, Côté (1996, 1997, 2002) proposed that individuals faced with the choice and responsibility of constructing a life path may react by either embracing the freedom of choice or by becoming frozen in fear. Individuals who feel overwhelmed and fearful when faced with the responsibility for and the ability to design their futures can passively adapt other's choices or allow chance to set their course (Côté & Levine, 2002). Individuals who perceive the lack of social guidance as an opportunity may choose to actively engage in growth experiences that foster development of an identity offering an internal stability capable of managing the inevitable challenges inherent in mastering life goals (Côté, 1996, 1997; Côté & Levine, 2002).

ICM Agency Literature

In a seminal study of the agency/structure split, Côté (1997) developed two instruments to measure identity capital: The Multi-Measure Agentic Personality Scale (MAPS20) investigated the intrapersonal characteristics of the model, while the Identity Stage Resolution Index (ISIR) measured how a person accumulated and applied identity capital. The results indicated that sociological factors, such as parental wealth or contribution to student schooling, were not correlated to the students' identity development (Côté, 1997). Rather what was connected to identity was the students' own belief about their skills (Côté, 1997).

Ten years after the original study, Côté (2002) surveyed the participants again to determine if structural and agentic factors were influencing career and life satisfaction. Seven years after college graduation, the students' reports of job satisfaction and personal

development were strongly correlated to the agency measures from their first year in college and not at all related to sociological factors such as gender or socioeconomic status (Côté, 2002). The results of the two studies indicated that identity formation occurred when agentic characteristics were influenced in formation by social capital with agentic characteristics becoming the dominant power to shape life paths and satisfaction over the long run (Côté, 2002).

Tikkanen (2016) also investigated the ICM split between social and agentic characteristics by surveying Finnish 14- and 15-year-olds from disadvantaged and affluent schools. Tikkanen suggested that the Finnish social safety net worked to hold sociological factors constant and show the influence of agentic characteristics because the students knew that government programs were in place to provide for them irrespective of their academic or career outcomes. Regardless of the students' socioeconomic status, all participants showed the same levels of confidence in their futures and academic achievement (Tikkanen, 2016). However, students with stronger identity capital showed less concern about their future career prospects, indicating that a sense of identity seemed to provide them a possible life path and the confidence in their ability to overcome inevitable obstacles (Tikkanen, 2016).

Negru-Subtirica, Pop, Luyckx, Dezutter, and Steger (2016) studied one aspect of identity capital--meaning in life. Romanian ninth to 12th graders were surveyed at three different points during a school year (Negru-Subtirica et al., 2016). Regardless of age or gender, students with a stronger commitment to their goals evidenced a clearer sense of

meaning and sense of self (Negru-Subtirica et al., 2016). In their findings, cultural capital was not correlated to goal development or commitment as strongly as identity capital.

Cross-Cultural Application of ICM

The ICM has been applied to the identity development of transitioning youth in multiple countries, including Finland (Tikkanen, 2016); Romania (Negru-Subtirica et al., 2016); Italy (Sica, Aleni Sestito, & Ragozini, 2014); Belgium (Luyckx, De Witte, & Goossens, 2011); Portugal (Oliveira, Mendonça, Coimbra, & Fontaine, 2014); and China (Yuan & Ngai, 2016). Schwartz, Zamboanga, Weisskirch, and Rodriguez (2009) used the ICM to understand how personal identity might mediate the relationship between cultural identities and adaptive psychosocial functioning. Regardless of ethnicity, origin of birth, or generational immigration, participants who had a better attachment to their heritage-cultural identity and their American-cultural identity status had better psychosocial adaptation (Schwartz et al., 2009). Schwartz et al. hypothesized that the ICM intrapersonal characteristics provided a consolidating framework by which an individual could connect different cultural identities into a coherent and stable personal identity, creating healthy functioning.

ICM in Career and Academic Contexts

The ICM has also been used as a foundation to explore academic issues. Lewis (2016) used a qualitative, single-case study approach to explore how the ICM intrapersonal characteristics supported the social entrepreneurial efforts of a student. The participant, SJ, used his agentic capital, such as ego strength and sense of purpose, as a foundation from which to launch new opportunities to attract tangible resources, such as

money and media attention, to support his nonprofit organization's mission (Lewis, 2016).

Webb et al. (2017) conducted semistructured interviews with youth in a volunteering program in the United Kingdom's foster system. The interviews explored participants' identity development and acquisition of the agentic components of the ICM. The participants' interviews revealed that the volunteer experiences provided opportunities for them to develop their identities by gaining agentic characteristics, such as resilience, self-esteem, locus of control, and social-perspective taking (Webb et al., 2017).

Sica et al. (2014) found that assisting students with developing coherent and stable identities allowed them to establish appropriate roles in their social and vocational communities, limiting academic problems and psychological distress. Approximately 330 second-year Italian college students were surveyed using measurements of identity development and identity distress, locus of control, self-esteem, and depression and anxiety (Scia et al., 2014). The results of the study indicated that identity commitment was positively correlated with well-being and negatively correlated with identity distress (Scia et al., 2014). A strong identity appears to serve a protective factor for college students as they face the uncertainty of academic transitions.

Simon (2012) conducted a three-interview qualitative study with nine precollegiate student teachers to identify how they were forming their professional identity. The participants were asked questions about their sense of self and professional identity as well as their emerging beliefs about their capacities as instructors (Simon,

2012). An analysis of the participants' reports indicated that the greater identity capital the student teachers possessed, the more confident they were in their future capacity to fulfill their teaching roles and responsibilities (Simon, 2012).

The ICM holds that a strong and coherent identity supports individuals as they transition from context to context along life's paths in pursuit of their goals (Côté, 1997, 2016). Students who enter master's programs face significant transitions. Randall, Eatman, Mitchell, and McNeal (2018) discussed the adjustments in learning style, teaching context, and evaluation processes that new graduate students encounter. Additionally, master's students often struggle with work/life balance due to the significantly increased academic workload and can experience emotions, such as loneliness, stress, and confusion (Grawitch, Barber, & Justice, 2010; Randall et al., 2018). However, as the ICM literature has shown, individuals with a strong and coherent sense of self are more likely to be self-determining agents of life paths, highly engaged with tasks, happier, and more hopeful as well as experience fewer transition and academic problems while developing skills and building confidence in emerging capacities (Burrow & Hill, 2011; Côté , 2002; Lewis, 2016; Luyckx et al., 2011; Negru-Subtirica et al., 2016; Sica et al., 2014; Simon, 2012; Webb et al., 2017). ICM researchers have shown that individuals who have a clear sense of purpose, a strong commitment to their goals, and positive self-esteem are less likely to be derailed by the inevitable obstacles inherent in life paths (Burrow & Hill, 2011; Luyckx et al., 2011; Negru-Subtirica et al., 2016). Theoretically, the agentic ICM factors that lead to goal commitment and foster well-being will help master's students face academic transitions

and manage negative emotions that accompany the adjustment to graduate school, allowing them to retain in their program.

Nature of the Study

In this study, I used a quantitative, nonexperimental, survey to gather information from participants about their program persistence and the intrapersonal and sociological factors that contribute to retention. Survey research is the most common method for collecting information from participants about their thoughts, feelings, and self-observed behaviors (Bradburn, Sudman, & Wansink, 2004). Surveying participants about their retention and persistence actions and intentions has been a common means of collecting such data (CGS, 2013; Cohen, 2012; Gordon, 2016). Côté (1997, 2002) designed two survey instruments, the MAPS20 and the ISRI, to understand individuals' identity development patterns and socialization and identity accumulation behaviors. These surveys have been used successfully in a number of studies (e.g., Côté, 1997; 2002; Luyckx et al., 2011; Oliveira, et al., 2014; Sica et al., 2014; Tikkanen, 2016), Surveying participants about their traits and behaviors allows for predictive analysis of the data without casual links being established (Groves et al., 2009). In this study, I used the participants' retention in their master's programs from one academic period to the next as the dependent variable, the MAPS20 responses were the independent variable, and age and personal financial contribution to educational costs as covariates that were held constant in the logistic model.

I drew the sample for this study from students in degree-seeking programs at CACREP master's in counseling and master's in counseling psychology programs who

were in good standing, had been actively enrolled full-time for at least one academic period, and had at least one additional academic period remaining in their programs. I used a convenience sample to recruit participants (see Bradburn et al., 2004; Groves et al., 2009). Since there was no predicted geographic influence on the variable of identity development, I recruited participants from schools of different sizes and in different regions of the United States. Studies conducted in a variety of countries have shown the ICM to be generalizable to different cultures (Luyckx et al., 2011; Oliveira et al., 2014; Sica et al., 2014; Tikkanen, 2016) and the diversity of population in this study should not prevent the results from being generalized.

Using the accepted events per variable (EVP) rule of thumb method, I calculated a participant sample size of 82 would be required for my study (see Ogundimu, Altman, & Collins, 2016; Wilmer et al., 2015). Calculating a sample size for logistic regression is a complex and contested procedure (Hsieh, Bloch, & Larsen, 1998; Ogundimu et al., 2016). G*Power Statistical Software makes use of the Hsieh et al.'s (1998) statistical model that requires means, standard deviations, variances, and clear population parameters for at least two of the predictor variables gathered from previous research (Faul, Erdfelder, Buchner, & Lang, 2009). The limited nature of both the master's retention and the MAPS20 literature negated the possibility of obtaining the needed statistics; however, was possible to determine a sample size using the EVP formulae (see Thompson, 2009). Following this method, I calculated seven predictors (i.e., four MAPS20 subscales, age, personal financial contribution, and retention) multiplied by 10 observations per predictor to obtain 70 degrees of freedom (see Thompson, 2009). I then

divided the degrees of freedom by a percent of an outcome of interest, in this study, the percentage of students retained in their program, to achieve a minimum sample size (see Ogundimu et al., 2016; Thompson, 2009). The percentage I used for my calculation was taken from Barry and Mathies' (2011) study of University of Georgia master's students. The authors found that 85% of master's students in their sample had either graduated or were retained after 3 years (Barry & Mathies, 2011). Following the EVP method, the minimum sample size required for my study was 82 participants.

I used a logistic regression to analyze if the agentic characteristics of the ICM, as measured by the MAPS20, predicted retention when controlling for age and personal funding source. The covariate of age was measured by asking participants their age in years on the demographic questionnaire. The covariate of personal funding source was measured by asking participants about the total amount of the personal, out-of-pocket contribution they made to their tuition, fees, and books per academic period. The independent variable of the ICM agentic characteristics was measured with the MAPS20. The MAPS20 was designed to assess key constructs of the intrapersonal traits of the ICM and contains 20 items on four subscales to measure self-esteem, purpose in life, internal locus of control, and ego strength (Côté, 2016). The dependent variable, retention, was a dichotomous variable that indicated if the student reenrolled for the academic period following the original data collection period of the study.

Definitions

The following are definitions of concepts I use throughout this study:

Agency: Constructivism views the process of meaning making as an individual pursuit (Raskin, 2011). According to constructivism, agency for constructing a personal narrative resides with the individual (Somerville & Bengtsson, 2002).

Agentic or intrapersonal characteristics: In this study, I use both terms to refer to the personal trait concept in the ICM. I used the MAPS20 (Côté, 1996) assessment to measure agentic characteristics of the ICM. According to the ICM, these personal traits allow an individual to develop a strong, coherent, and consistent personality across changing social contexts. These traits include ego strength, an internal locus of control, self-esteem, a sense of purpose in life, social-perspective taking, critical thinking abilities, cognitive reasoning abilities, and moral reasoning abilities (Côté, 1996, 2002).

Attrition: Failure of a student to reenroll for consecutive academic periods (Burrus et al., 2013).

Late Modernity: The British sociologist, Giddens (1991) developed this term to describe life in the late 20th and early 21st centuries. In the modern era, technology has created relational distance that limit reflective experiences for building strong identities (Giddens, 1991). Additionally, traditional institutions and social structures have begun to weaken, and existing transitional paths have become less predictable leaving individuals responsible for making choices about their actions, accountable for the outcomes, and in charge of the identity constructed from their chosen life designs (Côté, 1996, 1997, 2002; Giddens, 1991).

Persistence: The reenrollment of a student at any institution for consecutive academic periods (Hagedorn, 2006). As is true in most higher education literature, in this

study I preferred the term retention to refer to students' reenrollment intentions, however, I also use the term persistence.

Personal funding contributions: In this study, I defined this term as the total amount of personal or familial funds a student contributes to paying for books, fees, or tuition in an academic period. This is in contrast to the external funds, such as loans, scholarships, assistantships, grants, or employee assistance, a student might receive to cover academic-related costs. In my study, I used this concept as a covariate in the model and measured it by asking respondents how much of their personal income they contributed toward tuition, books, and fees in an academic period. Barry and Mathies (2011) and CGS (2013) found that students who were personally responsible for more of the costs of their education had lower retention levels compared to those who covered tuition through external means.

Retention: The reenrollment of a student at the same institution for consecutive academic periods (Hagedorn, 2006). In this study, I measured retention by determining which participants remained in their master's programs for two consecutive academic periods. Additionally, at the first study time period I asked participants to rate their certainty of remaining in their program.

Sociological factors or cultural capital: In this study, I use both terms to refer to the contextual factors of the ICM. According to the ICM, these factors help construct the groundwork onto which the intrapersonal characteristics can scaffold. Social capital includes conferred identities, such as social class, gender, and ethnicity; earned identities, such as academic credentials and professional reputation and networks; material

possessions; knowledge of accepted social behavior; and strong social skills (Côté, 1996, 1997, 2002, 2016).

Structural: Social constructionism views the process of meaning-making as a collectivist activity determined by external forces (Raskin, 2011). According to strong social constructionism theory, the forces influencing human meaning-making exist solely in the social context and are outside the individual's agency to act upon (Somerville & Bengtsson, 2002).

Student mortality: Failure of a student to remain in college until graduation (Burrus et al., 2013).

Assumptions

I made several assumptions when I designed this study. One assumption I made was that participating subjects would honestly and accurately report their characteristics using an online survey method. Dodou and de Winter (2014) conducted a meta-analysis of 62 studies comparing online and offline surveys to evaluate the occurrence of social desirability behavior. The results of their analysis indicated that social desirability occurred almost equally regardless of how the participants were administered the survey (Dodou & de Winter, 2014). Online surveys do not significantly increase the likelihood of subjects' falsifying information compared to other survey methods (Dodou & de Winter, 2014).

The sample for this study was drawn from CACREP master's in counseling and master's in counseling psychology programs in a variety of geographic regions in the United States. The identity capital model and the MAP20 assessment instrument have

been used successfully in multiple countries and cultures (i.e., Finland, Tikkanen, 2016; Romania, Negru-Subtirica et al., 2016; Italy, Sica et al., 2014; Portugal, Oliveira et al., 2014; China, Yuan & Ngai, 2016). Because of the wide applicability of the theory and assessment, I assumed that any variation in geographic location of the sample would not limit the generalizability of findings.

The final assumption I made in the design of this study was that the agentic characteristics of the ICM create the ability to navigate around goal obstacles (see Côté, 1997; 2002). Côté (2002) found that Canadian college students were more satisfied with their college career plans and more likely to complete them if they had a more developed sense of their identity. This was true regardless of gender, socioeconomic class, and financial support from parents (Côté, 2002).

Scope and Delimitations

I drew the sample for this study from the population of CACREP master's in counseling and master's in counseling psychology programs who were degree-seeking, currently enrolled, and in good standing with their programs. Participants were included if they had been enrolled for at least one academic period, had one or more academic periods remaining in their program before graduation, and were in in-seat or hybrid programs. Because the focus of this study was on intent to persist, the study population did not include students who were on probation, stopped-out, had left their program, or who were in their last academic period of study.

In this study, I examined student-focused characteristics, such as age, use of personal sources of funding, and agentic characteristics. There are suggestions in the

limited literature on master's student retention that program variables can influence students' enrollment decisions (Girves & Wemmerus, 1988; Cohen, 2012). For example, Girves and Wemmerus (1988) found that master's students were more likely to retain when they developed closer relationships with faculty. However, programmatic factors contributing to student retention have been inconsistently reported in the literature, so in this study I used student variables as a starting point for the investigation.

The programs from which I sampled participants were all based in traditional brick and mortar institutions. Most programs held classes exclusively in a face-to-face modality, with a few classes being offered virtually. However, none of the programs were taught in a fully online environment. Online learners tend to be more self-regulating and flexible in their learning styles and use different types of cognitive learning strategies compared to in-seat students, and these differences may influence retention factors (Kauffman, 2015; Lee & Choi, 2013). The type of learning environment is a variable warranted of inclusion in future research.

I drew the sample for my study from the population of students in CACREP master's in counseling and counseling psychology programs across the United States. Most recent research on master's student retention has relied on participant samples from a single, or at most two, universities (Barry & Mathies, 2011; Cohen, 2012; Gordon, 2016). The ICM has shown to be a generalizable model within different cultures, and the MAPS20 has been translated for use in different languages (Côté, 2016; Luyckx et al., 2011; Morsünbül, 2013; Oliveira et al., 2014; Sica et al., 2014; Tikkanen, 2016). The results of these studies indicated that any geographical variations within my sample

would not impact the identity development variable enough to severely limit the generalizability of the results. The results from my study should be generalizable for programs interested in understanding the factors that influence retention of full-time CACREP master's counseling students in traditional land-based or hybrid programs.

Limitations

Threats to internal validity jeopardize the ability of a researcher to state that differences obtained resulted solely from the independent variable (Creswell & Creswell, 2018). Threats to external validity threaten the researcher's ability to generalize study conclusions to a larger population or settings (Creswell & Creswell, 2018). For this study, history was an internal validity threat. Participants may intend to remain in their master's programs, but events in their lives, unrelated to study factors, may force them to drop-out. Self-selection bias was another threat to internal validity. Since participants had the ability to opt into or out of this study, those who opted out of participating may be uniquely different from those who chose to participate. However, these threats to internal validity should have been addressed by the relatively representative sample of master's in counseling and counseling psychology students that I used for this study.

Time can present a threat to external validity. In this study, I examined the retention behaviors of master's students at one point in their programs rather than following them from admission to graduation. I used a convenience sample, and this nonrandom selection method can create bias and statistical analysis issues.

Significance

As other researchers have observed (i.e., Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016), there is limited exploration of factors that encourage master's student retention. Connecting retention variables to a framework such as the ICM would begin to help master's educators understand the value of students forming professional and personal identities. As Côté (2016) pointed out, agentic characteristics are built early in a person's life, but the benefits are felt for decades. A strong, coherent, and consistent identity could allow students to pursue and achieve academic goals, maintain healthy emotional equilibrium, and find satisfaction and stability in career outcomes (Côté, 2002; Luyckx et al., 2011; Sica et al., 2014). Using the ICM as a guide to understand what variables contribute to retention would allow institutions to create programmatic efforts in appropriate directions. For the field of counseling, the results of this study could contribute to positive social change by finding means for CACREP counseling programs to increase retention, thereby: (a) creating more positive institutional management, (b) maintaining the ethical training responsibility of the counseling field, (c) cultivating personal and employment skills for master's students, and (d) increasing the availability of effective mental health providers in the community.

Summary

Research on the ICM has shown the agentic characteristics to have strong connections to a person's psychological well-being, ability to establish life paths, set goals, and find meaning in experiences, all of which are grounded in a consistent and solid identity (Côté, 2002; Negru-Subtirica et al., 2016; Sica et al. 2014). The literature

on the ICM related to education, transitions, and development points to the ability of a strong sense of identity to provide a stable foundation for life transitions, build confidence in skills and capacities, and facilitate entrance into vocational and social networks (Lewis, 2016; Sica et al., 2014 Simon, 2012; Webb et al., 2017). Certainly, students entering a master's program are facing all of these challenges. Jensen et al. (2016) interviewed first-year master's in counseling students about their experiences in a mandatory program integration project. The students' interviews evidenced their transition experiences, desire to build skills, and the need to gain confidence (Jensen et al., 2016). One student summed the transition experience and the strengthening of agentic idenity in the following way, "I feel that I'm learning a lot and have more insight about who I am and why I'm doing the things I'm doing. Trusting the process and being okay with that is something I've never done before in my life… (Jensen et al., p. 6)

The ICM offers a theoretical perspective on the internal drive that previous literature has suggested is important for master's students' success (CGS, 2013; Cohen, 2012; Gordon, 2016). Connecting a student's coherent and strong internal drive, represented as a stable identity, with their ability to manage the transition to graduate education, as indicated by their desire to retain and successfully complete their degree, will provide programs ideas about ways to support developing students. Creating programmatic offerings that foster identity during graduate school transition may have short-term and long-term benefits for students (Côté, 2016).

I begin Chapter 2 by reviewing the literature search strategy I used for my dissertation. Then, I provide a deeper exploration of the history of retention studies

including a review of relevant undergraduate and doctoral retention literature with a special focus on the limited master's retention literature of the past 20 years. Finally, I explain the ICM and discuss the model's theoretical and philosophical foundations. I review the ICM literature that supports the model's structure; examine its uses with multicultural populations; and offer evidence of the importance of identity in psychological well-being, educational resilience, and long-term career satisfaction.

Chapter 2: Literature Review

Introduction

Master’s education has been a significant contributor to higher education in terms of high enrollment and financial input for several decades (Glazer- Raymo, 2005). Yet, despite calls for a national database to track students’ progress and increased research into persistence and retention factors, little progress has been made (CGS, 2013; Cohen, 2012; Glazer-Raymo, 2005; Gordon, 2016). The research on factors that lead to master’s retention is limited with a scattered focus on predictors and inconsistent and conflicting results. However, for the general population of master’s students, risks, such as accruing large student loan debt and disrupting work and personal life patterns, can be significant (Albertini et al., 2012; Gordon, 2016). For the field of counseling, the ethical responsibility of gatekeeping mandates that counselor educators attend to retention to ensure that highly skilled students graduate and enter the profession (Glance et al., 2012; Swank & Smith-Adcock, 2014). The purpose of this quantitative, nonexperimental, survey study was to generate a predictive model of counseling master’s student retention using the agentic characteristics of the ICM when sociological factors of age and personal funding contributions are held constant.

In this chapter, I review the retention literature with special attention paid to the work on master’s students. I also examine the history of the concept of retention and trace the development from undergraduate to master’s education. Additionally, I explore the history of and the theories and literature supporting the ICM.

Literature Search Strategy

To conduct my literature review, I searched for sources using SAGE Journals Online, PsychINFO including PsychARTICLES, PsychEXTRA, Sociological Abstracts, and Google Scholar. The material reviewed included peer-reviewed journal articles, online books, presentations, and dissertations. In addition to these sources, I also reviewed the websites of the CGS, NCES, BLS, and CACREP.

When searching the subject of retention, I used the following terms: *retention in higher education, undergraduate retention models, Tinto and retention model, Bean and retention model, doctoral student retention model, master's student retention, master's student persistence, retention in maser's programs, persistence in master's programs, retention/ persistence in master's: counseling, nursing, athletic training, online programs, with African-American, Asian, Native American, Hispanic, LGBTQ, disabled,* and *international students.* The limited amount of master's level retention literature meant that I expanded the timeframe of my review to look for seminal works on the subject. In an effort to understand the history of retention in higher education, I expanded my timeframe to include Tinto's seminal and subject-defining 1975 work.

When searching the ICM, I used the following terms: *identity capital, identity capital model, identity,* and *Côté.* In exploring other topics associated with the subject, I searched*: identity and vocational construction; career construction; identity development and constructivism; social constructionism; constructivism; late modernity and sociology; Giddens and late modernity;* and *T-shaped, professional, boundaryless, and protean career*. Typically, my search timeframe covered works published between 2012–

2018. However, several of the seminal works were published prior to 2012, so I reviewed works from as early as 1991.

Conceptual Framework

In this study, the concept of retention was the phenomenon of interest. Retention was at the core of the design of the study. I used the ICM as a theoretical paradigm to explain how the phenomenon of retention occurs for counseling master's students.

Master's education is the fastest growing area of higher education (Barry & Mathies, 2011; Gordon, 2016). From 2001 to 2015, there was a 66% increase in the number of master's degrees granted, with some institutions awarding more master's degrees than undergraduate degrees (NCES, 2018a). The CGS's (2017a) *Graduate Enrollment and Degrees: 2006–2016* survey showed that in 2016, 84% of all new graduate enrollment was in master's programs, and this statistic offered evidence of the continuation of a 5-year trend of increasing first-time enrollment in master's programs. However, master's students do more than add to the higher education population.

Master's program enrollment has multiple benefits to both institutions and students (Cohen, 2012). Increased enrollment in master's programs equals an increased revenue stream for an institution; master's students tend to be financial boons because they often have alternative sources of funding and require no financial aid or are enrolled part-time and are ineligible for most types of aid thus their tuition and fees can be fed back into an institution's operating budget (Glazer-Raymo, 2005). Additionally, master's program classes typically have higher student enrollment than doctoral level ones, yet take less individualized attention or research mentorship, requiring fewer faculty and less

scheduling to teach the same class load (O'Brien, 1992). However, these students can be charged higher graduate tuition. Overall, a university can invest less financial aid dollars, faculty time and resources, and still recover more tuition money from master's students as compared to undergraduate or doctoral students (Cohen, 2012).

Master's degrees can be beneficial to students as well. In certain fields, such as counseling or accounting, a master's degree is a necessity for licensure (Cohen, 2012). Other fields, such as public policy or human resources, may require a master's degree for career advancement and increased salary opportunities (Glazer-Raymo, 2005). The required degree for entry into the profession of education and athletic training is shifting from the bachelor's to the master's degree (Cohen, 2012; Glazer-Raymo, 2005). Consistently, U.S. Census data has documented that individuals who obtain a master's degree earn more salary over their lifetime compared to those with lower credentials (O'Brien, 1992).

However, negative enrollment statistics can be detrimental to both parties as well. Institutions that suffer from poor graduation rates can experience lower rankings and modest reputations that reduce enrollment and lead to compromised financial well-being (Delen, 2010). Public institutions with low enrollment may face reduced federal funding and eventual program dissolution, while enrollment model universities with low graduation rates might lose student tuition dollars or face federal bans on student loan access (Gordon, 2016). Students face equally dire consequences for failure to complete a graduate degree, including loss of wages from time spent in school, high student loan debt, and a personal sense of failure (Albertini et al., 2012). A student who drops out of a

program before obtaining the master's credential may still have accrued student loan debt, lost wages, and made other sacrifices to attend school, but without completing the degree, none of these costs are adequately offset by the outcome (Gordon, 2016). In an educational landscape where master's programs are growing in popularity and importance, provide enormous benefits for completion, and profound consequences for failure, helping students complete degrees successfully is vital.

Important Enrollment Terminology

The terms persistence and retention have a confusing history in higher education literature (Hagedorn, 2006). Both expressions have been used to describe the phenomenon of students' consecutive enrollment. For example, Hagedorn (2006) explained three types of retention and presented complex formulas to account for ways institutions might count student enrollment. Hagedorn pointed to the NCES's definition of retention as an institutional measure of continued enrollment, and persistence as a student measure of ongoing registration. In other words, students persist in their schooling and institutions retain them (Hagedorn, 2006). The nonprofit group, the National Student Clearinghouse Research Center (2017), defined retention as reenrolling in the same university for consecutive semesters and persistence as reenrolling in any university for consecutive semesters. Even the American Council on Education has used retention and persistence interchangeably in discussions of the weaknesses of graduation rates as a benchmark of university efficacy (Cook & Hartle, 2011). Additionally, important terminology, such as attrition, or the failure of a student to reenroll for consecutive semesters, and mortality, or the failure of a student to remain in college until

graduation, should be understood to appreciate the college enrollment literature (Burrus et al., 2013). In this study, I use the term retention to describe the phenomenon of students reenrolling in the same program for consecutive academic terms; however, in accordance with the literature, I use the term persistence to describe students' continuing academic efforts.

History of the Study of Retention

The issue of undergraduate retention was first written about and modeled in the early 1930s (Demetriou & Schmitz-Sciborski, 2011). In an attempt to explain the history of student retention studies, Berger, Blanco Ram'rez, and Lyon (2012) divided the development of college student retention studies into nine different eras. Prior to the 1970s, the concept of retention was referred to as student mortality and theories tended to describe retention through students' characteristics, personal attributes, and deficiencies rather than examining how such student traits intersected with institutional characteristics (Aljohani, 2016; Berger et al., 2012). For example, Demetriou and Schmitz-Sciborski (2011) described the first major study of student mortality, McNeely's 1938 examination of 60 institutions, as a look at students' "demographic characteristics, social engagement and reasons for departure" (p. 2).

It was during the 1970s that the term retention was introduced to describe students' persistence in their academic careers (Aljohani, 2016). The models of this era incorporated the relationship between the institution and students and examined what role institutions played in students' enrollment decisions (Glazer-Raymo, 2005). Enrollment management, or a university-wide approach to encouraging student retention, was a

hallmark of persistence literature in the 1980s, while the retention of disadvantaged students was widely researched in the 1990s (Demetriou & Schmitz-Sciborski, 2011). Twenty-first-century retention models encourage holistic, cross-campus collaborations that offer students supportive interactions with a variety of institutional members (Demetriou & Schmitz-Sciborski, 2011).

Undergraduate student retention models. Tinto's (1975) student integration model is one of the first, and perhaps the most influential undergraduate retention models in higher education literature. Tucker (1999) succinctly described retention in Tinto's model as referring to "students having well-planned personal intentions in an academic sense and strong commitment to institutions in a social sense" (p. 165). Tinto identified three major influences for students' decisions to stay or leave college: academic problems, an inability to resolve educational and occupational goals, and a failure to engage and integrate with the intellectual and social life of the institution. Tinto identified 13 factors that impacted student retention including family, individual, and previous school attributes, beliefs about and commitment to staying in a specific college and completing a degree, institutional expectations about academic and intellectual performance and social interactions. Successful retention, according to Tinto, required integrating students into the formal academic requirements of the institution as well as the social academic system by activities such as mentoring and support from faculty and staff (Burrus et al., 2013). Additionally, students need to be engaged with the formal social systems of the university such as experiences outside class and peer interactions (Aljohani, 2016). According to Tinto "other things being equal, the higher the degree of

integration of the individual into the college, the greater will be his/her commitment to the specific institution and the goal of college completion" (p. 96).

Since the model was introduced, significant challenges to Tinto's model have emerged from researchers who questioned the usefulness of the concept of integration with certain on-campus populations such as first-generation, minority, commuter and other non-traditional students (Burrus et al., 2013). Additionally, community college practitioners have called into question whether social integration is relevant to that particular context and population (Deil-Amen, 2011). However, Tinto's seminal work has remained the most influential model of retention in higher education scholarship. Twenty years after the model's original publication it has been cited in over 400 publications and 170 dissertations, sparked many revised retention models and launched additional lines of inquiry such as the importance of a sense of belonging (Braxton, Milem, & Sullivan, 2000; Strayhorn, 2012).

A second significant retention model was published in the early 1980s by Bean (1980, 1986). Bean's model (1980, 1986) evidenced the same complexity of factors influencing students' college enrollment decisions as Tinto's but was more focused on aspects of students' psychological processes such as attitudes, intentions, and behaviors (Khuong, 2014). Bean's model was originally based on a theory of employee turnover in organizations and included external, environmental factors that impact a student (e.g., family financial needs and work commitments) but are beyond an institution's control (Bean, 1980, 1986). In Bean's model the interplay between interactions, student attitudes, and external factors influenced a student's decision to persist or depart an institution

(Burrus et al., 2013). Researchers have shown validity for Bean's model with diverse student populations, community college students, distance, and adult learners (Brown, 2002; Metzner & Bean, 1987; Stahl & Pavel, 1992).

Doctoral student retention models. While much energy has been concentrated on understanding the causes of retention and attrition in the undergraduate population, the graduate cohort has received far less attention (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016, Gururaj, Heilig, & Somers, 2010). Doctoral programs and students have been of more interest to researchers and theorists than those involved in master's education. Certainly doctoral program completion rates between 45% and 50%, depending on the field of study and student demographics, are of concern to educators (CGS, 2008; Gururaj et al., 2007; O'Meara, Griffin, Kuvaeva, Nyunt, & Robinson, 2017). Doctoral program attrition has negative consequences for students who have made substantial financial and psychological investments such as quitting jobs, moving families, taking on large student loans, and risking personal identities (Lovitts, 2011). Failure to complete a doctoral program leaves students without the needed credentials for employment opportunities equal to the costs incurred (Golde & Dore, 2001).

Approximately 20 years ago, Bair and Haworth (2005) conducted the first meta-synthesis of existing doctoral education retention and attrition literature to create a comprehensive picture of the issue. While many small studies had been undertaken to consider retention of doctoral students, there had been no comprehensive empirical study conducted to understand the phenomenon of doctoral student attrition (Bair & Haworth, 2005). Bair and Haworth attributed this lack of literature to the difficulty of collecting

data in the absence of a nationwide attrition database for doctoral programs and the housing of such data at the individual program or departmental level (Bair & Haworth, 2005). Additionally, as Tinto (1993) pointed out, the absence of a guiding model or theory of graduate student retention prevented the same kind of scholarship that led research into the undergraduate process.

Bair and Haworth (2005) reviewed 118 studies conducted between 1970 and 1998 looking for common themes. A general retention range could not be calculated from the results of the studies because the doctoral programs, unlike previously studied undergraduate populations, did not present a single uniform group (Bair & Haworth, 2005). Rather attrition and retention rates varied widely depending on the field of study, program, departmental culture, and institution (Bair & Haworth, 2005). The results of this meta-synthesis reinforced the problem with attempting to apply undergraduate retention models to graduate students. Doctoral programs’ approaches to professional indoctrination can differ significantly with some building a team approach to departmental culture while others preferring that students function more autonomously (Vasquera, 2004). Because graduate education grounds the student in the program and department rather than in the larger university, institutional integration models are not valid (Khuong, 2014).

Gururaj et al. (2007) reviewed three studies on graduate student financial aid and student loan debt that spanned over three decades. The samples for the studies included master’s, doctoral, and professional school students. The goal of this meta-analysis was to establish a single, common effect size estimate of the impact of financial aid on

graduate student persistence (Gururaj et al., 2007). The results showed that financial aid was related to higher levels of retention, but that level of student loan debt did not impact persistence (Gururaj et al., 2007). These findings contrasted with the existing literature of the time on the impact student loan debt had on persistence in undergraduate education. Unfortunately, neither Gururaj et al. or the original individual studies differentiated student outcomes by educational level, therefore, it was difficult to determine from this analysis if master's students were influenced by financial aid in the same manner as doctoral or professional students.

Tinto (1993) recognized that social and academic integration would vary for doctoral students. He proposed that academic integration happened in three phases: coursework, candidacy, and dissertation and that students who were able to give more attention to their academic pursuits were more likely to persist to graduation (Tinto, 1993). Lovitts (2001) followed the academic and social integration theoretical thread initiated by Tinto. Lovitts proposed that students who were better able to integrate with academic and social systems within their departments would be more likely to persist to graduation. According to Lovitts, faculty engagement was an important factor in encouraging retention and offering an academically challenging environment, while adequate faculty support was one suggestion made for increasing doctoral persistence. Vaquera (2004), confirmed Lovitts findings in a quantitative survey study of 550 doctoral students enrolled at a Hispanic serving institution. A measure of academic integration based on Tinto's model was used to explore, in part, the research question of what factors influenced doctoral students' retention in the early stages of their programs (Vaquera,

2004). The results of the study found that faculty support was a key factor in retention even more so than gender and educational background (Vaquera, 2004).

More recently, research on doctoral students' persistence and retention has focused on the concept of sense of belonging. O'Meara et al. (2017) described sense of belonging as "the feeling that the person is connected to and matters to others in an organization and has been found to influence retention and success" (p. 251). In doctoral programs, a sense of belonging might include being integrated into networks within the department, advisor support, mentoring, and collegial peer interactions and networks (O'Meara et al., 2017). O'Meara et al. conducted a quantitative survey study with approximately 1,500 doctoral students at four Maryland universities in a variety of programs about their sense of belonging and factors that contributed to their feelings. The results of a structural equation model analysis indicated that the single most influential factor to building a sense of belonging was the professional relationships that doctoral students developed with faculty (O'Meara et al., 2017).

Clearly, the factors that promote doctoral student retention differ from those that enhance undergraduate retention. Doctoral students appear to be less integrated into an institution's life and culture compared with undergraduates (Khuong, 2014). Rather doctoral students' integrate with the program and departmental culture and show higher retention levels when they build positive faculty mentoring relationships (Lovitts, 2001; Vaquera, 2004). However, research to examine if master's students' needs follow the same model as doctoral students, or if they have unique needs, is far less plentiful.

Master's student retention models. While factors leading to retention for undergraduates have been well researched and models for doctoral students are increasing, investigating retention in master's programs has remained a subject largely ignored (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). For example, after reviewing a report from the CGS regarding graduate enrollment from 1988-2009, Barry and Mathies (2011) found that 87% of the new enrollees were master's students. However, Barry and Mathies continued, despite the overwhelming enrollment numbers, during that same period, there were over 20 studies on doctoral student retention and virtual none examining the issue at the master's level. Cohen (2012) stated that even the reasons why master's education has been overlooked in retention literature are unclear. Certainly, master's education is a significant contributor to higher education. First-time enrollment in master's programs is at a record high (CGS, 2017b). In 2014, master's program enrollment accounted for approximately 73% of all graduate enrollment (CGS, 2017a). The high numbers of master's candidates are ideal since the BLS (2015) predicts a shortage of workers with the master's degrees needed to meet the requirements of employers over the next 10 years.

One significant example of the shortage of qualified employees comes from the counseling field. Untreated mental health issues are among the top reasons for disabilities, are associated with a 10-year reduction in life expectancy, and resulted in approximately $467 billion in health cost costs in 2012 (Tran & Ponce, 2017). Appropriate treatment could help reduce human and financial costs of mental illness. However, in the United States in 2012, fewer than half the individuals who needed

mental health treatment received it (Tran & Ponce, 2017). Tran and Ponce (2017) investigated why Californians needing mental health services had not received it and found that nearly 84% of the participants reported not having the financial means or the ability to find an available therapist. Finding affordable and available services was a significant gap for these patients, but one that could be reduced with more accessible care.

However, despite the rise in enrollment and the clear need for master's level educated individuals, there has been no national effort to track retention, attrition, and graduation rates as there is at the undergraduate level and is starting to be at the doctoral level (CGS, 2013). While individual programs may track these statistics for their own purposes, complete national aggregate data for master's programs are absent. Cohen (2012) hypothesized that many misunderstandings might be contributing to the dearth of interest in the master's enrollment issue. There may be a lack of perceived need for national retention data since master's students tend to require little institutional investment for large financial return (Glazer-Raymo, 2005). There may be a belief that since master's students tend to be older, more motivated, and career driven and because of the condensed, nondissertation format of the master's program curriculum, that master's students lack the same pressures as doctoral students (Cohen, 2012; Glazer-Raymo, 2005). This perceived lack of pressure and increased self-motivation translates into the mistaken conclusion that retention for master's students is expected (Cohen, 2012). Barry and Mathies (2011) argued that institutions may not be interested in understanding the master's student population since they offer far less return on the

faculty focus and institutional resources compared with doctoral students who are expected to take leading roles in research and teaching in the academy upon graduation.

In 2013, the CGS piloted a study, *Completion and Attrition in STEM Master's Programs,* to answer some key enrollment questions. However, the project was focused solely on STEM master's fields and MBA programs (CGS, 2013). The survey found that 66% of STEM students completed their programs after 4 years of study (CGS, 2013). While slightly higher than the average completion rate of 60% for doctoral STEM students (CGS, 2010), the different completion rates are not great enough to support the argument that master's program formats make persistence more likely. The *Completion and Attrition in STEM Master's Programs* pilot study also found that the primary reason that nearly 40% of master's program students dropped out was due to lack of motivation (CGS, 2013). Gordon's (2016) master's students' qualitative interviews also revealed that motivation was key to master's students' success. Clearly, master's students' motivation is more complex than imagining it is created and maintained exclusively by the program and related solely to career connected reasons. Barry and Mathies (2011) and Cohen (2012) found that older master's students were less likely to complete their degrees disputing the assertion that because master's students were older than doctoral students, they are more likely to persist. Given the financial and psychological risk to the master's candidate, the financial hardship of attrition to the institution, and the need for trained professionals in society, collecting data to understand how best to assist master's students in retaining in programs and persisting to graduation makes good financial and ethical sense.

Types of master's programs. Glazer-Raymo (2005) highlighted three types of master's degree programs: (a) academic, (b) professional, and (c) vocational. Academic master's programs tend to provide students with a general exposure to a field rather than a professional credential. This type of master's program can lead to a doctoral program, can be awarded as part of a doctoral program, or may be awarded to doctoral candidates who fail to complete the program.

Master of Business Administration and Master of Fine Arts are examples of professional master's programs (Glazer-Raymo, 2005). These programs are typically designed for students who already have experience in a discipline and are looking to expand their knowledge and skills through first-hand learning. The conferral of the degree signals the student has achieved an advanced level of knowledge and has the qualifications to work alongside other professionals (Glazer-Raymo, 2005).

If academic master's programs are scholarly focused, vocational master's programs are practical and employment-focused (Glazer-Raymo, 2005). These programs are often regulated by licensure or regulatory boards and can be designed to meet the needs of the surrounding communities and employers. Vocational master's programs, with their focus on practical skills, bridge the gap between higher education and society providing for both the student and the larger civilization (Glazer-Raymo, 2005). Given future economic and employment needs, these programs are anticipated to continue to grow (Gordon, 2016).

Counseling master's programs. One such vocationally focused master's program that has struggled with the issue of student retention is counseling. The need for qualified

and credentialed counselors in society is clear. Duenow et al. (2017) stated “In the U.S., there has been a nationwide shortage of mental health professionals, and this shortage is more pronounced in rural communities” (p. 1). It is estimated that an additional 16,900 mental health workers will be needed by 2025 to meet the need in the U.S. Tran and Ponce (2017) investigated why Californians needing mental health services did not receive it and found that nearly 84% of the study participants reported struggling with finding an available therapist and lacking financial means to engage services. Inadequate mental health care has costs for individuals ranging from worsening of symptoms to risks of homelessness, suicide, and substance abuse, while communities face higher primary care use for mental health issues and higher tax payer expenditures for medical and safety costs (Duenow et al., 2017). The gap between mental health care needs and obtainable and affordable services creates a costly disparity that could be reduced with more accessible care. Counselor educators play a role in bridging that social gap. Gatekeeping is a primary ethical responsibility to ensure that students become highly trained and skilled mental health professionals (Crawford & Gilroy, 2013). This gatekeeping responsibility protects the well-being of students’ current and potential clients and safeguards the future of the counseling profession (Glance et al., 2012). However, the focus in both the ethical standards and the research has been on the functions of the gatekeeping role as it pertains to admitting qualified students and assisting students who exhibit problematic behaviors during training (Liles & Wagner, 2010; Rust et al., 2013). A much smaller amount of research has been directed toward efforts to retain qualified and well-performing students to encourage persistence to graduation. In fact, in the

literature review for this dissertation, I could find only one study that had a connection with program retention of master's students in good standing (Jensen et al., 2016). Still, CACREP has recognized and expressed concerns over retention in its master's programs and included directives for programs and training for faculty about this issue (Liles & Wagner 2010). While CACREP does not release retention statistics (i.e., information on the number of students who continue in the same program one academic period to another) they do provide enrollment and graduation data. Graduation is not possible without retention and so graduation rates can offer a hint about retention patterns. The accepted method of calculating graduation rates is to find the percentage of students who complete their program within 150% of the timeframe of the program. For example, an undergraduate degree is typically a 4-year program so graduation rates are calculated on a 6-year time frame (NCES, 2018b). For CACREP counseling master's programs the 150% timeframe would be 3 years. According to CACRRP, the enrollment in 2014 was 37,380 while graduation in 2017 was 13,119 for a graduation rate of 35% (CACREP, 2018a). In 2013, the enrollment was 37,648 while graduation in 2016 was 12,496 for a graduation rate of 33% (CACREP, 2016). In contrast, during the 2015 school year the field of social work had a 48% graduation rate (CSWE, 2016). CGS' (2013) pilot study, *Completion and Attrition in STEM Master's Programs,* found 3-year graduation rates for STEM field master's students to be approximately 60% and for MBA students over 80%. Given that fostering the development of quality master's students is of professional and ethical importance to the field of counseling and that producing such professionals provides

benefits to members of society, investigating retention in our programs to understand what factors influence and promote persistence is vital.

Master's student retention literature. Growth has been an essential component to the success of master's programs. Between 2000 and 2012 the number of master's degree-granting programs increased 63% (Gordon, 2016). Financially, universities granting master's degrees are in better health than public universities granting only bachelor's degrees (Alstete, 2014). Students benefit from obtaining a master's degree as well. The Bureau of Labor Statistics estimates employers will face a shortage of qualified workers for their positions that require master's degree. (BLS, 2015). Fields such as teaching, accounting, and athletic training are shifting to make the master's degree the preferred entry-level credential (Cohen, 2012). Individuals with a master's degree earn more over their lifetime and face less unemployment than those with lower education credentials (O'Brien, 1992). Seibert, Kraimer, Holtom, and Pierotti (2013) described master's programs as short-term investments for long-term payoffs in career advancements and salary increases. Despite the growth in these programs, the financial impact they have on institutions, and the contribution they make to the individual student, higher education researchers have put little effort into understanding the master's student. Unlike for undergraduate and doctoral students, few models dedicated solely to understanding the retention, persistence, and attrition of master's students exist (Barry & Mathies, 2011, CGS, 2013; Cohen, 2012; Gordon, 2016).

In a report on the *Completion and Attrition in STEM Master's Programs* pilot study for the CGS the authors observed that there had been only two multidisciple and

multiinstitutional studies examining reasons for master’s student retention neither of which had been conducted in the United States (CGS, 2013). Rather the limited research on retention in master’s programs had been field specific, population limited, or method focused. Highly specialized retention literature has focused on specific populations such as online learners (Patterson & McFadden, 2009), women (Müller, 2008), international (Van Nelson et al., 2004), and non-traditional students (Brus, 2006). Literature in the field of nursing has examined the graduate retention issue (Beauvais et al., 2014; Mathis, 1993) while focusing on areas such as online master’s programs (Gazza & Hunker, 2014) and diverse students (Veal, Bull, & Miller, 2012). As the discipline of athletic training considers shifting the required entry-level degree from the bachelor’s level to the master’s level, athletic training educators have investigated the differences between the two educational degrees in terms of career placement and retention levels (Bowman et al., 2015) as well surveyed program directors to gather perceptions of factors influencing master’s students enrollment decisions (Bowman et al., 2015). However, little progress has been made to establish a general model of master’s student retention that applies across disciplines, populations, institutions, and teaching methods.

Early attempts at understanding the needs of master’s students emerged from a search for a unified model of graduate retention. For example, Girves and Wemmerus (1988) conducted a quantitative study to design a model that linked “department and student characteristics, financial support, and student perceptions of the faculty with student grades, involvement in the program, satisfaction with the department, and alienation in order to predict progress toward the master's and doctoral degrees” (p. 163).

The records of 948 graduate students at a Midwestern university were examined. The sample was drawn from 42 programs across twelve colleges with 47% of the participants being female and 7% being minority (Girves & Wemmerus, 1988). Basic demographic information was gathered from the school records, and a survey was developed and distributed to the previously randomly chosen students (Girves & Wemmerus, 1988). The survey asked about financial issues, family and living situation, faculty relationships, satisfaction with the department, and barriers to program completion. A hierarchical regression was conducted in an attempt to develop an empirical model of graduate retention (Girves & Wemmerus, 1988). However, while Girves and Wemmerus were searching for a single model to explain the persistence of graduate students, two empirical models emerged from the results, one for doctoral students and another for master's students. Grades contributed most to the model for master's students and when factors such as students' relationships with faculty and departmental characteristics where added, 30% of the variance in degree progress was accounted for by the model (Girves & Wemmerus, 1988). However, grades were not significant contributors to the doctoral retention model, while social integration was an important factor. In contrast, social integration did not contribute to the master's student retention model (Girves & Wemmerus, 1988). Although not intended, this was one of the first studies to identify factors important to a potential model of master's student retention. Additionally, this study offered initial and significant support for the theory that doctoral and master's students had different characteristics driving their enrollment and that predicting their retention and attrition required unique models. However, Girves and Wemmerus

conducted this study with the assumption that master's and doctoral students functioned in and experienced graduate education in similar ways and this error likely influenced the study design. For example, funding for master's and doctoral students are strikingly different and can even influence the level of engagement students have within their departments. While a doctoral and master's student may both have external funding for their education, a doctoral teaching and research assistant is building faculty and peer relationships in ways a master's student receiving employer assistance is not. My study recognized the unique developmental factors of master's education and accounted for this in the design.

The purpose of Pyke and Sheridan's (1993) quantitative longitudinal study was to further the scholarly understanding of why some graduate students failed to complete their degrees as well as gather important program effectiveness data. The authors reviewed records from a 10-yearl period of 477 master's students and 125 doctoral students from a variety of programs at York University. Pyke and Sheridan constructed a prediction model, using a logistic regression analysis, of the demographic, academic, and financial support factors that influenced retention for graduate students. A dichotomous dependent variable measured if the student had completed the degree or not. As with the Girves and Wemmerus (1988) study, different models emerged for doctoral and master's students. Master's students with higher graduate grade point averages, longer enrollment in the program, increased funding, and a focused enrollment status were more likely to graduate. The model was able to predict approximately 30% of the variance associated with master's students' degree progress (Pyke & Sheridan, 1993). While this study did an

admirable job of modeling over 12 different factors and achieved a credible outcome, the use of longitudinal data from a single university may present problems. Students who entered the university in 1977 may have faced drastically different academic requirements or financial realities than students 6 or 9 years later. Additionally, the use of data from a single university may mean the model reflects a combination of factors unique to that setting. While I measured master's student actual retention behavior in my study, I sampled participants from several universities, and limited my timeframe to two academic time periods.

In the counseling field, Jensen et al. (2016) used a constant comparative approach qualitative design study to explore the impact of a first-year integration program on the retention and satisfaction of master's in counseling students. Twenty-four students participated in a series of events designed to increase their social integration within the culture of their program. The 24 participants were female (75%) and male (25%) school counseling (75%) and addiction counseling (25%) students, nearly half of whom identified as first-generation students (Jensen et al., 2016). The largest portion of the sample were Caucasian (92%), with the remainder identifying as Hispanic (4%), and Asian American (4%). The students participated in focus groups to understand how the activities contributed to their satisfaction with their master's program (Jenson et al., 2016). A structural analysis of the focus group data indicated that the students valued the relationships the activities helped them develop with peers and faculty. The study was grounded in the sense of belonging theory and the experiences revealed by the student interviews supported the importance of students feeling connected to and valued by their

program to engender high levels of satisfaction (Jenson et al., 2016). However, neither the student interviews or the study's conclusions linked sense of belonging, social integration, or high levels of satisfaction with retention. The focus of my study is on factors that foster retention for counseling master's students.

Barry and Mathies (2011) conducted a quantitative longitudinal study at a large research institution in the Southeast offering 140 master's programs to examine how certain student demographics, academic factors, and program of study were related to retention. Additionally, the authors reviewed the data to understand if phases of academic progress encountered by doctoral students applied to master's students (Barry & Mathies, 2011). The academic progress of 3799 master's students from all master's programs were tracked over a three-year period using university records (Barry & Mathies, 2011). Barry and Mathies described the demographics of the study:

> 60.4% of the students in the study are female while 70.8% students are white, 11.0% are international, 9.5% are Black/African-American, 2.3% are Asian, 1.6% are Hispanic, and 2.9% are of unknown race/ethnicity. The mean age of students at the start of their programs was 27.8 years. (p. 7)

The following factors were used as independent variables: gender; age; ethnicity; discipline of academic program; standardized test score; enrollment status; receipt of assistantship or fellowship. The dichotomous dependent variable measured if a student was retained for a second year or not (Barry & Mathies, 2011). The results of the binary logistic regression modeling indicated that standardized test scores did not correlate to graduation, part-time students were less likely to be retained, time to graduation was

improved for students receiving graduate assistantships, and older students were less likely to graduate (Barry & Mathies, 2011). The authors hypothesized that master's students would follow an adaption to their educational program framework similar to what doctoral students experienced. The students would pass through entry, integration, and research project phases and successful completion of each phase would allow them to persist, retain, and graduate (Barry & Mathies, 2011). However, the results of the study did not support this hypothesis, instead indicating that master's students did not experience the first or final phases in the same way as doctoral students (Barry & Mathies, 2011). Once again, this study indicated that master's students were not simply shorter tenure doctoral students, but a unique cohort of graduate students with their own motivators and characteristics. Barry and Mathies concluded with a statement echoed repeatedly throughout the limited master's retention literature "As the vast majority of graduate students are master's students (75%; NCES 2006), this just seems to be a gap in the research on a large group of students in higher education" (p. 24). Barry and Mathies recognized that one of the limitations of their study was that it was conducted at a single institution that housed its own values and culture which could influence the retention behaviors of students. My study drew student participants from multiple universities to understand retention behavior on a larger scale.

Cohen (2012) conducted a quantitative study to explore factors that influence students' ability to retain in their master's programs and complete their degrees. A primary goal of the study was to develop and test a model of master's student persistence. Four hundred master's students representing all the programs at a large Northeastern

university were surveyed about demographics, graduate grade point average, academic and program influences, professional integration, psychological influences, and intent and reasons for persistence (Cohen, 2012). The mean age of the students participating in the study was 33.62 years with 62% of the sample falling in the 20-29-year age range (Cohen, 2012). Seventy-eight percent of the sample was White, 76% were not parents, and 57% were not married (Cohen, 2012). Multiple regression analysis was conducted using the 20 factors from the survey to design a master's retention model (Cohen, 2012). The results showed that the best predictors of persistence were the student's age, involvement in professional and departmental activities, and intent to persist. Intent to persist was defined as the student's stated intention to reenroll for the following academic period (Cohen, 2012). Intent to persist had the strongest direct effect on persistence with a regression coefficient of .309, while younger age ($r = -.162$) and greater involvement ($r = .120$) had the most significant impact on retention when mediated by intention to persist (Cohen, 2012). Cohen hypothesized that intent to persist could be defined as a type of self-efficacy that allowed participants to overcome obstacles that forced other students to drop-out. Unlike in undergraduate and doctoral models study habits, peer relations, and institutional factors had no impact on persistence (Cohen, 2012). Despite a wealth of possible factors that could influence retention, Cohen's findings indicated that master's students' motivation for and commitment to their education is vital to their ultimate success. One significant limitation of this study was that it was conducted at a single university. As Cohen pointed out, other universities might create different

environments and motivations for master's students. My study drew participants from twelve different universities to partially address this issue.

In 2004 the CGS completed a comprehensive project to understand the attrition patterns of doctoral students (CGS, 2013). The success of this study convinced the organization of the feasibility of and need for the same type of project to understand the retention factors for master's students. To address the long-standing gap in knowledge about the characteristics that foster retention for master's students, the pilot study, *Completion and Attrition in STEM Master's Programs,* chose five universities to participate in a three-year study (CGS, 2013). This mixed-methods longitudinal study was conducted with 191 STEM master's and MBA programs and included a record review for collecting basic demographic data, surveys of graduate programs directors, focus group interviews with master's students and group interviews with graduate deans and graduate program directors, and surveys of first-year, graduating, and nonpersister students (CGS, 2013). The student surveys and focus groups asked about enrollment decisions, finances, professional development, and academic and social interactions, while the institutional, professional surveys asked about program enculturation, policies, financial and professional development opportunities, and mentoring, advising and other support opportunities (CGS, 2013). Survey responses were gathered from 948 first-year master's students, 968 graduating master's students, 308 master's students who had stopped/dropped out of programs, and 177 master's program directors. Fifty-five to 66 percent of the participants in the three studies were male and all were younger than 30 years of age (CGS, 2013). Seventy-one percent of the drop-out sample were U.S. citizens

(CGS, 2013). According the CGS (2013) among the participants, both U.S. Citizens and permanent residents, responding to all three of the student surveys, "between 73% and 78% were White, between four and six percent were Black/African American, between six and eight percent were Hispanic/Latino/Latina, and between eight percent and 10% were Asian American/Pacific Islander" (p. 44). The results reiterated Cohen's (2012) findings that older students tended to leave programs more often. CGS (2013) found older students' attrition rate was 24 percentage points higher than their younger peers. The two factors that students listed as most important to their success were their own motivation (92%) and nonfamilial financial support (82%). CGS found that students reported a significant reason they entered their master's programs was to improve employment opportunities (60%). Motivation to complete their degrees was embedded in their desires to improve the future for themselves and their families and programs that could not engage them by offering these types of opportunities had students with lower persistence intentions (CGS, 2013). The *Completion and Attrition in STEM Master's Programs* pilot study, while multi-institutional, was focused on MBA and STEM master's students whose professional integration may have colored their motivations and influenced their experiences. However, the results did add support to the existing limited literature that proposed the importance of master's students' age, financial support sources, and motivation as factors in their retention. My study focused on counseling master's students to aid counselor educators in understanding the unique needs of our population.

Gordon (2016) investigated three research questions about persistence at two comprehensive public universities in the mid-south using a qualitative case study design. First, Gordon was interested in understanding what factors influenced master's students' persistence. Secondly, Gordon wanted to know how master's students' persistence was prioritized by their institutions and how students perceived these efforts. Finally, Gordon examined what supports master's students wanted from their institutions. Gordon did not discuss the demographic characteristics of the fourteen student participants who were master's students at 11 programs at the two universities more specifically than to state that there was a cross-section of gender, ethnicity, and program of study. After conducting semistructured personal interviews with the 14 students and reviewing institutional texts documenting the universities' priorities regarding budgets, planning and reporting, Gordon identified three important core traits to master's students' persistence: graduate faculty support, self-motivation, and peer support. The master's students felt most connected to their faculty within their departments and less connected to the institution as a whole (Gordon, 2016). Of the three factors, self-motivation was the reason master's students most associated with their ability to persist in their education (Gordon, 2016). The students believed self-motivation to be integral to their success but tended to take the presence of the trait for granted (Gordon, 2016). The master's students were confused and frustrated by and preferred to avoid peers who appeared to lack the same motivational drive to succeed (Gordon, 2016). Conversely, peer support was valued when it manifested as an external source of inspiration. Students who seemed to contribute little, put forth minimal effort but achieved a great deal were not well received

in the peer group (Gordon, 2016). Self-motivation allowed the students to persist past obstacles and helped peers serve as supports and inspiration. Gordon conducted this study at smaller universities with limited focuses on the graduate population. The review of the institutional documentation showed that although intentions were good, little effort was exerted by these two schools to offer master's students support, resources, or connections that might improve retention (Gordon, 2016). The lack of focus on retention at these universities might have influenced how master's students perceived themselves and their place in academia. However, the results did offer further support for the importance of motivation as a key to persistence and the power it can have for students. Gordon noted that the master's students reported, "self-motivation as having a significant impact, allowing them to overcome barriers and challenges both internal and external to the university" (p. 122). The master's students in Gordon's study used their intrapersonal motivation to drive their efforts at conquering a new learning context despite any obstacles they encountered.

Theoretical Framework

Côté (2016) credits the inspiration for ICM to his lived experience transitioning across social status barriers from a working-class individual to a middle-class academician. Along with discipline-specific knowledge required to enter the field of sociology, Côté found the middle class had language, attitudes, behaviors, and social protocols that he needed to understand and produce to become a member of that social stratum. However, while the intellectual and emotional flexibility to cross social, cultural, and career divisions was vital to his success, a secure sense of self was equally important

(Côté, 2016). According to the ICM, it was an internal set of qualities or agentic identity characteristics that allowed the transitioning Côté to conceive of himself as a strong, coherent, and consistent personality and achieve success despite crossing shifting social contexts (Côté, 1996, 1997, 2002; Côté & Levine, 2014). The ICM has roots in psychological and sociological theories that support the basic premises of the model.

An Object, Subject, Project Historical View of the Concept of Self

Throughout human existence, the process of identity development has been of intense interest. Savickas (2011b) chronicled the development of the concept of the self within psychology and more specifically within the field of vocational psychology. According to Savickas over the decades that identity has been studied, self has been perceived as object, subject, and project. In the 19th century, the self was viewed as part of a collective whole - a family or community – defined by an adaption to the characteristics of the group and the role the individual played in contributing to the well-being of the communal structure (Savickas, 2011b). Gergen (1991) described the individuals living in this time period as having a strong belief in integrity, moral character, and the idea that actions showed the true nature of a person.

As society moved from agrarian to industrial means of production, the communal way of life began to dissolve, and individuals looked to define themselves not by their roles within the group but by their ability to survive outside the group (Savickas, 2011b). In a city crowded with people looking to fulfill their needs, an awareness of individual interests and abilities gave a person the edge over others seeking to make a life (Savicaks, 2011b). Just as machines were redefining production capacities in the industrial

landscape, humans began to value the same precision, predictability, efficiency, and control of human faculties (Gergen, 1991). A well-adjusted person was one who could use reason and ability to meet the demands of a situation (Gergen, 1991). In the early and mid-20th century, science became interested in facilitating an understanding of the important characteristic of identity and discovering ways to measure, analyze, categorize, and predict it (Savickas, 2011b). Identity and its development were conceived of as an object to be studied and controlled to improve human functioning.

A shift occurred in psychological theoretical thought in response to the pressure of individuals' being objectified as categories of responses (Salmela-Aro, 1992). Rather therapists such as Rogers and vocational theorists such as Super proposed a focus on the developmental course of a person's life, on their emerging self-concept, and growing internal awareness (Savicaks, 2011b). These theorists placed value on the subjective nature of the human experience. As psychology moved into the late 20th and early 21st century theorists began to consider how individuals' subjective perceptions of personal experiences could create identity (Savickas, 2011b). Constructivism arose to explain how an individual's reality was created from the meaning that people made from their experiences (Young & Collin, 2004). Constructivism contains two basic principles: (a) people are active in making meaning from their experiences, and (b) there is an adaptive and survival purpose to the constructions built (Raskin, 2011). Individuals construct their lives through the stories they tell by making meaning and imposing purpose on events and experiences in an effort to explain the past, organize the present, and create a path to the future (Savickas, 2011a). It is within their own narrative that individuals share their

perceptions of themselves or their identities, their adaptability or ability to overcome obstacles, and their life themes or the sources of energy for moving their personal story forward (Del Corso & Rehfuss, 2011). In constructivism, there is an essential human nature that influences the personal and private meaning building process (Young & Collin, 2004). Closely connected to, but theoretical unique from constructivism, is social constructionism (Raskin, 2011). While the two core principles remain the same, the two theories differ in how the meaning-making process occurs (Young & Collin, 2004). Social constructionism theories hold that individuals make meaning through relational methods (Raskin, 2011). Social factors such as culture, language, and community help to form individuals' interpretation of experiences (Young & Collins, 2004). Savickas (2011b) described identity as emergent, "narrated by language, historically situated, socially constituted, and culturally shaped" (p. 25). While both theories are concerned with how individuals make meaning from experiences and construct their personal realities, constructivism views the process as an individual pursuit solely determined by internal characteristics, and social constructionism perceives the process as a collectivist activity solely determined by external forces (Raskin, 2011). Traditional constructivism places the entire influence for meaning-making within the individual, while strong social constructionism promotes the idea that all forces influencing human meaning-making exist in the social context outside of all human agency to act upon them (Somerville & Bengtsson, 2002). In designing ICM, Côté (1996, 1997, 2002, 2016) rejected both traditional constructivism and strong social constructionism but sought to design a social

psychology model of identity development that recognized both agentic and social influences on individuals' identify formation process.

Late Modernity

Giddens (1991), a British sociologist, in a seminal work, coined the term late modernity to describe life in the late 20th century and early 21st century. Giddens argued that modern life is not drastically different than previous means of existence, but that several important forces had changed to alter our experience (Giddens, 1991). Technology has virtually eliminated the barrier of time and space in social interactions. Individuals have nearly instantaneous access to other people almost regardless of time, distance, cultural differences, or economic constraints (Giddens, 1991). This has led to geographic, circumstantial, and chronological blurring that can leave people contextually adrift. Gergen (1991) discussed the impact that an increase in technological social relations and a decrease in face-to-face interactions have had on the individual's identity development. Rather than a stable core self-built from long associations and reflected experiences, a sense of self in late modernity is shaped by a plethora of other's images which are ungrounded and fleeting (e.g., Snapchat) but are the relational material available from which to construct personal identity (Gergen, 1991).

Additionally, according to Giddens (1991), the traditions and structures of the past have been largely eroded by modern forces. Institutions that once offered support and guidance to individuals as they planned important life milestones and transitioned from role to role have become less stable and reliable (Côté, 1996, 1997, 2002). As Savicaks (2011b) noted, in the past, the communal nature of traditional societies provided

structure and behavioral dictates for people to follow, but as institutions, traditions, and social structures have weakened, existing transitional paths (i.e., school to work, or childhood to adulthood) have become less predictable, and individuals are faced with plotting their life course (Côté, 1996, 1997, 2002; Giddens, 1991). In late modernity individuals have the ability to make choices about their actions, are accountable for the outcomes, and ultimately carry the responsibility for the identity constructed from this process (Giddens, 1991). Côté (2002) developed Giddens (1991) concept of personal responsibility for identity proposing that individuals may react to this challenge in one of two ways – embracing of the liberation of social freedom or frozen by the terrifying prospect of choice. Côté and Levine (2002) proposed a spectrum of identity development from default to developmental individualization. Default individualization occurs when people allow their identities to be formed for them through chance events, passive acceptance of other's decisions, personal inaction, and wholesale reception of a mass-produced identity leading to a default place in adult society (Côté & Levine, 2002). Identities for these individuals have been formed without the input of constructive energy or benefit of reflective effort. Developmental individualization is an active approach to personal development in which social structure gaps are opportunities for growth and recognition as a responsible adult (Côté & Levine, 2002). Individuals on this path are internally motivated and externally aware. A strong capacity for designing a life path through a well-constructed identity also provides the individual the stability to manage the inevitable challenges inherent in mastering life goals (Côté, 1996, 1997).

Identity Capital Model

Côté (1996, 1997, 2002, 2016), in developing the ICM, acknowledged deeply ingrained and often intractable social barriers of the current culture but questioned sociological and psychological theories that placed the responsibility for individual development either squarely on societal issues (social constructionism) or individual characteristics (constructivism). Rather, Côté proposed the ICM, a model consisting of two sets of resources. The first component often called social or cultural capital consists of tangible resources that can range from conferred identities such as social class, gender, and ethnicity to earned identities such as academic credentials and professional reputation and networks (Côté, 1996, 1997, 2002, 2016). Material possessions, knowledge of accepted social behavior, and strong social skills can also be considered part of this sociological set of cultural capital (Côté, 1996, 1997, 2002, 2016). However, Côté pointed out that in the climate of late modernity the value of conferred and earned identities is tenuous. The power and worth of such identities flow from social institutions, and with modern disillusionment with these social organizations creating instability and structural upheaval, identities built around them become of less worth and hold less influence in society (Côté, 2016). Likewise, the social capital resource of professional and social skills is a shifting set of expectations set by the needs of society (Côté, 2016). For example, in the late 20th century companies sought employees who were specialists in their fields, individuals who had deep knowledge about a specific discipline (Demirkan & Spohrer, 2015). These individuals were referred to as I-Shaped professionals (Demirkan & Spohrer, 2015). However, as the needs of organizations changed to manage

technology and global competition, employees were sought who had a depth of knowledge in specific fields, as well as the familiarity to work across disciplines (Demirkan & Spohrer, 2015). Demirkan and Spohrer (2015) offered this description of T-Shaped professionals:

> …lifelong learners with open minds who collaborate easily across their local and global networks. They are broad, empathic communicators and challenge seekers as well as deeply engaged, critical thinkers. And they are entrepreneurially minded opportunity finders with imagination who learn quickly from failure. (pg. 13)

The late modernity marketplace has demanded a shift in the type of social capital required for employee success. Another example of this late modernity change is offered in a whitepaper from the Royal Bank of Canada (RBC, 2018). Spurred by ongoing conversations and concerns about computers, automation, and artificial intelligence and the disruption these technologies are bringing to the human workforce, the RBC spent over a year interviewing employers, policymakers, educators, workers, and students to consider what the next decade of work might hold (RBC, 2018). The study found that in the next decade over 25% of Canadian jobs would undergo a significant change in the skills needed due to technology but the Canadian higher education system was not prepared to train individuals for this marketplace (RBC, 2018). Employers will be seeking skills and competencies rather than credentials with an emphasis on the types of tasks for which technology is ill-suited – critical thinking, decision-making, cultural awareness and influence (RBC, 2018). Individuals who are flexible, adaptable, life-long

learners, and career mobile will thrive in the rapidly changing work environment (RBC, 2018). In other words, social capital such as assigned or earned identities will provide less value than a person's ability to draw on their coherent internal sense of self to adapt, pivot, and learn in and from rapidly changing contextual work environments.

Côté (1996, 2002, 2016) acknowledged that while cultural capital is undeniable and useful to pursue, develop, and exchange, its worth, in the current era diminishes beyond its return. What is needed is for the individual to create and sustain an identity that can withstand the changes of late modernity (Côté, 1996, 2002, 2016). This identity will support the individual in social interactions while providing a secure sense of self during times of transition. Côté (1996, 1997, 2002) defined the set of characteristics needed for this strong identity as identity capital. Identity capital consists of a set of intangible resources including assets such as ego strength, an internal locus of control, self-esteem, a sense of purpose in life, social-perspective taking, critical thinking abilities, cognitive reasoning abilities, and moral reasoning abilities (Côté, 1996, 1997). The aptitudes of identity capital allow the individual to move at will through the fluctuating contexts of late modernity using the conferred and earned identities and social skills as needed all while maintaining a strong core and consistent sense of self (Côté, 2002, 2016).

Savickas et al. (2009) provided an example of the ICM from a vocational psychology perspective. Workers in the 21st century face a marketplace filled with unpredictable and frequent transitions (Savickas et al., 2009). In 2017, BLS reported that baby boomers held an average of 12 jobs during their 35 years of working and that

individuals changed jobs most frequently before age 25. In other words, on average, workers changed jobs every 3-5 years (BLS, 2017). Those seeking employment in the era of late modernity must adjust how they approach the task (Savicaks et al., 2009). To thrive in an uncertain and frequently changing job market, workers must rely on their own path construction abilities rather than expect organizational guidance (Duarte, 2009). Successful 21st-century job seekers must be flexible in the face of constant change, life-long learners of rapidly developing technology, capable of seeking and creating career opportunities, and able to express and market a developed career skill set grounded in a clear and stable vocational identity (Briscoe & Hall, 2006; Savickas et al., 2009). Despite uncertain and shifting social, vocational, and economic contexts, effective 21st-century employees must be capable of constructing life paths grounded in a commitment to a personal sense of self (Savickas et al., 2009). According to Savicaks et al., it is a strong identity that permits the individual to successfully transition across frequent employment changes without the guidance and stability of traditional organizations.

Identity Capital Model Literature Review

Over the past twenty years, research has been conducted that supports the ICM (Burrow & Hill, 2011; Côté , 1997, 2002; Lewis, 2016; Luyckx et al., 2011; Negru-Subtirica et al., 2016; Sica et al., 2014). Côté (1997, 2002) was the first researcher to examine the model in depth, however other researchers have looked at the value of identity capital for work engagment and academic success (Luyckx et al., 2011; Sica et al., 2014; Simon, 2012). Addtionally, strong identity capital has proven efficacy in promoting happiness, hopefulnes, and higher levels of well-being (Burrow & Hill, 2011).

Agency-structure split. In his seminal study to examine the intersection of cultural and agentic capital, Côté (1997) chose students from the Canadian higher education system. Canada has invested monetary and social efforts to create more egalitarian opportunities for higher education, but despite these efforts, the student body remained largely middle class (Côté, 1997). Côté believed that studying a sample with a significantly homogenous social and cultural background would provide an opportunity to differentiate the contributions of structural and agentic factors to identity development. The purpose of the study was to design reliable measures of identity capital, investigate the relationships between the agentic and sociological factors, and understand how identity capital is acquired by college students (Côté, 1997). Côté developed several instruments for this study including the MAPS that measures intangible characteristics such as purpose, self-esteem, and locus of control and the two-factor ISRI a measure of identity capital accumulation (Côté, 1997). The first factor, the Adult Identity Resolution Scale measures the participants' sense of adult identity, while the second factor, the Community Identity Resolution Scale measures the participants' feelings of integration into the larger adult community (Côté, 1997). Tangible or sociological factors measured included gender, ethnicity, parental education and income, parental financial investment in their children, and participants' perceived special skills with corresponding benefits (Côté, 1997). One hundred and seventy Canadian college students were surveyed during their first and third years in school using the previously discussed instruments (Côté, 1997). At time one 43% of the sample was male, and the average age of the respondents was 19 years (*SD* = 1.6; Côté, 1997). Sixty-seven percent of the original sample returned

to participate at time 2 of whom 61% were female, and 39% were male (Côté, 1997). Repeated measures MANOVAs were used to find that social capital such as mother's income (T1: $r = -.03$, T2: $r = .05$), father's education (T1: $r = -.00$, T2: $r = .09$), investment in their children (T1: $r = -.04$, T2: $r = -.03$), or club involvement (T1: $r = .01$, T2: $r = .07$) were not correlated with participant identity development (Côté, 1997). However, the purposeful use of a special skill was correlated with identity development (T1: $r = .38$, $p < 0.001$ T2: $r = .34$, $p < 0.001$) and tended to yield more input into identity maturation than any other sociological factor (Côté, 1997). This seminal work on the ICM examined the agency/structural split and provided evidence for the validity of the MAPS and ISRI instruments.

Côté (2002) conducted a follow-up study 10 years after the 1997 investigation to determine how structural and agentic factors were influencing career and life satisfaction. Côté hoped to establish more proof for the ICM by investigating and disproving both the individualization process (personal agency predicts outcomes without the influence of social factors) or structural process (social structures predict outcomes without the influence of agency) of identity formation (Côté, 2002). Côté believed that the participants' agentic characteristics would be predictive of career and life satisfaction, while social traits such as gender and parental financial aid would not have had an significant impact. Côté conducted a quantitative survey study with 125 participants from the 225 participant pool he had studied in the 1997 investigation. In this sample 54% of the participants were female, 41% were male, 81% were White, 12% were Asian, 4% were Black, and 6% were recorded as 'other' (Côté, 2002). While most of the measures,

including the MAPS and ISRI from the 1997 study where repeated, assessments of job, salary, and life path satisfaction were added to reflect the participants' vocational context (Côté, 2002). At the 10 year assessment, repeated measures MANOVAS indicated that social capital had lost influence and the agency the students showed during their first year in university was a stronger correlate to their reports of job satisfaction ($r = .23$. $p < 0.05$), personal development ($r = .34$, $p < 0.001$), and identity capital ($r = .40$, $p < 0.001$) then factors such as father's income ($r = -.10$) or mother's education ($r = -.05$; Côté, 2002). It appeared that neither individualization or structural process could explain how these students successfully formed an identity. Rather identity formation occurred as the result of agentic characteristics influenced in formation by social capital with agentic characteristics becoming the dominant power to shape life paths and satisfaction over the long-run (Côté, 2002). This study deepened Côté's seminal work on the agency/structure construct of the ICM and offered further support for the ICM and its organization. However, the sample was relatively small and homogenous. Nonetheless, the results indicated that given the goal of allowing individuals to become self-determining agents, certain intrapersonal factors need to be fostered to help them build strong identities (Côté, 2002).

Tikkanen (2016) also investigated the ICM split between social and agentic characteristics by attempting to hold social factors constant. The quantitative study was conducted with 354 Finnish 14 and 15-year-olds from disadvantaged (43%) and affluent schools (57%). The sample was also divided by the educational and employment levels of the children's parents (Tikkanen, 2016). Eighty-five percent of the participants from

disadvantaged schools had mothers with low levels of education and 79% had fathers with low levels of education (Tikkanen, 2016). Children from affluent schools had mothers (59%) and fathers (54%) who were in managerial or professional employment roles, and fathers who were significantly less likely to be unemployed (2% compared to 8%), and twice as likely to be self-employed (14% compared to 8%; Tikkanen, 2016). Tikkanen suggested that Finnish students, aware of the social safety net that exists in Finland providing all living requirements regardless of a person's academic or career achievements would, regardless of their current conditions, academic expectations or outcomes, show little concern for their futures. The purpose of the study was to investigate if: (a) agency traits of the ICM, (b) social class, or (c) parental education would have more influence on adolescents' concerns over prospective careers, education achievement, and status in society (Tikkanen, 2016). Tikkanen defined worry as the uncertainty that exists about the future due to the unstable nature of modern life. The author hypothesized that socioeconomically advantaged students would have less worry about their future and that concerns would be even lower for those students whose agency traits were strong (Tikkanen, 2016). The students were measured on five variables: self-efficacy; parental support; academic self-concept; future worry; and parental education level. Using structural equation modeling (SEM), Tikkanen found that regardless of the socioeconomic background of the school attended or the educational level of the parent, the adolescents all exhibited the same levels of confidence in their futures (t (352) = 1.42, p = .16). The students also showed the same confidence in their academic achievement. Students with stronger identity capital did show a greater decrease in concerns about their

prospects ($r = -.37$; $p < .01$; Tikkanen, 2016). Agentic characteristics provided students, regardless of social status or parental background, a sense of identity that provided them a possible life path and confidence in their ability to overcome inevitable obstacles (Tikkanen, 2016). Tikkanen commented that the study was limited by the cross-section design and relying on the self-report of the adolescents about their intend actions in the future. The design of my study allowed me to track master's students across two academic periods to assess how their reported identity development was expressed in their actual retention behavior.

Negru-Subtirica et al. (2016) approached studying the agency/ structure split in the ICM by investigating one component of identity capital. Negru-Subtirica et al. focused on adolescents' identity commitments also conceived of as personal goals and termed meaning in life. Individuals with a stronger sense of self organize their experiences, perceive their capacities, and derive meaning from their actions based on the life goals to which they are committed (Negru-Subtirica et al., 2016). The study examined if gender and age would moderate the correlation between identity commitment to future goals and meaning in life (Negru-Subtirica et al., 2016). A sample of approximately 1,000 Romanian ninth to 12th graders were surveyed at three measurement points during one school year (Negru-Subtirica et al., 2016). Fifty-nine percent of the sample were female, the average age of the sample was 16.64 years (SD = 1.29) with 35% of the sample aged 13–15 years, and 65% aged 16–19 years (Negru-Subtirica et al., 2016). Negru-Subtirica et al. conducted a latent growth curve analyses and the results indicated that there was a positive correlation between identity

commitment and meaning as well as the exploration process and search for meaning (Negru-Subtirica et al., 2016). Students who strongly identified with their future goals evidenced a clearer sense of meaning indicating a more secure sense of self (Negru-Subtirica et al., 2016). The study results were not moderated by the participants' gender or age (Negru-Subtirica et al., 2016). Negru-Subtirica et al. concluded that participants who were highly committed to their goals, had a strong sense of meaning in their life and that these two constructs worked in a continuous loop to feed each other. According to Negru-Subtirica et al. (2016) "These relations can foster young people's identity capital and can help them in resisting the cultural destructuring of late-modern societies in an agentic manner" (p. 7).

One of Côté's (2002) goals for the ICM was to provide a balanced roadmap for helping those in transition become self-determining agents rather than passive absorbers of identity development. The literature on the ICM appears to indicate that agentic characteristics are foundational and have long-term power for identity development, or as Côté (2002) stated, "go together to produce positive life-project outcome" (pg. 132). As counseling master's students face a myriad of personal and professional transitions including entering into an insecure vocational context, it is clear that it is their stable and coherent identity that will bridge the gap and allow them to plan for and persist through the inevitable obstacles.

Multicultural applications. The ICM has been used to successfully explore the identity development of transitioning youth in Finland (Tikkanen, 2016); Romania (Negru-Subtirica et al., 2016); and Italy (Sica et al., 2014). Additionally, ICM has been

used in Belgium (Luyckx et al., 2011); Portugal (Oliveira et al., 2014), and China (Yuan & Ngai, 2016). The following two studies highlighted cross-cultural comparisons of the ICM theory.

Côté, Mizokami, Roberts, and Nakama (2016) sought to explore the validity of the ICM through a quantitative survey study using two different cultural populations, American and Japanese college students. The primary purpose of the study was to examine if there would be a major difference between the two cultural samples regarding how identity developed (Côté et al., 2016). The authors also questioned if age and gender would influence agentic characteristics differently and if the concept of individualistic collectivism might influence the development of identity capital. Approximately 1000 students, 500 from each country, were surveyed using the MAPS20 and the ISIR assessment (Côté et al., 2016). The students in the American sample ranged between 18–24 years old with a mean age of 21.21 years (*SD* = 1.86), and half were male (55%; Côté et al., 2016). The students in the Japanese sample were slightly younger with a mean age of 20.39 years (*SD* = 1.43) and had somewhat more females represented in the group (51%; Côté et al., 2016). In the Japanese sample, 99% of the respondents chose Japanese as their race, while in the American sample the respondents' ethnicity is summarized as follows: White (67%), Black (7%,) Hispanic (8%), Asian (10%), and other (9%).

An SEM analysis produced results that indicated that for both samples agentic characteristics were essential to understanding variations in how participants resolved and acquired adult concepts and community standing (Côté et al., 2016). However, which agentic characteristics where most important differed by participant culture and gender.

Japanese men reported ego strength as important ($p < .000$), purpose in life as more salient ($p < .000$) and internal locus of control less ($p = .067$) important for the Japanese population compared to the American population, while internal locus of control was of strong importance for American women ($p < .000$; Côté et al., 2016). Côté et al. (2016) hypothesized that compared to American culture, Japanese culture continues to offer transitioning adults normed expectations for life paths which requires less personal control of the external situation but more ability to express a social role. Individuals faced with social barriers, such as women facing discrimination, may feel a greater need for control of external situations. Overall, this study offered the first indications that the ICM has generalizability to different cultures and a variety of contexts (Côté et al., 2016). My study's sample was geographically diverse, and the Côté et al. study provided support for the generalizability of the results using the ICM and the MAPS20 across multiple cultures.

Schwartz et al. (2009) explored how personal identity might mediate the relationship between cultural identities and adaptive psychosocial functioning. Four research questions were investigated by this quantitative survey study: (a) is there a relationship between personal identity exploration and psychosocial functioning, (b) what are the relationships of personal compared to ethnic identity exploration and psychosocial functioning, (c) does identity confusion play a mediating role in the relationship of personal and ethnic identity exploration to psychosocial functioning, and (d) is there a difference in these relationships across ethnic groups. Seven hundred and fifty White, Black, and Hispanic college students from Florida International University (73%),

University of Massachusetts-Amherst (18%), University of Miami (3%), University of Nebraska-Lincoln (3%), and California State University-Monterey Bay (3%) were surveyed using measures of personal and ethnic identity exploration, adaption and maladaptive psychosocial functioning, and identity confusion (Schwartz et al., 2009). The sample contained 186 men and 719 women enrolled in undergraduate social science classes (Schwartz et al., 2009). The respondents ranged in age from 18 to 29 with a mean age of 19.84 years ($SD = 2.14$; Schwartz et al., 2009). Ethnically the participants in the study were White (34%), Black (16%), and Hispanic (50%; Schwartz et al., 2009). The results of an SEM analysis indicated that participants who had better attachments to both their heritage-cultural identity and their American-cultural identity, regardless of ethnicity, origin of birth or generational immigration status, had better psychosocial adaptation ($r = -.80$, $p < .001$; Schwartz et al., 2009). More importantly for the ICM, the mediation analysis indicated that personal identity (agentic characteristics) served as a mediator between cultural identity and psychosocial adjustment (Schwartz et al., 2009). When analyzed in relationship to psychosocial adjustment, all of the subscales on the MAPS20 had significant ($p < .001$) correlational values between .53 and .83 (Schwartz et al., 2009). Agentic characteristics, it was hypothesized served a protective role providing a consolidating framework connecting cultural identities and creating healthy functioning (Schwartz et al., 2009). Schwartz et al. pointed out that one limitation to this study was that the measurement of psychological well-being (PWB) was, in part, dependent on asking emerging adults about their tolerance for behaviors which may be typical for their developmental stage. Schwartz et al. stated that using external and observable behaviors

might offer a clearer picture of respondents' impulsivity and goal indifference. My study measured observable retention behavior of master's students.

Mental health and well-being. Oliveira et al. (2014) studied Portuguese adolescents as they transitioned into adulthood. In traditional Portuguese society, families have been the guiding structure for adolescents providing psychological and financial support and eventual permission to transition into adult roles (Oliveira et al., 2014). As increased length of schooling and lack of employment opportunities have become a reality for Portuguese youth, the traditional pattern of transition to adulthood has become less stable (Oliveira et al., 2014). Oliveira et al. hypothesized that stronger active strategies for overcoming obstacles and constructing adult identities would influence PWB and that these strategies would be enhanced by parental support and accumulated identity capital. A quantitative survey design study was conducted with 620 Portuguese students who ranged in age from 18 to 30 years with a mean age of 23 (SD = 3.8; Oliveira et al., 2014). Fifty-seven percent of the sample was female, 66% were at university or had completed a degree, and 72% of the respondents lived with their parents (Oliveira et al., 2014). Forty-one percent of the participants reported being financially independent of their parents, but 46% indicated their socioeconomic status to be low, while 34% indicated a medium socioeconomic status and 20% indicated a high socioeconomic status (Oliveira et al., 2014).

The individuals were administered questionnaires about their parental support, purpose in life, self-efficacy, self-determination, uncertainty management, and PWB (Oliveira et al., 2014). A path analysis was conducted to construct a model of factors that

influenced PWB (Oliveira et al., 2014). Parental financial support did not have a significant direct influence on PWB (r = -.06; Oliveira et al., 2014). The strongest predictor of PWB was agentic identity capital (r = .65, p < .01; Oliveira et al., 2014). The model strengthened when adding in the effect parental support had on the development of the adolescents' agentic identity (β = .1416; Oliveira et al., 2014). According to Oliveira et al. (2014), "Parental autonomy support was evidenced as a strong direct predictor of intangible identity capital, which, on its turn is the strongest predictor of PWB" (p. 1452). It appeared that when parents were able to provide young adults a context in which to develop an independent and strong sense of their identity they were more likely to weather the obstacles of life and be psychologically well. Oliveira et al.'s results offer a suggestion that during times of developmental transition, providing individuals environments in which identity development is supported and fostered can supply multiple benefits. In graduate education this may translate into better emotional resilience, academic achievement, retention, and graduation. However, Oliveira et al.'s study population was highly culturally focused on Portuguese youth and further research to provide support for these ideas is needed.

Burrow and Hill (2011) used the ICM as a framework to examine how purpose acts to mediate the relationship between identity and well-being for adolescents and young adults. The intention of the three studies Burrow and Hill conducted was to examine how identity and purpose were related to well-being among adolescents and emerging adults both on a meta level and in day-to-day development. The authors theorized that a clear purpose might lay the groundwork for the growth of identity leading

to increased well-being (Burrow & Hill, 2011). Part one of a two-part quantitative study sampled 107 adolescents from a private, urban, Catholic high school while the second part of the study included 398 undergraduate participants from a Midwestern Catholic university (Burrow & Hill, 2011). In study 1A the students were recruited from an English class at the high school. Fifty-one percent of the sample was female and the participants had a mean age of 15.74 years (*SD* = 1.85; Burrow & Hill, 2011). Ethnically the sample consisted of individuals from the following groups: White (65%), Latino (15%), African-American (9%), and Asian (8%). The respondents were in the following grade levels: freshmen (26%), sophomores (22%), juniors (29%), and seniors (22%; Burrow & Hill, 2011). The sample for study 1B consisted primarily of women (58%), Freshmen (64%), with a mean age of 19.0 years (*SD* = 1.11) who participated in the online study as part of an undergraduate course (Burrow & Hill, 2011).

Both studies used measures of identity, purpose, hope, happiness, and positive affect to examine relationships. Correlational and mediation analyses were conducted, and the results indicated that identity and purpose were correlated with well-being (B = 0.37, t = 6.33, p = .05; Burrow & Hill, 2011). Purpose, Burrow and Hill (2011) hypothesized, served as identity capital during this period of life and was associated with higher levels of well-being.

A third study, with a sample of 135 high schoolers from two different Midwestern high schools, measured identity, and purpose for 14 days using emotion dairies (Burrow & Hill, 2011). Fifty-seven percent of the sample was female, and the average age of the participants was 16 years (*SD* = 1.43; Burrow & Hill, 2011). The respondents were in the

following class levels: freshmen (19%), sophomores (27%), juniors (28%), and seniors (25%). Ethnically the sample consisted of participants from the following groups: White (76%), Latino (7%), African-American (15%), and multiracial (1%; Burrow & Hill, 2011). Using the same assessments as the previous two studies, Burrow and Hill (2011) first measured participants' purpose and positive and negative emotions. The participants were then asked to complete 14 daily diaries about their negative and positive emotions. Multilevel random coefficient modeling was used to analyze the diary data, and the results indicated that purpose was primary to shaping identity and mediated feelings of daily well-being (Burrow & Hill, 2011). Overall, Burrow and Hill found support for the idea that having a sense of purpose ($\beta = .265$, $SE = .058$, $p = .01$) and a commitment to an identity ($\beta = .304$, $SE = .094$, $p = .01$) contributed to daily emotional well-being. The three studies found that young adults and adolescents who had an established purpose and identity evidenced higher levels of well-being (Burrow & Hill, 2011). Burrow and Hill's studies were focused solely on the role that purpose plays in building identity and how that loop fosters psychological well-being. However, the ICM contains multiple agentic characteristics that are all necessary for developing identity. Additionally, as Burrow and Hill pointed out they did not clearly define for participants what was meant by purpose and that such an encompassing term and current social axiom could be interpreted to mean everything from a religious calling to a financial goal depending on the individual. My study focused on retention as a goal and included all the factors of the ICM in the model.

Luyckx et al. (2011) conducted a quantitative study to assess how identity instability in young adulthood relates to life and work outcomes and if having strong identity capital characteristics could positively influence such outcomes. A sample of 202 working Belgian young adults were administered a series of questionnaires to assess their levels of identity capital, work engagement, depression, and self-esteem. The respondents in the sample ranged in age from 18-30 years old with a mean age of 25.41 years (SD = 2.74; Luyckx et al., 2011). Sixty-four percent of the participants were women, 22% were married, and 66% had received a college degree (Luyckx et al., 2011). The majority of the respondents, 68%, were working in the social sector, full-time (85%), on permanent contracts (67%), and earning between $1390 and $2400 a month (Luyckx et al., 2011).

Luyckx et al. (2011) used assessments to measure identity development, self-esteem, depression, and burn-out. The results of four one-way MANOVA indicated that identity instability predicted higher levels of depression ($r = .40$, $p < .001$) and lower levels of self-esteem ($r = -.38$, $p < .001$). An interaction effect was found between identity instability and sense of adult belonging with job engagement ($r = .24$, $p < .001$; Luyckx et al., 2011). Luyckx et al. concluded that these results supported the body of literature that suggested an insecure identity during the transition period of young adulthood has negative intrapersonal impacts. As Côté (1996, 1997, 2002) and Savickas et al. (2009) have discussed the current era of late modernity can provide young adults an opportunity to take a more active and directive role in establishing the course of their lives, but it can also create feelings of confusion and being overwhelmed by the possibilities. The hallmarks of depression, anxiety, and low self-esteem could be

indicators that individuals have stopped attempting to discover a sense of self and are lost in the uncertainty of societal choices (Luyckx et al., 2011). Master's students are individuals experiencing a time of transition with negative emotional outcomes a significant possibility (Randall et al., 2018). Fostering motivation, supporting their PWB, and maintaining program engagement are all likely factors in promoting retention.

A strong sense of self built from secure agentic characteristics such as purpose tends to serve a protective mental health effect. Individuals with a robust sense of self are more engaged with their jobs, happier, more hopeful, and have higher reported levels of well-being (Burrow & Hill, 2011; Luyckx et al., 2011). As master's counseling students pursue academic, vocational, and personal transitions strong agentic characteristics will serve as protection against the inevitable stresses of pursuing their life project.

Career and education. Lewis (2016) used a holistic single case study approach to "explore the nature of SJ's identity capital prior to and during his socially entrepreneurial response to a time of crisis" (p. 193). SJ was a 21-year-old college student at a local university in Christchurch, New Zealand when a powerful earthquake caused significant damage and suffering. SJ mobilized social, financial, and human resources to contribute aid to the crisis response efforts (Lewis, 2016). Lewis used a qualitative research format to describe how SJ accumulated and spent his identity capital in service of launching and sustaining his socially focused entrepreneurial work. First person interviews were supplemented with reviews of publicly available social and media information to understand how SJ's identity and agentic characteristics contributed to his ability to establish and maintain the SVA nonprofit (Lewis, 2016). In forming and

running SVA, SJ appeared to act in a manner wholly consistent with a long-held personal ideology (Lewis, 2016). His capacity to leverage intangible identity capital such as a sense of purpose, ego strength, social-perspective taking, critical thinking abilities, and moral reasoning benefited not only his own entrepreneurial efforts but the goals of SVA (Côté, 1996, 1997; Lewis, 2016). SJ was able to use the foundation of his intangible resources to create an opportunity to attract more tangible resources (e.g., money, staff, media attention) to address a social problem. This study showed how, despite the chaos of rapidly shifting and deeply impactful contexts, an individual can remain dedicated to a formed core identity and use the developed agentic capital to achieve goals.

Webb et al. (2017) were interested in understanding if volunteering could assist those leaving foster care in developing identity capital and with agentic individualization. Additionally, the authors looked to explore personal resilience in relationship to identity capital. Webb et al. undertook a positivist paradigmatic qualitative study with adolescents who were either currently in the United Kingdom foster program or in the process of aging out of the system. The authors conducted semi-structured interviews with eight adolescents from a larger cohort of 18 young adults engaged in a program called Boom that offered appropriately matched and supported volunteer opportunities (Webb et al., 2017). The larger cohort consisted of 12 females and six males, 16 of whom were white British, 10 who identified as having a disability and all of whom ranged in age from 14–21 years (Webb et al., 2017). The interview questions and answers analysis focused on the impacts of volunteering on the participants' identity development and acquisition of intangible components of the ICM (Webb et al., 2017). The participants' reports

evidenced proof of growth and maturity of their identities through the acquisition of agentic characteristics such as resilience, self-esteem, locus of control, and social-perspective taking (Webb et al., 2017). This study offered an interesting insight into the connection between the development of identity and agentic characteristics.

Sica, Sestito, and Ragozini (2014) hypothesized five different modalities of identity coping (identity problem solving and transition to adulthood; normative adaptation and lack of difficulties consciousness; searching without outcomes, developmental diffusion; lack of involvement and participation in identity task; carefree diffusion or culturally adaptive diffusion; getting stuck disturbed or ruminative diffusion) that were correlated to positive and negative psychosocial functioning (e.g. self-esteem, anxiety and depression). Sica et al. conducted a quantitative survey study with 330 second year Italian college students using measurements of identity development and identity distress, locus of control, self-esteem, and depression and anxiety. The participants in the study were second-year university students a quarter of whom were studying law and another quarter studying psychology with the rest of the sample split between a variety of other disciplines (Sica et al., 2014). Fifty-six percent of the sample participants were female, and the mean age of the students was 21.65 years (*SD* = 2.28; Sica et al., 2014). Two-way MANOVAs were conducted to examine the relationship between the clusters and the psychosocial outcomes (Sica et al., 2014). The findings suggested that identity commitment was positively correlated with depth and breadth of exploration, adult community integration, and feelings of psychological well-being and negatively correlated with identity distress (Sica et al., 2014). Participants high in identity

commitment indicated a strong and stable sense of identity built through reflective exploration, which allowed them to feel a significant place in the adult world increasing their sense of well-being. Sica et al. concluded that the findings also pointed to a link between identity development and difficulties in university students. Assisting students with developing coherent and stable identities may prevent academic problems and limit psychological distress by helping students navigate the identity construction process and identify appropriate roles in the larger social and vocational community. Sica et al. pointed out that one limitation of their study was the cross-section rather than longitudinal design. My study connected identity characteristics with behaviors over time.

Simon (2012) conducted an interpretive phenomenological inquiry qualitative study using a case study methodology. The author was interested in understanding how pre-collegiate teachers formed their professional identities in the context of being both an instructor and a high school student. Additionally, Simon was interested in learning how the teachers developed a sense of efficacy about their roles. Simon conducted three interviews with nine precollegiate student teachers and asked questions about their sense of self and professional identity as well as their emerging beliefs about their capacities as instructors. Three of the participants were 17-year-old African-American females, three were 16-year-old Hispanic males, one was a 17-year-old White female, one was a 15-year-old African-American female, and one was a17-year-old African-American male (Simon, 2012). An analysis of the participants' reports indicated that the greater identity capital the student teachers possessed, the more confident they were in their future

capacity to fulfill their teaching roles and responsibilities (Simon, 2012). According to Simon, teacher development researchers strongly agree that one of the most vital aspects to the growth of a teacher's identity is a reflective, integrative, ongoing, and intentional improvement of self. About teacher identity development Simon stated, "Teacher identity begins with and involves the self, emotion, stories, reflection, agency, and context" (p. 211). One significant limitation of this study was that it relied on the reflective and self-report abilities of young adolescents. While Simon reported that the participants became more adept and comfortable with the reflective activities, there might be some confounding issue between development of identity and ability to reflect on self. My study tracked actual behavior rather than relying on self-report of intended actions.

The literature on the ICM related to education indicated that a strong sense of identity allows individuals to commit to social and vocational roles and these future goals prevent academic problems (Sica et al., 2014). Individuals who have stronger agentic identity characteristics such as sense of purpose, ego strength, and social-perspective taking tend to engage in social relational activities that help them continue to construct their sense of self (Lewis, 2016; Webb et al., 2017). Additionally, strong identities assist students in developing important academic and vocational skills and help them build confidence in their capacities (Simon, 2012; Webb et al., 2017).

Master's students face a significant challenge adapting to a new learning environment. As the transitioning Côté (2016) discovered, a strong identity serves a protective factor for those shifting between social contexts. Master's students who evident consistent and coherent identities through the transition to graduate study and the

inevitable obstacles inherent in their programs should have the foundational characteristics necessary to remain committed to their educational goals.

Summary and Conclusions

The ICM literature has shown that individuals with a strong and coherent sense of self are more likely to: be self-determining agents of life paths, be highly engaged with tasks, be happier, be more hopeful, report higher levels of well-being, experience fewer transition and academic problems while developing skills and building confidence in emerging capacities (Burrow & Hill, 2011; Côté , 2002; Lewis, 2016; Luyckx et al., 2011; Negru-Subtirica et al., 2016; Sica et al., 2014; Simon, 2012; Webb et al., 2017).

Master's students face a significant transition when entering graduate school. Randall et al. (2018) discussed academic and personal issues that new graduate students encounter. Master's students are adjusting to a new learning style, teaching context, and evaluation process (Randall et al., 2018). For example, grades are often assigned differently and can have more weight on academic outcomes. New graduate students may struggle with the intensity of the master's program workload which differs significantly from the undergraduate workload and may disrupt work/life balance (Grawitch et al., 2010). Emotions such as loneliness, stress, and being overwhelmed can be powerful and impeded a master's student's progress (Randall et al., 2018). However, as the ICM research has shown individuals who have a clear sense of purpose, a strong commitment to their goals, and positive self-esteem are less likely to be derailed by these inevitable obstacles (Burrow & Hill, 2011; Luyckx et al., 2011; Negru-Subtirica et al., 2016). For example, a graduate student who has a clear sense of purpose for their graduate education

can use that anchor to adjust to shifting academic contexts. Burrow and Hill (2012) found that commitment to goals fostered positive emotions and might help master's students manage negative emotions that accompany the adjustment to graduate school. Agentic characteristics provide a stable foundation from which to engage and adapt to the new academic context of graduate school.

Despite a handful of studies, there continues to be a gap in the literature regarding what factors promote retention, persistence, and graduation for master's students (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). Nationally, minimal efforts have been made to establish a master's student tracking database to aid in furthering the understanding of master's student demographics. The studies to date lack a coherent theory that drives the design of the models tested. Rather, the handful of existing studies have tested a wide range of student and institution focused factors in an effort to establish a unified model. The result of this approach has been inconsistent and conflicting results with only a few factors appearing significant in multiple studies. However, understanding retention in master's education is an important endeavor. The field of counseling, for example, recognized the importance of mentoring master's students and has set gatekeeping as an ethical standard for counselor educators (Swank & Smith-Adcock, 2014). However, the counseling literature focuses retention on admitting appropriate students or addressing problematic issues (Glance et al., 2012). Only one study has attempted to understand what factors foster retention for students in good standing. Yet, faced with low counseling master's graduation rates and continued high social need for trained mental health professionals, understanding what fosters persistence for counseling

master's students is needed (CACREP, 2018a; Duenow et al., 2017). My intention for this study was to contribute support for the understanding of counseling master's students' retention by examining if the agentic characteristic of the ICM were strong determinants of master's students' intent to retain when factors such as age and personal financial contribution were held constant.

In Chapter 3, I discuss the study variables, my research design, and how my design addresses the study research questions. Additionally, I explain the study procedures for sampling, recruitment, data collection, and data analysis. Finally, I review the instruments I used in the study and explore any ethical issues important to consider.

Chapter 3: Research Methods

Introduction

The purpose of this study was to examine if retention in counseling master's programs could be predicted by the agentic factors of the ICM when the sociological factors of age and personal funding contributions were held constant. In this chapter, I discuss my research design, the study variables, and how the study design addresses the research questions. I also explain the study population, the sample and sampling strategy, and procedures as well as discuss the recruitment and data collection measures. Additionally, I review the statistical strategy and analysis used, the internal and external threats to study validity, and each instrument used in the study. Finally, I examine ethical considerations related to confidentiality, subject protection, and data collection.

Research Design and Rationale

For this study, I used a quantitative, nonexperimental, survey design to investigate the relationship between the agentic factors of the ICM and retention in counseling master's programs when age and personal financial contribution were held constant. In the study, I measured identity capital with the MAPS20 and it served as the independent variable in the logistic analysis. Retention, measured by reenrollment behavior, was the dependent variable and age, measured by chronological age, and personal financial contribution, measured by amount of personal funds spent toward educational costs, were the covariates held constant in the model.

Survey research is a scientifically rigorous method used to collect information on human behavior from large groups of people, most often through well-validated

quantitative measures such as questionnaires (Ponto, 2015). The qualitative research tradition is best used to explore individual or small groups of participants' thoughts, feelings, and opinions about a subject (Yilmaz, 2013). The method does not function well when defining patterns, identifying trends, or predicting future outcomes (Creswell & Creswell, 2018). Quantitative research, which gathers numeric information from large groups of individuals, has the statistical ability to generate predictive models from data (Yilmaz, 2013). This generative power was what was needed to answer my research questions. CGS (2013), Cohen (2012), and Girves and Wemmerus (1988) all researched retention in master's programs using quantitative survey methods.

The use of a time-series design allowed me to examine a connection between participants' reported identity capital agentic factors and their actual enrollment behaviors the following academic period. Cohen (2012), for example, relied on the participants' self-reported intentions rather than actual behavioral outcomes. Self-report can be inaccurate due to a number of factors, including frequency; recency; saliency; and distinctiveness of the event and age, gender, and education level of the respondent (Geisen, Strohm, Stringer, Kopp, & Richards, 2012). To allow me to maximize my contribution to the literature about factors that contribute to master's program retention, it was important to track participants' actual behavioral patterns to more clearly define the predicted relationship between identity and retention.

Methodology

In this section, I introduce the basic rationale for the design of my study. I begin by exploring the target population from which I drew my sample, then describe my sampling and recruitment procedures. Finally, I review my instrumentation and data analysis plan.

Population

I drew my sample from the population of CACREP counseling and counseling psychology master's students. For this study, I excluded fully online programs and focused on in-seat and hybrid delivery curricula. Additional exclusion criteria, discussed later, helped to concentrate the sample further.

The American Psychological Association (APA) website states that the APA Commission on Accreditation does not accredit master's programs (APA, 2019). As a result, the APA Commission on Accreditation "does not do any type of programmatic review of master's level programs" (G. Fowler, personal communication, June 14, 2018). However, the APA Office of Graduate and Postgraduate Education and Training published 2014–15 admissions application and acceptances figures for over 500 counseling psychology master's programs (Michalski, Cope, & Fowler, 2016). While the report does not differentiate the modality of curriculum delivery, for the 2014–15 academic year, 14,404 master's students were admitted to APA counseling master's programs. There are currently no enrollment statistics published for more current academic years.

The Council for Accreditation of Counseling and Related Educational Programs does accredit master's programs and tracks application and admissions numbers every year. In the *2018 Annual Report*, CACREP (2019) reported their master's student enrollment as 49, 944. As with the data in the APA survey, the CACREP report does not differentiate the enrollment statistics by program delivery method. Looking back at the *2017 Annual Report* to align with the APA data, CACREP (2018a) report their master's student enrollment as 39,158.

Procedures

A sample is a portion of the population chosen to be included in a study (Groves et al., 2009). In the following section, I review my sampling frame. Additionally, I discuss my recruitment procedures.

Sampling. I used a convenience sample for this study by inviting the participation of select CACREP master's in counseling and master's in counseling psychology program students who were enrolled full-time, had completed (or were completing) at least one academic period in their programs, were in good academic standing, and had one or more academic periods remaining in their programs until graduation (see Groves et al., 2009). Students who were on probationary status, had stopped-out, or were attending part-time were excluded from the study because their situations had the potential to create confounding variables. For example, part-time students are often ineligible for financial aid, such as loans, grants, and assistantships, and therefore, may be paying more out of their personal finances for their education.

Sample size. For my study, the minimum sample size I required was 82 participants. I used the EVP rule of thumb method for calculating this sample size (see Ogundimu et al., 2016).

$$70\ df * .85 = 82 \text{ participant sample size}$$

Calculating sample size for a logistic regression analysis is a complex and contested procedure (Hsieh et al., 1998; Ogundim et al., 2016). Hsieh et al. (1998) offered a method of calculating logistic regression sample size where sample means or proportions from previous research results could be compared and the variance used to adjust the needed sample size. G*Power Statistical Software makes use of this model when calculating sample sizes for logistic regression analyses (Faul et al., 2009). However, alternative methods for calculating sample size for a logistic regression exist (Ogundimu et al. 2016; Wilmer et al., 2015). One of the older and more widely recognized approaches is the EVP rule of thumb (Ogundimu et al., 2016). Hsieh et al.'s method requires means, standard deviations, variances, and clear population parameters for at least two of the predictor variables gathered from previous research. Retention of master's students has received limited research attention, and the factors that promote retention have not been consistent variables of interest. Finding the needed statistical data to complete Hsieh et al.'s model from the retention literature was not possible. Additionally, the MAPS20 (Côté, 1997), the independent variable in my study, is not a widely used instrument with this population. This fact also prevented me from gathering the statistical data needed for the Hsieh et al.'s method for this variable. However, it was possible to determine a sample size using the EVP method (see Thompson, 2009). Following this method, the number of

predictors, seven (i.e., four subscales of the MAPS20, age, personal financial contribution, and retention), are multiplied by 10 (i.e., a general rule of thumb) to arrive at 70 degrees of freedom (Thompson, 2009).

7 predictors (four subscales of the MAPS20, age, personal financial contribution, and retention) * 10 (rule of thumb) = 70 *df*

The 70 *df* are then divided by the percent of the outcome of interest, in this study, the students retained in their program, to achieve a minimum sample size (see Ogundimu et al., 2016; Thompson, 2009). The percentage of outcome of interest used in the EVP method is drawn from previous research (Thompson, 2009). The percentage I used was taken from Barry and Mathies' (2011) study of University of Georgia master's students. This study was one of the only master's education retention papers to include students in a College of Education where, traditionally, most counseling programs are housed. The authors found that 85% of master's students in their sample had either graduated or were retained after 3 years (Barry & Mathies, 2011).

70 *df* * .85 = 82 participant sample size

Participant recruitment. I recruited participants with the help of program directors at select schools. Program directors were contacted by e-mail with an explanation of the study procedures, Institutional Review Board (IRB) requirements, a discussion of the relevance of the findings to counselor education, and a request for a follow-up phone call to secure their assistance contacting their master's students. Program directors who were comfortable with the study shared my invitation with their students through direct e-mails and posting on listservs. This procedure did limit my

ability to track nonrespondents and send out targeted follow-up as well as constrained my ability to know the true response rate since the distribution numbers were only estimates (see Honderich & Lloyd-Hazlett, 2015). Informed consent was part of the online survey process and included information on customary participant rights as well as requested permission to gather e-mail addresses for follow-up data collection.

The focus of this study was on retention, so the sample did not include students on probation, those who had stopped-out, those who had left their programs, or those who were in their last academic period of study. I chose to examine student-focused characteristics, such as age, use of personal sources of funding, and agentic characteristics, because these factors were suggested in the limited literature on master's student retention as influencing students' enrollment decisions (see Barry & Mathies, 2011; Girves & Wemmerus, 1988; Cohen, 2012, CGS, 2013). Other factors such as programmatic or relational factors have been inconsistently reported in the literature as contributing to master's students' retention, so I used student variables as a starting point for this study. The students I sampled attended brick and mortar institutions. Differences exist between the characteristics of virtual and face-to-face learners with online learners tending to be more self-regulating and flexible and using different types of cognitive learning strategies (Kauffman, 2015; Lee & Choi, 2013). These dissimilarities could have created significant unintended variation in the outcome of my study. My sample for this study was students in degree-seeking programs at CACREP master's in counseling and master's in counseling psychology programs who were in good standing and who had

been actively enrolled full-time for at least one academic period and had at least one additional academic period remaining in their programs.

Data collection. I used Qualtrics Survey Software to set up and distribute the survey through e-mail. The participants followed a link embedded in an e-mail back to the Qualtrics site to take the survey online. Qualtrics Survey Software is a responsive design software (Qualtrics, 2016a). Surveys designed in Qualtrics Survey Software can be taken on Internet-enabled devices, and the design of the survey will adapt to the screen size and the ability of the user to manipulate the survey responses (Qualtrics, 2016a).

The first part of the survey consisted of a set of screening questions to determine if the respondent was eligible for the study. These questions asked if the participant was a full-time student, in good standing, had completed one academic period, had one or more academic periods remaining in their program before graduation, and attended a fully online program. Next, those who met inclusion criteria were given a brief description of the study and asked to sign the informed consent form that included granting permission to collect contact information for the second-round of data collection. Five demographic questions were asked on the topics of age, gender, ethnicity, focus of program of study, and number of credit hours completed. Additionally, students were asked if they intended to return to their programs the following academic period. I used the age data as a covariate in the final analysis. Finally, the participants completed the survey by answering two personal financial contribution questions, and the 20 MAPS20 questions. Participants spent 10–15 minutes completing the survey.

Participants took the identity focused survey during the fall 2018 academic period. Follow-up data collection to assess participants' enrollment status took place during the spring 2019 academic period and occurred in one of two ways: (a) direct participant follow-up e-mail inquiries, or (b) information gathered from university registrars. Enrollment status is not Family Educational Rights and Privacy Act (FERPA) protected information and, so, if participants gave consent for follow-up data collection, enrollment data was gathered from university registrar offices who verified enrollment (FERPA, 2011).

Instrumentation and Operationalization of Constructs

In this section I define how each of the concepts of interest in this study, agentic characteristics, retention, age, and personal financial contribution was measured. I provide a brief review of the instruments I used to measure each construct. Additionally, I discuss scoring and available validity information for the instruments.

Demographic questionnaire. First, I asked participants five inclusion questions to assess if they were full-time students, in good standing, had completed one academic period, had one or more academic periods remaining their in programs before graduation, and attend a fully on-line program. Next, I used a brief demographic questionnaire to inquire about participants' age, gender, ethnicity, focus of program study, and credits completed. I also solicited e-mail addresses from the participants to facilitate the enrollment status survey the following academic period. In the demographic questionnaire, I used the age question data as a covariate. The age variable was held constant to allow analysis of the contribution of the MAPS20 independent variable to the

retention model. I asked respondents to provide their age in years and placed logical restrictors on the open-ended response box to limit the chances of participants providing out of range answers (e.g., 12 years or 120 years).

Personal financial contribution. I asked two questions to assess the participants' personal financial contribution to the cost of their education. The first question inquired about the approximate amount, in dollars, of tuition, fees, and books the participants paid through personal or familial sources of income. The second question inquired about the approximate amount, in dollars, of the cost of tuition, fees, and books the participants paid through external sources of funding (e.g., loans, grants, scholarships, assistantships, employer funding). Each question offered a series of multiple-choice answers in incremental dollar amounts. In the final analysis, I used the data from the first question regarding the amount of money participants spent on tuition from personal sources of income as a covariate. To allow analysis of the contribution of the MAPS20 independent variable to the retention model, I held the personal financial contribution variable constant in the analysis.

The Multi-Measure Agentic Personality Scale20 (MAPS20). I used the MAPS20 to measure the agentic traits of the ICM (Côté, 2016). The author granted, by e-mail, permission to use the instrument for my study (see Appendix D). I used the results from the MAPS20 as the dependent variable. In a policy paper for the Acumen Research Group (2008), Côté described the origins and structure of the MAPS20:

a measure of personal agency that was initially derived from a bank of 14 of the most commonly used personality measures associated with effective identity formation

among university students. The Multi-Measure Agentic Personality Scale (MAPS20 - Côté, 1996) is made up of 20 items distributed into four subscales: self-esteem, purpose in life, internal locus of control and self-efficacy. (p. 14)

In a study of 704 high school students enrolled as entering college freshmen (no demographic data reported), Côté (Acumen Research Group, 2008) tested the reliability of the MAPS20 and found Cronbach's alphas of .68, .75, .61, and .69 for the 20-item scale. Each of the four subscales has a different scoring scale (Côté, 2016). The self-esteem subscale asks questions such as "people usually follow my ideas" and is scored on a 2-point scale with responses of *unlike me* and *like me* (Côté, 2016, p. 67). The purpose in life subscale asks questions such as "life seems to me always exciting" and is scored on a 7-point Likert scale with a neutral center anchor (Côté, 2016, p. 67). The internal locus of control subscale asks questions such as "what happens to me is my own doing" and is scored on a 6-point Likert scale ranging from *strongly agree* to *strongly disagree* with no neutral response (Côté, 2016, p.67). The ego strength subscale asks questions such as "I enjoy difficult and challenging situations" and is scored on a 5-point Likert scale from *completely false* to *completely true*, with two intermediate responses (Côté, 2016, p.67). Four of the questions are reverse scored, meaning a higher score indicates a less positive response (Côté, 2016). Since each of the subscales are scored on different scales, Côté (2016) recommended that the items be standardized before being summed into a global score. Higher scores on the MAPS20 indicate that the individual has stronger agentic identity resources (Côté, 2016).

The MAPS20 was originally designed and tested with Canadian college students in a 1997 study to assess how identity capital was acquired by individuals in late adolescences (Côté, 1997). In a follow-up study, Côté (2002) used the MAPS20 to explore the connection between career and life satisfaction experienced by the participants, now college graduates, and their identity capital. Schwartz et al. (2009) used a version of the MAPS20 to examine the connection between identity capital and psychological well-being. Schwartz, Côté, and Arnett (2005) and Côté et al. (2016) conducted studies with cross-ethnic populations using the MAPS20. Schwartz et al. (2005) explored identity formation with three ethnic groups in the United States and found that individuals with higher MAPS20 scores were more likely to be committed to exploration and identifying a sense of self. Côté et al. studied both American and Japanese college students and found that personal agency characteristics were just as relevant and important to the participants from the collectivist culture as they were to those from the individualistic one. Morsünbül (2013) translated the MAPS20 into Turkish and used the instrument to explore the effects of agency on life satisfaction. The results of the study showed that identity commitment was an important mediator between identity capital and life satisfaction (Morsünbül, 2013).

The MAPS20 (Côté, 1997) was the most appropriate instrument to use in this study to assess master's students' identity characteristics. The MAPS20 (Côté, 1997) measures four important traits and has shown good validity and reliability. The instrument has been used in studies examining a range of topics from psychological well-

being to identity development and has proven to be a reliable assessment with diverse populations.

Retention. At the beginning of the spring 2019 academic period, I conducted a follow-up assessment with students who completed the identity development survey in the fall 2018 academic period to ascertain if they reenrolled in their programs. In other words, the follow-up survey determined if the previous participants enrolled for the spring 2019 academic period in the same program they were enrolled in during the fall 2018 academic period. I conducted the follow-up survey by: (a) directly e-mailing participants for enrollment status information, or (b) verifying enrollment data with university registrars. The informed consent asked participants for permission to gather this follow-up data. Additionally, enrollment data are considered open directory information and not protected under FERPA (2011).

Data Analysis Plan

I used IBM SPSS analysis software to analyze the data. My first step in data cleaning was to check for incomplete surveys and remove those responses from the data set (Van den Broeck, Argeseanu Cunningham, Eeckels, & Herbst, 2005). Then, I screened the data for out of range and suspect distributions. Next, I ran descriptive and frequency analyses to look for missing and outlier data. Finally, I assessed options for editing, eliminating, or transforming gaps I discovered in the data (Van den Broeck et al., 2005). I conducted a logistic regression analysis to assess if the agentic characteristics of identity capital as measured by the MAPS20 predicted retention in master's counseling programs when age and personal financial contributions were controlled for in the

model. I chose to control for these variables based on the limited research on master's students which indicated that older students retain with less frequency than younger students, while students who pay more for their education from personal sources tend to persist at lower rates (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). Logistic regression is an appropriate statistical analysis to use when the goal of the researcher is to evaluate if a group of independent variables predicts a dichotomous dependent variable (Park, 2013). My study analysis plan allowed an evaluation of the odds of a student either being retained in their program or not based on a combination of the MAPS20 factors given the covariates of age and personal financial contribution.

Because logistic regression models are designed to accommodate non-linear relationships between the dependent and independent variables, many of the linear regression assumptions are unnecessary (Park, 2013; Statistics Solutions, 2018). For example, linearity, normality of the error distribution, and homoscedasticity of the errors all need not be assumed (Park, 2013). However, assumptions that should be proven in logistic regression include: (a) independence of observations, (b) a dichotomous outcome variable, (c) no multicollinearity among the independent variables, and (d) a linear relationship between the odds ratio and the independent variable (Statistics Solutions, 2018). My study did not include repeated measures or other similarly correlated outcome variables (Stoltzfus, 2011). My dependent variable was dichotomous and measured if master's students had retained or not in their programs in the spring 2019 academic period. Multicollinearity was addressed by running statistical diagnostics in SPSS. I checked the linear relationship assumption by assessing for significant statistical terms

representing the interaction between each continuous independent variable and its natural logarithm since these would indicate a violation of the assumption (Stoltzfus, 2011)

I ran the logistic regression analysis using SPSS, and built the model using a backward entry method (Stoltzfus, 2011). The backward entry method is best used when previous research exists to offer guidance for the relative importance of factors to the model, and the current research seeks to clarify patterns of relationships between the independent variables and the dependent variable (Stoltzfus, 2011). I conducted an overall evaluation of the logistic model, statistical tests of individual predictors, goodness-of-fit statistics, and an assessment of the predicted probabilities (Statistics Solutions, 2018). The overall significance of the logistic regression model was examined using the χ^2omnibus test of model coefficients (Statistics Solutions, 2018). The percent of variance accounted for by each independent variable was assessed by the Nagelkerke R^2 (Statistics Solutions, 2018). Exp (β) determined the probability of an event occurring, for example a student remaining in his or her program, based on one unit change in an independent variable, for example, an increase in MAPS20 score, when all other independent variables, for example, age, were kept constant (Laerd Statistics, 2018).

Threats to Validity

Creswell and Creswell (2018) discussed threats to both the internal and external validity of a study. External threats to validity challenge a researcher's ability to generalize the results to other populations or settings (Creswell & Creswell, 2018). Threats to internal validity challenge a researcher's ability to draw correct conclusions

about the contribution the study variables make to the findings (Creswell & Creswell, 2018).

Threats to External Validity

Through the use of a survey instrument, this study captured a snapshot in time of students' intentions to retain in their programs. The results of the survey are time-bound to a single event, retention to the next academic period, rather than tracking how students' actions follow their intentions through to graduation. Although the study can only provide information about participants' behavior at one point in time, this information is helpful in understanding what factors facilitate master's students' retention in their programs. Because I used a convenience sample of students who opted into the study by responding to an invitation e-mail, I did not randomly sample the population of all possible CACREP counseling and counseling psychology master's students (Wiersma, 2013). This lack of random sampling could introduce biases and negatively influence my statistical analysis (Wiersma, 2013).

Threats to Internal Validity

In this study, history is an internal validity threat. Events in the participants' lives unrelated to the factors measured could influence their intentions to remain in their master's programs. For example, a student could be required to take on caregiving responsibilities for an elderly relative or the student's partner could lose his or her employment. Both of these situations, factors unrelated to issues measured by the study, could force the student to withdraw from the program. Another threat to internal validity is the self-selection bias. Participants had the ability to opt into or out of this study and

those who opted in may have been different in some unique way from those who chose not to participate. However, this study drew a relatively large sample of master's counseling students and this should help address these threats to internal validity.

Ethical Procedures

I solicited CACREP master's in counseling and master's in counseling psychology program directors for permission to contact their students to participate in this study. While I obtained Walden IRB consent before contacting program directors, some universities required IRB consent, or at least proof of Walden IRB approval, before allowing their students' participation. Ethical research procedures required that I negotiate additional IRB permissions during the recruitment phase of the study. The follow-up phase of my study meant that I needed to seek permission from my participants to contact them for phase two. Enrollment status is considered non-protected directory information under FERPA regulations and can be disclosed without student consent (FERPA, 2011). However, my informed consent form solicited participant permission to collect enrollment status.

I completed the Walden University IRB consent process prior to participant recruitment (IRB Approval # 10-03-18-0572908). As part of the Walden University IRB process, a consent form for participants was designed and vetted. This consent form was included in the online survey and described customary participants' rights such as confidentiality and the ability to withdraw from the study at any time. Additionally, the consent asked permission to gather contact information and solicit, through e-mail, enrollment status information the following semester. Since the study was being

conducted in concert with and in relation to an academic program, the consent form included language which assured the subjects that participation was voluntary and would not influence their progress, standing, or grades in their program.

The purpose and nature of the study was described prior to the participants encountering the informed consent and survey instruments. As a part of the study description, I stressed the voluntary and confidential nature of the research along with potential risks and benefits, and my name and contact information was provided in case further communication was needed. It was stated on the informed consent form that personal reflection on and answering questions about the subject of personal identity and future enrollment carried minimal risk of psychological distress to participants. However, participation in the study could benefit future master's counseling students by providing information that helped counseling faculty understand retention and persistence factors and design stronger programmatic efforts. Participants had the right to withdraw from the study at any time including refusing their permission for follow-up contact in the spring 2019 academic period. In both the study description and the informed consent I made it clear that the students' participation or withdrawal would not influence their program progress, standing, or grades.

Qualtrics received the survey data into a secure server that could only be accessed through a password-protected account login (Qualtrics, 2016b). After the data were downloaded, I stripped it of identifying information such as e-mail addresses which could link data records back to unique individuals. Once I stripped the data, I stored it on a

password secured server, and password protected computer. I will securely retain the data for a minimum of 5 years after which I will destroy the data by permanent deletion.

Summary

At the beginning of Chapter 3, I stated the purpose of this quantitative, nonexperimental, survey design study was to investigate the relationship between the agentic factors of the ICM and retention in counseling master's programs when age and personal financial contributions were used as covariates. Next, I explained the recruitment procedures I used to engage full-time master's students in good standing from CACREP master's in counseling and master's in counseling psychology programs who had at least one remaining academic period to complete in their in-seat program in my study. I detailed the procedures participants followed to take my study and how data was collected and analyzed. The primary constructs of the study and instrumentation I used were described, and issues of internal and external validity that threatened the results of the study were explored. Finally, ethical considerations such as informed consent important to the veracity of the study were detailed.

In Chapter 4, I review data collection procedures, recruitment timeline and process, and respondant response rates. Next, I explain the demographics of my sample, the analysis plan for the data and the results obtained. Finally, explore additional directions suggested by the data mining.

Chapter 4: Results

Introduction

Despite the significant contribution master's instruction has made to higher education in terms of increased enrollment numbers and greater institutional financial input, calls for expanded research into student persistence and retention and a national database to track students' academic progress have remained largely unanswered (CGS, 2013; Cohen, 2012; Glazer-Raymo, 2005; Gordon, 2016). While the limited research that might assist students in increasing academic retention has produced inconsistent and conflicting results, the risks master's students face from failing to complete their degrees are very real. Master's students who do not complete their degrees may accrue large student loan debt, while significantly disrupting work and personal life patterns all without the benefits conferred by a higher degree (Albertini et al., 2012; Gordon, 2016). In the field of counseling, gatekeeping is an ethical responsibility that mandates counselor educators ensure highly skilled students graduate and enter the profession (Glance et al., 2012; Swank & Smith-Adcock, 2014). The retention of capable counseling students is equally as important as remediating at-risk students in fulfilling this ethical duty.

The purpose of this quantitative, nonexperimental, survey study was to formulate a model of counseling master's student retention using the agentic characteristics of the ICM when the previously suggested sociological risk factors of age and personal funding contributions were held constant. I measured the agentic factors of the ICM with the MAPS20 assessment, retention by students' continued enrollment in their academic

programs, and age and personal financial contribution to tuition costs by self-report responses on a demographic questionnaire. The results of this study provide suggestions to counselor educators about agentic factors that can be sought, developed, and programmatically adopted to produce positive retention patterns in master's counseling programs.

In Chapter 4, I review the recruitment timeline and process, the response rate received, as well as the data collection procedures followed. Next, I explain my data analysis plan including the demographics of my sample and the statistical analysis of my data. Finally, I address the original research question, which leads into a discussion of future research directions.

Data Collection

Data collection for my study occurred over a 6-month period beginning in October 2018 and ending in March 2019. There were two unique data collection points, the first consisting of a longer survey and the second of a single follow-up question. I collected data with CACREP master's counseling and counseling psychology students from a variety of programs across the United States.

Recruitment Time Frame and Process

In the summer of 2018, I used professional conferences and trainings to network with CACREP counseling and counseling psychology program directors to assess their interest in my dissertation project. When faculty or training directors indicated that future collaboration would be possible, I contacted those schools' IRBs to inquire about the necessary collaborative IRB clearances needed. Once I had IRB approval from my

institution, I was able to contact each training director and secure their cooperation, clear their school's IRB process, and obtain my institution's approval for each unique school. I then submitted to each training director the necessary approval documents, a brief description and justification of the study, and an e-mail invitation to the participants containing a link to the Qualtrics survey. Sixteen schools were originally identified for the study. One training director refused participation after being contacted, two training directors did not respond, one school's IRB refused approval, and one school's IRB did not respond. After filing IRB Change of Procedure forms, two more programs' training directors, who were willing and able to distribute the invitation, were found to replace nonresponsive programs. Additionally, I was permitted to allow the director of a professional conference to distribute invitation cards to all conference participants. Ultimately, the networking contacts led to my survey being distributed to master's level students in 13 programs across the United States.

Recruitment for my study occurred over two semesters. Program directors of 11 different CACREP counseling and counseling psychology master's programs distributed the requests for the first round of data collection. I sent the first requests for participation through e-mail with a link to the survey in early October 2018 and sent my last request in December 2018. In total, I made 13 unique requests for participation to 13 sets of respondents. Participants were not resolicited after the original request. The initial request for the second round of data collection occurred on February 3, 2019. Only participants who responded to the initial Fall 2018 survey were asked to answer the single yes or no question of the second round survey. Those respondents who did not complete the

retention question initially were resolicited two more times, 2 weeks apart, meaning data collection ended March 3, 2019.

Response Rates by Program Type

I requested assistance distributing the invitations for master's student participation to faculty and training directors of 16 CACREP counseling and counseling psychology programs through e-mail as well as contacted another respondent group through e-mail and one group by flyer solicitation. Overall, agents of 11 of the 16 programs (69%) agreed to forward the invitation to their students. The CACREP-accredited programs participated at a higher rate (72%) than the counseling psychology programs (60%) or the nonaffiliated groups (50%). However, the number of programs involved in each category were small (CACREP: 8/11, counseling psychology: 3/5, and nonaffiliated 1/2). It was not possible for me to ascertain an exact response rate for my individual student respondents. I did not know how many students were enrolled in each program or in which program each respondent was enrolled. As stated in my informed consent, in an effort to ensure confidentiality, I did not ask training directors to identify the student populations of their programs. Additionally, I did not request student participants to reveal the university in which they were enrolled.

Of the 143 participants who began the first round survey, several did not meet the eligibility criteria which included: (a) being a full time master's student (i.e., 18 ineligible), (b) had completed or were in the process of completing one or more academic periods (i.e., five ineligible), (c) had one or more academic periods to complete (i.e., eight ineligible), and (d) attended a program at least partially taught in traditional

classroom settings (i.e., three ineligible). The remaining 109 participants were asked to complete the informed consent and take the survey. One hundred and three participants completed the informed consent and began the survey. Thirteen of the participants' surveys were not completed to a usable degree, leaving 90 usable surveys at the end of Round 1.

In the second round of data collection, I collected 89 responses. Seventy-six participants responded directly to my solicitation, and information for 13 participants were gleaned from university registrars. One of the respondents had not completed the first round survey to a usable degree, eliminating it and the student's second round response as well. I was not able to secure information on two participants' academic enrollment, so their participation in the study was eliminated. The final number of participants included in the study was 88.

Data Collection Procedures

Round 1 of data collection proceeded largely as I had planned. Eleven CACREP counseling and counseling psychology program directors distributed, through e-mail, the link to my Qualtrics survey, which students followed to complete the measurement. I was able to find one student enrollment list with e-mail addresses on a departmental site, which I used to distribute my survey. Additionally, I distributed flyers printed with the Qualtrics link at a professional conference with a large number of counselor trainees in attendance.

The second round of data collection deviated slightly from my original plan. The goal of my second round of data collection was to ascertain if participants had reenrolled

in their program of study. I had intended that the second round of data collection would occur in one of three ways: (a) enrollment status information provided by program directors, (b) information gathered from university directories, or (c) direct participant follow-up e-mail inquiries. Since enrollment status is considered directory information and not FERPA protected, it can be readily shared by university personnel (FERPA, 2011). My participants had given permission for follow-up data collection in the informed consent so no barriers should have existed to enrollment data collection. My first attempt was to contact students directly and ask them to complete a single question survey through Qualtrics which asked "Are you currently enrolled in the same master's program, at the same university you were enrolled in when you completed the identity survey (i.e., are your enrolled in the same program at the same university this semester [or quarter] as you were last semester [or quarter])?" After sending three requests, this approach encouraged 73 participants to complete the survey, of which 70 responses were usable. I e-mailed the three participants whose responses were not completed and asked them to try again and received two more usable responses. A personal request that simply asked participants to type their answers into an e-mail gathered six more responses. In an effort to maximize my sample size, I undertook the other options for collecting my data. Using the e-mails of the participants, I entered their information into appropriate school directories. However, some schools' password-protected access to their student directories, so this approach was fruitful for only a few schools. Additionally, I contacted several schools' registrar's offices and learned that directories might not offer up-to-date information since students might have limited public access to their information, be on

stop-out status, or have changed their names. Given that enrollment status is considered directory information and not FERPA protected, several schools did offer to verify enrollment for me. I filed an IRB Change of Procedure form and was able to gather 12 more responses by this method.

I had intended to request enrollment verification from program faculty by having them provide me their enrollment lists, but several of them cited FERPA and student privacy as reasons for not providing me the requested information. As an alternative, I was asked to provide the names of the students who had participated in the study so that the faculty could verify enrollment. However, as stated in my informed consent, students were assured that faculty would not know if they had chosen to participate; therefore, this method was eliminated for data collection.

Results

My sample was generally reflective of the population of CACREP counseling master's students. I reviewed and coded the data to ensure the accuracy of my analysis. I used SPSS statistical software to conduct a backward logistic regression analysis to examine the model of master's student retention.

Characteristics of the Sample

The age range of the participants was 21 to 58 years old (M = 30.76; SD = 9). Of the respondents who identified a gender, 89% identified as female, 10% identified as male, and 1% preferred not to answer the gender question. The largest portion of the sample respondents identified as White or Caucasian (82%) with Hispanic or Latinx (8%), Asian (4%), African-American (2%), White or Caucasian and Hispanic or Latinx

(4%), and multiracial (1%) identities also being represented in the sample. Clinical Mental Health Counseling program students comprised 73% of the sample, followed by School of Counseling program students (14%), Counseling Psychology program students (7%), College Counseling and Student Affairs program students (3%), Clinical Rehabilitation Counseling program students (2%), and Career Counseling program students (1%). The largest portion of respondents (73%) contributed between $0 and $1,000 per academic period of their personal finances toward their tuition costs. Table 1 presents additional information on the sample sizes and percentages of responses associated with the demographic measures included in this study.

My study sample evidenced relatively similar proportions regarding gender, ethnicity, and program enrollment as the national population of the CACREP master's counseling students. In 2017, CACREP (2018b) reported that 83% of the enrolled master's students identified as female, 17% identified as male, and .09% chose an alternative gender identifier. These population demographics are similar to the student participants in this study. In 2017, CACREP (2018b) reported that 18% of the enrolled master's students identified as African American, 2% as Asian-White/Caucasian, 8% as Hispanic/Latino, and 2% as multiracial. My sample had a significantly smaller portion of African American students and a larger portion of Caucasian students. The other portions were approximately the same. The Council for Accreditation of Counseling and Related Educational Programs does not report program enrollment as a percentage of total national enrollment. however, in 2017 Clinical Mental Health programs had the largest enrollment, followed by School and Student Affairs. Clinical Rehabilitation was a

Table 1

Demographics by Retention Status

	Retained		Not Retained		Total Sample	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Gender						
• Female	76	88	2	2	78	89
• Male	9	11	0	0	9	11
• Prefer not to answer	1	1	0	0	1	1
Total	86		2		88	100
Ethnicity						
• American Indian or Alaska Native	0	0	0	0	0	0
• Asian	3	4	0	0	3	4
• Black or African American	2	2	0	0	2	2
• Hispanic or Latinx	7	8	0	0	7	8
• Native Hawaiian or Other Pacific Islander	0	0	0	0	0	0
• White or Caucasian	70	81	2	2	72	82
• White or Caucasian, Hispanic or Latinx	3	4	0	0	3	4
• Other – Multiracial	1	1	0	0	1	1
Total	86		2		88	100
Age						
Mean Age		30.9		24		30.8
• 21 - 33	61	71	2	2	63	72
• 34 - 46	16	19	0	0	16	19
• 47 - 58	9	11	0	0	9	11
Total	86		2		88	100
Program						
• Addiction Counseling	0	0	0	0	0	0
• Career Counseling	1	1	0	0	1	1
• Clinical Mental Health Counseling	62	72	2	2	64	73
• College Counseling and Student Affairs	3	4	0	0	3	4
• Community Counseling	0	0	0	0	0	0
• Counseling Psychology	6	7	0	0	6	7
• Marriage, Couple, and Family Counseling	0	0	0	0	0	0
• Rehabilitation Counseling	2	2	0	0	2	2
• School Counseling	12	14	0	0	12	14
Total	86		2		88	100
Completed Credit Hours						
• 0 - 15	38	44	1	1	39	44
• 16 - 31	20	23	0	0	20	23
• 32 - 47	18	21	0	0	18	21
• 48 - 60	10	12	1	1	11	13
Total	86		2		88	100
Personal Financial Contribution						
• 0 -$500	42	49	0	0	42	48
• $500 - $1,000	20	23	1	1	21	24
• $1,000- $1,500	3	4	0	0	3	4
• $1,500 - $2,000	3	4	0	0	3	4
• $2,000 - $5,000	7	8	0	0	7	8
• $5,000 - $7,000	6	7	0	0	6	7
• $7,000 - $10,000	1	1	1	1	2	2
• $10,000 - $15,000	2	2	0	0	2	2
• $15,000 - $20,000	1	1	0	0	1	1
• More than $20,000	1	1	0	0	1	1
Total	86		2		88	100

relatively new addition to the CACREP accreditation process, so the number of enrolled students was not accurately reflected (CACREP, 2018b). The hierarchy of program specializations reported by CACREP fits with the breakdown of my sample. The Council for Accreditation of Counseling and Related Educational Programs does not report an average age of the population of enrolled master's students that could be compared to my sample. The American Psychological Association "does not do any type of programmatic review or accreditation of master's level programs" (G. Fowler, personal communication, June 14, 2018). The American Psychological Association Office of Graduate and Postgraduate Education and Training has conducted a survey with approximately 500 graduate programs to understand their student demographics (Cope, Michalski, & Fowler, 2016). However, the last survey results published were from the 2014–15 academic year. No direct comparison between the demographics of the national population of counseling psychology master's students and my sample's demographics was possible. Table 2 shows a comparison of the demographics between program types.

Data Integrity

The first step in my data analysis was to identify and clean the errors in the data. I began the process by reviewing the collected data for outliers and missing data. Using SPSS statistical software, I ran basic descriptive and frequency statistics There were no data points that were out of range (beyond the logical maximum and minimum scores for the scale). Three of the 88 cases had one question response missing. These gaps were filled using the SPSS Replace Missing Value – Mean of Nearby Points function.

Table 2

Demographics by Program Status

	CACREP*		Counseling Psychology		Total Sample	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Gender						
• Female	71	81	5	6	78	89
• Male	8	9	1	1	9	11
• Prefer not to answer	1	1	0	0	1	1
Total	82		6		88	100
Ethnicity						
• American Indian or Alaska Native	0	0	0	0	0	0
• Asian	2	2	1	1	3	4
• Black or African American	2	2	0	0	2	2
• Hispanic or Latinx	6	8	1	1	7	8
• Native Hawaiian or Other Pacific Islander	0	0	0	0	0	0
• White or Caucasian	68	77	4	5	72	82
• White or Caucasian, Hispanic or Latinx	3	4	0	0	3	4
• Other – Multiracial	1	1	0	0	1	1
Total	82		6		88	100
Age						
Mean Age		34		23		31
• 21 - 33	57	65	6	7	63	72
• 34 - 46	16	19	0	0	16	19
• 47 - 58	9	11	0	0	9	11
Total	82		6		88	100
Completed Credit Hours						
• 0 - 15	33	38	6	7	39	44
• 16 - 31	20	23	0	0	20	23
• 32 - 47	18	21	0	0	18	21
• 48 - 60	10	12	1	1	11	13
Total	82		6		88	100
Personal Financial Contribution						
• 0 -$500	42	49	0	0	42	48
• $500 - $1,000	19	22	2	2	21	24
• $1,000- $1,500	3	4	0	0	3	4
• $1,500 - $2,000	3	4	0	0	3	4
• $2,000 - $5,000	7	8	0	0	7	8
• $5,000 - $7,000	5	7	1	1	6	7
• $7,000 - $10,000	2	2	0	0	2	2
• $10,000 - $15,000	1	1	1	1	2	2
• $15,000 - $20,000	0	0	1	1	1	1
• More than $20,000	0	0	1	1	1	1
Total	82		6		88	100

* The students who did not retain came from CACREP programs

The next step I took was to recode variables as appropriate. Given my original research question: do the agentic factors of the identity capital model (purpose, locus of control, self-esteem, ego strength) predict the retention of master's counseling students while controlling for age and personal financial contribution, I dummy coded the dependent variable of retention into "0 = no" and "1 = yes". I coded text response variables into an interval scale. Likert type response options were provided for the items of the MAPS20. These response options were coded from 0 to 5 with 0 being *Strongly Disagree* and *Strongly Agree* being 5. Several items were reverse scored. For example, the item "I am not as not looking as most people" from the self-esteem subscale of the MAPS20 (Côté, 2016, p. 67) was reversed scored to reflect the negative intent of the item.

Finally, I standardized the MAPS20 subscales. I followed Côté's (2016) suggestion for scoring, "Because each subscale uses different scaling ranges, it is recommended that items be standardized before summing into subscales" (p. 21). I calculated *z* scores for each item of the MAPS20, summed the items into the subscales of purpose, locus of control, self-esteem, ego strength, and then summed the subscales into the total MAPS20 score.

Logistic Regression Assumptions

Many of the assumptions necessary for linear regressions are unnecessary when dealing with logistic regressions because these models are meant to accommodate nonlinear relationships between the dependent and independent variables (Park, 2013; Statistics Solutions, 2018). However, four important assumptions should be proven in

logistic regression: (a) independence of observations, (b) a dichotomous dependent variable, (c) no multicollinearity among the independent variables, and (d) a linear relationship between the odds ratio and the independent variables (Statistics Solutions, 2018). The first assumption met by the data was independence of observations. My sample consisted of master's students from a variety of types of counseling programs (e.g., Counseling Psychology, Career, Marriage and Family, Vocational Rehabilitation, Clinical Mental Health) representing a variety of geographic regions in the United States. This sampling plan ensured that the respondents were not nested or too closely clustered together to prevent independence of observations. Participants in the Not Retained group were not also accounted for the Retained group.

The data met the second assumption that the dependent variable was dichotomous. The outcome measure asked respondents to answer 'yes' or 'no' to indicate if they had retained in their program of study. The dependent variable being dichotomous is a key characteristic of a logistic regression.

The data met the third assumption of collinearity. Table 3 reviews the collinearity statistics for the data. All of the tolerance and VIF parameters are within recommended values. Additionally, when comparing the independent variables of age, personal financial contribution, and scores on the MAPS20 the highest correlation, between age and MAPS20, was still considered a low correlation ($r = .31$, $N = 88$, $p = 0.002$). Even when dividing the MAPS20 into its subscales there was no more than a weak correlation between the subscales and either age or personal financial contribution ($r = -1.31$ to .26, $N = 88$, $p = .22$ to .02).

Table 3
Collinearity Statistics

	Tolerance	VIF
MAPS 20 *z* score Total	.888	1.126
Personal Financial Contribution	.982	1.018
Age	.901	1.110

[a] Dependent Variable: Current Enrollment

The data met the fourth assumption that there must be a linear relationship between the continuous independent variable and the logit transformation of the dependent variable. Age of the respondents is the one continuous independent variable in the study since personal financial contribution was a dummy coded interval scale independent variable. The interaction between the independent variable of age and log of itself resulted in a *p* value greater than .05 ($p = .337$) indicating that the main effect had not violated the assumption of linearity of the logit.

Logistic Regression Analysis

I used a backward binary logistic regression model to test the research question of whether the MAPS20 instrument could predict master's students' enrollment retention in their CACREP counseling and counseling psychology programs when the factors of age and personal financial contribution to tuition costs were controlled. I choose this method because previous research had pointed to the negative impact that master's students' age and personal contribution to tuition cost could have on retention. I hoped to eliminate those factors from my model to determine how strong personal identity was in influencing students' persistence in master's education. The model was not significantly predictive of master's students' enrollment retention, $\chi2(3, N = 88) = 2.62$, $p = .453$. A

reduced model, including only age and personal financial contribution, was also not significantly predictive of master's students' enrollment retention, $\chi 2(2, N = 88) = 2.59$, $p = .274$. Using the Nagelkerke R^2, the full model accounted for 15.1% of the variance in the dependent variable. Removing the MAPS20 independent variable reduced the amount of variance accounted for in the model to 14.9%, while removing the personal financial contribution independent variable, leaving only the age IV, reduced the amount of variance accounted for in the model to 9.8%. The Homser and Lemeshow Goodness of Fit test showed that the full model was a good fit for the data, $\chi 2(8, N = 88) = 3.46$, $p = .903$. It indicated that the model correctly identified 90% of the respondents as retained. However, this was most likely a result of the small sample size rather than an accurate predictive probability. Table 4 lists the odds ratios and confidence ranges for all of the relevant variables.

Table 4
Odds Ratios of Master's Students' Enrollment Retention by Age, MAPS20, and Personal Financial Contribution

Variables	**Odds Ratio**	**95%Confidence Interval**	***p* Value**
Age	1.18	.75 – 1.87	.468
MAPS20	1.02	.83 – 1.25	.858
Personal Financial Contribution	.78	.48 – 1.27	.314

Additional logistic regression. In an effort to ascertain if the individual subscales of the MAPS20 might contribute to the model in a way that was masked in the aggregate instrument, I ran a backward binary logistic regression analysis using the individual subscales. The full model was not significant, $\chi 2(6, N = 88) = 2.721$, $p = .843$. The full model accounted for 15.5% of the variance in the dependent variable. Removing either and both the self-esteem and ego strength subscales from the model did not change the

amount of variance accounted for in the model. However, when the internal locus of control subscale was removed, the variance accounted for in the model reduced slightly (15.4%) and when all the MAPS20 subscales were removed the variances account for in the model reduced further (9.8%). The Homser and Lemeshow Goodness of Fit test showed that the full model was a good fit for the data, $\chi 2(8, N = 88) = 3.456, p = .903$. It indicated that the model correctly identified 90% of the respondents as retained. However, this was most likely a result of the small sample size rather than an accurate predictive probability. Table 5 lists the odds ratios and confidence ranges for all of the relevant variables.

Table 5
Odds Ratios of Master's Students' Enrollment Retention by Age, Personal Financial Contribution, and Subscales of the MAPS20

Variables	Odds Ratio	95% Confidence Interval	*p* Value
Age	1.20	.73 – 1.95	.474
MAPS20 – Ego Strength	.99	.55 – 1.77	.962
MAPS20 – Internal Locus of Control	.96	.56 – 1.67	.896
MAPS20 – Purpose in Life	1.20	.59 – 2.05	.775
MAPS20 – Self-Esteem	1.02	.62 – 1.66	.947
Personal Financial Contribution	.76	.45 – 1.22	.296

Data Mining

The vastly different sample sizes between the Retained ($n = 86$) and Not Retained ($n = 2$) groups made most statistical comparisons useless. Additionally, the very small size of the Not Retained group made any statistical analysis of that group suspect (Hackshaw, 2008). However, the logistic regression analysis of the MAPS20 subscales did suggest that certain constructs contributed to the variance of the model. I decided to engage in a data mining process to examine, visually, the mean differences in the scores of the subscales between the Retained and the Not Retained groups. Throughout this data

mining process, I was not conducting a statistical analysis of the data, but rather seeking patterns within the data. Using data mining, I was focused on understanding how data points could be visualized as patterns that suggested relationships of variables in a model of behavior (Maimon & Rokach, 2009). These relationships could also help support or suggest additional directions for future inquiry given the sparse results of the logistic regression analysis. Taking the *z* scores of each subscale, I found the mean of each of the four subscales for the Retained group and the Not Retained group. The eight data points are plotted in Figures 1 and 2. A pattern emerged from the visuals that further highlighted the connections suggested by the nonsignificant statistical variances of the logistic regression analysis. Certain subscales, such as purpose in life, seemed to contribute most to the variance of the model and also showed the greatest difference on the mean *z* scores between the two groups. I will discuss implications for further investigation of this possibility in Chapter 5.

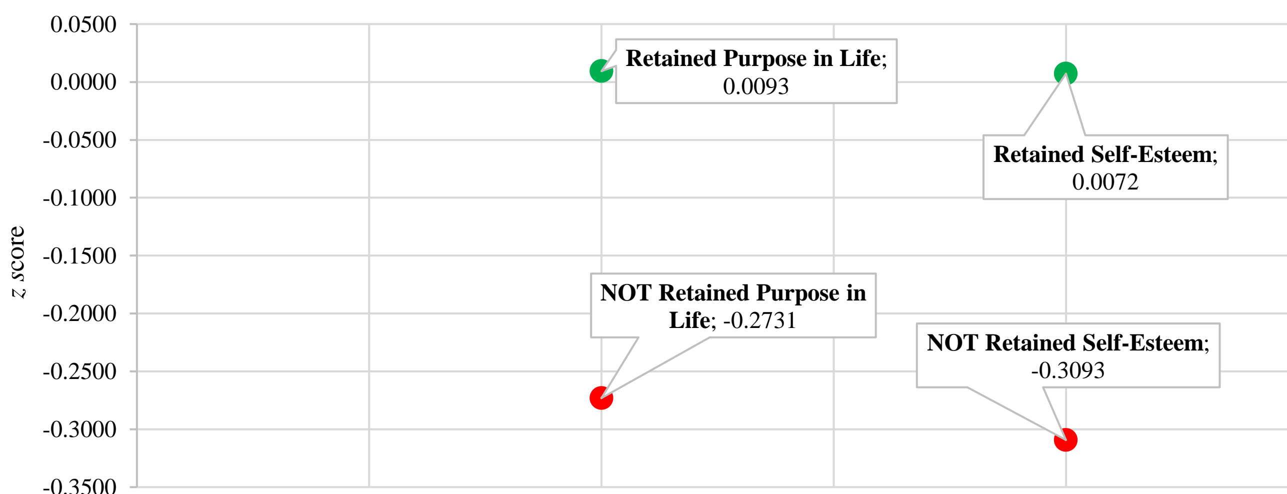

Figure 1. Comparison of the mean *z* scores for the Retained and Not Retained respondents on the purpose in life and self-esteem subscales of the MAPS20.

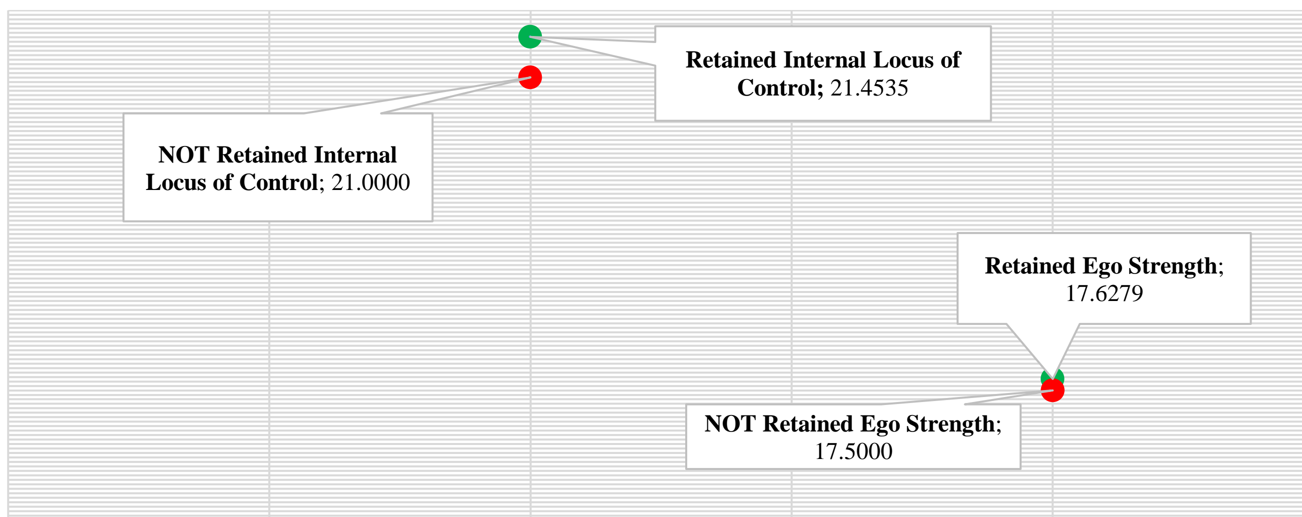

Figure 2. Comparison of the mean *z* scores for the Retained and Not Retained respondents on the ego strength and internal locus of control subscales of the MAPS20.

Figure 3. Mean age of respondents by group.

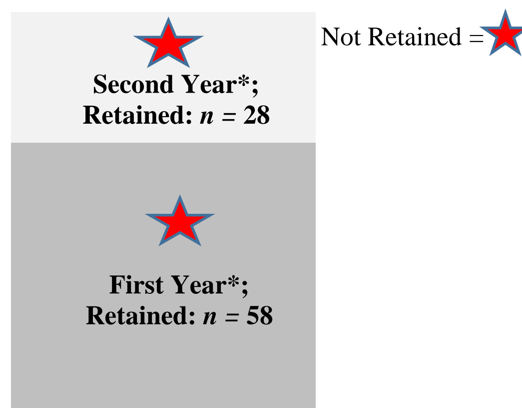

Figure 4. Year in school by group.

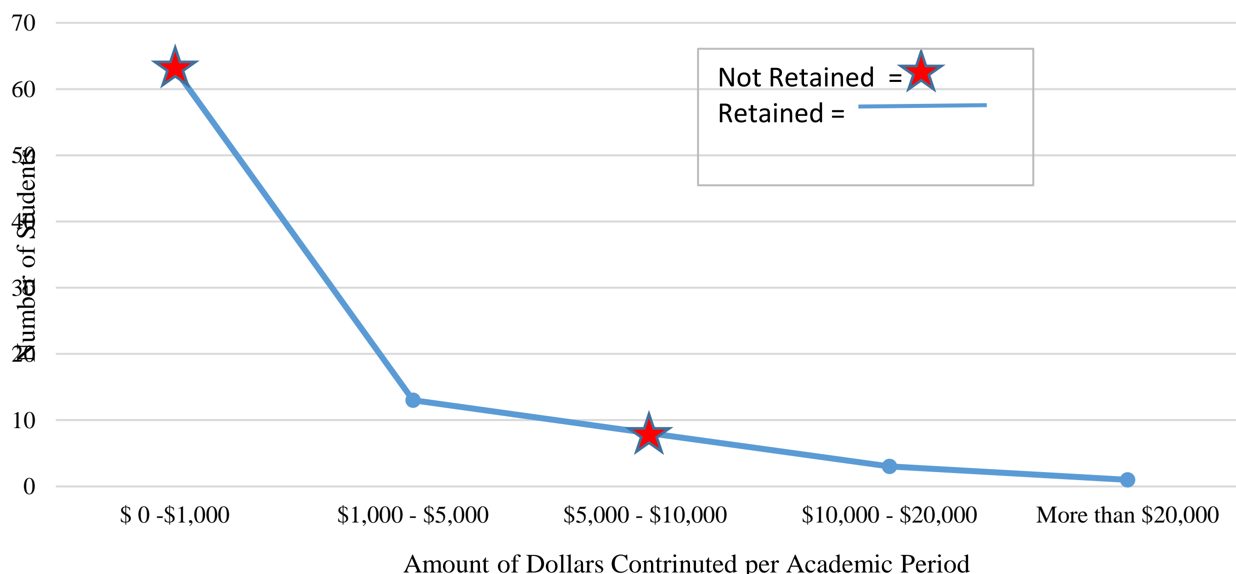

Figure 5. Personal financial contribution to tuition costs per academic period by group.

Figure 3 shows the differences in the mean ages between the Retained and Not Retained groups. The split across the academic years of study is displayed in Figure 4. Figure 5 highlights the amount of personal financial contribution to tuition made by the members of the Retained and Not Retained groups. The very limited information provided by this data mining effort with the age and personal financial contribution factors did not support previous research that suggested older students who contributed more to their tuition costs tended not to retain in their programs (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016).

Summary

The logistic regression analysis conducted on the identity development survey, MAPS20, and program enrollment retention data collected from master's in CACREP counseling and counseling psychology students failed to produce a statistically significant model. The control variables of student age and personal financial contribution to tuition suggested by previous research as important factors contributing to master's students' lack of persistence did not appear to be significant in this model (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012). There were substantial challenges and limitations inherent to the sample which help explain the negative statistical results and which I explore in Chapter 5. Using data mining techniques, I was able to visualize several relevant patterns and relationships in the data. Interestingly, these connections were suggested by the statistical outcomes. In Chapter 5, I explore the findings in the context of the ICM, survey

the limitations of the study more thoroughly, and present implications and recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Despite the rapid enrollment increase in master's education and the benefits, such as higher lifetime earnings and lower unemployment, a master's degree confers on successful graduates, there is little empirically supported understanding of what promotes master's students' retention and graduation (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). Using institutional, programmatic, and sociological student factors (e.g., age, race, and financial status), the limited research into master's student retention of the past 20 years has been unsuccessful in creating a universal model to explain enrollment behavior (Cohen, 2012; Gordon, 2016). The purpose of my dissertation was to predict retention using Côté's ICM when the factors of age and personal financial contribution to tuition costs were controlled. I used logistic regression to analyze the data collected from a quantitative, nonexperimental, survey. Counseling programs that have a better understanding of factors that promote retention can create programmatic efforts to foster positive, developmentally focused academic environments.

Key Findings

The logistic regression model, which included all independent variables of master's students' age, personal financial contribution to tuition costs, and MAPS20 results, was not significant. I did not find any combination of these independent variables that produced a statistically significant model. Disaggregating the MAPS20 into the four subscales of purpose in life, self-esteem, ego strength, and internal locus of control, I conducted another logistic regression analysis to evaluate the individual contribution of

each construct to the model. Again, no combination of independent variables produced a statistically significant model. Although no model showed statistical significance, when I reviewed the measures of R^2, I was able to estimate the variance that each of the MAPS20 subscales accounted for in the model. The independent variables of ego strength and self-esteem appeared not to influence the model, while internal locus of control had a slight influence and purpose in life had the greatest influence. Given the small size of my sample and particularly of my Not Retained respondent group ($n = 2$) the R^2 data could only be used as a clue to spur further analysis rather than as significant statistical proof.

I took the variance information and conducted a round of data mining to see if visualizing relationships among data points would be beneficial. After converting all of the MAPS20 scores to *z* scores, I plotted the averages of each subscale by respondent group (Retained vs. Not Retained; see Figures 1 and 2). Visually, a relationship between the two groups emerged that echoed the variance data. Figure 1 shows a large difference between the Retained and Not Retained respondent groups' average *z* scores on the purpose in life and self-esteem subscales. The statistical data showed that when the purpose in life subscale was removed from the model, the variance accounted for in the model dropped. However, when the self-esteem subscale was removed from the model, no drop in variance was observed. Figure 2 shows a slight difference between the Retained and Not Retained respondent groups' average *z* scores on the internal locus of control subscale and almost no difference between the two groups on the ego strength subscale. The statistical data showed that when the internal locus of control subscale was

removed from the model, the variance accounted for in the model dropped slightly. However, when the ego strength subscale was removed from the model, no drop in variance was observed. The visualization of the data helped to further illuminate the relationships suggested by the R^2 statistical data that the purpose in life and internal locus of control constructs may have influenced retention.

Interpretation of Findings

While the logistic regression model did not produce statistically significant results, I was able to use data mining exploration and visual pattern identification to suggest possible relationships. I explored each of the subscales of the MAPS20 as a contributor to master's student retention and proposed a model based on the ICM. Although my primary focus is on the subscales of the MAPS20, I discuss the results of the other independent variables of age and personal financial contribution.

Age and Personal Financial Contribution

Unlike the long-standing and well-researched models of undergraduate student retention and the emerging models of doctoral student retention, researchers have paid little attention to the persistence and retention needs of master's students (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). The limited research on the topic has produced conflicting and inconsistent factors that influence master's students' decisions to remain in their academic programs. One factor that appeared in several studies was that older students tended not to retain in their programs (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012). Barry and Mathies's (2011) sample had an average age of 27.8 years old, while the average age of Cohen's (2012) sample was 33.67 years old.

The average age of the sample in this study fell directly in between at 30.76 years old. However, age was not a significant variable in any of the statistical models I conducted. The mean age of the Not Retained group in my study was 24 years old, over half a standard deviation (SD = 9) younger than the mean age of the overall sample. Being an older student did not appear to negatively affect retention for the master's students in my study as had been previously identified.

Personal financial contribution to tuition costs was another factor that had been identified by previous master's students' retention research as preventing students from maintaining enrollment (Barry & Mathies, 2011; CGS, 2013). Barry and Mathies (2011) found that master's students who received an assistantship or fellowship were more likely to retain in their programs. According to the CGS (2010), "Participants indicated that financial support is a critical factor that affects completion and attrition in master's education" (p. 38). In my study, respondents could indicate that they had contributed an amount ranging from $0 to over $20,000 in personal financial assets to the cost of their education per academic period. However, the two students in the Not Retained group indicated that they contributed at the lower end of the scale with nearly one fourth of the respondents in the Retained group contributing more personal financial assets to their tuition. The personal financial contribution independent variable, however, did appear to account for the most variance in the nonsignificant logistic regression model. As Barry and Mathies observed, "Taking a more in-depth examination of financial variables, cost of attendance and opportunity costs would provide additional understanding of master's students' retention and completion" (p. 23).

Multi-Measure Agentic Personality Scale20 (MAPS20) Subscales

Côté (1997) designed the original MAPS instrument from a variety of other assessments; in total, 14 assessments were tested and evaluated to build the MAPS. One of the original assessments was The Self-Esteem Inventory (Coopersmith, 1981). For Coopersmith (1967), the concept of self-esteem described a person's positive and negative attitudes toward self. With the Self-Esteem Inventory, Coopersmith attempted to measure the person's approval, or disapproval, of self and the degree of belief in personal talent, success, and the meaning and value he or she found in life. Luyckx et al. (2011) examined the relationship between the developmental identity instability that characterized the transition period of emerging adulthood. One of the links the authors investigated was between identity capital, or a stable sense of self, and self-esteem. Luyckx et al. found that individuals who had a more stable sense of self evidenced higher levels of self-esteem. The study authors also expanded their exploration to examine the effect that instability of sense of self had on job-related outcomes. Individuals with lower identity capital also had lower work engagement and higher rates of job burnout (Luyckx et al., 2011). Luyckx et al. concluded by reinforcing the protective connection between agentic characteristics and positive work engagement, "The present results underscored that piloting a passage through emerging adulthood in today's late-modern society in a way that protects against negative work outcomes requires developmental resources contributing to an internal point of reference" (p. 143).

Master's students, like emerging adults, are individuals in transition, and just as Luyckx et al. (2011) found that a stable sense of self contributed to stronger self-esteem,

higher work engagement, and lower burnout for emerging adults, so too would strong identity capital contribute a protective factor for master's students. The lower average *z* score on the self-esteem subscale of the MAPS20, evidenced by the Not Retained group of this study, may follow the pattern Luyckx et al. found. Lower self-esteem scores may have indicated that those who did not retain in their master's programs lacked the internal resources of strong identity capital to support engagement with graduate studies and protection against attrition.

The second subscale of the MAPS20, internal locus of control, was designed using the Locus of Control Scale (Rotter, 1966). This instrument was written to assess individuals' beliefs about the internal versus external control acting in their lives (Rotter, 1966). Individuals with a high internal locus of control belief proceed with the thought that their actions influence the outcomes in their lives (Wang & Iv, 2017). Individuals with a high external locus of control belief proceed with the thought that their own behavior has little impact on the direction of their lives and that external forces dictate the outcome of their actions regardless of their intentions (Wang & Iv, 2017). Gordon (2016) conducted focus groups with a set of master's students to understand what factors contributed to their persistence and retention and found that the factor interviewees referenced second most frequently in importance was self-motivation. Gordon described it as an "intrinsic element of graduate persistence" (p. 69). Self-motivation was inherent in every aspect of the master students' graduate experience; it assisted them in solidifying their decision to attend school, acted as a constant driver to achieve, and was the final reason for choosing to remain in their programs (Gordon, 2016). The desire to pursue

their education was such an internal motivator that most of the students were not even consciously aware of it and took the energy it provided for granted (Gordon, 2016). However, Gordon noted the students only referenced external motivation nine times during the interviews, further reinforcing the importance of self-motivation in their academic pursuits. In other words, their belief in their determination and drive to finish their degree indicated a high internal locus of control. The interviewees' rejection of external motivators as reasons for their success in graduate school indicated low external locus of control. Still, Rotter (1966) pointed out that certain environments might influence individuals' locus of control preference. Individuals in extremely competitive settings, such as athletes, or environments that require high motivation, such as master's students, may be prone to externalizing their sources of control as a defense mechanism against failure (Rotter, 1966). While the students in my study might have expressed high internal locus of control tendencies, they might also have externalized reasons for problems they encountered to protect their sense of self. Both Retained and Not Retained students scored similarly on the MAPS20 locus of control subscale with Not Retained respondents showing a slightly stronger tendency toward an external locus of control. The differences may have stemmed from the Not Retained students, who were functioning in an environment that required a great deal of motivation, then externalizing causes for negative outcomes to account for any perceived failures.

To assess the construct of ego strength, Côté (1996) took items from Epstein's (1983) Ego Strength Scale. This scale was designed to measure an individual's tendency to behave in a responsible way, including delaying gratification, avoiding impulsiveness,

and exhibiting a willingness to confront challenging situations (Pacini & Epstein, 1999). In my study, the Not Retained and Retained respondents scored almost identically on this subscale. It was the one subscale that showed virtually no difference in the average *z*-score of the two groups (Not Retained = 17.50; Retained = 17.62). During the confirmatory factor analysis round of data modeling, Cohen (2012) found that the psychological outcome variables of reliability and goal commitment did not have strong correlations with persistence. In fact, these variables did so little to help predict why master's students retained in their programs that Cohen removed them from further modeling. In a qualitative study with master's students on reasons for retention, Gordon (2016), reported that peer support was highly valued. However, students complained about peers who contributed little in the academic sphere but appeared to achieve a great deal. There seemed to be an expectation of motivated effort from peers that equaled the essential and intrinsic level of self-motivation they demanded of themselves and for which they evidenced little patience when it was missing. The two groups in my study appeared to be on equal footing in terms of responsibility and willingness to face challenges. The findings from Cohen and Gordon would support the concept that ego strength is a trait master's students admire in others and perceive as intrinsically fundamental to their success.

Côté (1996) designed the purpose in life subscale of the MAP20 from items on The Purpose-in-Life Test which was based on Frankl's work on purpose and meaning (Crumbaugh & Maholick, 1969). Negru-Subtirica et al. (2016) sought to understand the link between identity formation and meaning in life. The authors studied this

phenomenon with a group of adolescents and found that identity and meaning in life were mutually supportive constructs (Negru-Subtirica et al., 2016). Individuals in the study who were more committed to their personal goals tended to have a stronger sense of meaning in their lives, and the two concepts appeared to support one another and grow in tandem (Negru-Subtirica et al., 2016).

As an individual clarified and committed to personal goals, the person’s sense of meaning in life strengthened (Negru-Subtirica et al., 2016). The purpose in life MAPS20 subscale showed, by far, the greatest difference between the average *z* scores of the two groups (Not Retained = -.2731; Retained = .0093). Certainly, as master’s students develop and progress in their programs, their commitment to the profession may clarify and strengthen the meaning they find in their professional life. Alternatively, they may discover their original career path is no longer a good fit and that their true purpose lies in another direction. While it is unclear why this subscale showed the greatest difference in average scores between the two groups, as Negru-Subtirica et al. (2016) pointed out, goal commitment and meaning in life appear to develop mutually and provide support for each other. Perhaps the students in the Not Retained group found that either their career goals or purpose were no longer in alignment with their current path and they left their programs.

ICM and Retention Model

Figure 6 helps to visually conceptualize how the four subscale constructs work together to promote retention. The master’s student is grounded in social or cultural

capital factors (e.g., gender, age, racial identity, undergraduate major) which he or she takes into a master's program. The agentic capital factors (e.g., ego strength, locus of control, purpose in life, self-esteem) scaffold onto the social capital traits. As the master's student faces the normal challenges of graduate school, the agentic capital factors interact with each other and form a resilient shell that helps the student conquer the inevitable obstacles of graduate school, leading to retention.

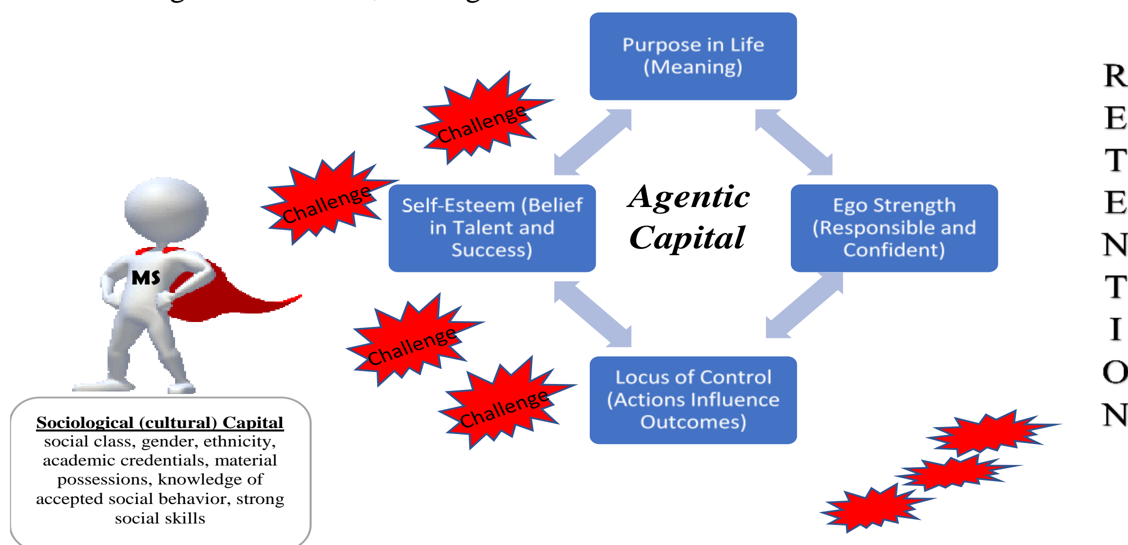

Figure 6. ICM and retention model visualization.

A master's student shared with me an illustrative story of how ICM worked for her in the first year of her program. She approached a faculty member after class to ask about the feedback she had received on a graded paper. This master's student is a first-generation, AfricanAmerican female and admitted, that at that early stage in her academic career, her writing skills were poor, and she lacked faith in her abilities. As she stood at the head of a line of her fellow master's students, her faculty member berated her writing abilities and commented that her lacking basic skills were things she should have been taught at an early age, in the home, by educated parents. The student left feeling angry,

embarrassed, isolated, and defeated. Her self-esteem and ego strength were battered by the conversation, and she thought about leaving the program. However, the rest of the story she told me highlighted how ICM works. First, she considered why she chose to enter graduate school (purpose). She knew that she wanted to help other minority, first-generation students like herself succeed in college. She realized she could access help from the university to improve her writing skills (locus of control). She reflected on previous academic challenges she had mastered (ego strength). The student assessed her belief in her future capacities and, given the strength of her three other agentic identity capital traits, was convinced that she could improve her writing skills to sufficiently meet her faculty's demands (self-esteem). She decided to retain in her program.

This anecdote shows one way the ICM might influence retention. However, it is not a stretch to imagine students missing an important part of the model such as not knowing how to access university assistance, having poor confidence in skills, or lacking a grounding in a purpose for being in graduate school. Additionally, it is conceivable that students could become overwhelmed by challenges that are too numerous or too intense to master. Programs could design intentional curricular efforts that help students strengthen identity capital during key transitions with the goal of developing resilient, flexible, and capable future professionals.

Limitations of the Study

The most substantial limitation of my study was the non-significant statistical results achieved. Previous research and published data had shown lower retention and graduation rates for master's students, especially CACREP counseling master's students

(CACREP, 2018b). However, my sample retained at nearly 100% across the two academic periods. Additionally, my sample size, although reaching the suggested magnitude according to the EVP calculation, underpowered my analysis (Thompson, 2009). The retention rate anomaly coupled with the smaller sample size resulted in nonsignificant logistic regression findings. However, visualization of the data provided clues about the underlying differences between the Not Retained and Retained groups on the subscales of the MAPS20.

Another significant limitation of my study was the sample focus of CACREP counseling and counseling psychology master's students. The findings from the study may not generalize to the larger master's student population since the sample was highly specific. However, the concepts within my study may be applicable to other helping fields such as nursing, social work, or teaching.

My study used strict inclusion criteria in an attempt to control extraneous variables that might have influenced the dependent variable (Creswell & Creswell, 2018). However, the inclusion criteria also served as limitations since students without certain characteristics were eliminated from participation in the study. The concepts from my dissertation may not apply to these excluded groups without further studies.

I conducted my study with master's students attending in-seat or hybrid programs and excluded students in fully online programs. Online learners tend to use more flexible learning styles, have more self-regulating motivational qualities, and use different types of cognitive learning strategies compared to in-seat students (Kauffman, 2015; Lee & Choi, 2013). These students' attitudinal and learning style differences may influence

enrollment behaviors. While the type of learning environment created a generalization limitation for my study, it is a variable warranted of inclusion in future research.

Another inclusion criteria for participants in my study was program standing. Students were required to be in good academic standing to participate in the study. Respondents who were on probation, on stop-out status, or had left their program were not included in the sample. Although students who are struggling in their programs certainly have insights into retention issues, the purpose of this study was to assist program faculty in understanding the average student into whom little research effort has been invested (Teixeira, 2017). However, this limitation may constrain the generalization of my conceptualizations.

The final inclusion criteria that created a limitation to the generalizability of my study was full-time enrollment. Participants in my study were required to be enrolled in their master's programs full-time for at least one academic period or with at least one academic period left before graduation. Enrollment status was another extraneous variable that could have influenced the outcome of the dependent variable. Part-time graduate students are often dependent on a narrower range of funding options leaving them personally responsible for a greater portion of their tuition costs (Glazer-Raymo, 2005). This reality could have introduced a confounding factor into the model when trying to understand how personal financial contribution influences master's students' retention behavior. However, part-time students would be another population to include in future research to continue to illuminate the contribution of financial issues to retention.

My study relied on students to report, accurately and honestly, the amount of money they contributed to their tuition costs per academic period. Self-report can be inaccurate due to a number of event and individual factors (Geisen et al., 2012). Participants tend to be better at reporting on events that occur more frequently, are more relevant to them, more unique, and are closer in time to when they are surveyed (Geisen et al., 2012). Younger, female, and better-educated participants also tend to be more accurate self-reporters (Geisen et al., 2012). Overall, both the event and person factors influencing my sample should have led my participants to be relatively accurate self-reporters; however, self-report variables should always be viewed with caution.

Logistic regression tends to bias and overestimate the odds ratios in small to moderately sized samples (Nemes, Jonasson, Genell, & Steineck, 2009). The odds ratios that are produced by the test are too large for the small sample (Nemes et al., 2009). In addition, small sample sizes can create separation (Mansournia, Geroldinger, Greenland, & Heinze, 2017). Separation (or quasi-separation) occurs when an independent variable is associated with only one (or a smaller than expected number) of the outcomes of the dependent variable (Mansournia et al., 2017).

In my study, the MAPS20 results were associated with only two respondents being in the Not Retained group. Both small sample and quasi-separation can bias the statistic and overestimate the odds ratio of the regression (Mansournia et al., 2017; Nemes et al., 2009). If the sample size were larger or the covariates were all discrete, a more complex logistic regression analysis (i.e., exact logistic regression) such as King

and Zeng's (2001) bias correction method or the penalized maximum likelihood estimation proposed by Firth (1993), might be possible (Leitgöb, 2013).

My study was designed to capture the actual enrollment behavior of a group of counseling master's students. However, my capacity to track these students' persistence and retention behaviors across time was limited by the realities of completing a dissertation. I was only able to track students for two academic periods. To truly understand how identity development influences retention across the academic life cycle of a class of master's students, measurement and tracking would begin at admission and continue until attrition or graduation. The data collected would be used to develop a model of retention. My study was only able to take a momentary snapshot of students' actions.

The participants in my survey were not randomly selected. Despite the broad range of program types and geographic regions sampled, the program directors who were approached to engage their students' participation were a convenience sample. The students who participated in the study volunteered to take my survey during round one data collection and, for the majority of participants, self-selected into round two data collection as well. The result of this very self-selected group of participants could limit the generalizability of my conceptualizations.

Recommendations

Nearly 30 years ago, O'Brien (1992) recognized the rapid growth of master's education and attempted to understand the master's student population more fully. O'Brien ended with recommendations for a national collection of master's student

enrollment data and expanded research on reasons that influenced master's student retention. The echoes of this call to action are still reverberating 25 years later (CGS, 2013; Cohen, 2012; Gordon, 2016). My study is another voice adding to those who stress the importance of understanding the factors involved in master's student persistence. I offer six recommendations from the work I have done; three for general master's student educators and four for master's student counselor educators.

Future Research on the Link Between ICM and Retention

The crucial recommendation I would make from my dissertation work is the need for further research into the influences of the ICM constructs on master's students' retention. Research on the ICM has shown that individuals with strong identity capital are more engaged with their jobs, happier, more hopeful, experience fewer transition and academic problems, feel more confident in their developing skills, are more committed to social and vocational roles, and report more psychological well-being (Burrow & Hill, 2011; Côté, 2002; Lewis, 2016; Luyckx et al., 2011; Negru-Subtirica et al., 2016; Sica et al., 2014; Simon, 2012; Webb et al., 2017). Clearly, identity capital offers individuals many positive and protective benefits during times of transition and adaptation. Future research should follow several lines of inquiry to investigate the ICM and retention connection. My study focused on CACREP counseling and counseling psychology master's students. Future research should expand the participant pool to include a variety of disciplines. My study followed students for two academic periods to track their enrollment behavior. Future researchers should conduct longitudinal studies that follow students across the life of their academic careers to assess identity capital development

and its intersection with retention. In my dissertation, participation was limited to students in in-seat and hybrid programs who were in good standing with their programs. Online students or those on probation and other at-risk enrollment statuses would be yet another line of research for future study. To date, there is no model of master's student retention, and researchers disagree about factors that influence master's students' enrollment behavior (CGS, 2013; Cohen, 2012; Gordon, 2016). Much research is needed and possible to help students, programs, and institutions create success.

Nationwide Tracking of Retention, Persistence, and Graduation Data

While collection of retention, persistence, and graduation data is done nationally at the undergraduate level, it is left to individual universities or programs at the master's level. There are no standardized reporting structures, methods, or requirements (Gordon, 2016). Some academic programs track numbers for licensure requirements, others for university needs, and still others do not track enrollment data at all. Bair and Haworth (2005) found that undergraduate programs tended to be more institutionally rooted while graduate programs were more grounded in their departments. Unlike more uniform undergraduate education, field of study, program, departmental and institutional culture all greatly influenced graduate enrollment statistics, making aggregate outcome data more difficult to calculate (Bair & Haworth, 2005). However, while there may be significant differences between a Master in Biology program and a Master in Nursing program, and each will have unique data collection needs, general persistence, retention, and graduation statistics collection would be possible and useful. As Tinto (1993) observed, a lack of a model of graduate student retention has been detrimental to

insightful research furthering the understanding of graduate student persistence and retention. One reason that has hampered the development of a universal model has been the lack of investment in collecting data about the master's student population's enrollment behavior. Aggregate collecting and tracking of master's students' persistence, retention, and graduation statistics would assist researchers as they search for an understanding and build models of enrollment behavior.

Search for a Universal Model

To date, master's retention researchers have been limited in efforts to build general models of understanding because their studies have been highly specialized. They have examined a single professional discipline, such as nursing or athletic training (Bowman et al., 2015; Mathis, 1993), student populations from one or two universities (Cohen, 2012; Gordon, 2016), or focused on unique populations such as women (Müller, 2008), online learners (Patterson & McFadden, 2009) or nontraditional students (Brus, 2006). Only two studies have examined factors that influence retention for master's students across professional disciplines and geographic boundaries, and neither of those studies were carried out in the United States (CGS, 2010). None of these studies have offered what is desperately needed, the building blocks of a generalized model of master's student retention encompassing multiple disciplines, crossing a variety of academic institutional cultures, and incorporating a diverse range of student experiences. Undergraduate education has benefited from several useful models for decades, and doctoral education has been dedicating research efforts toward their own effective models.

Institutions with high retention rates evidence students with better learning and growth (Tinto, 1993). Understanding what helps master's students persist and retain means understanding what factors help them learn and develop as students and professionals. A retention model is a vital developmental guide for educators. Master's education is the fastest growing segment of higher education (CGS, 2013). Developing the growth of this area of education without an adequate understanding of what fosters success for master's students is education, at the least, acting unprofessionally and at the extreme, pushing the ethical and moral boundaries of the profession. A shift is taking place within higher education. Greater concern is being expressed for the cost students are paying for their education and the outcomes they gain (Pyne & Grodsky, 2018). Gordon (2016) expressed his view of the duty and concern academic programs should have for enrolling master's students:

> By admitting a student to a degree program, an institution assumes a moral obligation to provide the greatest opportunity for the student to succeed; taking tuition payments from a student who does not have a reasonable expectation of completing a degree is at best unethical. (p. 2)

Broader research, inclusive of all disciplines, geographic regions, and student populations can help build a model of master's student retention useful to programs in curricular and cocurricular design to foster student success. The CGS has laid an excellent foundation for this work with the *Completion and Attrition in STEM Master's Programs* pilot study (CGS, 2010), but universities and education researchers must think

collaboratively to expand this research and promote the success of this segment of students.

Converge the Counselor Education Philosophies of Retention and Gatekeeping

Gatekeeping is one of the most fundamental and interwoven concepts in counselor education (Teixeira, 2017). Faculty are gatekeepers during the admissions process, evaluating candidates for their fit with the program and profession (Swank & Smith-Adcock, 2014). They assess students' professional dispositions during training to address concerns and assist with intervention and remediation as necessary (Glance et al., 2012). Ultimately, the purpose of gatekeeping is to ensure that counseling programs are training highly skilled students, fully capable of entering the field as competent professionals (Swank & Smith-Adcock, 2014). However, with the 3-year graduation rate for master's programs at 33% in 2016 and 35% in 2017, these capable graduates are not easily available (CACREP, 2018b). Retention is concerned with students continuing their education, typically in the same program (Hagedorn, 2005). As has been discussed throughout this study, programs that cannot retain students are in jeopardy of losing institutional and federal funding and eventual disbandment.

Yet, philosophically, there is a core divergent attitude between retention and gatekeeping. Retention minded programs seek ways to keep students engaged and maintain their enrollment. As an educational institution, the yardstick to measure impact on students' development is the positive retention numbers they generate (Tinto, 1993). Gatekeepers, on the other hand, while not seeking student attrition, look to maintain the ethical integrity of the profession by limiting access to the field through training (Swank

& Smith-Adcock, 2014). The quality of the student produced evidences the program's commitment to the training process.

My first recommendation for counselor educators is to consider expanding the role awareness of retention can play within gatekeeping. If, as has been suggested, CACREP is concerned with persistence, retention, and graduation, I would suggest widening the concept of gatekeeping from simply access to the profession to encompassing strong aspects of engagement and development (Swank & Smith-Adcock, 2014). It may be possible to maintain the necessary ethical constraints of ensuring the most capable students are trained and graduated while raising awareness that students must persist and retain to graduate. Students in danger of dropping out may not have problems of professional competence requiring remediation but still have personal and professional developmental needs. Without intensive guidance, these capable and competent future counselors will become attrition statistics, left with debt, feelings of failure, and deprived of commiserate outcomes to offset their educational expenses (Gordon, 2016). As Nagpal and Ritchie (2002) observed in their study of counselor educators' master's program applicant interviewing techniques, faculty knew what characteristics they thought made good candidates, but proceeded from a screen-out mindset rather than an accept-in position. Retention is about engaging students to promote their inclusion in the educational community, while gatekeeping is about finding screening criteria for exclusion. I believe counselor educators can do better in recognizing the importance and possibilities of retention, even within the context of

gatekeeping. My recommendation is to put research, practice, and cultural efforts into shifting the gatekeeping philosophy to allow room for retention efforts.

Commit to Research on the Characteristics of Master's Counseling Students

My second recommendation for counselor educators would be to engage in research focused on factors that influence counseling master's students' retention and persistence. Reviewing literature for my study, I was able to find only one study in the counseling literature that investigated a method for engaging master's students, not on a remediation plan, with their program (Jensen et al., 2016). Despite the inclusion of the word retention in the title, the focus of the study results was on the students' satisfaction with their program, rather than on their persistence in their program.

Nagpal and Ritchie (2002) interviewed nine faculty from four counselor education departments about the interview criteria they used to select students for their master's in counseling programs. Although ten factors were identified that all faculty used in common, the counselor educators used the criteria to screen applicants out rather than as selection characteristics on which to choose the most qualified applicants (Nagpal & Ritchie, 2002). Honderich and Lloyd-Hazlett (2015) conducted a study to understand the factors that influence students to enroll in master's counseling programs. However, beyond these few studies, counselor education research has largely focused on the identification of dispositions, problematic professional behaviors, and remediation (Teixeira, 2017). Little attention has been paid to the development of the "average" master's student. It is as though counselor education assumes that if the changes and challenges a master's student faces do not cause them to break a disposition or behave

problematically, the student will develop the skills and characteristics needed to succeed without further attention. In 2003, Myers, Mobley, and Booth (2003) reported that a review of the PsychINFO database revealed no studies examining psychological wellness of counseling trainees. The authors pointed out that the CACREP standards promoted development of counseling students by: (a) urging faculty to choose applicants based on an assessment of their potential for professional and personal growth, (b) systemic assessment of students' progress in their programs based on their personal and professional development, and (c) encouraging students to participate in activities that enhanced their professional and personal growth (Myers et al., 2003). However, as Myers et al. pointed out, despite the CACREP standards, there is little support and information provided to counselor educators about "effective strategies for promoting personal development of counseling students or strategies for screening and reviewing student personal growth" (p. 264).

Counselor educators have little research to help them understand the reasons master's students choose to enter the field, engage in training, what factors help master's students to retain, persist or graduate from programs, or what happens next in their professional development. Yet, the professional standards of the field expect counselor educators to make decisions and guide students based on this incomplete knowledge. Counselors welcome any opportunity to understand the characteristics of clients and assess the impact interventions have on client outcomes. Evidence-based practice as shifted the responsibility for helping clients make better-informed decisions onto the clinician who is expected to take the uniqueness of the person into account when forming

treatment plans (APA, 2005). Committing to research that develops an understanding of the characteristics of master's students across their academic life span would give counselor educators the same evidence-based practice ability on an academic level. The research should strive to encompass all of the nearly 44,000 incoming students (CACREP, 2018b). Studies that are limited in population scope or design focus reduce counselor educators' effectiveness and capacity to build models and strategies that help programs produce more capable and competent professional counselors.

Lengthen the retention research perspective. As an addendum to the recommendation above, I urge counselor educators to research retention of master's counselors 1 year and 5 years postgraduation. Burnout and attrition in the field is a phenomenon of concern (Gutierrez & Mullen, 2016; Swank & Smith-Adcock, 2014). Nursing has a robust line of research examining how educators in that field can better support, mentor, and retain first-year nurses (DeGrande, Liu, Greene, & Stankus, 2018; Pelletier, Vincent, Woods, Odell, & Stichler, 2019; Price, Hall, Murphy, & Pierce, 2018). Research has assisted student affairs professionals in recognizing an attrition problem in their field (Marshall, Gardner, Hughes, & Lowery, 2016; Silver, & Jakeman, 2014). If counseling master's programs are only graduating 33%–35% of students, then understanding what happens to these valuable professionals 1–5 years postgraduation could be essential to the long-term health of the profession (CACREP, 2018b).

Identity Capital Model for Program Development

My final recommendation for counselor educators is the development and integration of identity enhancement programmatic pieces into the curriculum. Given the focus of my study, I would advocate for using the ICM framework as a platform for this. A program could look at evaluating the four constructs of the ICM at admissions and alongside disposition assessments throughout the program. Opportunities to reflect on and practice the four ICM constructs could be built into the curriculum with the goal of students strengthening the agentic characteristics to promote resilience.

Sica et al.'s (2014) study with college students found that those with stronger identity capital reported fewer academic problems, greater psychological well-being, as well as stronger internal locus of control. Simon (2012) found that student teachers with stronger identity capital were more confident about their abilities to fulfill their professional responsibilities. Individuals with stronger identity capital in Luyckx et al.'s (2011) study were more engaged with their work and evidenced lower levels of burn-out. If from the beginning of a master's program, students were provided intentional curricular opportunities to reflect and articulate how they are developing purpose and meaning in their work, a strong belief in their personal skills, feelings of control regarding outcomes, and the willingness to be responsible and take on challenges research indicates these traits will build resilience to face the inevitable hardships associated with helping careers. Given a field that faces low graduation rates and high burn-out trends, considering an intentional curriculum shift to include educating master's students to be adaptable, flexible, engaged, resilient individuals who are developing

strong identity capital has multiple benefits. The field will not only increase persistence, retention, and graduation but meet the ethical mandate of producing capable and competent professionals.

Implications

There are social change implications regarding my research for a variety of groups. In this section, I discuss how the results of my study can be applied to help master's students. Next, I discuss implications for the academic community, especially counselor educators. Finally, I explore the larger implications for social change possible from my study.

Student Implications

In 2016, 84% of new graduate school admissions were in master's programs, making this segment the fastest growing of the education market (CGS, 2017a). However, what has lagged behind the upward trend in enrollment is educators' understanding of the factors that influence master's students' enrollment behavior (Barry & Mathies, 2011; CGS, 2013; Cohen, 2012; Gordon, 2016). Unlike in undergraduate education, no models exist to help guide higher education institutions in creating positive environments targeted to meet the needs of master's students. The results of such lacking academic environments are often higher attrition rates of students. Students who drop out of their master's programs carry negative consequences such as large student loan debt, loss of wages, and negative emotional impacts (Albertini et al., 2011; Cohen, 2012). Well-prepared master's students, on the other hand, have discipline-specific information that has equiped them to be technologically proficient, adaptable, flexible, critical

thinkers, capable of using their advanced skills to pivot quickly within the rapidly changing job market to seek and create career opportunities and express their marketable skill set (Briscoe & Hall, 2006; Savicaks et al., 2009).

A master's degree, intentionally focused on aiding a student's career development, can help improve a student's career opportunities and increase their lifetime earnings (CGS, 2013). The data relationships discovered in my study suggest the importance of further research on students' focusing on identity development during graduate school to promote retention and graduation. Additionally, further research would be beneficial to uncover the link between strong identity capital and fostering critical employment skills.

Institutional and Program Implications

As Gordon (2016) pointed out, when an institution of higher education admits students, it takes on a moral obligation to offer the best opportunity for student success. Counselor educators are urged by their ethical standards to "aspire to foster meaningful and respectful professional relationships and to maintain appropriate boundaries" (American Counseling Association [ACA], 2014, p. 12). While the ACA ethical standards only admonish counselor educators to engage actively in the recruitment and retention of minority students, the low 3 year enrollment to graduation rate compared to other master's programs (15% lower than social work; 25% lower than STEM; 50% lower than MBA) indicates the need for a focus on retention in the field (ACA, 2014; CGS, 2013; CSWE, 2016). An educator who hopes to foster meaningful student relationships with the goal of creating the best opportunities for student success would,

ideally, wish to have some idea of what factors contribute to the persistence and eventual graduation of students from their programs.

The gatekeeping ethical obligation might also be enlightened by understanding what assists counseling master's students in retaining and persisting in their programs. Furthering an awareness of issues that create stressors for master's students and derail their progress, then intentionally designing programmatic supports might help eliminate some of the need for remediation. Further investigation of the ICM concepts in this study might suggest curricular possibilities for developmental programs focused on retaining students in a positive and success centered manner while upholding ethical gatekeeping obligations.

Social Implications

The United States is facing a mental health provider crisis. Duenow et al. (2017) reported that 16,900 more mental health workers would be needed by 2025 to meet the needs of the growing U.S. population. The authors stated that the shortage was more significant in rural areas of the country. Lin, Lin, and Zhang (2015) examined the need for social workers in the United States based on the aging population. Lin et al. stated that by 2030, over 195,000 more social workers will be needed with the western and southern regions of the United States experiencing the most severe shortages. In 2017, Tran and Ponce conducted a study with Californians who needed mental health services but did not receive any. Approximately 84% of the respondents to the study reported difficulties finding available mental health care or lacking financial means to pay for services (Tran & Ponce, 2017). Individuals with poor mental health care are at greater risk for

homelessness, suicide, and substance abuse and communities face higher expenses for medical and safety costs (Duenow et al., 2017). There is a growing gap between the social need for counselors and the trained professionals being produced. Counselor education programs can help address this gap by ensuring programs are creating positive, intentional, developmentally focused on retention curricula. Counseling programs developing and producing flexible, adaptable, more resilient counselors are good for society now and in the future. The ICM constructs within my study have the potential to help programs create such a curriculum.

Conclusion

Master's education is an increasingly popular option that offers both students and institutions short-term investments for long-term gain (CGS, 2017b, Glazer-Raymo, 2005). Intuitions can charge higher graduate tuition rates without the small classes and intensive research mentoring needed for doctoral students (Glazer-Raymo, 2005, O'Brien, 1992). A master's degree offers graduates higher lifetime earnings and more employment opportunities (CGS, 2013). Society obtains benefits from individuals with advanced degrees as well. In a global, knowledge-based economy, intellectually flexible individuals with discipline specific talents, who are technologically capable, and adaptable to work across subject fields will be strong contributors (Glazer-Raymo, 2005; Savicks et al., 2009). Professions such as athletic training, social work, counseling, human resources, and education, are shifting and requiring a master's degree as the entry level credential for employment (Cohen, 2012; Glazer-Raymo, 2005). And more professionals in these fields are needed as the U.S. population ages and diversifies and

shortages in fields such as mental health and social work increase (Duenow et al., 2017; Lin et al., 2015).

But despite the value the growing master's education arena has for intuitions, students, and society, educators and researchers have not put forth the level of effort spent on undergraduate students to understand the factors that influence retention, attrition, and graduation behavior of master's students (CGS, 2013; Cohen, 2012; Gordon, 2016). Attrition has devastating effects for master's students including high student loan debt, lost wages, family conflict, and personal sense of failure (Albertini et al., 2011; Cohen, 2012). Ethically it is the responsibility of educators to ensure students have the best chance at success (Gordon, 2016). Counselor educators are urged by the ACA *Code of Ethics* (2014) to promote social justice. However, little research has been done to understand what factors promote and foster retention and prevent attrition in master's students (Cohen 2012; Gordon, 2016). Given what students risk to attend master's programs, how much society needs trained counselors, and how badly counselor education has been performing (34% graduation rate; CACREP, 2018b) the field can do more to meet the ethical obligations.

The purpose of this study was to determine if the constructs of the ICM could create a model of master's student retention. Previous research indicated that strong identity capital provided numerous benefits such as confidence in developing skills, better engagement with employment, and more commitment to social and vocational roles (Burrow & Hill, 2011; Luyckx et al., 2011; Sica et al., 2014; Simon, 2012).These benefits appear to not only support the individual during times of transition, but also form

a foundation for life (Côté, 2002). It is my hope that future researchers continue to search for a link between agentic factors such as purpose, ego strength, self-esteem and retention. Providing future counselors positive and supportive training environments in which they can strengthen and articulate these important personal traits will help build engaged, resilient, adaptable, flexible, capable, and competent professionals. The 21st century marketplace will demand these types of employees, society deserves these types of mental health practitioners, and as educators, ethically, we owe students this type of master's education (ACA, 2014; Duenow et al., 2017; Savickas et al. 2009).

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Appendix A: Exclusion Criteria Questions

Please answer the following questions to verify your eligibility for this study.

Q1 Are you a full-time master's student?
Yes
No

Q2 Are you in good standing with your master's program (e.g., not on probation, not in stop-out status)?
Yes
No

Q3 Have you completed, or are you completing, at least one academic period (semester or quarter) of classes?
Yes
No

Q4 Do you have one or more academic periods (quarters or semesters) left in your master's program before you graduate?
Yes
No

Q5 Do you attend an online program (all classes attended online - no in-person classes)?
Yes
No

Appendix B: Demographics Questionnaire

Please answer the following questions to help me learn more about you.

Q1 Name

Q2 E-mail (for follow-up contact regarding enrollment status next academic period)

Q3 What is your gender?
Male
Female
Not listed (please specify) ____
Prefer not to respond

Q4 What is your race/ethnicity? (Check all that apply)
White or Caucasian
Black or African American
Hispanic or Latinx
Asian
American Indian or Alaska Native
Native Hawaiian or Other Pacific Islander
Other (please specify) ____

Q5 What is your age?

Q6 In what kind of master's program are you enrolled?
Addiction Counseling
Career Counseling
Clinical Mental Health Counseling
College Counseling and Student Affairs
Community Counseling
Counseling Psychology
Marriage, Couple, and Family Counseling
School Counseling
Rehabilitation Counseling (Clinical Rehabilitation Counseling)

Q7 How many credit hours have you completed in your master's program?
0 - 15
16 - 31
32 - 47
48 - 60

Q8 How much of the cost of tuition, books, and fees do YOU pay out of pocket per academic period (quarter or semester) through personal or familial funds?

$0 -$500
$500 - $1,000
$1,000- $1,500
$1,500 - $2,000
$2,000 - $5,000
$5,000 - $7,000
$7,000 - $10,000
$10,000 - $15,000
$15,000 - $20,000
More than $20,000

Q9 How much of the cost of tuition, books, and fees do you pay using external funds (e.g., loans, scholarships, grants, assistantships, employer grants) per academic period (quarter or semester)?
$0 -$500
$500 - $1,000
$1,000- $1,500
$1,500 - $2,000
$2,000 - $5,000
$5,000 - $7,000
$7,000 - $10,000
$10,000 - $15,000
$15,000 - $20,000
More than $20,000

Q10 At this point, do you intend to re-enroll in your current program next academic period (quarter or semester)?
Yes
No

Appendix C: Sample Questions from the Multi-Measure Agentic Personality Scale20 (MAPS20)

You will read statements about feelings. If a statement describes how you usually feel, click "Like Me." If the statement does not describe how you usually feel, click "Unlike Me." There are no right or wrong answers.
(Self-Esteem Subscale: Unlike me -Like me)

Q1 I am a lot of fun to be with.

Q3 People usually follow my ideas.

Q5 Most people are better liked than I am.

Click the descriptor next to each statement that is most true for you right now.
(Purpose in Life Subscale; Scale of 1-7 with a neutral point)

Q6 I am usually: completely bored / exuberant and enthusiastic

Q8 Every day is completely: new and different / exactly the same

Q10 I am a very: irresponsible person /very responsible person

For each question indicate how much you agree or disagree with the statement. (Locus of Control Subscale; Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree, Strongly Disagree)

Q12 When I make plans, I am almost certain that I can make them work

Q13 There is a direct connection between how hard I study and the grades I get.

Q15 What happens to me is my own doing.

For each question, indicate how true or not true you believe the statement is for you.
(Ego Strength Subscale: Completely True, Partly True, Neither True nor False, Partly False, Completely False)

Q16 I enjoy difficult and challenging situations.

Q18 I am able to concentrate better than most people under distracting conditions.

Q20 When I have a job to do, I am not easily distracted.

Appendix D: E-mail from MAPS20 Author

From: James Cote
Sent: Thursday, December 22, 2016 1:23 PM
To: Smith, Tammison
Subject: Re: MAPS request

Dear Tammison: Thank you for your interest in my work. I've attached a Handbook that I recently wrote synthesizing the research conducted to date on the Identity Capital Model, including the MAPS (the items for which you will find in an Appendix). It would be interesting to see how well the MAPS lines up with the concept of "grit". You will see other elements in the Model can help understand student success and retention.
Feel free to use the MAPS and any other scales in the Handbook, and be sure to let me know how the research turns out.

Best wishes, Jim

James Côté, Ph.D.,
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http://sociology.uwo.ca/people/profiles/Cote.html