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An Investigation of Tax Assessors' Perception of the Relationship Between Proactive Career Management Behaviors (PCMBs) and Career Success: Determining the most Valuable Career Management Behaviors

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An Investigation of Tax Assessors' Perception of the Relationship Between Proactive Career Management Behaviors (PCMBs) and Career Success: Determining the most Valuable Career Management Behaviors

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education in Human Resource Development and Workforce Education

by

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Abstract

The purpose of this study was to investigate government and private-sector tax assessors' perceptions of the relationship between proactive career management behaviors (PCMBs) and career success. The findings of the study established a foundation to assist government and private-sector tax assessor organizations with developing the human capital within and the careers of their employees. The study's findings revealed that all four of the PCMBs (career planning, career self-exploration, environmental career exploration, and voluntary human capital development) had significant relationships to career success when tested with a multiple regression model. The study's findings also revealed that there was no significant difference between government and private-sector tax assessors concerning the PCMB/career success relationship. The PCMBs and career success were also investigated by tax assessors' gender, age, and education level differences. The study was grounded in aspects of career literature including expectancy theory, career management theory, career development theory, social cognitive career theory, the model of proactive behaviors, and boundaryless and protean career theory. There were also no significant differences in perception of career success for employment, gender, age groups, and educational level. The theoretical framework for this study supported previous findings from the literature.

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Chapter One: Introduction

Status of the Issue

“The only thing we know about the future is that it is going to be different” (Drucker, 1973, p. 44). The nature of today’s career paths has become increasingly complex with the globalization of the world of work, the new technological advances, and the diversification of the workforce. Changes over the past decades in the world of work caused by transformations in the economic, technological, and business environments have also impacted individual career attitudes and experiences. Unlike the last century when career success was defined by the organization and measured by promotions and wage increases, organizations now must be more flexible to adapt to market changes (Hall, 2002). Many institutions are now downsizing and hiring employees, contract workers, and consultants for specific short-term purposes based on their unique skill sets. As a result, internal employees have less chance for vertical mobility. These changes are partly responsible for the formulation of a new psychological contract concerning the dependent responsibilities between employees and their employers. (Greenhaus et al, 2010; Greenhaus & Kossek, 2014; Hall et al., 2018; Sullivan, 1999).

Careers

Historically, careers have been defined as a succession of related progressive jobs that follow an ordered pattern with few similar organizations (Clarke, 2009). Careers were viewed as happening within organizational boundaries. “Metaphors for career progression included terms such as ‘climbing the ladder’, ‘working your way through the ranks’, or ‘moving up the hierarchy’; career success was evidenced by increasing status, responsibility and monetary rewards” (Clarke, 2009, p. 9). However, the definition of careers changed in the 1980s. Auto and manufacturing companies began downsizing and delayering as global competition gained momentum. This resulted in an issue for U.S. companies dealing with the plateauing of employee careers. Organizations were faced with the problem of motivating employees and preserving their careers without the opportunity for upward mobility. Companies were forced to

react to the global competition continuing into the 1990s by reducing their workforce. The mass layoffs resulted in the reduction of the psychological career contract, a set of rules and boundaries between the employee and their employer, and a shift to the boundaryless career where the employee is not bounded by the rules of a single organization (Arthur & Rousseau, 1996; Hall et al., 2018; Rousseau, 1995). The straight-line career from adolescence to retirement described by Super (1957) in his career lifespan theory was coming to an end. Super also recognized the demise of the linear career relationship and extended his theory to include career transitions which gave his model a cyclical nature (Hess et al, 2012).

Another phenomenon related to the boundaryless career also emerged and was identified by Hall, et al., (2018) as the “protean paradox”. The protean paradox, also known as the protean career, is an extension of the boundaryless career where the individual takes control and responsibility for her career. The protean paradox is a process that is used by individuals who have greater levels of specific self-direction and values orientation aimed at serving their particular purposes and interests. The process not only has a satisfying effect on the individual but also may have a positive influence on the groups and organizations in which they work. This view is different from the traditional view where the individual’s career is guided by the organization. The organization’s role has evolved from directing career development to a supportive role concerning the employee’s career development choices (Hall et al., 2018). The result is a boundaryless, self-guided career for the individual where his training not only fills the needs of the organization but also is transferable to other organizations (Arthur et al., 2005; Hall, 2002; Kossek et al., 1998). Companies can fulfill organizational needs while also increasing employee satisfaction and advancing career success by supporting boundaryless career employees in developing their careers (Baruch, 2006). This relationship includes efforts taken by the employee to develop his career and the organization’s support for career development to enhance the employee’s career success and create a more valuable employee for the organization (Barnett & Bradley, 2007).

Proactive Career Behaviors

Proactive career behaviors are needed by employees in all fields because of the continuously changing nature of the world of work. Constant shape-shifting careers within the rapidly changing employment context that is impacted by drastic technological change will require accelerated human capital development and nimble adaptation to the work environment. The process the individual uses to craft her career will be managed by her as part of her career development for the contentment, satisfaction, and well-being of her career (Coetzee et al., 2019). Proactive career behaviors are needed to facilitate this process. Wilhelm and Hirschi (2019) explain that career self-management (CSM) is influenced by the degree that which the individual has proactive traits that influence his personality and motivations. The authors also espouse that CSM is a key factor in career well-being. According to Ashford et al. (2018), for individuals to obtain career success in the new world of work, they must possess proactive career-related behaviors to develop the human capital necessary for adapting to the new work environment. Specifically, the authors suggest the development of core competencies in areas such as communication, marketing ability, and digital capabilities to enable workers to fill many types of roles and be more appealing to a wide range of organizations.

Recently, the COVID-19 pandemic has illustrated that without proactive career behaviors, many employees would be unemployed and unemployable as organizations were mandated to close due to no fault of their own. Akkermans et al. (2020) describe the COVID-19 pandemic as a career shock that requires individuals to use proactive behaviors to enhance career competencies that help them deal with the pandemic's consequences. A career shock is defined as "a disruptive and extraordinary event that is, at least to some degree, caused by factors outside the focal individual's control and that triggers a deliberate thought process concerning one's career" (Akkermans et al., 2018, p.4). Positive career shocks, such as a promotion or raise, will help individuals with the confidence of achieving career goals. However, negative career shocks, such as the COVID-19 pandemic will hinder an individual's career

progress (Blokker et al., 2019). Proactive behaviors toward career competencies help the individual cope with a negative career shock crisis such as the COVID-19 pandemic when compared to the coping mechanisms of other individuals without proactive career competency behaviors (Akkermans et al., 2020). Additionally, Seibert et al. (2013) illustrated that career self-management and career shocks both serve as factors in career decisions. Furthermore, Blokker et al., (2019) demonstrated that career competencies were indirectly related to perceived employability and based on the individual's perception of subjective career success. An individual that is proactive in developing career competencies is more employable and adaptable to handling the COVID-19 pandemic when it comes to his or her career decisions.

Proactive Career Management Behaviors

Therefore, this study was concerned with the proactive career management behaviors (PCMBs) of individuals that are the result of today's protean and boundaryless careers and their relationship to individuals' perceptions of career success. PCMBs are the processes that proactive individuals take to accomplish their career objectives. Because of their proactive personality traits, these individuals desire to actively influence their career outcomes (Barnett & Bradley, 2007). While many proactive career behaviors exist, this study aims to investigate four general validated and valued career behaviors: career planning, career self-exploration, environmental career exploration, and voluntary human capital development (Hirschi, et al., 2014). These particular career behaviors were chosen as the topic of this study because they are shown as being proactive career behaviors (Hirschi, et al., 2014), have a positive relationship with career satisfaction (Barnett & Bradley, 2007), are easily measurable (Hirschi, et al., 2014; Hirschi, et al., 2018), and are valuable to the career management and career development of individuals (Greenhaus et al., 2000; Sharf, 2010). Additionally, organizations can aid with the career success of their workforce by assisting with these valued PCMBs which may improve the profitability of the company.

Career Success

Career success, as an outcome of PCMB, was also a major concern investigated in this study. Hirschi et al. (2018) define career success as anything that an individual perceives to help achieve his career goals. Career success can be characterized as an objective outcome with wages and promotions. Additionally, it may also be viewed subjectively in terms of career satisfaction. Isolating and determining relevant predictors of career success is difficult because the existing literature proposes an enormous array of probable career success factors that cannot be easily measured. This significantly affects the application and research related to career success. While many career success outcomes and career success measurements exist, this study uses three measures from the career resources questionnaire to measure career success based on individual self-perceptions: career management activities, individual motivation, and the knowledge and skill development of the individual. This measure has confirmed reliability, and convergent and criterion validity with factors of objective and subjective career success. Additionally, these predictors of career success can furnish professionals and clinicians with a dependable, specific, and complete standard to evaluate valuable factors of career success (Hirschi et al., 2018).

PCMB and Career Success Relationship

Based on past research, PCMBs were expected to impact career success (Crant, 2000; Lent and Brown, 2006). However, there is no clarity regarding the specific types of valuable PCMBs of individuals for achieving career success. A better understanding of these relationships by organizational managers may better facilitate employee success (Barnett & Bradley, 2007). Also, by understanding the impact of career management behaviors on career success, individuals will be additionally motivated to participate in self-directed career planning and management activities (Hirschi et al., 2018). The outcome should result in a more knowledgeable and proficient workforce leading to leaner budgets for public sector organizations and reduced cost and increased profit for private sector companies.

The Tax Assessment Industry

This study is focused on the PCMB/career success relationship of individuals in the tax assessment industry. The tax assessment industry includes individuals who contribute to the assessment of the value of real estate and personal property owned by individuals within specific assessment districts to tax the individual for property owned to generate revenue for local and state governments. These individuals may work in different assessment departments including personal property assessment, real estate property assessment, geographic information system or mapping, and website database management. Additionally, these individuals may be employed by state agencies, local assessor's offices, and public sector business contractors. State and local tax assessors are employed by government agencies while tax assessors who work for public sector business contractors are employed by private and public businesses who are contracted by the government agencies to perform some of their required functions.

The International Association of Assessing Officers (IAAO) is the international association for the tax assessment industry. It was founded in 1934 and currently has more than 8,500 members. The association's mission "is to promote global excellence in property appraisal, assessment administration, and property tax policy, through innovative professional development, education, research, and technical assistance" (IAAO, n.d.). Additionally, the IAAO is represented and promoted throughout the United States with state and local chapters and organizational affiliates.

Problem Statement

To provide taxpayers with fair and equitable tax assessments of real estate and personal property, it is critical for tax assessment organizations to realize the importance of identifying the career success needs of tax assessing individuals not only to address the objective components of career success like pay, promotion, and status but to also fulfill the subjective career satisfaction components that assist individuals with meeting career goals (Hirschi et al., 2018;

Ng et al., 2005; Ng & Feldman, 2014b). Additionally, tax assessment employees can benefit from their employing organization's comprehension of the relationship between their PCMBs and their career satisfaction. An understanding of the PCMBs and career satisfaction relationship can help the respective organizations assist with the PCMBs of tax assessment employees. The assisting of the PCMBs by organizations will lead to improved career satisfaction, and greater career success. Government and private-sector business contracting institutions may also benefit from improved employee career satisfaction and success through better customer service to taxpayers and improved organizational efficiencies (Barnett & Bradley, 2007; Lent & Brown, 2006).

Many government and private-sector business contracting tax assessment organizations do not currently inquire about the career success needs of individuals employed by their respective entities. While the IAAO has a standard curriculum for tax assessment employees to obtain national certification, tax assessors lack the career development counseling at the local level needed to jump-start their careers. Additionally, while studies have been conducted measuring the relationship between PCMB and career satisfaction, the researcher was unable to identify any studies that have been conducted measuring the relationship between specific PCMBs and career success as suggested by Barnett and Bradley (2007), Hirschi et al., (2014), and Hirschi (2018).

If the government and private-sector business contracting tax-assessing organizations continue to operate without determining the factors that lead to employee career success, the entities may waste time and money on employee motivation, employee retainment, and production improvement programs which are all tied to boundaryless and protean career needs of the employee (Hall, 2002, Hall et al., 2018). The lack of career satisfaction can result in poor customer service and office inefficiencies due to substandard worker knowledge, increased employee turnover, and low worker motivation (Barnett & Bradley, 2007; Hall et al., 2018; Lent & Brown, 2006). This can result in the inefficient use of taxpayer money, overspending, and/or

the inability to stay within budget by the government assessment offices. Additionally, private business tax assessment contractors may lose contracts over poor taxpayer rapport and experience increased costs with lower profits leading to the inability to compete in the marketplace (Swanson & Holton, 2009).

Purpose of the Study

The purpose of the study was to investigate tax assessors' perceptions of valuable PCMBs that contribute to their career success. Additionally, the study investigated whether the perceptions of tax assessors employed by government agencies were different than those of tax assessors employed by private sector business contractors.

Research Questions

The study was guided by the following five research questions:

1. Is there and what is the relationship between career planning and career success for tax assessors?
2. Is there and what is the relationship between employee self-career exploration and career success for tax assessors?
3. Is there and what is the relationship between employee environmental career exploration and career success for tax assessors?
4. Is there and what is the relationship between voluntary human capital and career success for tax assessors? If there is a relationship, how does the relationship influence the development of additional training?
5. Are the perceptions of tax assessors employed by government offices different than tax assessors employed by private sector business contractors regarding the relationship between their overall proactive career management behaviors and career success? If so, to what extent and in what way(s) are they different?

Theoretical Framework

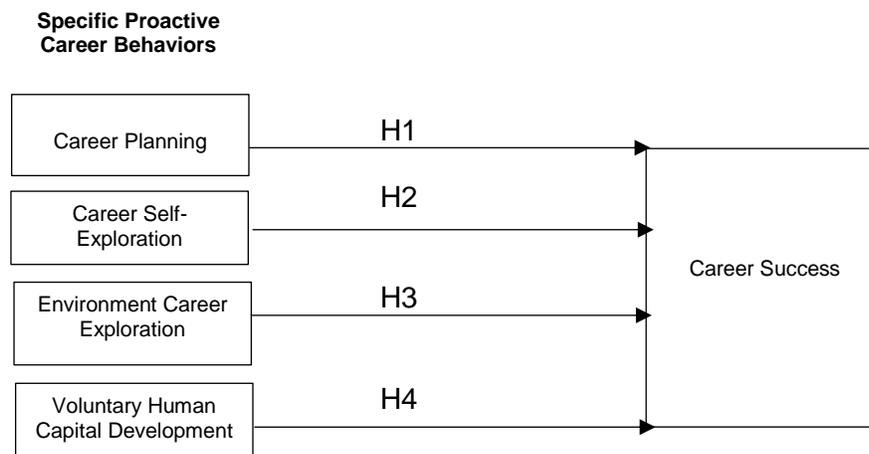
The theoretical framework of this study is grounded in the integrated model of proactive behaviors (Barnett & Bradley, 2007), the specific proactive career behaviors developed and validated as factors of career engagement (Hirschi, 2014), and the developed and validated predictors of career success (Hirschi, 2018).

Integrated Model of Proactive Behaviors

The integrated model of proactive behaviors is an extension of the social cognitive career theory (SCCT). The model is used to demonstrate and investigate the relationships between an individual's proactive personality traits (PPTs), the organizational support for career development (OSCD), and an individual's proactive career management behaviors (PCMBs), relative to the individual's career satisfaction. Additionally, the individual's PCMBs mediate between the individual's PPTs and career satisfaction and between the OSCD and the employee's career satisfaction (Barnett & Bradley, 2007).

Specific Proactive Career Behaviors

Figure 1 illustrates the framework of this study based on the integrated model of proactive behaviors focusing on specific valuable PCMBs of individuals, the career success indicator of career management behaviors, and the relationship between the two. The relationship magnitude between four of the six specific career management behaviors that were found to impact career engagement (Hirschi et al., 2014) and their perceived impact on career success (Hirschi et al., 2018) will be investigated. Hirschi et al. (2014) defined career engagement as "the degree to which somebody is proactively developing his or her career as expressed by diverse career behaviors" (p. 577). Additionally, Hirschi et al. (2014) developed

Figure 1*Specific Individual Proactive Career Behaviors / Career Success Model*

Note: The model illustrates the relationship between the specific proactive career behavior constructs and career success. Adapted from “The Career Engagement Scale: Development and Validation of a Measure of Proactive Career Behaviors” by A. Hirschi, P.A. Freund, and A. Herrmann, 2014, *Journal of Career Assessment*, 22(4) and “Assessing Key Predictors of Career Success: Development and Validation of the Career Resource Questionnaire” by A. Hirschi, N. Nagy, F. Baumeler, C.S. Johnston, and D. Spurk, 2018, *Journal of Career Assessment*, 26(2).

and validated six proactive career behaviors relevant to career engagement: career planning, career self-exploration, environment career exploration, networking, voluntary human capital development, and positioning. The four PCMBs that were pertinent to this study are listed and defined below:

1. Career Planning: The self-directed actions of individuals that include setting obtainable objectives and goals to achieve desired career outcomes (Hall, 2002).
2. Career Self-exploration: The steps an individual take to collect information about the interests and talents of self (Greenhaus et al., 2000).
3. Environmental Career Exploration: The steps an individual takes to collect career information about job options and their requirements, employers, and professional development opportunities within the individual's desired work environment (Greenhaus et al., 2000; Hirschi, 2014).

4. Voluntary Human Capital Development: The voluntary participation by the individual in further education, training, or other events that support his or her career (Hirschi et al., 2014).

Career Success Indicators

Hirschi et al. (2018) developed and validated the career resource questionnaire to assess key predictors of career success for workers and students. The researchers identified four broad factors or resources of career success: human capital, motivation, environment, and career management behavior. Human capital resources included the individuals' knowledge and skills including occupational expertise, job market knowledge, and soft skills. Environmental resources included knowledge of career opportunities, organizational support, job challenge, and social support. Motivational resources included the individuals' degree of career involvement, confidence, and clarity. Career management behavior involved career activities such as networking, career information gathering, and continuous learning. Additionally, the study outlined 13 items for workers or 12 items for students that comprise the broader factors of career success, established them as predictors of career success, confirmed that they are not redundant, and verified that they do not represent fixed traits or socio-demographics. The groundwork added to the academic basis of career research by incorporating the broad composition of forecasting variable information of career success into a framework that is both all-inclusive and workable. Unlike other studies that focus on a narrow range of personality or developmental variables related to career competencies or career adaptability (Akkermans et al., 2013; Savickas & Porfeli, 2012), the investigators used a larger scope of research including human capital resources, environmental resources, motivational resources, and career management behavior (Hirschi et al., 2018). This study examined and measured the impact of the specific PCMBs on the career success resource indicators of human capital resources, environmental resources, motivational resources, and career management behavior using the career resource questionnaire. The research questions correspond with the theoretical

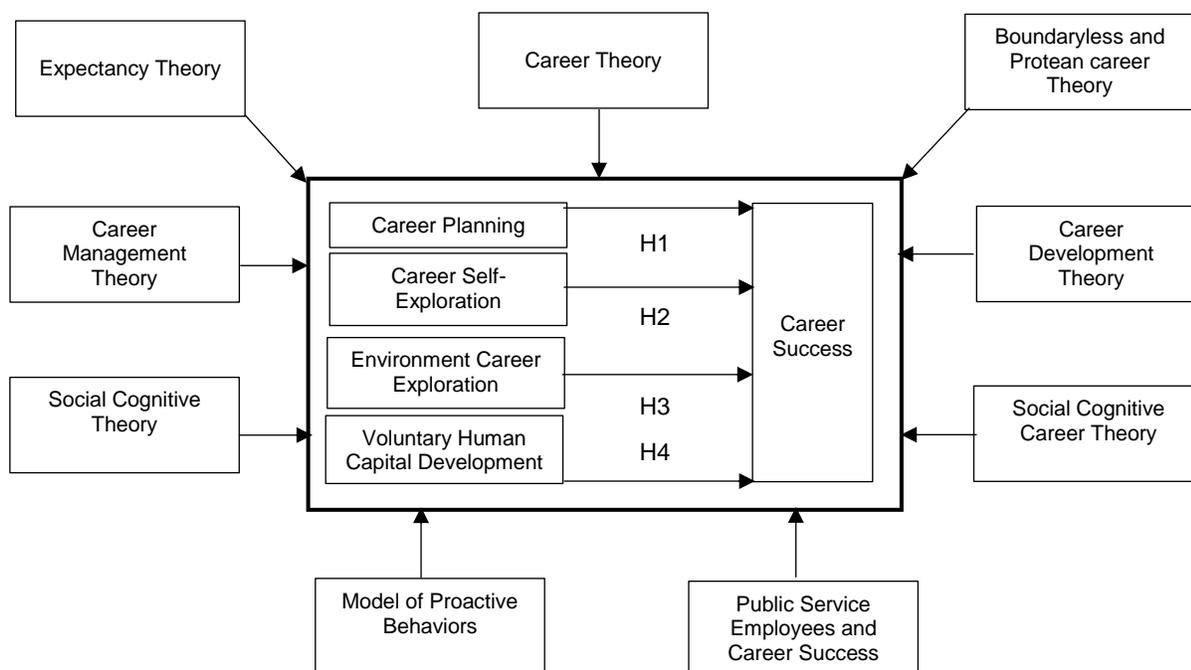
framework of this study concerning the relationships between valuable career management behaviors from tax assessors' perceptions that contribute to their career success.

Career Literature

The theoretical framework of the study was guided by several topics grounded in career literature illustrated in figure 2 and further discussed in the literature review. Individual motivation outlined by expectancy theory, explains the reasoning why an individual participates in PCMBs and the process he uses to gauge career success. Career theory includes the factors that contribute to an individual's career and influence the individual's PCMBs and definition of career success. The boundaryless and protean career theories describe the changing mentality of workers concerning their careers where the locus of control has shifted from the organization to the individual. The individual is no longer bound by organizational boundaries and is in charge of his career. This focus is the foundation of the individual's PCMBs and is a factor in the individual's gauge of career success. Career management theory emphasizes the environment in which the individual participates in PCMBs and the processes taken by the individual as he or she uses PCMBs to achieve career success. Career development theory lays out the background of individual self-examination and environmental exploration of the individual where PCMBs and career success happen throughout the individual's career. SCCT illustrates the individual's cognitive process when planning and developing his career and is the precursor to understanding proactive behaviors and their relationship to career success. An additional review of the literature concerning public service employees and their views of success was warranted to understand the career success motivations of tax assessors who are employed by government organizations.

Figure 2

Specific Individual Proactive Career Behaviors / Career Success Model Grounded in Career Literature



Note: The model illustrates the relationship between the specific proactive career behavior constructs and career success and the influence of career literature. Adapted from "The Career Engagement Scale: Development and Validation of a Measure of Proactive Career Behaviors" by A. Hirschi, P.A. Freund, and A. Herrmann, 2014, *Journal of Career Assessment*, 22(4) and "Assessing Key Predictors of Career Success: Development and Validation of the Career Resource Questionnaire" by A. Hirschi, N. Nagy, F. Baumeler, C.S. Johnston, and D. Spurrk, 2018, *Journal of Career Assessment*, 26(2).

Significance of the Study

The study is significant in the following ways:

1. The study further investigates the PCMB/career success relationship by identifying and measuring the perceived impact of specific PCMBs on the career success of tax assessors. Government and private-sector contracting institutions can improve tax assessor career success by understanding these relationships.
2. The study contributes to understanding the strength of the relationship between valuable PCMBs and the career success of tax assessors. This knowledge will emphasize to government and private-sector contracting institutions the need and importance of supporting PCMBs because of their impact on employee

success. Therefore, it will emphasize a pathway to improved customer service, office efficiencies, budget control for government offices, and a competitive advantage based on the value of human capital for contractors.

3. This research can be used as a basis for additional study of similarities and differences of groups throughout North America and internationally regarding the contribution of general PCMBs to the career success of tax assessors.
4. This research will fill the suggested gap in past research of identifying the types of career management behaviors that are most valuable for achieving important career success for employees (Barnett & Bradley, 2007; Hirschi et al., 2014; Hirschi et al., 2018).

Research Objectives

The research objective of the study is to investigate individual tax assessors' perceptions of the relationship between general career management behaviors and career success by exploring the relationships with the testing of five hypotheses of which the first four are illustrated in figure 1.

- H1. Career planning behavior has a positive impact on career success for tax assessors.
- H2. Employee self-career exploration behavior has a positive impact on career success for tax assessors.
- H3. Environmental career exploration behavior has a positive impact on career success for tax assessors.
- H4. Voluntary human capital behavior has a positive impact on career success for tax assessors.
- H5. The perceptions of tax assessors employed by government offices are different than tax assessors employed by private-sector business contractors regarding

the relationship between their overall proactive career management behaviors and career success.

Delimitations

This study is limited by the following delimitations:

1. This study is limited to the perceptions of tax assessors. The limitations based on the geography and industry of participants were dictated by the profession and geographic area of the researcher who had access to the participants. The perceptions of tax assessors in other states or from international countries may differ from this study. Additionally, the perceptions of individuals in other industries may also differ.
2. This study is limited by the use of a quantitative analysis that uses a limited number of independent variables (Career planning, career self-exploration, environmental career exploration, career networking, voluntary human capital development, and career positioning) to describe the dependent variable (career success). Other independent variables may have been discovered to be significant if a hybrid analysis including qualitative techniques was conducted.
3. This study was conducted shortly after the COVID-19 pandemic which greatly influenced the world of work. The timing of the research may influence the participant's perceptions of career management behaviors related to career success.
4. This study used a convenience sample from the publicly available membership list of the IAAO to make inferences about a specific sample of the tax assessor population. The results are not generalizable beyond this specific sample of the tax assessor population.

Definitions of Key Terms

To clarify the terms used throughout this study, definitions of key terms are provided below. Unless otherwise noted, the definitions were created by the author:

Boundaryless Career: A career role based on the individual's perception. The role spans the boundaries of more than one employer. The individual's role expertise is valued outside the present employer, maintained by external networks, not limited by traditional organizational hierarchy and upward mobility standards, and includes a work-life balance (Lazarova & Taylor, 2009).

Career: Roles that individuals play over their lifetime. Career roles may be related to adolescence, home, leisure, work, student, and community service (Sharf, 2010).

Career Development: "An ongoing process by which individuals progress through a series of stages, each of which is characterized by a relatively unique set of issues, themes, and tasks" (Greenhaus et al., 2000, p. 13).

Career Management: "A process by which individuals develop, implement, and monitor career goals and strategies" (Greenhaus et al., 2000, p. 12).

Career Management Behaviors: "The actions that individuals take to achieve their career goals" (Barnett & Bradley, 2007, p. 622).

Career Networking: The relationships that an individual creates with others within and outside the organization that contributes to the individual's career success (Hall, 2002).

Career Positioning: The duties or specific job opportunities assumed that will help the individual to progress professionally (Hirschi, 2014).

Career Satisfaction: "The extent to which individuals believe their career progress is consistent with their own goals, values, and preferences" (Barnett & Bradley, 2007, p. 621).

Career Success: "Positive psychological and work-related outcomes accumulated as a result of one's work experiences" (Seibert & Kraimer, 2001, p. 2). It may be categorized

as an objective success (status, promotions, and salary) or a subjective success (individual development of new skills, work-life balance, and purpose).

Contractors: Sub-contracted companies hired by the County Assessor's Office to perform some of the tasks that are the responsibility of the Assessor's Office.

Organizational Support for Career Development (OSCD): "The programs, processes, and assistance provided by organizations to support and enhance their employees' career success" (Barnett & Bradley, 2007, p. 622).

Personal Property: Property owned by individuals that are not permanently affixed to the ground. All property that is not characterized as real estate property (Eckert et al., 1990).

Proactive Personality Traits (PPTs): "A stable individual difference construct that differentiates individuals based on the extent that which they take action to influence their environment" (Barnett & Bradley, 2007, p. 622).

Protean Career: Based on the self-directed and self-destined perception of the individual who is the sole manager and developer of the career instead of the organization (Aloysius, 2015).

Real Property: Property owned by individuals that are permanently affixed to the ground (Eckert et al., 1990).

Tax Assessor: Individuals who work in the industry that assesses the value of personal and real estate property to tax individuals who own the property. This group may include, but not be limited to, individuals in administration, appraising, information technology, and geographic information systems (GIS). This group may be divided into two subgroups: employees of government and employees of private-sector business contractors.

Taxpayer: Individuals who are taxed for owning personal and real estate property.

Outline of the Study

Chapter 1 has been an introduction to the study including a discussion of the status of the issue, the problem and area of concern, the purpose of the study and research questions, the theoretical framework, the significance of the study, the objectives to be investigated, the delimitations of the study, and the definitions to key terms. In chapter 2, the literature review of the study will be discussed. Significant research concerning motivation theory, social cognitive theory, SCCT, the integrated model of proactive behaviors, and PCMBs and career success will be elaborated on in the study. Chapter 3 will include the methodology of the study. This chapter will include an elaboration of the research design, a description of the independent and dependent variables, a selection of the subjects, a description of the instrumentation used in the study, data collection procedures, data analysis and reporting techniques, and topics of qualitative studies. Chapter 4 will include the presentation and analysis of data. The data analysis procedures and presentation for each hypothesis will be discussed in detail and summarized. In chapter 5, the study will be summarized and recommendations and conclusions will be discussed.

Chapter Two: Review of Literature

The following literature review investigates the grounding of this study within the background of individual motivation, career theory, boundaryless and protean career theory, career management theory, career development theory, social cognitive career theory, the integrated model of proactive behaviors, and career success factors within the public service context of tax assessors. During the literature review, searches were conducted using Google Scholar, the University of Arkansas Libraries website, Sage Publishing, Wiley Online Library, Emerald Insight, Science Direct, and the International Association of Assessing Officers (IAAO) database. The literature review included searching relevant terms in publications primarily starting in 2010 until the present. The relevant terms include motivation, career theory, boundaryless career, protean career, career management, career development, career success, career satisfaction, proactive career management behaviors, social cognitive theory, social cognitive career theory, tax assessor career success, ad valorem assessor career success, government employee career success, and public service motivation.

Vroom's Expectancy Theory

Individual motivation is the basic foundation and cause of PCMBs which are based on the expectations and desirability of career success outcomes (Barnett & Bradley, 2007). It can be defined as the willpower of an individual that contributes to the magnitude, course, and perseverance of effort at work. Motivational magnitude refers to the extent of effort the individual exerts. The course of motivation is based on the direction of one's effort and is coupled with perseverance or the length of time an individual exerts the effort (Schermerhorn, 2008). One process motivation theory that is relevant to this study is Vroom's expectancy theory. Vroom (1964) developed the expectancy theory of motivation on the belief that work motivation is based on the individual's opinion about his effort/accomplishment relationship concerning work and how the association influences the individual's work outcomes (Schermerhorn, 2008). In other words, motivation is the product of expectancy, instrumentality, and valence. Expectancy

is the probability that the individual's work intention will lead to the desired task performance. The model further postulates that the task performance will result in a likelihood of desired work-related outcomes that Vroom labeled as instrumentality. The resulting valence is the degree that which the work-related outcome satisfies the individual's personal needs. The degree of employee motivation will be contingent on the value or valence she places on the work-related outcome (Vroom, 1964). These small motivational moments result in the accumulation of career steps and career success throughout the individual's career lifespan (Hall, 2002; Super, 1957). This study will measure the perceptions of individuals regarding the relationship between specific PCMBs and career success. The motivation for the specific PCMBs is based on the probability that they are achievable, will lead to the desired outcome (career success), and the degree that which career success is desirable to the individual (Barnett & Bradley, 2007; Vroom, 1964).

Career Theory

Merriam-Webster (n.d.) defines a career as a profession (in the objective sense) and as a pursuit (in the subjective sense). Hall (2002) discussed two career perceptions. The first is that a career can be viewed as a lifelong sequence of jobs. In this case, an individual's career is defined by the positions held. Secondly, all employees have careers since they all hold positions within an organization. With this definition, careers are perceived as value-neutral. The type of occupation or evolution of the career is not addressed. Also, the frame of reference for the job position is that it describes the individual's objective career while the experiences with each job explain the subjective career of the employee (Hughes & Coser, 1994). A career can also be described as a lifelong series of role-related occurrences. From this subjective viewpoint, the career is defined based on how the individual experiences important career episodes (Hall, 2002).

According to Arthur et al. (2005), career success is the consequence of an individual's career experiences. It is the accumulation of an individual's career events and leads to career

satisfaction. It can also be described as the achievement of satisfying work-related events on specific occasions throughout the individual's career lifespan. These career experiences can be categorized as objective or subjective. Career success is usually recognized as an objective state because it is easily seen. Objective career success may be described as tangible work positions, capacities, and rankings that exemplify specific achievements throughout an individual's career lifespan. It is an external viewpoint that characterizes viewable symbols of an individual's career circumstances. The symbols may relate to the profession, household circumstances, job characteristics, job status, and job earnings (Arthur et al., 2005). On the other hand, subjective career prosperity may be defined as the employee-specific assessment of career progress concerning variables that are meaningful to that individual (Stebbins, 1970). Arthur et al. (2005) described the subjective career as a person's visceral understanding and assessment of her career based on the importance of self-identified characteristics. While many theorists emphasize one facet of career success over the other, Arthur et al. (2005) explain that career success should be defined as an interrelationship between objective and subjective aspects of the career. Additionally, the career ambitions of workers are different because each individual is unique causing them to place contrasting importance on career success factors such as earnings, job security, work location, job status, career learning, and career progression. Therefore, this study is grounded in career theory with the purpose to investigate the relationship between an individual's PCMBs and subjective career success factors to develop a generalized model of the relationship.

Boundaryless and Protean Career Theory

In response to the changes in the business environment caused by increasing competition, the boundaryless career originated because organizations needed individuals with advanced career competencies that were acquired from outside the organization (Arthur & Rousseau, 1996; Hall, 2002). At the same time, workers' needs were changing from a long-term organizational contract to a self-directed protean career (Hall et al., 2018). The boundaryless

and protean career theories are related to the psychological contract between the employee and the employer. Schein (1965), perceived the psychological contract as the basis for the mutual expectations of the employment arrangement concerning employee contributions in exchange for employer rewards.

In a boundaryless career, the objective and subjective sides of the career work interdependently. On one hand, the individual fills individual roles and identities which are subjective while also occupying objective institutional positions (Barley, 1989; Hughes, 1958). Employees also regularly assess their career successes both objectively and subjectively over time (Arthur et al., 2005). The protean career is closely related to the boundaryless career but is also based on the individual's perspective that he is in charge of his career, not the organization. Therefore, from this viewpoint, career decisions are based on the satisfaction of the individual, not the organization. Additionally, this perspective emphasizes subjective aspects of work that are satisfying to the individual instead of objective factors such as salary or job title (Hall, 2004).

Because of how individuals view their boundaryless and protean careers, the definition of career success continues to change. The traditional benchmarks of vertical mobility and hierarchical advancement are losing value (Greenhaus & Kossek, 2014). Career satisfaction is now based on the viewpoint of the individual where several continuous satisfaction experiences result in a sustainable career (Arthur et al., 2005). "Sustainable careers should enable employees to have positive career experiences in the present and remain engaged over the long-term, and thus promote individual well-being as well as organizational effectiveness" (Nagy et al., 2019). Within the boundaryless and protean career framework, individuals advance their careers and define career success by their relationships with similar peer groups or work-related associations. These connections supply a network medium for individuals to relate to and find common meaning through overlapping work experiences (Van Maanen & Barley, 1984). "Through the eyes of comparable or knowledgeable peers, individual careers may be seen as

'careers of achievement' in terms of skill and behavior, rather than seen as 'careers of advancement' in terms of a person's hierarchical progression" (Arthur et al., 2005, p. 182). Career networks outside of the organization also influence and benefit an individual's career. This network may include ideological, family, occupational, alumni, and industry connections, to name a few (Arthur & Parker, 2002). It is important to study the roles and processes within the employee's career support network because over time it may affect the relationship between their objective and subjective career success and satisfaction (Arthur et al., 2005).

DeVos and Soens (2008) investigated the relationship between a protean career perspective regarding self-directed career management behaviors and career success outcomes. The outcome of the study resulted in protean career attitude being significant and positively related to career insight and career self-management behavior. Additionally, a positive and significant relationship existed between career insight and career satisfaction. However, no significant support for a positive relationship between career self-management behaviors and career satisfaction was found. Additionally, no support was found that addresses the mediational relationship of self-management behaviors between protean career attitude and career satisfaction. Therefore, the study concluded that individuals with a protean career attitude have higher levels of career satisfaction and the relationship is mediated by career insight. On the other hand, the study could not conclude that a significant relationship exists between career self-management behaviors and career satisfaction. This conclusion contradicts earlier study outcomes (Kuijpers et al., 2006; Seibert et al., 2001). The authors concluded that the inconsistent conclusion was the result of measuring the behavioral component of self-management behaviors and excluding the reflective component of career attitudes which contributes to the motivation behind self-management behaviors. This result supports the need for organizations to address both the behavioral and reflective components of an individual's self-management behavior. Additionally, it shows that a scale measuring self-management behaviors should include behavioral and reflective elements. This current study attempts to

clarify previous study contradictions by introducing further research regarding self-management behaviors by using behavioral and reflective components to measure self-management behavior and its relationship to career success.

Volmer and Spurk (2011) investigated the relationship between boundaryless and protean career perceptions and predictors of subjective career success. The results of the study were contradictory to the DeVos and Soens (2008) study. The outcome showed that self-career management was significantly related to subjective career success. The study also supported the theory that individuals who proactively manage their careers are more satisfied with their career success than individuals with indifferent career attitudes. However, support was not determined for the relationship between protean value-driven career attitudes and subjective career success. The authors believed the individuals did not associate the protean attitudes with subjective career success because their protean attitudes were not reinforced by their employers. Therefore, this current study further investigates protean value-driven career attitudes in the form of proactive career management behaviors and their relationships to career success to clarify the inconclusive results of past studies. Additionally, this study is relevant to organizational leaders with an understanding of the specific PCMBs of boundaryless and protean career-oriented individuals and their impact on career success.

Career Management Theory

According to Greenhaus et al. (2000), career management is an ongoing series of decision-making actions taken by the individual to influence her career. The process is influenced by the individual's environment and includes data, career events, and support from academia, family, employers, and societal organizations. To initiate the career management process, the individual decides to either start a career or change an existing career. Once the career decision is made, the individual explores possible careers. Career exploration is the assemblage and evaluation of career information by the individual to determine a more comprehensive and precise picture of the situation. The individual participates in self-exploration

to identify important principles, passions, and expertise that may lead to a career. Additionally, she explores her career environment to identify viable occupations, industries, and organizations, necessary job skills, and the impact of career decisions on the family dynamic. From the self and environmental exploration, the individual becomes more aware of her knowledge, skills, and abilities and the job options, requirements, opportunities, and obstacles of her environment (Greenhaus et al., 2000).

Once the individual is more aware of self and the environment, she can set career goals and develop strategies. A career goal is a career-related aspiration by the individual of desired future career events. Additionally, career strategy is a process of planned activities used to assist the individual in reaching career goals (Greenhaus et al., 2000). Next, the individual progresses toward a career goal or acquires work and non-work feedback related to the career implementation. The process of career management requires the PCMBs that are the subject of this study: career planning, career self-exploration, environmental exploration, and voluntary human capital development (Hirschi et al., 2014). From the work and non-work feedback and the success or non-success outcome of the career implementation, the individual will evaluate her career, to determine the extent of career success by comparing how well career goals are being met and whether further career exploration and additional career management are needed. The particular PCMBs of this study were selected to parallel the career management process. Additionally, the purpose of this study is to better understand their relationship to individual career success within the career management context (Barnett & Bradley, 2007; Greenhaus et al., 2000; Hirschi, 2018).

Career Development Theory

Career development theory can be traced back to Frank Parsons who is known as the pioneer of vocational guidance based on his book *Choosing a Vocation* written in 1909 (Sharf, 2010; Tang, 2019). Career development theory has changed over time but can currently be characterized by the school-to-work transition, international careers, and career technology

advancement (Pope, 2000). Savickas (2012) defined career development as the emergence of life design career intervention where individuals develop careers based on individual and social interests and interact with their environment.

Human Capital Theory and Human Resource Development

The career development theory relationship with human capital theory and human resource development (HRD) underlines the significance of this study. The basis of the human capital theory is that individuals invest in time, training, and education with career development to improve their career success. Adolescent students are motivated to achieve good grades for the chance of attending college and improving their chances of obtaining a worthwhile job and a budding career. Working individuals volunteer for additional education and training with the hope of promotion and a position with greater pay and more benefits (Sharf, 2010). From the organization's perspective, they assist employees with their career development through HRD strategies to help the individual build human capital. The organization's goal for investing in the employee's career development is to unleash employee expertise for a more productive workforce to improve the organization's competitive position in the marketplace (Swanson & Holton, 2009). It may be worthwhile for organizations to recognize the PCMBs introduced in this study to assist those behaviors when helping employees with career development. Therefore, the PCMB / career success model of this study is grounded in the career development relationship between human capital theory and HRD.

Three career development theories that are related to this study are the trait and type theories, career lifespan theory, and social cognitive theory.

Trait and Type Theory

Trait and type theory originated with Parsons (1909) and was later expanded by Hartung and Blustein (2002). Parsons's theories formed the basis of the later developed trait-and-factor theories that emphasized three steps to vocational development: knowing one's self, understanding the world of work, and using developed reasoning to combine the two (Sharf,

2010; Tang, 2019). Additionally, Holland's theory of types was developed based on the view that "career choice and career adjustment represent an extension of a person's personality" (Sharf, 2010, p. 129). Holland expanded the theory by matching individual personality types to occupational environments (Sharf, 2010; Tang, 2019). Another trait and type theory based on individual personality is the Myers-Briggs Type Theory (MBTT). The theory identified personality along four bipolar dimensions: extraversion-introversion, sensing-intuition, thinking-feeling, and judgment-perception (Sharf, 2010). The characteristics resulted in 16 different individual personality combinations that can be measured and matched with careers that require individuals with those distinct personalities (Sharf, 2010). The PCMBs that are the focus of this study are the result of trait and type theory and further explain the process an individual uses to self-evaluate personal knowledge, skills, and abilities while evaluating the external organizational requirements of the labor market to match the two and achieve career success.

Career Lifespan Theory

Career success is influenced by the individual's perceptions and personality traits and by the stage of her career within her career lifespan. Originally, personality traits were thought of as static and unchanging in young adulthood (Costa & McCrae, 1994; Srivastava et al., 2003). However, an expanding body of research now advocates that personality traits can change over time and that work events lead to the change (Lodi-Smith & Roberts, 2007; Roberts, 2006). Furthermore, the absence of work can negatively impact an individual's personality trait progression (Boyce et al., 2015). "These findings are generally consistent with the broader notion of plasticity in lifespan development theories, which suggests that there are within-individual differences in development that can be shaped by life conditions and experiences" (Nye & Roberts, 2019, p. 47).

Career lifespan theory describes the progression of an individual's career based on his age and career maturity throughout his career life. It is grounded on the theory that individual capabilities, character, principles, passion, traits, and needs are different and change

throughout their career and life. The individual's self-concept related to vocational preferences and competencies changes with time and experience based on his work environment. The process of change can be characterized as a series of life stages (Sharf, 2010; Super, 1957; Tang, 2019). The essence of the career pattern that includes the progression and duration of jobs and obtained job levels are impacted by the person's socioeconomic level, intellect, education, and expertise. The career lifespan is also influenced by personality traits such as attitudes, desires, self-concepts, and career maturity which includes the individual's exposure to unique opportunities (Sharf, 2010; Super, 1957; Tang, 2019). Success at any level of the career lifespan is dictated by how well the individual interacts with the demands of her work environment which is related to her career maturity. Progression through the life stages is facilitated by the maturing of abilities and principles of the individual and the evolving self-concept (Sharf, 2010; Super, 1957; Tang, 2019). The career development system is the process of establishing and carrying out work-related self-concepts. It can also be described as a harmonizing and negotiating system where the self-concept is developed by the interaction of the individual and her environment. Additionally, work and life fulfillment are dependent on the career development that leads to a positive self-concept and the type of work, work situation, and way of life desirable and self-actualizing to the individual (Sharf, 2010; Super, 1957; Tang, 2019).

According to Super (1957), individuals fill five career roles within five career life stages. Different factors lead to career development and career satisfaction at each career life stage. The career roles include a student, leisurite, citizen, worker, and homemaker. The importance of each career role changes throughout the individual's career life stages. The employee also encounters different career satisfaction expectations while experiencing the growth, exploration, establishment, maintenance, and disengagement career life stages (Greenhaus et al., 2000; Super, 1957). The student roles are most prevalent during the growth and exploration of career life stages. On the other hand, the worker role is filled mostly during the establishment and

maintenance of career life stages. Lastly, the citizen, leisurite, and homemaker roles become important to the individual as she enters the disengagement career life stage.

According to Lent and Brown (2013), individuals use adaptive career behaviors throughout their career life cycle to direct their career and educational development. Many of these behaviors can be linked to the PCMBs investigated in this study. As a child and student during the growth career stage, the individual develops self-regulating skills which are the foundation of career planning and self-exploration. The child also develops social and extracurricular skills that will be used with environmental career exploration as an adult. Additionally, the student will progress subjective-specific academic skills that will lay the foundation for voluntary human capital development attitudes later in his or her career. In the exploration career stage, the adolescent student develops work readiness and employability skills that contribute to voluntary human capital development. The individual also gains experience implementing decisions such as applying for jobs and/or college which is part of career planning. Additionally, the student learns self-exploration and environmental career exploration skills by reading, observing, and participating in formal and informal self-assessments of interests, abilities, and values. As the individual becomes an established worker, he or she progresses career planning skills by preparing for career changes and visualizing where they are career-wise and where they want to go. The individual also continuously recycles through self and environmental career choices based on his or her work environment and personal circumstances. Additionally, he may look for additional challenges and decide to develop new interests and skills such as advancing leadership or teaching skills. As the individual enters the maintenance portion of his career, self and environmental career exploration decisions may be based more on the individual's wants and needs than the organization's strategic objectives. Additionally, the individual may use voluntary human capital development and career planning skills to fulfill a specialist role or job niche. As the individual retires, environmental and personal exploration, career planning, and human capital

development are guided entirely by the individual's personal preferences. The main takeaway from the career lifespan theory that is relevant to this study is that individuals relate to work diversely based on their work maturity. They require different PCMBs and assign self-defined values to PCMBs when seeking career success (Hirschi et al., 2018; Lent & Brown, 2013; Super, 1957, 1980). Therefore, this study will further explore the differences in the career success definition of individuals caused by their career maturity by comparing the PCMB / career success relationship of individuals in different career life stages.

Social Cognitive Theory

Social cognitive theory ([SCT]; Bandura, 1986), which emphasizes the individual's initiative in his career development, laid the groundwork for social cognitive career theory (SCCT). SCT also became the foundation for career development by linking three variables: (1) the development and specifications for career-relevant actions, (2) the choosing of academic and career alternatives, and (3) the perseverance and performance level in pursuing scholarship and professional endeavors. The schema underscores the way an individual uses initiative in the career development process while exploring the factors that enhance and restrain the individual's initiative. It is used to understand the ways social cognitive variables, such as PCMBs, interact together with personality and environmental factors to affect work satisfaction and career success (Barnett & Bradley, 2007; Lent et al., 1994).

Social Cognitive Theory Factors

Three factors of SCT distinguish it from other theories and explain its contribution to describing career behavior. These factors are the individual-environment interplay, socio-cognitive mechanisms, and the expansion of the theory to include career theory. The individual-environment relationship uses a triadic reciprocal causation of individual characteristics, environmental factors, and individual behavior to impact individual thought processes (Bandura, 1986; Lent et al., 1994).

Self-efficacy. Bandura (1986) also discussed three personal socio-cognitive mechanisms that contribute to social cognitive theory: self-efficacy, outcome expectations, and goal-setting. Self-efficacy is defined as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1986, p. 391). It is the foundation of human agency where the magnitude of the individual’s initiative is directly related to his motivation, thought patterns, emotional intelligence when faced with environmental hindrances, and choice of activities and environments (Bandura, 1989). Self-efficacy originated in career literature by Hackett and Betz (1981). Additionally, it is a predictive measure of career and academic performance due to its positive impact on career and academic performance (Hackett & Lent, 1992; Multon et al., 1991; Sadri & Robertson, 1993). From the SCT viewpoint, self-efficacy is a changing array of self-beliefs that are distinct to the individual’s performance and collaborate in a complex network with other individuals, and environmental and behavioral factors (Lent et al., 1994). The SCT postulates that the person’s capabilities and competence are a continuous individual quality, not one that is static. Therefore, the individual’s proficient actions and conduct while performing complicated and taxing assignments demand fundamental skills related to the performance domain and a robust perception of efficacy so that he can use his expertise effectively (Bandura, 1991).

Outcome expectations. Individual assumptions about personal outcome expectations are the second socio-cognitive component of SCT. While self-efficacy is focused on the self-confidence of an individual performing a task, outcome expectations deal with the probability of an outcome happening based on the performance of individual behaviors (Bandura, 1986). Outcome expectations, grounded in Vroom’s expectancy theory of motivation (Vroom, 1964), can be in the form of physical, social, and self-evaluative outcomes which may significantly influence career performance (Bandura, 1986). SCT is established on the belief that individual performance is based on confidence in one’s abilities and the probability of outcomes based on personal actions. However, self-efficacy and outcome expectations have different potentials. An

individual may expect an outcome based on a specific work behavior but may not perform the act due to a lack of self-efficacy. On the other hand, an individual may have the confidence to perform a task even though she may not fully know the outcome (Bandura, 1986).

Goal Setting. The third socio-cognitive component of SCT is the individual's act of goal-setting (Bandura, 1986). Related to management by objectives ([MBO]; Drucker, 1954), the SCT emphasizes the critical role of goal-setting in the self-regulation of behavior. Individuals set goals to assist with organizing and directing their conduct, to persist over some time even without reinforcement, and to raise the probability that desired outcomes will be accomplished. Goal-setting may be defined as the intent to start a specific action or to influence a distinct future consequence. Goal-setting is the individual's self-evaluation of behavior based on personal standards of performance to assess the possible scenarios of future outcomes. Goals contribute to the individual's self-motivation by linking self-fulfillment to goal achievement and conduct execution to personally significant set standards (Bandura, 1986). "Social cognitive theory posits important reciprocal relations among self-efficacy, outcome expectations, and goal systems" (Lent et al., 1994).

Expanding SCT to Include Career Development

Based on the growing research at the time, Lent and associates felt the need to develop a career development model that included and extended the SCT beyond the self-efficacy theory from the Hackett and Betz and Krumboltz theories (Hackett & Betz, 1981; Lent et al., 1994; Mitchell & Krumboltz, 1990). The model framework includes individual and environmental factors that are discussed by various career development theories and in social cognitive literature. Additionally, the theory attempts to explain the relationship between the factors and the way by which they influence career endeavors and behaviors (Lent et al., 1994). Three models laid the framework for expanding the SCT to include career development: the model of interest development, the model of career choice, and the model of performance.

Model of Interest Development. Lent et al. (1994) used the model of interest development to expand the SCT. The model explained how basic career interests develop over time by focusing on cognitive and behavioral influences during childhood and adolescence. Individuals are influenced by an infinite number of factors regarding their possible career choices during their childhood and adolescent years. Additionally, they are impacted both directly and vicariously by a diversified number of interests. These interests are strengthened to various degrees which differentiates them from each other and drives the individual's performance for selected activities. The individual's self-efficacy is developed and reinforced by repetitive engagement and the modeling and feedback of significant others. The developed self-efficacy leads to various interests. As children and adolescents, individuals develop self-confidence while doing specific tasks and expect their performance to meet self-imposed standards. The person's self-efficacy leads to their outcome expectations and their specific interests (Lent et al., 1994). Additionally, it is more probable that individuals develop lasting passion in actions in which they have self-confidence and expect positive outcomes (Bandura, 1986; Lent et al., 1989). On the other hand, the individual will find it difficult to sustain a career development interest with low efficacy and negative outcome expectations regarding the interest (Lent et al., 1994).

During an individual's adolescent and young adult years, he will participate in a variety of career-specific actions but will eventually establish a regimen directed specifically toward a career interest based on his intrinsic interests. These developing interests lead to intentions and goals for activity involvement, the selection of activities and practices, and the performance attainment of goals and skills. The performance outcome then becomes a feedback source of self-efficacy and outcome expectations (Bandura, 1986; Holland, 1985; Super, 1957). It is expected that the individual will repeat this process throughout her career lifespan reinforcing career interests and development. As career interests stabilize in late adolescence and early adulthood, career development solidifies and less career evaluation takes place. However, a

transitional career experience such as a work layoff, a change in family circumstances, or an unexpected health condition may restart the process (Lent et al., 1994; Super, 1957).

In addition to career interests, outcome expectations may influence goal intentions for activity involvement directly as well as indirectly through career interests. In this case, the individual participates in goals for activity involvement partially due to her interests and intrinsic and extrinsic rewards and partially because of outcome expectations. Outcome expectations may also directly influence activity selection and practices (Lent et al., 1994). While outcome expectations may be in the form of tangible rewards such as supervisor approval or a pay increase, Bandura (1986) espouses that self-assessment outcomes result in anticipated self-satisfaction and drive interest. From this view, the proficiency acquired from completing complex assignments results in a favorable self-assessment. The individual then anticipates self-satisfaction from additional expertise which leads to continued assignment interest and participation resulting in skill development and the development of interest in pursuits that were initially not intriguing. "Some of the most valued rewards of activities are in the satisfaction derived from fulfilling personal standards, rather than in tangible payoffs" (Bandura, 1986, p. 231). Lastly, self-efficacy is postulated to directly influence intentions and goals for activity involvement, activity selection and practice, and performance attainment. The direct impact is based on the assumption that self-efficacy assists individuals with the understanding, coordinating, and implementing their career skills (Lent et al., 1994).

Model of Career Choice. Lent et al. (1994) also used another model to expand SCT: the model of career choice. Career or occupational choice can be defined in several various ways. Vroom (1964) espoused career selection as a compromise between what career the individual desires and which career he attempted. The individual not only selects a career but is also selected by the career. This selection process is based on the fit between the characteristics of the individual and the requirements of the career (Holland, 1985).

The model of the career choice process includes the fundamental relationships proposed by the model of interest development previously discussed. However, it is differentiated by the specification and implementation of career choice goals. Additionally, career choice development is divided into three sub-processes: the individual's interpretation of a dominant career choice goal from among the other interests, the processes of the individual intending to carry out the choice such as specific training or education, and the resulting performance attainment outcomes (successes and failures) that generate a feedback loop and influences future career behavior (Lent et al, 1994).

The career choice model attempts to explain the relationships between the underlying tenets of self-efficacy, other causal factors, and career choice. As discussed with the interest development model, the individual's self-efficacy and outcome expectations influence interests. Interests influence choice goals in the form of dreams, purposes, or objectives that influence career direction. Choice goals will influence the individual's choice actions. The activity choice will result in goal-attainment experiences. At this stage, the individual will experience different levels of success resulting in a feedback loop and a learning experience input that either positively or negatively influences self-efficacy and outcome expectations (Lent et al., 1994).

In addition to influencing choice conduct through interests, outcome expectations can influence choice goals and activity directly. The more desirable the outcome expectation, the more probable that the individual will choose specific career goals and action routes. Self-efficacy can also indirectly influence choice conduct through the individual's interests or by output expectations and interests. Additionally, self-efficacy can directly influence career choice, choice activity, and the goal attainment experience (Lent et al., 1994).

The model of career choice expanded the model of interest development by adding additional personal and contextual factors that influence the career choice process. Personal input characteristics include the individual's disposition, gender, race/ethnicity, and health status. These personal inputs influence the individual's learning experiences and contextual

influences close to the choice behavior. Contextual influences may include environmental, geographical, accessibility, and affordability factors. Additionally, the personal inputs interact with the individual's contextual background which in turn influences the individual's learning experiences. The contextual influences close to the choice behavior mediate the individual's interest/goal choice and the goal choice/choice action relationships while directly influencing choice goals and choice actions (Lent et al., 1994).

This model expanded SCT by emphasizing career goal-setting and choice concepts. It differentiates career choice intentions in the form of choice goals from career choice actions (Mitchell & Krumboltz, 1990). The noting of this difference is useful for three reasons. First, it emphasizes the transitional role of the individual's goals in career choice-making. This distinction explains that the intermediate step is needed and that career choice is not necessarily the direct result of the individual's environment or personal background. Therefore, self-directed goals based on the interaction of the individual's self-efficacy, outcome expectations, and interests are the result of the measure of the personal agency of the individual in determining the individual's career outlook (Lent et al., 1994). Additionally, the model represents the career choice behavior process as a dynamic process instead of static steps often influenced by the probability of resulting performance outcomes. Therefore, the model recognizes that career choice behavior is a complicated continuous process. Lastly, the model is advantageous because it considers additional factors that influence career choices which allow the identification of specific elements that may temper the informative magnitude of the model (Lent et al., 1994).

Model of Task Performance. The model of task performance evolved from the model of interest development and the model of career choice (Lent et al., 1994) while being grounded in Vroom's (1964) expectancy theory. The model expands beyond interest development and career choice to explain the criteria of performance and success. The model emphasizes the expectancy/performance link and the self-efficacy/ability relationship. It also helps to illustrate

the attainment of a level of performance relative to set goals. In this model, Lent et al. (1994) define performance in general terms as the level and consistency of success.

The individual's ability and past performance reinforce self-efficacy, outcome expectations, and future performance attainment levels. Furthermore, the individual's self-efficacy influences the individual's outcome expectations, performance goals, and the performance level of the activity. Lastly, the outcome expectations of the individual effects his performance goals which influence his performance attainment level and ultimately reinforce his ability (Lent et al., 1994).

Social Cognitive Career Theory Model

The resulting social cognitive career theory (SCCT) model evolved from the SCT models of interest development, career choice, and performance and includes the addition of career development. Lent and Brown (2006) explained that the model shows a direct relationship between the individual's personality traits of extraversion, neuroticism, conscientiousness, and work satisfaction. Additionally, those traits also influence work satisfaction indirectly through the individual's self-efficacy expectations; goal-setting confidence; and interaction with environmental supports, resources, and obstacles. These factors affect the individual's participation in goal-directed activities and interaction with working conditions which influence the individual's work satisfaction (Lent et al., 1994; Lent & Brown, 2006). SCCT is the result of research studying the collaboration of individual-focused outcomes from vocational psychology and institutional-focused issues of organizational psychology to better understand career satisfaction (Lent & Brown, 2006).

Personality (neuroticism, extraversion, and conscientiousness) and affective traits with positive and negative influences have been directly linked to work satisfaction. Research also has shown that a second variable that influences work satisfaction is self-efficacy (Lent & Brown, 2006). An individual's self-assurance is influenced by four of the "big five" personality traits including neuroticism, extraversion, conscientiousness, and acceptance of new

experiences (Judge & Ilies, 2002). Additionally, the individual's views of environmental support are related to positive and negative personalities (Warr, 1999). In summary, individuals with high levels of positive personality will have a positive view of environmental forces and self-efficacy expectations. However, those with low levels of affective traits will have a negative view of their environmental support and self-adequacy (Lent & Brown, 2006).

According to Lent and Brown (2006), participation in goal-directed activities is also shown to positively affect work satisfaction. Individuals who establish and follow through on career objectives are more satisfied with their careers than those who do not have career goals or fail to follow through on their career objectives. Additionally, those individuals may also experience an increase in self-efficacy expectations (Lent & Brown, 2006). However, the failure to participate in career goal-directed activity may lead to lower self-efficacy expectations (Bandura, 1997). Self-efficacy expectations and work conditions and outcomes also directly influence work satisfaction. It is expected that if an individual feels good about her abilities and has positive work conditions and outcomes, she will have a greater desire to participate in goal-directed activities and have greater career satisfaction (Dawis & Lofquist, 1984; Lent & Brown, 2006; Lent et al., 2005).

Lastly, environmental supports and obstacles that are specifically related to the individual's career goals directly affect the individual's work satisfaction (Cantor & Sanderson, 1999). Additionally, they influence the individual's participation in goal-directed activity, self-efficacy, and work conditions and outcomes which all intercede with work satisfaction. Therefore, environmental supports increase the efficiencies of these variables while obstacles may be a hindrance to work satisfaction (Lent & Brown, 2006; Lent et al., 2005).

The SCCT model contributed to the career literature in two ways. The first advancement includes the integration of the organizational and occupational psychology perspectives. Occupational psychology tends to focus on the individual with work satisfaction being the ultimate goal (Lent & Brown, 2006; Russell, 2001). On the other hand, organizational

psychology concentrates on the outcomes of work satisfaction such as turnover, commitment, and output capacity. Therefore, further study of the SCCT model contributed to the marrying of the two perspectives concerning work satisfaction (Lent & Brown, 2006). Another advantage of the SCCT model is a further and more comprehensive understanding of the personal, environmental, cognitive, and behavioral factors that affect work satisfaction (Lent & Brown, 2006). The SCCT model combines these areas of study into a broader concept. It is an all-inclusive but simple approach to describing these multiple influences on work satisfaction. While the individual variables in the model had been studied, the SCCT model supplied an all-inclusive framework for envisioning how they interact with one another and their impact on work satisfaction (Lent et al., 2005). Lent and Brown (2013) expanded the model to show its applicability with understanding the process aspects of self-directed career behavior. The intent of expanding the model was to show that the model could explain the self-managed career development process based on the individual's career management behaviors. Therefore, the PCMBs that are the focus of this study; career planning, career self-exploration, environmental career exploration, and voluntary human capital development are used with career interest development, career choice, and career task performance processes as described by the SCCT and influence career development and success. The SCCT model also laid the groundwork for the integrated model of proactive behaviors.

Integrated Model of Proactive Behaviors

According to Barnett and Bradley (2007), the integrated model of proactive behaviors is an extension of the SCCT. The model is used to demonstrate and investigate the relationships between an individual's proactive personality traits (PPTs), the organizational support for career development (OSCD), and an individual's proactive career management behaviors (PCMBs), relative to the individual's career satisfaction. Additionally, the model illustrates the individual's PCMBs mediation between the individual's PPTs and career satisfaction and between the OSCD and the employee's career satisfaction (Barnett & Bradley, 2007). The primary focus of

this current study is on the PCMB of individuals, career success which is an outcome of career satisfaction, and the relationship between PCMB and career success components found in the integrated model of proactive behaviors.

Career Satisfaction and Career Success

Hall (2002) suggested that historically, the career has been defined as the increase of job responsibility throughout an individual's career lifespan within one organization limited to those who prepared for work by extended study or practice. However, recently, the career definition has developed to include a broader application that includes the progression of a related series of role-related occurrences experienced by individuals (Hall, 2002). The individual's career satisfaction is influenced by his self-concept, personality, proactiveness, values, knowledge, skills, and abilities (McIlveen et al., 2011; Patton & McMahon, 2006; Smith et al., 2009). Career satisfaction can be defined as "the extent to which individuals believe their career progress is consistent with their own goals, values, and preferences" (Barnett & Bradley, 2007, p. 621). This definition can be further expanded to include career success and viewed as the "positive psychological and work-related outcomes accumulated as a result of one's work experiences" (Seibert & Kraimer, 2001, p. 2).

Characteristics of career success can be defined as having either objective or subjective properties. Objective career success is identifiable and related to progressive work events related to authority, pay, and advancement (Seibert & Kraimer, 2001). Originally, career research investigations were centered mostly on objective determinates of career success (Gattiker & Larwood, 1988). This view was the result of the typical business environment of the time which consisted of hierarchical organizations where the professional's career success was dictated by job position, upward mobility, and years of service (Hall & Chandler, 2005). Analyzing only the objective characteristics of career success is shortsighted because individuals also value subjective events such as work-life opportunities, learning new skills, and career challenge and purpose (Gattiker & Larwood, 1988; Heslin, 2005). Also, just because an

individual has reached success does not mean that he is satisfied with his career (Hall, 2002). The individual may be in the career based on necessity and not interest. Additionally, organizations are now more restricted in their offerings of objective career elements. For example, flatter organizations have resulted in less opportunity for upward mobility (Heslin, 2005). To fully understand career success and satisfaction, it is important to investigate beyond the restrictive nature of objective career elements and analyze the relationships concerning subjective career success.

Subjective career success is based on how an individual assesses her actual career advancement, achievement, and progressive events in comparison to her planned ambitions and purposes (Seibert & Kraimer, 2001). The shift of attention to measuring internal subjective career success instead of external objective career success is compatible with the change in the career environment resulting in boundaryless and protean careers where the individual is responsible and in control of his own career choices instead of the employing organization (Hall, 2002; Hall & Chandler, 2005; Hall & Mirvis, 1995). Consistent with the subjective career success elements of boundaryless and protean career theory, Ng & Feldman (2014a, 2014b) define career success as the conservation of resources or COR theory. COR theory is generally known as a general motivational theory based on how individuals manage their resources to achieve a favorable outcome (Hobfoll et al., 2018). However, Ng & Feldman (2014a, 2014b) have outlined four characteristics of COR theory that apply to career success. One aspect of COR theory is that the use of resources to obtain a goal happens on a personal and contextual basis. Personal resources may include knowledge, skills, abilities, and personality traits while contextual resources may include an individual's culture or external environment. This factor explains why the career success definition is person-specific. An individual uses personal and contextual resources which define his definition of career success goals. A second COR theory factor is that individuals can better deal with career development and career success challenges if they have more advanced personal and contextual resources. This explains why an individual

located in a larger metropolitan area may have more career alternatives than someone living in a rural area. Additionally, the resource potential is compounded if the individual has lived in the metropolitan area or multiple areas their entire life and where the culture has become part of their personality. Lastly, COR theory states that resources have a compounding effect on career success. The individual's voluntary and involuntary successful career events throughout her work lifespan compound career resources over time leading to further career success (Feldman & Ng, 2007).

The outcomes of several studies have shown career satisfaction as an antecedent to career success (Edrogan et al., 2004; Heslin, 2003; Seibert & Kraimer, 2001). In a review of career success studies by Ng et al. (2005), 20 out of 49 studies measured the relationship between career satisfaction and career success. Additional studies of a meta-analysis only reviewed the career satisfaction and subjective career success correlation instead of other correlations to career success (Ng et al., 2005). Shockley et al. (2016) further investigated the factors that contribute to career success while developing a measure of subjective career success titled the subjective career success inventory (SCSI). The authors concluded that job satisfaction, job meaning, and job growth and development were related to career success. This current study progresses the field of research regarding career success by investigating PCMBs that support job satisfaction, job meaning, and job growth and development.

PCMB and Career Success

PCMBs are the activities that the individual performs to accomplish career ambitions. Instead of behaving indifferently when faced with change regarding her career, the individual takes action in a specific way to influence her career outcome (Crant, 2000). Barnett and Bradley (2007) stated that these tendencies may also be known as "career enhancing strategies, context-specific proactive behaviors, and career goal-directed activities" (p. 623). This form of career management includes career research, planning, and assessment; the training and development of one's competencies; and socializing professionally to advertise

one's achievements (Claes & Ruiz-Quintamilla, 1998; Kossek et al., 1998; Nabi, 2000, 2003; Noe, 1996; Orpen, 1994). While many individual PCMBs and the aggregate effect of PCMBs have been researched, this study focuses on specific PCMBs that can be easily seen, understood, and applied to an individual's career development. These PCMBs include career planning, career self-exploration, environmental career exploration, and voluntary human capital development.

It is expected that engaging in career management conduct aimed at attaining personally esteemed career achievements will enhance the individual's career fulfillment and progress (Crant, 2000; Lent & Brown, 2006). The act of progressing toward privately independent ambitions is an important way that an individual can provide himself with a better quality of life and it allows him to have control over his own career fulfillment (Lent & Brown, 2006). The positive association between career management behaviors and career fulfillment is backed by meta-analytic research. Ng et al. (2005) researched eight studies examining the career management behavior/career satisfaction relationship. Significant effect sizes of 0.33 and 0.28 were discovered specifically for career scheming and worker professional social connecting behavior on career fulfillment. Wiese et al. (2002) performed a longitudinal study investigating the relationship between career management and career satisfaction. The three-year investigation outcome resulted in no significant difference in the strength of the relationship between career management behaviors and individual career satisfaction in the first study and the second study. Therefore, the individual's perception of the relationship between career management and career satisfaction is consistent over time.

Barnett and Bradley (2007) sampled employees from a variety of private and public sector industries to determine the relationship between their proactive career management behaviors and their perceived career satisfaction. The study used two scales developed by Gould (1979) and Sturges et al. (2002) to measure career management behaviors. To measure career satisfaction, Barnett and Bradley (2007) used a scale developed by Greenhaus et al.

(1990). The study outcome reported a significant moderate positive relationship between career management behaviors and career satisfaction with internal consistency reliability for career management behaviors and career satisfaction.

Park (2010) examined the effects of an individual's career-enhancing strategy on subjective career success. An individual's career-enhancing strategy, in the context of the study, was expressed as the way an individual becomes invested in managing his career. It was also described as a series of events participated in by the individual caused by specific behaviors to attain a career goal. Therefore, the PCMBs of individuals are ways those individuals implement their career-enhancing strategies. The outcome of the study resulted in a positive relationship between career-enhancing strategies and subjective career success. This current study will progress the research regarding the PCMB/career success relationship by investigating specific PCMBs that are practical to an individual's career development and success. As a result, organizations will have the ability to measure practical PCMBs that lead to the individual's career success to support the individual's career development needs and the organization's human capital needs.

Public Service Employees and Career Success

Limited research exists examining the PCMBs of public service employees and career success. However, Christensen et al. (2017) furthered the research on public service career success by investigating the literature on public service motivation (PSM) to uncover lessons that practitioners can use to motivate public service employees, improve their performance, and contribute to their career success. The researchers determined that one practical outcome of PSM that is grounded in the literature is that public service organizations should create a supportive work environment that reinforces PSM to enhance employee career success. Homberg et al. (2015) conducted a meta-analysis of the relationship between PSM and job satisfaction. A sample of 20 studies resulted in a moderate and significant correlation between PSM and job satisfaction. Additionally, a high and significant relationship was found between

the opportunity to serve and job satisfaction. Harari et al. (2017) investigated the relationship between PSM and job satisfaction with a meta-analysis of 24 studies that included 78,483 participants. The results showed that PSM was moderately related to job satisfaction. Therefore, practitioners who assist public service employees with career development and career management through the transfer of competencies, autonomy, and performance feedback “are likely to have salutary influences on job satisfaction and, by inference, public service motivation” (Christensen et al., 2017, p. 12). The PCMBs identified by this study as contributors to career success can be used as the focus of state and county tax assessor offices to increase employee PSM and career success.

Ismail et al. (2016), studied the relationship between career management, proactive behavior, and career management using a sample from the public service industry. The research tested whether a significantly positive relationship exists between job autonomy and career satisfaction with proactive behavior as a mediator. Additionally, the study tested the hypothesis that a significant positive correlation exists between transformational leadership and proactive behavior and career satisfaction. The study showed that job autonomy was positively significant to proactive behavior and that proactive behavior as a mediator was positively significant to career satisfaction. Therefore, it determined that proactive behavior is an important mediator between job autonomy and career satisfaction. Additionally, the study determined that transformational leadership was positively significant to proactive behavior and that proactive behavior as a mediator was positively significant to career satisfaction. Therefore, it determined that proactive behavior is an important mediator between transformational leadership and career satisfaction. Consequently, the study shows that proactive behavior appears to be an important mediating variable in the relationship between career management and career satisfaction. Therefore, if the public service organizational environment supports job autonomy and transformational leadership, those factors will elicit proactive behavior resulting in higher career satisfaction. The PCMBs tested in this current study support job autonomy and

transformational leadership. As a result, the investigated PCMBs may lead to the greater career success of public service employees if supported by their respective public service organizations.

Cantarelli et al. (2016) conducted a quantitative meta-analysis covering 42 public administration journals published between 1969 and 2015 to identify factors that lead to job satisfaction in public administration. The outcome of the study showed that several factors have a significant and positive correlation with job satisfaction. These factors include mission valence, commitment, intrinsic motivation, autonomy, and self-value. Additionally, these same factors may also be related to subjective career success and PCMBs (Hirschi, 2012, Hirschi et al., 2014, Hirschi et al., 2018). The goal of the study was to contribute to the public administration literature relating to the factors of job satisfaction to assist practitioners with employee satisfaction, motivation, and production (Cantarelli et al., 2016). This current study seeks to add to the knowledge base of public administration research by investigating tax assessors' perceptions of the relationship between the PCMBs and their perceptions of career success since they are also public administration employees.

Abele et al. (2011) conducted a study aimed at analyzing subjective and objective career success perceptions of professionals working in either the public sector, private sector, or self-employed. The public sector group was found to be statistically different than the other two. Participants from the public sector perceived themselves as less successful than self-employed participants and less successful than individuals from the private sector. However, the difference between self-employed participants and private-sector individuals was not statistically significant. Therefore, this current study further researches the possible perceived differences in career success between the public sector and private sector employees by comparing the possible differences between the two groups regarding PCMB and career success relationships.

Specific Individual Proactive Career Behaviors / Career Success Model

As illustrated in figure 1, this study is primarily concerned with investigating the relationship between specific valued PCMBs that are practical for organizational and individual management and development and the career success of individual employees that are employed as tax assessors. Using the career engagement scale (CES) as a measurement tool, the PCMBs of interest include career planning, career self-exploration, environmental career exploration, and voluntary human capital development (Hirschi, 2014; Hirschi et al., 2014). Career success factors of human capital development, individual motivation, environmental, and career management behavior resources will be measured using the career resource questionnaire ([CRQ]; Hirschi et al., 2018). The PCMB / career success relationship will be studied using the outcomes of the two measurements.

The Career Engagement Scale

The CES identifies six specific career management behaviors by the individual that impact career engagement (Hirschi et al., 2014) and may lead to career success (Hirschi et al., 2018). Hirschi et al. (2014) defined career engagement as “the degree to which somebody is proactively developing his or her career as expressed by diverse career behaviors” (p. 577). With the development of the career engagement scale, Hirschi et al. (2014) tested six career behaviors relevant to career engagement: career planning, career self-exploration, environment career exploration, networking, voluntary human capital development, and positioning. The number of behaviors tested was limited to not overburden the participant. The particular career behaviors were also selected because they are known to impact career engagement (Hirschi et al., 2014).

The researchers developed and validated the CES by conducting six studies with different participants that measured the degree of engagement in self-directed career management behaviors. The first inquiry analyzed existing measurement scales that included six specific career behaviors: career planning (Gould, 1979; Super et al., 1981), career

exploration (Hirschi, 2009; Rowold & Staufenbiel, 2010; Sumpf et al., 1983; Super et al., 1981), networking (Forret & Dougherty, 2001; Wolff & Moser, 2009) and, voluntary human capital development and positioning (Gould & Penley, 1984). Three additional general behaviors were also added to the study to measure the engagement of career behaviors more broadly. The research resulted in all factors significantly correlated to career engagement.

The purpose of the second study was to validate the CES by measuring gender invariance among college students. The scale resulted in good overall internal consistency and sample group consistency for the female and male groups. Additionally, the inquiry resulted in the measurement of career engagement similar for men and women without gender bias (Hirschi et al., 2014).

The third investigation examined the scale's invariance over time. The establishment of the measurement's invariance over time was needed to support the tool's applicability in long-term research. For the scale to be invariant over time, it was expected that the measure of career engagement to be consistent over two points in time. The researchers assumed that students will be more engaged the further they progressed in their academic careers. Therefore, the career engagement score of the scale was anticipated to be higher in the second testing than the score of the original testing. The responses of college student participants from the second study were collected again six months later. The CES scores showed that the students were more engaged in their careers as they neared graduation (Hirschi et al., 2014).

The objective of the fourth study was to determine if the career measurement scale that was previously used with college students was also useful for working professionals. The results confirmed the researchers' assumptions that working professionals would possess higher levels of career engagement than college students. Therefore, the inquiry validated the applicability of the career measurement scale to college students and working professionals (Hirschi et al., 2014).

The fifth study had three goals: to test the concurrent validity of the CES by comparing it to established measures of career management behaviors, determine discriminant validity by showing that the CES measured elements other than those measured by closely related concepts such as career self-efficacy and vocational identity, and show that the measurement is not redundant with other specific career behavior scales. The study results showed that the CES possessed concurrent validity and was significantly correlated with planning, self-exploration, environmental exploration, and networking. The study outcome also supported the scale's discriminant validity with only small positive relationships between vocational identity and career self-efficacy. Lastly, the CES explained additional variance in the criterion-related constructs of career self-efficacy beliefs and vocational identity clarity of students, and job satisfaction and career satisfaction with professionals beyond the measures of career planning, self-exploration, environmental exploration, and networking. Therefore, the outcome showed that the CES was different than other career measurement scales (Hirschi et al., 2014).

The purpose of the last study was to determine the scale's predictive utility in career transitions based on the assumption that career engagement increases as college students transition from college to work. The researchers specifically measured responses from college participants while in college and then several months later after they had entered the world of work. The sample results were compared to the participants' results six months later. The study outcome showed that the college student participants with higher career engagement while at the university are more likely to have higher career engagement after entering the world of work beyond the impact of career planning, self-exploration, environmental exploration, and networking. In summary, the purpose of the study was to evaluate the usefulness of the CES by comparing it with other similar scales, testing for gender bias, evaluating outcomes over time, measuring its outcome with professionals, comparing results of college students and professionals, and determine its incremental predictive validity with career transitions from college to the world of work. Of the six factors identified in the CES, this current study will

concentrate on career planning, career self-exploration, environmental career exploration, and voluntary human capital development because they are outcomes of career engagement and are practical and applicable measures in the world of work and employee development (Hirschi et al., 2014).

Career Resource Questionnaire (CRQ)

Hirschi et al. (2018) developed and validated the CRQ to assess key predictors of career success for workers and students. The groundwork added to the academic basis of career research by incorporating the broad composition of forecasting variable information of career success into a framework that is both all-inclusive and workable. Unlike other studies that focus on a narrow range of personality or developmental variables related to career competencies or career adaptability (Akkermans et al., 2013; Savickas & Porfeli, 2012), the CRQ uses a larger scope of research including human capital resources, environmental resources, motivational resources, and career management behavior (Hirschi et al., 2018). Additionally, even though the CRQ is expansive, it compacts many career-success factors into four broad areas using only three or four items per factor contributing to a short questionnaire that improves participant responses (Hirschi et al., 2018).

The increased interest in career literature related to boundaryless and protean careers and the proactive role of career management (Hall, 2002), led Hirschi et al. (2018) to add career management behaviors as the fourth element of career success which included human capital, environment, and motivation factors as part of the CRQ. After defining the four broad components of career success, the researchers focused on identifying the specific variables that define each factor. Several criteria were used in selecting the determinants. The criteria included that each component should have substantial academic support in the literature, possess sufficient content validity, have a sufficient theoretical base as an antecedent for career success, be developable instead of a fixed trait like self-efficacy, be highly correlated with objective and/or subjective career success outcomes, and avoid redundancies with other

constructs (Hirschi et al., 2018). All CRQ factors correlated positively and significantly with the objective and subjective career success factors, therefore, supporting criterion validity (Hirschi et al., 2018).

The CRQ was shown to possess convergent validity measuring similar career constructs as existing scales for both professional and student individuals. However, it was found to be more useful than other measures due to its comprehensiveness and shorter length. The study also verified that the CRQ expanded the key predictors beyond existing scales. The factors of the CRQ were only moderately correlated to existing career factors while more strongly correlated to additional formulated career factors. Additionally, CRQ factors were shown to be significantly correlated with both subjective and objective indicators of career success (Hirschi et al., 2018).

The CRQ is applicable in several contexts of career services. It can provide practitioners in the areas of university development services, human resource development, and career services with a short, simple, and comprehensive career success measurement that uses many established key predictors. The CRQ can also be used to assess the resource inventory of individuals to determine deficient career success areas that need development. The CRQ can be used in a pre-test/post-test format to measure the success of career interventions and which career resources are most affected. Additionally, the CRQ can be used by individuals to self-assess their career resources for self-engaged career planning, development, and management purposes (Hirschi et al., 2018). These goals are all consistent with the purpose and significance of this study.

Literature Review Summary

As outlined in this literature review, the PCMB/career success relationship is grounded in the theories of motivation, career theory, boundaryless and protean career theory, career management, career development, SCCT, PCMBs, and career success factors (Crant, 2000; Greenhaus, 2010; Hirschi et al., 2014; Hirschi et al., 2018; Lent & Brown, 2006; Sharf, 2010;

Vroom, 1964). Vroom's expectancy theory (1964) is relevant to this study because it explains that an individual's PCMB is based on his expectations and the value of and degree of value of the career success outcome. Therefore, it is the driving force of many careers that are boundaryless and protean which affects how individuals define career success and their use of PCMBs (Arthur et al., 2005; Greenhaus & Kossek, 2014; Hall et al., 2018). The decision-making process of career management theory describes the environment that influences the individual's PCMBs and how he defines career success (Greenhaus, 2010). Trait and type career development theory explain that an individual's personality and perception of the organization will influence her PCMBs and definition of career success (Sharf, 2010; Tang, 2019). Additionally, career lifespan theory illustrates that an individual's PCMB/career success relationship will change throughout his career based on his view of career success (Barnett & Bradley, 2007; Greenhaus, 2000; Sharf, 2010; Super 1957; Tang, 2019).

SCT laid the foundation for SCCT with the formulation of the models of interest development, career choice, and task performance extending the environmental/individual cognitive relationship to include career theory (Bandura, 1986; Lent et al., 1994, Lent & Brown, 2006). The model is further formulated with the integrative model of antecedents and consequences of PCMB and the integrated model of proactive behaviors (Barnett & Bradley, 2007; Crant, 2000). Therefore, these models describe the environment, decision-making processes, and personality factors that influence the individual's PCMBs and definition of career success.

Barnett and Bradley (2007) developed a general measure of the overall PCMB of individuals. However, Hirschi et al. (2014), tested and validated a tool to measure six specific individual proactive career behaviors. The scale can measure each proactive behavior individually in addition to an overall assessment. Additionally, Hirschi et al. (2018) evaluated and certified a scale that determines career success using four specific determinants of career success: human capital, motivation, environment, and career management behaviors. However,

the testing of the relationship between specific individual PCMBs and their effect on career success is not prevalent in the career success literature. Therefore, the focus of this study is to compare the relationships of four specific individual PCMBs; career planning, career self-exploration, environmental career exploration, and voluntary human capital development, with the individual's perception of career success (Hirschi et al., 2014; Hirschi et al., 2018). Lastly, the literature review of public service employees is important to this study because tax assessors employed by government institutions are public service employees that may be motivated by different factors than contracted tax assessors. As a result, their PCMBs and definition of career success may also be different (Christensen et al., 2017; Ismail et al., 2016). Therefore, another purpose of this study was to measure if any differences exist between public service tax assessors and those who work for private organizations regarding their PCMBs and perceived career success.

Chapter Three: Methodology

This chapter details the approaches and processes completed in this study for analyzing the impact of specific valuable PCMBs of tax assessors on their career success. The purpose of the study is to explore these connections to better understand the factors of career success for tax assessors. An additional goal of the study is to test for possible differences between the perceptions of those tax assessors who are employed by government agencies and those who work for private sector businesses that are contracted by government agencies. Therefore, the study sought to answer the following five research questions:

1. Is there and what is the relationship between career planning and career success for tax assessors?
2. Is there and what is the relationship between employee self-career exploration and career success for tax assessors?
3. Is there and what is the relationship between employee environmental career exploration and career success for tax assessors?
4. Is there and what is the relationship between voluntary human capital and career success for tax assessors? If there is a relationship, how does the relationship influence the development of additional training?
5. Are the perceptions of tax assessors employed by government offices different than tax assessors employed by private sector businesses contracted by government offices regarding the relationship between their overall proactive career management behaviors and career success? If so, to what extent and in what way(s) are they different?

This chapter also explains the research design and defines the variables, accessible population, sample, and sampling technique used in the study. Additionally, it describes the instrumentation used including the specific tests, types of measures, and questionnaire design.

The data collection procedures and a description of data analysis techniques will also be outlined.

Research Design

Since the study required a relational analysis between four independent variables (career planning, career self-exploration, environmental career exploration, and voluntary human capital development) that describe PCMBs and one dependent variable that uses four indicators (human capital, environment, motivation, and career management behaviors) to describe career success, a quantitative research design was used. An independent variable can be defined as “a variable used to describe, predict, and control the dependent variable” while the dependent variable is the variable that is “being described, predicted, or controlled” (Bowerman et al., 2014, p. 543). Additional demographic variables were considered including age, gender, education, and employer type. This study used quantitative methods and descriptive statistics to derive frequencies, means, and standard deviations for the variables that are the focus of the study. Parametric and non-parametric inferential statistical tests were also considered to study the impact of independent variables on the dependent variables and determine whether a significant difference exists between government and private business contractor tax assessors’ perceptions of PCMBs and career success (Glass & Hopkins, 1996; Marczyk et al., 2005).

The survey research approach was used for the study because it can supply the numeric data needed for the quantitative research design using a rigorous methodical research framework. The survey research approach sampling design consisted of probability sampling to acquire a sample that is representative of the population to provide more credibility to the statistical test. The survey research approach is the better approach for the study when compared to the experiment or quasi-experiment approaches because it is difficult to conduct the experiment or quasi-experiment approaches with participants who are separated by geographical distances. The survey research approach refers to a technique of gathering

information regarding a variable under study from the respondents of the population. On the other hand, the experiment and quasi-experiment approaches use scientific procedures to isolate and test the hypothesis about an independent variable that is affected by an extraneous dependent variable. The questionnaire tool used in the survey research approach can be administered easily via the internet and overcome logistic barriers (Bartlett, 2005).

Subject Sampling

According to the U.S. Bureau of Labor Statistics (n.d.), the target population of tax assessors employed in the United States is approximately 76,880. While several techniques concerning sample size were discovered during the literature review, the researcher used a technique developed by Cochran (1977) because of its simplicity of use. Additionally, it included the variables known by the researcher about the sample and population parameters. The researcher of this study determined that the minimum sample size for the overall study to be 94.91 participants based on the accessible population of 8000 tax assessors to achieve 95 percent confidence and allow for a maximum standard error of 5 percent using the equation for n below. However, since the study is testing the hypothesis of whether there is a difference between two groups (government tax assessors and private-sector tax assessors) and the number of employees for each group is unknown, the minimal sample was determined using the number of participant outcomes of the equation n_0 times 2 groups or 96.04×2 or 192.08 rounded to 193 participants sampled (Bartlett et al., 2001; Cochran, 1977).

$$n_0 = \frac{t^2 * s^2}{d^2} = \frac{1.96^2 * (1.25)^2}{(5 * .05)^2} = 96.04$$

$$n = \frac{n_0}{1 + \frac{(n_0-1)}{N}} = \frac{96.04}{1 + \frac{(96.04 - 1)}{8000}} = 94.91$$

n_0 is the required sample size when the population is unknown

n is the required sample size when the population is known

s is the estimate of the standard deviation of a 5-point scale divided by the 4 possible values

t is the t value corresponding to the selected level of confidence of 95%.

d is the acceptable margin of error of 5% for categorical data using a 5-point scale

N is the known accessible population size from which the sample is being drawn

The goal was to seek a minimum of 300 participants to fully complete the survey to exceed the minimum (193) number of completed surveys which would increase the effect size of the study (Field, 2018).

The maximum accessible population to be surveyed were 8000 tax assessors throughout the United States who are members of the International Association of Assessing Officers (IAAO) and whose contact information was publicly available. The accessible population was notified of the survey by email and it was administered using Qualtrics (<https://www.qualtrics.com>). A second email soliciting responses from those who did not originally respond was sent to ensure a sufficient number of responses were received. The internet questionnaire was used to secure participant anonymity which contributes to a higher response rate (Dillman, 2000; Sills & Song, 2002).

Instrumentation

Several instruments were discovered during the literature review process regarding the measurement of PCMBs and career success. The researcher eventually decided on two instruments that contain proven historical construct and criterion validity and the most current research backing. The career engagement scale (CES) that measures PCMBs (Hirschi et al., 2014) and the career resource questionnaire (CRQ) that measures career success (Hirschi et al., 2018) were used to examine the relationship between PCMBs and career success. Additional questions were added regarding demographic variables regarding employment, age, educational background, and gender are illustrated in Appendix C. The questions address career success as the dependent variable and career planning, career self-exploration, environment career exploration, and voluntary human capital development as the independent variables. The rationale for using a survey was to allow the researcher to eliminate interviewing bias and ensure the internal validity of the study (Salant & Dillman, 1994). Additionally, with a well-developed survey, the data-gathering tool can be accurate and allow for complete participant anonymity. For this study, the survey design is advantageous because of the quick

data collection response, ease of data analysis, and requires minimal resources (Salant & Dillman, 1994).

Instrument Design

The independent and dependent variable questions used a Likert scale of 1 through 5 for responses. Likert scales have increased power and simplicity with the main advantage of flexibility, economy, ease of creation, and data collection (Alreck & Settle, 1995). The researcher used a 5-point Likert scale to allow for a neutral answer and not influence the participant's response toward either end of the scale (Blessings, 2005). The Likert scale was also used to avoid redundancy and assure that the questions were easily understood. Careful organization of the survey, appropriate question groupings, and clear and understandable instructions were utilized to maximize the visual appeal of the survey and contribute to the accuracy of the participants' answers (Alreck & Settle, 1995; Blessings, 2005).

The instruments selected for the study were based on the research design and recommendations by Hirschi et al. (2014) and Hirschi et al. (2018) to further investigate the relationship between factors influencing career engagement and the objective and subjective career success of individuals to better understand "their career resources that could be important for career planning and to promote active engagement in self-directed career management" (Hirschi et al., 2018, p. 15). Additionally, the instruments were selected based on their internal reliability coefficient or Cronbach's Alpha rating, which is the degree that which each instrument measures its intended purpose, using the following scale (George & Mallery, 2003, p. 231):

<u>Cronbach's Alpha</u>	<u>Internal reliability</u>
$\alpha > 0.9$	Excellent
$0.9 \geq \alpha > 0.8$	Good
$0.8 \geq \alpha > 0.7$	Acceptable
$0.7 \geq \alpha > 0.6$	Questionable
$0.6 \geq \alpha > 0.5$	Poor
$0.5 \geq \alpha$	Unacceptable

The instruments were also selected because the factors of each instrument also strongly correlated with its intended purpose. A correlation coefficient (r) of 0.10 corresponds to a small effect size while 0.30 is a medium effect size, and 0.50 is a large effect size (Cohen, 1988; 1992).

Previous findings from Hirschi et al (2014) using the CES showed each of the PCMBs being significant ($p < .001$) to career engagement. Hirschi and associates reported the following correlations and reliability factors for the relationship between the PCMBs and career engagement: Career planning (Student sample: $r = .46$, $\alpha = .87$; Working sample: $r = .36$, $\alpha = .85$), Self-exploration (Student sample: $r = .57$, $\alpha = .85$; Working sample: $r = .54$, $\alpha = .87$), Environmental exploration (Student sample: $r = .72$, $\alpha = .89$; Working sample: $r = .67$, $\alpha = .90$), Vocational identity (Student sample: $r = .32$, $\alpha = .81$; Working sample: $r = .22$, $\alpha = .89$). Since the career management behaviors strongly correlate with career engagement, they are shown to be proactive behaviors since career engagement is based on the individual's proactive personality traits (Barnett & Bradley, 2007; Lent & Brown, 2006).

Hirschi et al. (2018) developed the CRQ as a tool to measure career success. The CRQ consisted of 40 questions. Hirschi et al. (2018) reported that the aggregate score of the CRQ strongly correlates with existing measures of career success such as occupational expertise, career self-efficacy, and career planning with the correlation coefficients ranging from $r = 0.38$ to 0.83 for workers and $r = 0.39$ to 0.76 for students. Additionally, the reliability of those factors was reported to be high with a Cronbach's Alpha ranging from $\alpha = 0.80$ to $\alpha = 0.93$ for the workers and $\alpha = 0.78$ to $\alpha = 0.90$ for the students. This study uses the specific questions of the CES and the aggregate scores of the CRQ to investigate the gap between the PCMBs and career success as suggested by Hirschi et al. (2014) and Hirschi et al. (2018).

Demographic Variables

The questions about the demographic variables used in the instrument of this study are illustrated in Appendix C and include age, gender, education, and employer type. The question

regarding the age of the participant was used to derive a stratified variable using the age groupings espoused by several career lifespan theories to include the exploration stage for individuals under the age of 25 years, the establishment stage for individuals between 26 and 40 years of age, the maintenance stage for individuals between 41 and 60 years of age, and the disengagement stages for individuals greater than 60 years of age (Greenhaus et al., 2010; Sharf, 2010; Super, 1957). The age variable may be used to measure differences between career life stages. The question regarding the participant's gender included three choices: male, female, and other in an attempt to expand the number of answer options to acknowledge diversity in gender expression (Westbrook & Saperstein, 2015). This variable can be used to gauge differences between gender choices. To measure differences in responses based on the participants' education levels, the level of education question stratified responses into eight categories that are consistent with the Bureau of Labor Statistics (n.d.). They include no formal educational credential, high school diploma or equivalent, some college but no degree, postsecondary certification, associate degree, bachelor's degree, master's degree, and doctoral or professional degree. The employer question was a dichotomous question that stratified responses into government employment and independent contractor employment to be used to assess any differences in responses of members in the two groups.

Career Resource Questionnaire

The CRQ, illustrated in Appendix A, was used to measure predictors of career success from four key areas: human capital resources, environmental resources, motivational resources, and career management behaviors. The items were presented as statements. Additionally, the participant was asked to rate his agreement with the statements using a 5-point Likert scale ranging from 1 = not true at all to 5 = completely true. The questions of the CRQ are illustrated in Appendix D along with their respective average Cronbach alpha levels based on the two worker and two student studies. In two different studies using worker and student samples, the Cronbach alpha levels per question were reported to be 0.80 to 0.94. Additionally, the average

Cronbach alpha level of the entire four studies ranged from 0.83 to 0.91. Therefore, the scale is reported to be a reliable measure of career success (Hirschi et al., 2018).

Career Engagement Scale

The CES, illustrated in Appendix B, was used to determine the magnitude to which an individual proactively develops his or her career using self-rated responses to questions related to career management behaviors. The overall alpha level for the scale is reported to be 0.89. Therefore, the scale and its questions measure the intended purpose of career engagement (Hirschi et al., 2014).

The scale was used to test six career behaviors relevant to career engagement: career planning, career self-exploration, environment career exploration, networking, voluntary human capital development, and positioning (Hirschi et al., 2014). Questions 1 through 3 focused on the general engagement of the participant and were not used in this study. Additionally, the results from question 7 and question 9 directed to networking and positioning respectively were not used in this study because they do not correspond to the purpose of the study. The following questions from the questionnaire are grouped by behavior and illustrated in Appendix B. The participants were asked about the extent that which they participated in a task during the last six months:

General Career Engagement

- Actively sought to design your professional future?
- Undertook things to achieve your career goals?
- Cared for the development of your career?

Career Planning

- Developed plans and goals for your future career?

Career Self-Exploration

- Sincerely thought about personal values, interests, abilities, and weaknesses?

Environmental Career Exploration

- Collected information about employers, professional development opportunities, or the job market in your desired area?

Networking

- Established or maintained contacts with people who can help you professionally?

Voluntary Human Capital Development

- Voluntarily participated in further education, training, or other events to support your career?

Positioning

- Assumed duties of positions that will help you progress professionally?

Data Collection Procedures

The accessible population of the study includes all tax assessors in the United States. The data sample for this study was obtained by surveying members of the International Association of Assessing Officers (IAAO), members of IAAO state chapters, members of state tax assessors' organizations, and employees of government and private-sector tax assessors' offices throughout the United States. A minimum sample of 300 fully completed surveys from the 8000 tax assessors surveyed was sought. The sample size is sufficient for the accuracy and reliability of the study based on the opinions of Cochran (1977) concerning the minimum sample size.

The study used an internet-based survey method which has several advantages over other methods (Blessings, 2005). A few advantages are that the data are immediately available and collected in a user-friendly manner, results can be loaded directly and managed more efficiently reducing the time required for data analysis, high-quality graphics are easily visible to participants, and participants can skip to appropriate items and still maintain the anonymity of participation. A couple of disadvantages of internet-based surveys are the potential lack of

computer access, computer literacy, software, and equipment of the survey participants.

Dillman (2000) offers some suggestions for overcoming internet-based survey disadvantages including the utilization of a multiple contact strategy similar to regular mail surveys, personalize email communication as much as possible, designing the survey with a welcome screen that is motivational, emphasizing the ease of response, and instructs the participants how to proceed with the survey using simple and easy to follow instructions. The disadvantages of administering an internet-based survey method were noted. However, the researcher believes that the disadvantages were minimal since most employees in the industry have either personal or work email addresses indicating an adequate level of knowledge and experience with the use of personal and/or work computers, internet access, and ample hardware and software.

Additionally, survey notifications using introductory emails that were tailored to the tax-assessing participant and distributed using email databases that contained known accurate email addresses from individuals within the industry supported the completion of the survey and minimized the chance that the email correspondence would be marked as spam by email providers, therefore, increasing the likelihood of them reaching their intended recipients.

To address the potential weakness of a low response rate for the online survey, a three-step follow-up sequence was followed to obtain a higher response rate (Dillman, 2000; Sills & Song, 2002). An introductory email explaining the purpose and design of the study was sent to all potential participants the week before the actual survey invitation to increase response rates illustrated in appendix F. The next week, a second email illustrated in appendix G was sent to participants explaining the purpose and design of the study along with a link to the online survey. The survey started with an informed consent document. The informed consent outlined the project title, the researcher's contact information, the purpose of the study, the design of the study, potential risks of the study, possible benefits of the study, participant confidentiality, and advisor contact information. The informed consent document was used to introduce the participant to the study and ensure he or she is properly informed and the research is ethically

compliant. The delivery of the online survey was calibrated so that a participant could not answer the survey more than once. No personal identifiers were asked or recorded within the survey to maintain participant anonymity. Individuals are more willing to respond honestly and candidly if they can complete the survey in absolute anonymity (Alreck & Settle, 1995). The participation in the study by the individual was confirmation that the individual was a willing and consenting participant. A third email illustrated in appendix H was sent a week after the second email asking for responses from participants who did not respond to the previous survey. The email explained the purpose and design of the study and advised the individuals that they have only one week to respond to the email before the online survey closes. It also included a link to the survey. The survey started with the same informed consent document explained earlier.

The process was used for the CES survey which included the informed consent document and demographic questions and took three weeks. Afterward, the process was repeated for the CRQ survey which also included an informed consent document (appendix E), introductory emails (appendices I, J, and K), and demographic questions and took an additional three weeks. Therefore, participants were contacted a maximum of six times. The entire data collection process took a total of six weeks. The CES survey and the CRQ survey were conducted separately to ensure the validity of each measurement tool. However, they were linked together using the Qualtrics online collection platform. This data collection design allowed for multiple regression and correlation analysis to be performed on PCMB and career success outcomes from participants who answered both questionnaires.

Data Analysis Methodology

The data of the study were analyzed using several techniques. Descriptive data analysis was used to get a better “feel” of the data. Convergent and discriminant validity tests were also conducted to determine the construct validity of the CES. A multiple regression analysis was used to measure the impact of the PCMBs, employment group, gender, age, and education level on the dependent variable career success.

Descriptive Statistic Analysis

Summary descriptive statistics were calculated and reported for the total sample, each PCMB, employment group, gender, age, and education level. The frequency and percentage of participants, the mean, median, standard deviation, and 95% confidence interval were derived from the participant scores. The PCMBs included career planning, career self-exploration, environmental career exploration, and voluntary human capital development. The gender groups included males, females, and others. Employer groups included government agencies or private-sector contractors. The age groups used included 18 - 25 years, 26 - 40 years, 41 - 60 years, and 60+ years. Lastly, the educational background groups included less than high school, high school or GED, some education past high school, postsecondary certification, and associate, bachelor's, master's, doctorate, or professional degrees.

Inferential Analysis and Multiple Regression Analysis

A correlation matrix was computed including the PCMBs, the employment type, gender, age, education level, and career success to assess variable correlation and assess multicollinearity. A multiple regression analysis was used for analyzing the impact of PCMBs, employment group, gender, age, and education level on tax assessors' perceived career success. Multiple regression analysis is an extension of simple regression in which an outcome is predicted by fitting a linear combination of two or more predictor variables to a set of data.

The regression model is fitted to the data using the least square method which minimizes the vertical distances between the model prediction and each data point (Field, 2018). The researcher used R^2 to assess the goodness of fit of the model to the data illustrated below:

$$R^2 = SS_M / SS_T$$

$$R^2 = \text{Goodness of fit}$$

$$SS_M = \text{Sum of Squares of the model}$$

$$SS_T = \text{Total Sum of Squares}$$

The SS_T illustrates how accurate the mean is as a model by calculating the difference between the observed values and the predicted values of the mean. On the other hand, the SS_M measures the difference between the predicted values of the mean model and the predicted values of the regression model. The better fit the regression model is to the data than the mean model, the larger the SS_M and the larger the R^2 or fit of the model to the data.

The multiple regression model used in this study is illustrated below with the PCMBs, employment group, gender, age, and education level as predictor variables and career success as the dependent variable.

$$\begin{aligned} \text{Career Success} &= \beta_0 + \beta_1 * \text{Career planning} + \\ &\beta_2 * \text{Career Self-Exploration} + \\ &\beta_3 * \text{Environmental Career Exploration} + \\ &\beta_4 * \text{Voluntary Human Capital Development} + \\ &\beta_5 * \text{private-sector tax assessor} + \\ &\beta_6 * \text{government tax assessor} + \\ &\beta_7 * \text{male employee} + \\ &\beta_8 * \text{female employee} + \\ &\beta_9 * \text{18-25 age group} + \\ &\beta_{10} * \text{26-40 age group} + \\ &\beta_{11} * \text{41-60 age group} + \\ &\beta_{12} * \text{60+ age group} + \\ &\beta_{13} * \text{high school education} + \\ &\beta_{14} * \text{some college education} + \\ &\beta_{15} * \text{certification or associate degree} + \\ &\beta_{16} * \text{bachelor's degree} \\ &\beta_{17} * \text{master's degree} + \\ &\beta_{18} * \text{doctorate or professional degree} + \epsilon_i \end{aligned}$$

β_0 is the outcome when the predictor variables are zero. β_1 to β_{18} are slope coefficients associated with each covariate, indicating the change in outcome for one unit change in covariate holding others constant. Career planning, career self-exploration, and voluntary human capital development are variables using the ratings of ordinal data. The remaining are binary variables where the response is either yes or no affirming that the response belongs to the particular variable. Additionally, ϵ_i is the error of the model associated with career success. The predictor coefficient can be either positive or negative based on its relationship to the career success. A positive predictor coefficient has a positive relationship with career success

and a negative predictor coefficient has a negative relationship. For unstandardized coefficients, the larger the predictor coefficient in absolute value the greater the relationship with career success. This is because the coefficient represents the change in the outcome associated with a unit change in the predictor coefficient. On the other hand, standardized coefficients permit the researcher to relate the extent of the impact of different predictor variables in the model by regulating the standard deviations so all the predictor variables are placed on a scale of mean 0 and standard deviation 1. Using the t-test, each variable is tested, holding other variables constant to whether it significantly contributes to the career success. If $p < 0.05$, the researcher concluded that the variable significantly contributes to career success. On the other hand, if $p > 0.05$, the conclusion is that the variable does not contribute to career success (Field, 2018).

A 95% level of confidence was used when testing each hypothesis. If the resulting p-values from the testing of each hypothesis were less than 0.05, the null hypothesis for each particular test that no relationship exists between the predictor variable and career success was rejected and the alternative hypothesis for each particular test that a significant relationship exists between the predictor variable and career success was retained. On the other hand, if the p-values from the particular hypothesis were greater than 0.05, the null hypothesis that no relationship exists between the predictor variable and career success was retained (Field, 2018). The IBM SPSS Statistics software was used to analyze the survey data.

Research questions 1 through 4 pertained to the testing of the impact of each PCMB (career planning, career self-exploration, environmental career exploration, and voluntary human capital development) on career success. The fifth research question concerning the difference in perception regarding the impact of PCMBs on career success between government and private sector tax assessors was tested using each employment group as a predictor variable. Additional research was also conducted concerning the impact on career success perceptions caused by differences in gender groups, age groups, and education level

groups by defining them as binary predictor variables in the regression model (Bowerman et al., 2014; Field, 2018).

Test of Data Normality

For the regression analysis to produce the best parameter estimates of the population using the least squares method, the residuals or differences between the observations and model estimates must have a normal distribution. The researcher first used P-Plots, which is a graphical representation of how closely the standardized predicted values and standardized residuals produced by the model fit a linear target line, to check the normality of the residuals (Field, 2018). If the plots followed closely along the linear line showing a perfect relationship between the observed and expected cumulative probability, it can be assumed that the residuals follow a normal distribution. Next, the Shapiro-Wilk test was used to test the normality of the standardized and unstandardized residuals. If the outcome of the test results with a $p < 0.05$, the residuals are determined not to be normally distributed. However, if $p \geq 0.05$, it will be determined that the residuals met the assumption of normality (Field, 2018).

Test of Homogeneity of Variance

Homogeneity of variance in regression models means that the variance of the outcome variable should be stable at all levels of the predictor variable. Like the assumption of normality, the regression model will produce optimal parameters using the least squares method when the model residuals are homogeneous. Additionally, heteroscedasticity creates inconsistency in the estimate of standard error associated with model parameter estimates (Field, 2018). While the homogeneity of variance is not extremely critical because the least squares method will produce unbiased estimates for regression analysis, it will affect the conclusions of significant tests (Field, 2018). The researcher used a scatter plot of standardized predicted values and standardized residuals to check the homogeneity of the residuals. If the plots result in a square shape with z-scores between -3 and 3, it can be interpreted that the residuals met the assumption of homogeneity because residuals were similar across all predicted values.

Additionally, adjustments can be made using statistical software to correct violations of the homogeneity of variance assumption.

Other Testing

Additionally, the variance inflation factor (VIF) tolerance statistic was computed to also measure the collinearity of the predictor variables. The convergent and discriminant validity of the CES was measured with Cronbach's Alpha and comparison to the outcome of the original study of the CES. (Field, 2018; Hirschi et al., 2014).

Explanation of Statistical Data Types

The testing produced the following statistical data (Field, 2018):

- **Measures of Central Tendency** - The average of a distribution of numbers
 - Mode - The number that occurs the most in a set of data.
 - Median - the middle score in a data set. It is less affected by extreme scores or skewness of the data.
 - Mean - The arithmetic mean. The aggregate score of all observances is divided by the number of observances.
- **Frequency Distribution** - The number of times each observance occurred in a data set illustrated by a histogram.
 - Normal Distribution - When the distribution of data is characterized by a bell-shaped curve where the majority of scores are found at the center of the distribution and less occur symmetrically as scores move away from the mode. The mean, median, and mode are approximately the same in a normal distribution.
 - Non-normal distribution - When the distribution of data does not follow a normal distribution.
 - Skewness - When the data lacks symmetry and is centered either at the lower end or upper end of the distribution. Positively skewed data

is when the majority of the data scores are at the lower end of the distribution and the median is less than the mean. Negatively skewed data is when the majority of the data scores are at the upper end of the distribution and the median is greater than the mean.

- **Kurtosis** - Relates to the pointiness of the distribution in the data set. A positive kurtosis is known as a leptokurtic distribution where the distribution is very pointy and the tails on either end are minimal. A negative kurtosis is known as a platykurtic distribution where the distribution is relatively flat.
- **Effect Sizes** - An objective and standardized measure of the magnitude of the observed effect that can be compared between studies (Field, 2018).
 - **Correlation coefficient (r)** - An effect size that shows the strength of the relationship between two variables ranging from a strong negative relationship from -1 to a strong positive relationship of 1 with no relationship being 0 (Field, 2018). An r-statistic of 0.10 corresponds to a small effect size while 0.30 is a medium effect size, and 0.50 is a large effect size (Cohen, 1988; 1992).
 - **Cohen's d** - The difference between two means divided by the pooled standard deviation for the data. A d-statistic of 0.20 corresponds to a small effect size, 0.50 is a medium effect size, and 0.80 is a large effect size (Cohen, 1988).
- **Cronbach's Alpha** - The Cronbach Alpha rating is the degree that which the instrument measures its intended purpose based on the items of the instrument (George & Mallery, 2003).
- **Regression Model** – A model expression used to predict a dependent variable by using one or more predictor variables. Illustrated by the general model

$$y = \beta_0 + \sum \beta_j x_j + e \text{ (Bowerman et al., 2014; Field, 2018).}$$

- **R² or Coefficient of determination** - The proportion of the variance of a dependent variable is explained by a predictor variable or variables in a regression model.
- **Adjusted R²** - Adjusts for the number of predictor variables in the model and only increases if the predictor variable improves the model more than would be expected by chance.
- **F statistic** - The amount of variability the model can explain relative to how much variability it cannot explain. It is represented by the equation $F = MS_M / MS_R$ where MS_M is the variability that the model can explain and MS_R is the variability that the model cannot explain between the predictor and outcome variables.
- **Beta Value or β value** - The gradient of the regression line and the strength of the relationship between the predictor variable and the dependent variable.
- **P-value or probability value** - The probability of obtaining test results is at least as extreme as the results observed during the test, assuming that the null hypothesis is correct.

Methodology Summary

As previously discussed, the methodology of this chapter outlines the processes and techniques used to answer the study questions concerning the relationship between career planning, employee self-career exploration, employee environmental career exploration, and voluntary human capital development with career success based on the perceptions of tax assessors. Additionally, the methodology for investigating whether a difference exists between the perceptions of tax assessors based on employment, gender, age, and education level grouping was discussed. The research design, sampling methods, instrumentation, data

collection procedures, and data analysis methods were also outlined. The outcome of these methods will be revealed in the next chapter which includes the data analysis and results of the study.

Chapter Four: Data Analysis and Results

The purpose of this study was to determine tax assessors' perception of the relationship between proactive career management behaviors (PCMBs) and determine if perceptions were different based on employment group. Differences by gender, age, and educational level were also investigated. In this chapter, the results of the five research questions are provided. Descriptive and inferential data analysis results from the participant responses to the two surveys are revealed.

Research Questions Investigated

The five questions investigated in this study include:

1. Is there and what is the relationship between career planning and career success for tax assessors?
2. Is there and what is the relationship between employee self-career exploration and career success for tax assessors?
3. Is there and what is the relationship between employee environmental career exploration and career success for tax assessors?
4. Is there and what is the relationship between voluntary human capital and career success for tax assessors? If there is a relationship, how does the relationship influence the development of additional training?
5. Are the perceptions of tax assessors employed by government offices different than tax assessors employed by private sector business contractors regarding the relationship between their overall proactive career management behaviors and career success? If so, to what extent and in what way(s) are they different?

Sampling Results

The links to two surveys, the Career Engagement Scale (CES) and the Career Resource Questionnaire (CRQ), were distributed by email to approximately 8000 tax assessors throughout the United States from January 24 to March 4, 2022. The CES was used to measure

career engagement using selected proactive career management behaviors (PCMBs). The CRQ was used to measure career success (Hirschi et al., 2014; Hirschi et al., 2018). Participants were introduced to the study and informed of their rights throughout the study process. They were also notified that participation in the study is voluntary and based on informed consent. Anonymous responses were collected using Qualtrics, an online survey website. The data was secured on the investigator's laptop.

Nine hundred and twelve tax assessors responded to the survey with 612 fully completing the survey. The investigator used only the 612 fully completed survey responses for analysis. Illustrated in table 1, the 612 responses included 543, or 89% government tax assessors, and 69, or 11% private tax assessors. Based on the accessible population of 8000 tax assessors, a minimum of 193 responses are needed for a 5% margin of error and a 95% confidence level. The sample size should increase the effect size of the study (Cochran, 1977; Bartlett et al., 2001; Field, 2018).

Demographic Data

As shown by the summarization of the demographic data in table 1 and previously mentioned, the majority of tax assessors surveyed work for government agencies (n= 543, 89%). Most participants (n = 352, 57.5%) answered that they were from 41 to 60 years of age. However, a significant number (n = 163, 26.6%) identified as being older than 60 years of age. Therefore, only 15.9% of the sample was less than 41 years old.

Frequencies based on educational background resembled a normal distribution with the majority of participants responding that they held a Bachelor's Degree (n = 273, 44.6%). Additionally, 18.3% of the respondents reported holding an advanced degree. However, 37.1% of the tax assessors surveyed had less than a Bachelor's degree. The sample included a larger number of male participants (n = 365, 59.6%) than female participants (n = 247, 40.4%). Analyzing data from groups with small sample sizes of less than 30 may be problematic. Based on the central limit theorem, the larger the sample size the more accurate the estimates of

confidence intervals, the significance tests of models, and the estimates of model parameters (Bowerman et al., 2014; Field, 2018). Therefore, this study did not focus on groups with small sample sizes such as the 18 - 25-year-old age category, less than high school and high school education groups, and the doctorate or professional educational group category.

Table 1
Demographic Characteristics of Study Sample

Demographic	Number of Participants	Percent of Participants
Employed by:		
Government Agency	543	89%
Private Sector Contractor	69	11%
Age:		
18-25 years	6	1%
26-40 years	91	14.9%
41-60 years	352	57.5%
60+ years	163	26.6%
Educational Background:		
Less than high school	0	0%
High School or GED	27	4.4%
Some education past high school but no degree	106	17.3%
Postsecondary Certification or Associate Degree	94	15.4%
Bachelor's Degree	273	44.6%
Master's Degree	94	15.4%
Doctorate or Professional Degree	18	2.9%
Gender:		
Male	365	59.6%
Female	247	40.4%

Descriptive Data

The descriptive data from the study are summarized in tables 3 through 10. The tables include descriptive data for the entire sample, employment groups, gender groups, age groups, and education level groups regarding PCMBs. Data frequencies, mean, median, standard deviations, and 95% confidence intervals are included. The scale illustrated in table 2 was used to interpret the average scores for each variable.

Table 2

Scale for Career Engagement Scale and Career Resource Questionnaire Rating Averages

Career Engagement Scale	Career Resources Questionnaire Scale	Scale
Almost never	Strongly Disagree	1.00 - 1.49
Seldom	Disagree	1.50 - 2.49
Neutral	Neutral	2.50 - 3.49
Often	Agree	3.50 - 4.49
Very often	Strongly Agree	4.50 - 5.00

Total and Employment Group Data

Table 3 illustrates the frequency of responses to the four PCMBs of the career engagement scale by total and employment group. From the overall sample of 612 tax assessors, 543 respondents were government employed and 69 were private-sector tax assessors. Concerning career planning, 40.4% of the tax assessors responded that they participated “often” and 30.9% responded that they participated “very often.” Forty-one-point-five percent of the tax assessors responded that they participated in career self-exploration “often” while 35.6% responded that they participated “very often.” Relative to environmental career exploration the most frequent responses were located in lower “neutral” and “often” ratings with 27.9% responding that they participated “neutrally” while 29.7% responded that they participated often. Lastly, 32.5% of the tax assessors responded that they participated in voluntary human capital development “often” while 52.1% responded that they participated “very often.”

When comparing employment groups, 72.4% of the government tax assessors responded that they “often” or “very often” engaged in career planning while 63.7% of the private-sector tax assessors do the same. With career self-exploration, 77.6% of the government tax assessors and 73.9% of the private-sector tax assessors reported that they either “often” or “very often” participate in the behavior. The majority of frequencies of environmental career exploration reported from government and private-sector tax assessors, 57.7% and 57.9% respectively, were either “neutral” or “often”. Lastly, the majority of both

government and private-sector tax assessors reported that they engage in voluntary human capital development with 86% of the government and 73.9% of the private-sector reporting that they “often” or “very often” participate in the behavior. Therefore, the frequency of responses was similar for both employee groups. All employment groups responded mostly “often” or “very often” for three of the four PCMB questions and responded “neutral” or “often” to the environmental career exploration question.

Table 3

PCMB Questions Frequency of Rating by Employment Group

Employment Group		Career Planning		Career Self-exploration		Environmental Career Exploration		Voluntary Human Capital Development	
		Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Gov't	1 Almost Never	14	2.6	12	2.2	78	14.4	10	1.9
	2 Seldom	38	7.0	21	3.9	69	12.7	19	3.5
	3 Neutral	98	18.0	89	16.4	152	28.0	47	8.7
	4 Often	224	41.3	224	41.3	161	29.7	180	33.1
	5 Very Often	169	31.1	197	36.3	83	15.3	287	52.9
	Total	543	100.0	543	100.0	543	100.0	543	100.0
Private	1 Almost Never	1	1.4	1	1.4	8	11.6	2	2.9
	2 Seldom	4	5.8	2	2.9	13	18.8	5	7.2
	3 Neutral	21	30.4	15	21.7	19	27.5	11	15.9
	4 Often	23	33.3	30	43.5	21	30.4	19	27.5
	5 Very Often	20	29.0	21	30.4	8	11.6	32	46.4
	Total	69	100.0	69	100.0	69	100.0	69	100.0
Total	1 Almost Never	15	2.5	13	2.1	86	14.1	12	2.0
	2 Seldom	42	6.9	23	3.8	82	13.4	24	3.9
	3 Neutral	119	19.4	104	17.0	171	27.9	58	9.5
	4 Often	247	40.4	254	41.5	182	29.7	199	32.5
	5 Very Often	189	30.9	218	35.6	91	14.9	319	52.1
	Total	612	100.0	612	100.0	612	100.0	612	100.0

Table 4 illustrates the summary responses of the aggregate sample and by tax assessor employment group. The total sample size was 612 participants. The average participant response regarding career planning was “often” ($M = 3.90$, $Mdn = 4$, $SD = 0.995$, $95\% CI [3.82, 3.98]$). Participants also responded “often” to the participation of career self-exploration ($M =$

4.04, Mdn = 4.00, SD = 0.943, 95% CI [3.97, 4.12]). When questioned about the participation of environmental career exploration, respondents reported “neutral” (M = 3.16, Mdn = 3.00, SD = 1.290, 95% CI [3.06, 3.26]). The average participant response regarding the participation in voluntary human capital development was “often” (M = 4.29, Mdn = 5.00, SD = 0.938, 95% CI [4.21, 4.36]). The aggregate average of participant responses to the CES concerning career engagement was “often” (M = 3.90, Mdn = 4.00, SD = 0.760, 95% CI [3.84, 3.96]). The typical participant “agreed” to having career success based on their average response to the CRQ (M = 3.76, Mdn = 3.78, SD = 0.540, 95% CI [3.72, 3.80]).

The responses of government tax assessors are also summarized in table 4 showing that the total sample was 543 participants. The average participant response regarding the participation in career planning was “often” (M = 3.91, Mdn = 4, SD = 0.999, 95% CI [3.83, 4.10]). Participants also responded “often” to the participation of career self-exploration (M = 4.05, Mdn = 4.00, SD = 0.951, 95% CI [3.97, 4.13]). When questioned about the participation in environmental career exploration, respondents reported “neutral” (M = 3.16, Mdn = 3.00, SD = 1.290, 95% CI [3.06, 3.26]). The average participant response regarding voluntary human capital development was “often” (M = 4.29, Mdn = 5.00, SD = 0.938, 95% CI [4.21, 4.36]). The aggregate average of participant responses to the CES concerning career engagement were “often” (M = 3.92, Mdn = 4.00, SD = 0.750, 95% CI [3.85, 3.98]). The typical government tax assessor “agreed” with having career success based on their response to the CRQ (M = 3.74, Mdn = 3.78, SD = 0.530, 95% CI 3.72, 3.80]).

The responses of private-sector tax assessors are also summarized in table 4. The total sample size was 69 participants. The average participant response regarding participation in career planning was “often” (M = 3.83, Mdn = 4, SD = 0.969, 95% CI [3.59, 4.06]). Participants also responded “often” to participating in career self-exploration (M = 3.99, Mdn = 4.00, SD = 0.883, 95% CI [3.77, 4.20]). When questioned about the participation in environmental career exploration, respondents reported “neutral” (M = 3.10, Mdn = 3.00, SD = 1.226, 95% CI [2.81,

3.40]). The average participant response regarding the participation in voluntary human capital development was “often” (M = 4.07, Mdn = 4.00, SD = 1.089, 95% CI [3.81, 4.33]). The aggregate average of participant responses to the CES concerning career engagement was “often” (M = 3.79, Mdn = 3.67, SD = 0.790, 95% CI [3.60 – 3.98]). The typical private-sector tax assessor “agreed” with having career success based on their response to the CRQ (M = 3.75, Mdn = 3.65, SD = 0.620, 95% CI [3.60, 3.90]). Government and private-sector tax assessor frequencies were similar. Additionally, their average responses were similar for career planning, career self-exploration, environmental career exploration, and career success. However, their average responses for voluntary human capital development seemed noticeably different. These similarities and differences will be tested later in the study.

Table 4

Descriptive Data of the Aggregate Sample and Tax Assessor Employment Groups

TOTAL					
<u>Variable</u>	<u>n</u>	<u>Mean</u>	<u>Median</u>	<u>Std. Dev.</u>	<u>95% CI.</u>
Career Planning	612	3.90	4.00	0.995	3.82 – 3.98
Government Tax Assessors	543	3.91	4.00	0.999	3.83 - 4.00
Private Sector Tax Assessors	69	3.83	4.00	0.969	3.59 - 4.06
Career Self-exploration	612	4.04	4.00	0.943	3.97 - 4.12
Government Tax Assessors	543	4.05	4.00	0.951	3.97 - 4.13
Private Sector Tax Assessors	69	3.99	4.00	0.883	3.77 - 4.20
Environmental Career Exploration	612	3.16	3.00	1.290	3.06 - 3.26
Government Tax Assessors	543	3.17	3.00	1.300	3.06 - 3.26
Private Sector Tax Assessors	69	3.10	3.00	1.226	2.81 – 3.40
Voluntary Human Capital Development	612	4.29	5.00	0.938	4.21 - 4.36
Government Tax Assessors	543	4.31	5.00	0.914	4.24 - 4.39
Private Sector Tax Assessors	69	4.07	4.00	1.089	3.81 - 4.33
Career Engagement Aggregate Score	612	3.90	4.00	0.760	3.84 – 3.96
Government Tax Assessors	543	3.92	4.00	0.750	3.85 – 3.98
Private Sector Tax Assessors	69	3.79	3.67	0.790	3.60 – 3.98
Career Resource Questionnaire Score	612	3.76	3.78	0.540	3.72 - 3.80
Government Tax Assessors	543	3.74	3.78	0.530	3.72 - 3.80
Private Sector Tax Assessors	69	3.75	3.65	0.620	3.60 – 3.90

Gender Group Data

Table 5 illustrates the frequency of response ratings to the four PCMBs by gender group. From the overall sample of 612 tax assessors, 247 respondents were female and 365 were

male. When comparing the two groups, 73.3% of female tax assessors responded that they “often” or “very often” engage in career planning while 69.8% of males do the same. With career self-exploration, 83.4% of the female tax assessors and 72.9% of the male tax assessors reported that they either “often” or “very often” participate in the behavior. The majority of the female and male tax assessors, 59.5% and 56.4% respectively reported that they perform environmental career exploration either “neutral” or “often”. Lastly, the majority of both female and male tax assessors reported that they engage in voluntary human capital development with 89.9% of the females and 81.1% of the males reporting that they “often” or “very often” conduct the behavior. Therefore, the frequency of response ratings is similar between the gender groups with the majority of participants rating three of the four PCMBs as either “often” or “very often” and environmental career exploration as either “neutral” or ‘often’.

Table 5

PCMB Questions Frequency of Rating by Gender

Gender		Career Planning		Career Self-exploration		Environmental Career Exploration		Voluntary Human Capital Development	
		Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Female	1 Almost Never	5	2.0	5	2.0	35	14.2	3	1.2
	2 Seldom	16	6.5	4	1.6	30	12.1	5	2.0
	3 Neutral	45	18.2	32	13.0	73	29.1	17	6.9
	4 Often	95	38.5	100	40.5	75	30.4	84	34.0
	5 Very Often	86	34.8	106	42.9	35	14.2	138	55.9
	Total	247	100.0	247	100.0	247	100.0	247	100.0
Male	1 Almost Never	10	2.7	8	2.2	51	14.0	9	2.5
	2 Seldom	26	7.1	19	5.2	52	14.2	19	5.2
	3 Neutral	74	20.3	72	19.7	99	27.1	41	11.2
	4 Often	152	41.6	154	42.2	107	29.3	115	31.5
	5 Very Often	103	28.2	112	30.7	56	15.3	181	49.6
	Total	365	100.0	365	100.0	365	100.0	365	100.0

Table 6 summarizes the sample by gender and reports the sample size, mean, median, standard deviation, and 95% confidence interval for each PCMB variable, career engagement, and career success. The average female tax assessor participant response regarding the

frequency of career planning was “often” (M = 3.98, Mdn = 4, SD = 0.987, 95% CI [3.85, 4.10]). Participants also responded “often” to the participation in career self-exploration (M = 4.20, Mdn = 4.00, SD = 0.892, 95% CI [4.09, 4.31]). When questioned about the participation in environmental career exploration, respondents reported “neutral” (M = 3.16, Mdn = 3.00, SD = 1.289, 95% CI [3.00, 3.32]). The average participant response regarding voluntary human capital development was “very often” (M = 4.41, Mdn = 5.00, SD = 0.826, 95% CI [4.31, 4.51]). The aggregate average of participant responses to the CES concerning career engagement was “often” (M = 3.97, Mdn = 4.00, SD = 0.723, 95% CI [3.88, 4.07]). The typical participant “agreed” with having career success based on their response to the CRQ (M = 3.77, Mdn = 3.83, SD = 0.570, 95% CI 3.70, 3.84).

Table 6

Descriptive Data of the Aggregate Sample and Tax Assessor Gender Groups

TOTAL					
<u>Variable</u>	<u>n</u>	<u>Mean</u>	<u>Median</u>	<u>Std. Dev.</u>	<u>95% CI.</u>
Career Planning	612	3.90	4.00	0.995	3.82 – 3.98
Female	247	3.98	4.00	0.987	3.85 – 4.10
Male	365	3.85	4.00	0.999	3.75 – 3.96
Career Self-exploration	612	4.04	4.00	0.943	3.97 - 4.12
Female	247	4.20	4.00	0.892	4.09 – 4.31
Male	365	3.94	4.00	0.963	3.84 – 4.04
Environmental Career Exploration	612	3.16	3.00	1.290	3.06 - 3.26
Female	247	3.16	3.00	1.289	3.00 – 3.32
Male	365	3.16	3.00	1.292	3.03 – 3.29
Voluntary Human Capital Development	612	4.29	5.00	0.938	4.21 - 4.36
Female	247	4.41	5.00	0.826	4.31 – 4.51
Male	365	4.21	4.00	0.999	4.10 – 4.31
Career Engagement Aggregate Score	612	3.90	4.00	0.755	3.84 – 3.96
Female	247	3.97	4.00	0.723	3.88 – 4.07
Male	365	3.85	3.89	0.774	3.77 – 3.93
Career Resource Questionnaire Score	612	3.76	3.76	0.539	3.72 - 3.80
Female	247	3.77	3.83	0.570	3.70 – 3.84
Male	365	3.75	3.75	0.517	3.70 – 3.81

The average male tax assessor response regarding the participation in career planning was “often” (M = 3.85, Mdn = 4, SD = 0.999, 95% CI [3.75, 3.96]). The participants also responded “often” to the participation regarding career self-exploration (M = 3.94, Mdn = 4.00,

SD = 0.963, 95% CI [3.84, 4.04]). When questioned about the frequency of participation with environmental career exploration, respondents reported “neutral” (M = 3.16, Mdn = 3.00, SD = 1.292, 95% CI [3.03, 3.29]). The average participant response regarding the participation in voluntary human capital development was “often” (M = 4.21, Mdn = 5.00, SD = 0.999, 95% CI [4.10, 4.31]). The aggregate average of participant responses to the CES concerning career engagement was “often” (M = 3.85, Mdn = 3.89, SD = 0.774, 95% CI [3.77, 3.93]). The typical participant “agreed” with having career success based on their response to the CRQ (M = 3.75, Mdn = 3.75, SD = 0.517, 95% CI [3.70, 3.81]).

Based on the outcome of data segregated by tax assessor gender illustrated in Table 6 the average responses appear similar concerning career planning, environmental career exploration, and career success. However, there may be differences between the genders regarding career self-exploration and voluntary human capital development. These differences will be tested for significance later in this study.

Age Group Data

Table 7 illustrates the frequency of response ratings to the four PCMBs by age group. Unfortunately, the study was unable to collect a sufficient number of responses from the 18 – 25-year-old group. Comparing frequencies related to the career planning behavior across age groups, 73.7% of the 26 - 40-year-old group, 73.6% of the 41 - 60-year-old group, and 64.4% of the 60+-year-old group responded “often” or “very often”. Comparing career self-exploration responses, the 26-40-year-old (70.4%), the 41-60-year-old (80.7%), and the 60+-year-old (73.1%) groups responded “often” or “very often”. Concerning environmental career exploration, the majority of respondents answered “neutral” or “often”. Fifty-three point nine percent of the 26-40 years old, 59.6% of the 41-60 years old, and 54.6% of the 60+-year-old groups responded “neutral” or “often”. Lastly, the percentage of the 26-40-year-old, 41-60-year-old, and 60+-year-old groups that responded “often” or “very often” to participating in voluntary human capital development behavior were 84.6%, 86.1%, and 81.6%. Therefore, the majority of rating

responses were 'often' or "very often" for three of the four PCMBs while participation in environmental career exploration was mostly rated "neutral" or "often" regardless of age category.

Table 7*PCMB Questions Frequency of Rating by Age*

Age		Career Planning		Career Self-Exploration		Environmental Career Exploration		Voluntary Human Capital Development	
		Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
18 - 25 years	2 Seldom					1	16.7		
	3 Neutral	1	16.7	1	16.7	2	33.3	1	16.7
	4 Often	2	33.3	1	16.7	3	50.0	2	33.3
	5 Very Often	3	50.0	4	66.7			3	50.0
	Total	6	100.0	6	100.0	6	100.0	6	100.0
26 - 40 years	1 Almost Never	2	2.2	2	2.2	14	15.4	3	3.3
	2 Seldom	11	12.1	4	4.4	15	16.5	1	1.1
	3 Neutral	11	12.1	21	23.1	23	25.3	10	11.0
	4 Often	40	44.0	33	36.3	26	28.6	28	30.8
	5 Very Often	27	29.7	31	34.1	13	14.3	49	53.8
	Total	91	100.0	91	100.0	91	100.0	91	100.0
41 - 60 years	1 Almost Never	5	1.4	9	2.6	49	13.9	6	1.7
	2 Seldom	19	5.4	9	2.6	41	11.6	15	4.3
	3 Neutral	69	19.6	50	14.2	98	27.8	28	8.0
	4 Often	150	42.6	157	44.6	112	31.8	119	33.8
	5 Very Often	109	31.0	127	36.1	52	14.8	184	52.3
	Total	352	100.0	352	100.0	352	99.4	352	100.0
+60 years	1 Almost Never	8	4.9	2	1.2	22	14.1	3	1.8
	2 Seldom	12	7.4	10	6.1	25	15.3	8	4.9
	3 Neutral	38	23.3	32	19.6	48	29.4	19	11.7
	4 Often	55	33.7	63	38.7	41	25.2	50	30.7
	5 Very Often	50	30.7	56	34.4	26	16.0	83	50.9
	Total	163	100.0	163	100.0	163	100.0	163	100.0

Table 8 summarizes the outcome from the respondents by age regarding career planning, career self-exploration, environmental career exploration, voluntary human capital development, career engagement, and career success. Descriptive data for the 18 - 25-year age category was not meaningful because of the small sample size of the group. Age groups 26 - 40, 41- 60, and 60+ years all responded "often" to participating in career planning reporting $n = 91$, $M = 3.87$, $Mdn = 4$, $SD = 1.046$, $95\% CI [3.65, 4.07]$; $n = 352$, $M = 3.96$, $Mdn = 4$, $SD =$

0.922, 95% CI [3.87, 4.06]; and $n = 163$, $M = 3.78$, $Mdn = 4$, $SD = 1.111$, 95% CI [3.61, 3.95] respectively. Participants also responded “often” to the participation in career self-exploration with age groups 26 - 40, 41 - 60, and 60+ years reporting $n = 91$, $M = 3.95$, $Mdn = 4$, $SD = 1.015$, 95% CI [3.73, 4.16]; $n = 352$, $M = 4.09$, $Mdn = 4$, $SD = 0.922$, 95% CI [3.99, 4.18]; and $n = 163$, $M = 3.99$, $Mdn = 4$, $SD = 0.949$, 95% CI [3.84, 4.13] respectively.

Table 8

Descriptive Data of the Aggregate Sample and Tax Assessor Age Groups

<u>Variable</u>	<u>n</u>	<u>Mean</u>	<u>Median</u>	<u>Std. Dev.</u>	<u>95% CI.</u>
Career Planning	612	3.90	4.00	0.995	3.82 – 3.98
18 – 25 years old	6	4.33	4.50	0.816	3.48 – 5.00
26 – 40 years old	91	3.87	4.00	1.046	3.65 – 4.09
41 – 60 years old	352	3.96	4.00	0.922	3.87 – 4.06
60+ years old	163	3.78	4.00	1.111	3.61 – 3.95
Career Self-exploration	612	4.04	4.00	0.943	3.97 - 4.12
18 – 25 years old	6	4.50	5.00	0.837	3.62 – 5.00
26 – 40 years old	91	3.95	4.00	1.015	3.73 – 4.16
41 – 60 years old	352	4.09	4.00	0.922	3.99 – 4.18
60+ years old	163	3.99	4.00	0.949	3.84 – 4.13
Environmental Career Exploration	612	3.16	3.00	1.290	3.06 - 3.26
18 – 25 years old	6	3.33	3.50	0.816	2.48 – 4.19
26 – 40 years old	91	3.06	3.00	1.369	2.77 – 3.34
41 – 60 years old	352	3.20	3.00	1.277	3.07 – 3.34
60+ years old	163	3.12	3.00	1.129	2.92 – 3.32
Voluntary Human Capital Development	612	4.29	5.00	0.938	4.21 - 4.36
18 – 25 years old	6	4.33	4.50	0.816	3.48 – 5.00
26 – 40 years old	91	4.30	5.00	0.994	4.09 – 4.50
41 – 60 years old	352	4.31	5.00	0.913	4.21 – 4.40
60+ years old	163	4.24	5.00	0.968	4.09 – 4.39
Career Engagement Aggregate Score	612	3.90	4.00	0.755	3.84 – 3.96
18 – 25 years old	6	4.02	4.00	0.546	3.45 – 4.59
26 – 40 years old	91	3.83	4.00	0.804	3.67 – 4.00
41 – 60 years old	352	3.95	4.00	0.700	3.87 – 4.02
60+ years old	163	3.84	3.89	0.847	3.71 – 3.97
Career Resource Questionnaire Score	612	3.76	3.78	0.539	3.72 - 3.80
18 – 25 years old	6	3.61	3.65	0.620	2.96 – 4.26
26 – 40 years old	91	3.65	3.73	0.555	3.54 – 3.77
41 – 60 years old	352	3.78	3.80	0.533	3.73 – 3.84
60+ years old	163	3.77	3.75	0.539	3.69 – 3.86

Age groups 26 - 40, 41 - 60, and 60+ years all responded “neutral” to participating in environmental career exploration reporting $n = 91$, $M = 3.06$, $Mdn = 3$, $SD = 1.369$, 95% CI [2.77, 3.34]; $n = 352$, $M = 3.20$, $Mdn = 3$, $SD = 1.277$, 95% CI [3.07, 3.34]; and $n = 163$, $M = 3.12$, $Mdn = 3$, $SD = 1.129$, 95% CI [2.92, 3.32] respectively. Additionally, participants

responded “often” to participating in voluntary human capital development with age groups 26 – 40, 41 – 60, and 60+ years reporting $n = 91$, $M = 4.30$, $Mdn = 5$, $SD = 0.994$, 95% CI [4.09, 4.50]; $n = 352$, $M = 4.31$, $Mdn = 5$, $SD = 0.913$, 95% CI [4.21, 4.40]; and $n = 163$, $M = 4.24$, $Mdn = 5$, $SD = 0.968$, 95% CI [4.09, 4.39] respectively.

Respondents also reported that they participated “often” in career engagement. Age groups 26 - 40, 41 - 60, and 60+ years reported $n = 91$, $M = 3.83$, $Mdn = 4$, $SD = 0.804$, 95% CI [3.67, 4.00]; $n = 352$, $M = 3.95$, $Mdn = 4.00$, $SD = 0.700$, 95% CI [3.87, 4.02]; and $n = 163$, $M = 3.84$, $Mdn = 3.89$, $SD = 0.847$, 95% CI [3.71, 3.98] respectively. Lastly, participants “agree” that they have career success. Age groups 26 - 40, 41 -60, and 60+ years reported $n = 91$, $M = 3.65$, $Mdn = 3.73$, $SD = 0.555$, 95% CI [3.54, 3.77]; $n = 352$, $M = 3.78$, $Mdn = 3.80$, $SD = 0.533$, 95% CI [3.73, 3.84]; and $n = 163$, $M = 3.77$, $Mdn = 3.75$, $SD = 0.539$, 95% CI [3.69, 3.86] respectively.

Three points can be determined by analyzing the descriptive data by age group. First, there appears to be little difference in responses by age group based on the mean, median, and 95% confidence intervals reported. Counterintuitively, each age group responded similarly to the PCMB, career engagement, and career success questions. This outcome may not be consistent with the findings of Super (1957) who states that each age group defines career success differently based on different needs. On the other hand, the outcome may distinguish the difference between career success needs and behaviors. Therefore, while different age groups may have different career success needs, their PCMBs may be the same while fulfilling those needs. Additionally, the scores were noticeably greater concerning voluntary human capital development across all age groups. This is consistent with the fact that most promotions and pay increases are tied to professional development in the tax assessment industry. Lastly, the scores across all age groups are consistently lower concerning environmental career exploration. This is also counterintuitive based on the findings of Super (1957) where individuals in the 26 - 40-year-old category are more likely to change jobs due to career aspirations. One

explanation may be that tax assessors 26 - 40 years old do not search outside their organization for advancement opportunities because many of their older peers in their organization will be retiring soon leaving in-house career opportunities.

Education Level Group Data

Table 9 illustrates the frequency of responses to the ratings of the four PCMBs by education level. Comparing frequencies related to career planning behavior across educational levels, 70.3% of the high school group, 68.9% some college group, 75.5% of the post-secondary certification/associate degree group, 68.9% of the bachelor's degree group, 76.6% of the master's degree group, and 72.2% of the doctorate degree group responded "often" or "very often". Comparing career self-exploration responses, the high school group (85.1%), some college group (89.2%), post-secondary certification/associate degree group (80.9), bachelor's degree group (73.7%), master's degree (78.8%), and doctorate degree group (77.8%) responded "often" or "very often". Concerning environmental career exploration, the majority of respondents responded either "neutral" or "often". The percentage of respondents who answered "neutral" or "often" include the high school group (51.8%), some college group (63.2%), post-secondary certification/associate degree group (60.7%), bachelor's degree group (57.5%), master's degree group (63.8%), and doctorate degree group (44.4%). Lastly, the high school group, some college group, post-secondary certification/associate degree group, bachelor's degree group, master's degree group, and doctorate degree group responded "often" or "very often" 88.9%, 84.9%, 89.4%, 80.6%, 88.3%, and 94.4% respectively concerning voluntary human capital development behavior.

Table 9*PCMB Questions Frequency of Rating by Education Level*

EDUCATION LEVEL		Career Planning		Career Self-Exploration		Environmental Career Exploration		Voluntary Human Capital Development	
		Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
High school graduate, GED, or equivalent	1 Almost Never	1	3.7			5	18.5		
	2 Seldom	1	3.7			4	14.8		
	3 Neutral	6	22.2	4	14.8	9	33.3	3	11.1
	4 Often	10	37	12	44.4	5	18.5	10	37.0
	5 Very Often	9	33.3	11	40.7	4	14.8	14	51.9
	Total	27	100.0	27	100.0	27	100.0	27	100.0
Some college but no degree or certifications	1 Almost Never	2	1.9			16	15.1	1	0.9
	2 Seldom	3	2.8	4	3.8	11	10.4	2	1.9
	3 Neutral	28	26.4	18	17.0	28	26.4	13	12.3
	4 Often	44	41.5	44	41.5	39	36.8	36	34.0
	5 Very Often	29	27.4	40	47.7	12	11.3	54	50.9
	Total	106	100.0	106	100.0	106	100.0	106	100.0
Post-secondary Certification / Associate Degree	1 Almost Never	2	2.1	2	2.1	11	11.7	1	1.1
	2 Seldom	2	5.3	1	1.1	14	14.9	4	4.3
	3 Neutral	16	17.0	15	16.0	34	36.2	5	5.3
	4 Often	36	38.3	40	42.6	23	24.5	31	33.0
	5 Very Often	35	37.2	36	38.3	12	12.8	53	56.4
	Total	94	100.0	94	100.0	94	100.0	94	100.0
Bachelor's Degree	1 Almost Never	8	2.9	9	3.3	38	13.9	7	2.6
	2 Seldom	26	9.5	14	5.1	39	14.3	13	4.8
	3 Neutral	51	18.7	49	17.9	74	27.1	33	12.1
	4 Often	114	41.8	117	42.9	83	30.4	89	32.6
	5 Very Often	74	27.1	84	30.8	39	14.3	131	48.0
	Total	273	100.0	273	100.0	273	100.0	273	100.0
Master's Degree	1 Almost Never	1	1.1	2	2.1	2	2.1	3	3.2
	2 Seldom	7	7.4	4	4.3	12	12.8	4	4.3
	3 Neutral	14	14.9	14	14.9	30	31.9	4	4.3
	4 Often	37	39.4	34	36.2	30	31.9	27	28.7
	5 Very Often	35	37.2	40	42.6	20	21.3	56	59.6
	Total	94	100.0	94	100.0	94	100.0	94	100.0
Doctorate or professional degree	1 Almost Never	1	5.6			4	22.2		
	2 Seldom					2	11.1	1	5.6
	3 Neutral	4	22.2	4	22.2	6	33.3		
	4 Often	6	33.3	7	38.9	2	11.1	6	33.3
	5 Very Often	7	38.9	7	38.9	4	22.2	11	61.1
	Total	18	100.0	18	100.0	18	100.0	18	100.0

The descriptive data for the PCMB, career engagement average, and career success variables by education level group are illustrated in table 10. Descriptive data for the high school and Doctorate or Professional Degree educational level category were not meaningful because of the small sample size of the groups. Each educational level responded "often" to the

frequency that they participate in career planning. The some college, post-secondary certification/associate degree, bachelor's degree, and master's degree educational level groups on average responded $n = 106$, $M = 3.90$, $Mdn = 4.00$, $SD = 0.904$, $95\% CI [3.72, 4.07]$; $n = 94$, $M = 4.03$, $Mdn = 4.00$, $SD = 0.978$, $95\% CI [3.83, 4.23]$; $n = 273$, $M = 3.81$, $Mdn = 4.00$, $SD = 1.034$, $95\% CI [3.68, 3.93]$; and $n = 94$, $M = 4.04$, $Mdn = 4.00$, $SD = 0.961$, $95\% CI [3.85, 4.24]$; respectively. The some college, post-secondary certification/associate degree, bachelor's degree, and master's degree educational level groups on average also responded "often" regarding the participation in career self-exploration while reporting $n = 106$, $M = 4.13$, $Mdn = 4.00$, $SD = 0.829$, $95\% CI [3.97, 4.29]$; $n = 94$, $M = 4.13$, $Mdn = 4.00$, $SD = 0.919$, $95\% CI [3.94, 4.32]$; $n = 273$, $M = 3.92$, $Mdn = 4.00$, $SD = 1.006$, $95\% CI [3.80, 4.04]$; and $n = 94$, $M = 4.13$, $Mdn = 4.00$, $SD = 0.964$, $95\% CI [3.93, 4.33]$ respectively.

All education level categories responded "neutral" concerning participation in environmental career exploration with the some college, post-secondary certification/associate degree, bachelor's degree, and master's degree reporting $n = 106$, $M = 3.17$, $Mdn = 3.00$, $SD = 1.268$, $95\% CI [2.93, 3.41]$; $n = 94$, $M = 3.10$, $Mdn = 3.00$, $SD = 1.219$, $95\% CI [2.85, 3.35]$; $n = 273$, $M = 3.15$, $Mdn = 3.00$, $SD = 1.292$, $95\% CI [2.99, 3.30]$, and $n = 94$, $M = 3.35$, $Mdn = 4.00$, $SD = 1.326$, $95\% CI [3.08, 3.62]$ respectively. All education level categories responded "often" concerning participation in voluntary human capital development with the some college, post-secondary certification /associate degree, bachelor's degree and master's degree reporting $n = 106$, $M = 4.32$, $Mdn = 5.00$, $SD = 0.834$, $95\% CI [4.16, 4.48]$; $n = 94$, $M = 4.39$, $Mdn = 5.00$, $SD = 0.858$, $95\% CI [4.22, 4.57]$; $n = 273$, $M = 4.18$, $Mdn = 4.00$, $SD = 1.009$, $95\% CI [4.06, 4.30]$, and $n = 94$, $M = 4.37$, $Mdn = 5.00$, $SD = 0.984$, $95\% CI [4.17, 4.57]$ respectively.

Table 10*Descriptive Data of the Aggregate Sample and Tax Assessor Educational Groups*

TOTAL					
<u>Variable</u>	<u>n</u>	<u>Mean</u>	<u>Median</u>	<u>Std. Dev.</u>	<u>95% CI.</u>
Career Planning	612	3.90	4.00	0.995	3.82 – 3.98
High School	27	3.93	4.00	1.035	3.52 - 4.34
Some College	106	3.90	4.00	0.904	3.72 – 4.07
Certification/Associate Degree	94	4.03	4.00	0.978	3.83 – 4.23
Bachelor's Degree	273	3.81	4.00	1.034	3.68 – 3.93
Master's Degree	94	4.04	4.00	0.961	3.85 – 4.24
Doctorate or Professional Degree	18	4.00	4.00	1.085	3.46 – 4.54
Career Self-exploration	612	4.04	4.00	0.943	3.97 - 4.12
High School	27	4.26	4.00	0.712	3.98 – 4.54
Some College	106	4.13	4.00	0.829	3.97 – 4.29
Certification/Associate Degree	94	4.13	4.00	0.919	3.94 – 4.32
Bachelor's Degree	273	3.92	4.00	1.006	3.80 – 4.04
Master's Degree	94	4.13	4.00	0.964	3.93 – 4.33
Doctorate or Professional Degree	18	4.17	4.00	0.786	3.78 – 4.56
Environmental Career Exploration	612	3.16	3.00	1.290	3.06 - 3.26
High School	27	2.93	3.00	1.385	2.38 – 3.47
Some College	106	3.17	3.00	1.268	2.93 – 3.41
Certification/Associate Degree	94	3.10	3.00	1.219	2.85 – 3.35
Bachelor's Degree	273	3.15	3.00	1.292	2.99 – 3.30
Master's Degree	94	3.35	4.00	1.326	3.08 – 3.62
Doctorate or Professional Degree	18	3.00	3.00	1.455	2.28 – 3.72
Voluntary Human Capital Development	612	4.29	5.00	0.938	4.21 - 4.36
High School	27	4.41	5.00	0.694	4.13 – 4.68
Some College	106	4.32	5.00	0.834	4.16 – 4.48
Certification/Associate Degree	94	4.39	5.00	0.858	4.22 – 4.57
Bachelor's Degree	273	4.18	4.00	1.009	4.06 – 4.30
Master's Degree	94	4.37	5.00	0.984	4.17 – 4.57
Doctorate or Professional Degree	18	4.50	5.00	0.786	4.11 – 4.89
Career Engagement Aggregate Score	612	3.90	4.00	0.755	3.84 – 3.96
High School	27	3.98	4.00	0.757	3.68 – 4.28
Some College	106	3.94	4.00	0.759	3.79 – 4.08
Certification/Associate Degree	94	3.95	4.00	0.730	3.80 – 4.10
Bachelor's Degree	273	3.69	3.73	0.532	3.62 – 3.75
Master's Degree	94	4.00	4.00	0.738	3.85 – 4.15
Doctorate or Professional Degree	18	3.95	4.22	0.896	3.50 – 4.40
Career Resource Questionnaire Score	612	3.76	3.78	0.539	3.72 - 3.80
High School	27	3.86	3.85	0.435	3.68 – 4.03
Some College	106	3.76	3.68	0.514	3.66 – 3.86
Certification/Associate Degree	94	3.79	3.75	0.565	3.67 – 3.90
Bachelor's Degree	273	3.83	3.89	0.760	3.73 – 3.92
Master's Degree	94	3.88	3.91	0.535	3.77 – 3.98
Doctorate or Professional Degree	18	3.98	4.11	0.682	3.65 – 4.32

Each education level responded “often” that they participate in career engagement. The some college, post-secondary certification/associate degree, bachelor’s degree, and master’s degree educational level groups on average responded $n = 106$, $M = 3.94$, $Mdn = 4.00$, $SD = 0.759$, 95% CI [3.79, 4.08]; $n = 94$, $M = 43.95$, $Mdn = 4.00$, $SD = 0.730$, 95% CI [3.80, 4.10]; $n =$

273, M = 3.69, Mdn = 3.73, SD = 0.532, 95% CI [3.62, 3.75]; and n = 94, M = 4.00, Mdn = 4.00, SD = 0.738, 95% CI [3.85, 4.15] respectively.

The some college, post-secondary certification/associate degree, bachelor's degree, and master's degree educational level groups on average "agree" to achieving perceived career success while reporting n = 106, M = 3.76, Mdn = 3.68, SD = 0.514, 95% CI [3.66, 3.86]; n = 94, M = 3.79, Mdn = 3.75, SD = 0.565, 95% CI [3.67, 3.90]; n = 273, M = 3.83, Mdn = 3.89, SD = 0.760, 95% CI [3.73, 3.92]; and n = 94, M = 3.88, Mdn = 3.91, SD = 0.535, 95% CI [3.77, 3.98] respectively. Counterintuitively, the scores for each variable are similar among each educational level group. One would think that individuals with higher educational levels would participate more in PCMBs than individuals with lower educational levels. Similar to the other tax assessor groupings, each of the educational level groups scored voluntary human capital development higher than the other variables and environmental career exploration lower than the other variables.

Model of the Study

A regression model was used to test the impact of each PCMB, employment group, gender, age, and education level on career success. The data resulted in the following regression model when all variables were loaded into the model:

$$\begin{aligned} \text{Career Success} &= 2.015 + 0.312 * \text{Career planning} + \\ &0.215 * \text{Career Self-Exploration} + \\ &0.105 * \text{Environmental Career Exploration} + \\ &0.164 * \text{Voluntary Human Capital Development} + \\ &-0.008 * \text{government employee} + \\ &0.054 * \text{male employee} + \\ &-0.051 * \text{18-25 age group} + \\ &-0.058 * \text{26-40 age group} + \\ &0.021 * \text{60+ age group} + \\ &0.036 * \text{high school education} + \\ &0.012 * \text{some college education} + \\ &0.014 * \text{certification or associate degree} + \\ &0.062 * \text{Master's Degree} + \\ &0.064 * \text{Doctorate or Professional Degree} + \epsilon_i \end{aligned}$$

The private-sector employee, female employee, 41 - 60 age, and bachelor's Degree education level groups were dropped from the study due to collinearity with the other variables. By using the regression model, the researcher was able to determine the overall strength of the model and the impact of the predictor variables (career planning, career self-exploration, environmental career exploration, voluntary human capital development) on the dependent variable (career success) based on the magnitude of their relationships (Bowerman et al., 2014; Field, 2018). Additional grouping variables (tax assessor employment, gender, age, and educational level) were added to the regression model to test the impact of those variables on career success perceptions. However, not all variables were significant to the model. The following model resulted when using stepwise regression where only the significant variables are left in the model.

$$\begin{aligned} \text{Career Success} &= 2.065 + 0.311 * \text{Career planning} + \\ &0.212 * \text{Career Self-Exploration} + \\ &0.108 * \text{Environmental Career Exploration} + \\ &0.163 * \text{Voluntary Human Capital Development} + \epsilon_i \end{aligned}$$

When considering the use of regression for the study, the investigator had to consider the statistical bias of the sample data. Statistical bias is caused by the assumptions of normality and homogeneity not being met. Bias influences parameter estimates of the population, standard errors and confidence intervals, and test statistics and p-values. Field (2018) has several suggestions concerning whether normality matters when using linear regression. Based on the central limit theorem, normality will matter less if the sample is large enough and does not contain outliers. In this case, standard errors, confidence intervals, test statistics, and p-values should be reliable. Additionally, linear models estimate parameters using the least error or bias in the data. Therefore, a reliable "best fit" model will result regardless if the normality assumption is met. However, the model will be more accurate with less bias if the residuals of the sample do meet the normality assumption. Furthermore, non-parametric techniques, which do not require the normality assumption, may be more reliable if the sample does not meet the

normality assumption. Considering these suggestions, the investigator decided to use multiple regression to analyze the data for this study because it is believed to produce reliable results due to the sample size and normality and homogeneity testing outcomes.

Significance tests for measuring the impact of each variable were performed testing the following hypothesis:

Null Hypothesis (H_0): No significant impact of the predictor variable on the outcome variable.

Alternative Hypothesis (H_a): A significant impact exists of the predictor variable on the outcome variable.

The stepwise regression model outcome is illustrated in table 11. The model fit is good based on the reported $F = 92.24$, $p < 0.05$, $R^2 = 0.378$. Since the F value is greater than the critical value of 1.70 and $p < 0.05$, at least one variable in the model significantly predicted the outcome of career success. Additionally, the model explains 0.378 of the variances in the career success scores. The regression results for the four PCMBs (career planning, career self-exploration, environmental career exploration, and voluntary human capital development) are $\beta = 0.311$, $t = 7.495$, $p < 0.05$; $\beta = 0.212$, $t = 5.389$, $p < 0.05$; $\beta = 0.108$, $t = 2.900$, $p < 0.05$; and $\beta = 0.163$, $t = 4.554$, $p < 0.05$ respectively. Therefore, each significantly adds to the model fit and predictability of career success. Additionally, employment group, age group, gender, and education level are not significant to the model of career success.

Table 11

Career Success Model

R	R Square	Adjusted R Square	F	Sig		
.615	.378	.374	92.24	.000		
		Unstandardized Coefficients		Std Coeff	t	Sig.
		B	Std. Error	Beta		
(Constant)		2.065	.097		21.287	.000
Career Planning		.169	.023	.311	7.495	.000
Career Self-exploration		.121	.023	.212	5.389	.000
Environmental Career Exploration		.045	.016	.108	2.900	.004
Voluntary Human Capital Development		.094	.021	.163	4.554	.000

Note: Stepwise regression was used with only the significant variables remaining in the model. Career success is the dependent variable in the model.

Normality of Residuals

The researcher first used P-Plots of standardized predicted values and standardized residuals to check the normality of the residuals illustrated in figure 3. Since the plots follow closely along the linear target line showing a perfect relationship between the observed and expected cumulative probability, it can be assumed that the residuals are normally distributed. Additionally, the Shapiro-Wilk test was used to test the normality of the standardized and unstandardized residuals illustrated in table 12. Since $p \geq 0.05$, it is determined that the residuals met the assumption of normality (Field, 2018).

Figure 3

P-Plots of Standardized Predicted Values and Standardized Residuals of Model

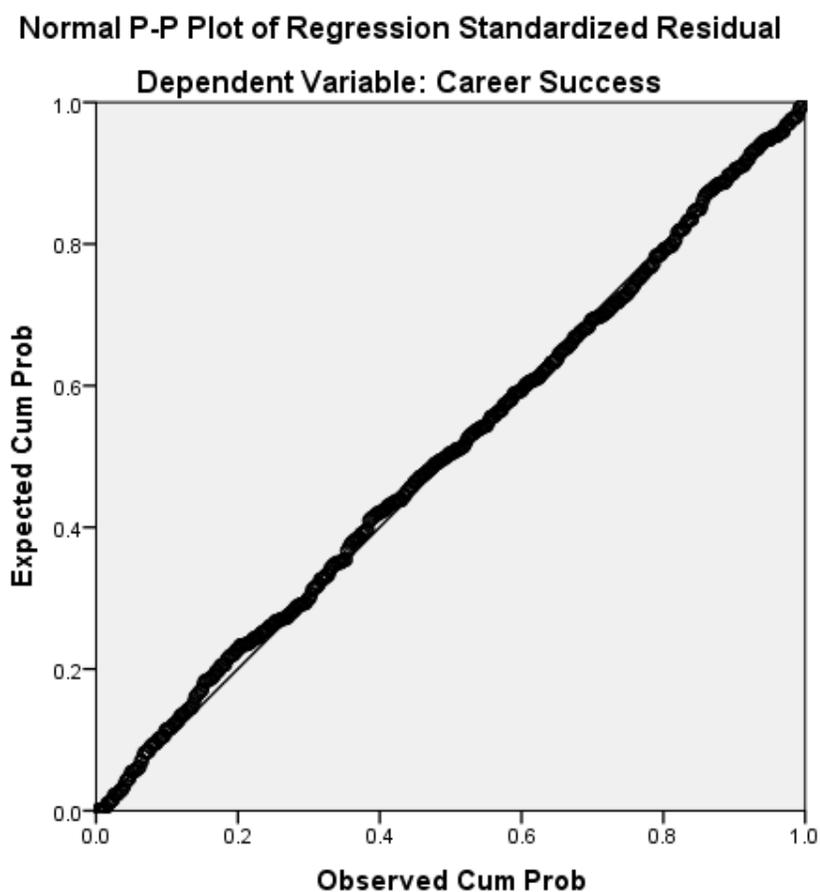


Table 12

Shapiro-Wilk Test of Normality of the Standardized and Unstandardized residuals

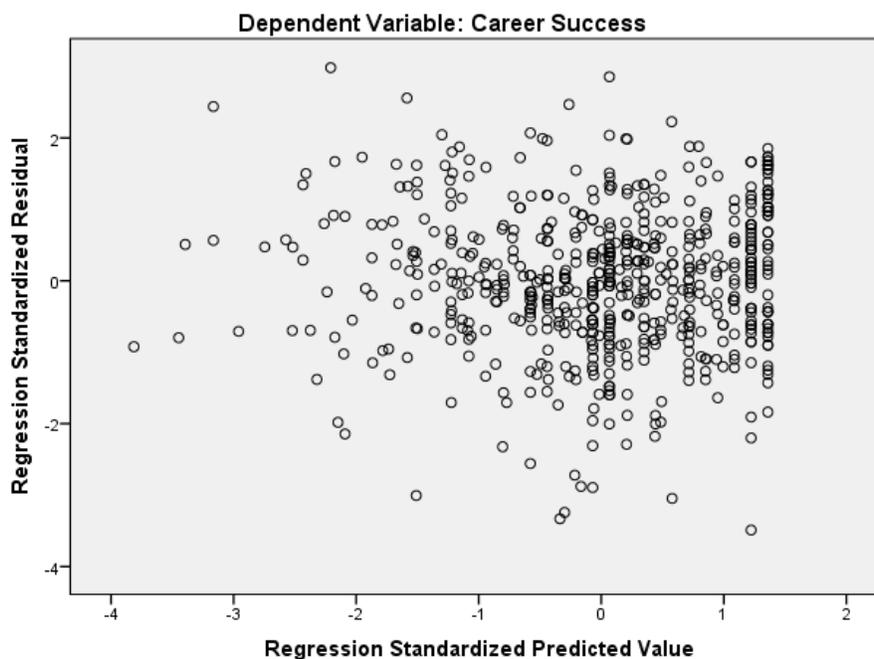
	Shapiro-Wilk		
	Statistic	df	Sig.
Unstandardized Residual	.993	612	.224
Standardized Residual	.993	612	.224

Homogeneity of Residuals

The researcher used a scatter plot of standardized predicted values and standardized residuals to check the homogeneity of the residuals. The outcome of plots illustrated in figure 4, resulted in a square shape with most z-scores between -3 and 3 for both the predicted values and residuals. Therefore, it can be interpreted that the residuals met the assumption of homogeneity because the residuals were similar across all predicted values (Field, 2018).

Figure 4

Standardized Predicted Values and Standardized Residuals of the Regression Model



VIF and Tolerance Statistic

The variance inflation factor (VIF) and the tolerance statistic, which is the reciprocal of the VIF, were also used to test whether the predictor variables have a strong linear relationship with other predictor variables illustrated in table 13. The greater the VIF, the more concern there should be with variable multicollinearity. Field (2018) suggests the following guidelines when testing for multicollinearity: the largest predictor variable should have a VIF less than 10, the average VIF of the predictor variables should not be substantially greater than 1, and the tolerance statistic of all predictor variables should be greater than 0.20. Menard (2002) suggests that a VIF > 5 should result in collinearity concerns. Based on the summary derived from the data illustrated in table 15, the tolerance and VIF fall within acceptable standards based on the previous guidelines for most predictor variables. Therefore, it can be concluded that collinearity between the predictor variables is minimal.

Table 13

VIF and Tolerance Collinearity Statistics

Predictor Variables	Collinearity Statistics	
	Tolerance	VIF
Career Planning	0.595	1.682
Career Self-exploration	0.661	1.512
Environmental Career Exploration	0.736	1.358
Voluntary Human Capital Development	0.800	1.251
Private Sector Employment	0.975	1.026

Construct Validity of the Career Engagement Scale

According to Cronbach and Meehl (1955), construct validity refers to the degree to that inferences can accurately be made from the predictor variables in a study. In other words, it is a way to determine if the measurement tool is measuring what it is intended to measure. It is also at the center of any research study that requires the researcher to measure subjective variables such as intelligence, attitudes, and perceptions. The purpose of construct validity is to determine whether a positive, negative or no relationship exists between variables. "Researchers typically

establish construct validity by presenting correlations between a measure of a construct and a number of other measures that should, theoretically, be associated with it (convergent validity) or vary independently of it (discriminant validity)” (Weston & Rosenthal, 2003, p. 608). One goal of a study is to show that the measurement tool has convergent and discriminant validity, therefore, having evidence of construct validity.

Convergent Validity. When testing convergent validity, the researcher is attempting to determine whether a subjective proxy construct that is theorized to represent a known construct is truly a measurement of the known construct. Additionally, the researcher must decide whether the proxy construct has a strong enough relationship to be determined as a substitute for the known construct. One method of determining convergent validity is measuring the impact between the proxy variable and the known variable. A correlation coefficient between the two variables ($r = 0.00$) indicates no convergent validity while ($r = 1.00$) is perfect convergent validity. Therefore, convergent validity measures are between 0 and 1. Convergent validities above $r = 0.70$ are recommended while those below $r = 0.50$ should be avoided. (Carlson & Herdman, 2012). In this study, the impact of the individual PCMB questions on the CES and the aggregate average score of all the questions that theoretically represent career engagement were calculated using Spearman’s Rho correlation statistic and Cronbach’s Alpha. Both Spearman’s Rho and Cronbach’s Alpha statistics are illustrated in table 13 along with the correlation coefficients reported from the original validation of the CES (Hirschi et al., 2014). The summary highlighted in table 14 shows that all predictor variables (career planning, career self-exploration, environmental career exploration, and voluntary human capital development) impact the dependent variable of career engagement (career engagement scale) because the correlation coefficient is greater than .50 and $p < 0.01$. Additionally, Cronbach’s Alpha is also acceptable at $\alpha > 0.7$. The data outcome from this study illustrated in column 1 of table 13 is also similar to the correlation outcomes for students and workers and the Cronbach Alpha score illustrated in columns 2 and 3 obtained by Hirschi et al. (2014) when the concurrent validity of

the original instrument was confirmed. Therefore, the correlation coefficient outcomes support the fact that the instrument has adequate internal reliability and convergent validity along with a large effect size when measuring career engagement (Carlson & Herdman, 2012; Cohen, 1988; 1992).

Table 14

Convergent Validity of the CES- Correlation of PCMBs and Cronbach Alpha

Career Engagement Scale Question	Study Correlation Coefficient	Hirschi et al. (2014) Student Sample (n = 681)	Hirschi et al. (2014) Working Sample (n = 271)
Career Planning	0.822	0.46	0.36
Career Self-Exploration	0.696	0.57	0.54
Environmental Career Exploration	0.662	0.72	0.67
Voluntary Human Capital Development	0.645	0.32	0.22
Career Engagement Scale	0.738*	0.87*	0.87*

Note: * Denotes the Cronbach Alpha for the Career Engagement Scale. All correlations $p < 0.01$.

Discriminant Validity. Discriminant validity can be defined in several ways. One definition of discriminant validity is that variables should not correlate with other variables that are theoretically illogical. It is also defined as the extent to which measures of distinct concepts differ (Ronkoo & Cho, 2020). Kenny (1976) states that “discriminant validation implies that correlation between traits is low. If both traits were identical, the correlation between the trait factors would be near one” (p. 251). Therefore, one can conclude that if the correlation between the predictor variables in a model is low, each factor measures a unique behavior different than the other factors. Table 15 illustrates the correlation matrix of the model predictor variables.

Correlations between the PCMB predictor variables ranged from 0.264 to 0.59 and were found significant. However, all correlations between the predictor variables are below 0.60 indicating a moderate or less correlation (Field, 2018). Therefore, it can be concluded that each predictor variable measures a distinct behavior different than the other, and the measurement tool exhibits discriminant validity. The PCMBs do not significantly correlate with employment

Table 15

	PCMB										EMPLOYTYPE				GENDER		AGE					HIGHEST EDUCATIONAL LEVEL						
	Career Planning	Career Self-Explor	Env Career Explor	Vol Human Cap Dev	Govt	Private	Female	Male	18-25	26-40	41-60	60+	High School	Some College	Cert/ Assoc	Bachelors	Masters	Doctorate	Career Success									
Career Planning	1	.543**	.461**	.421**	.028	-.028	.060	-.060	.043	-.015	.070	.005	.005	-.003	.055	.005	.060	.017	.545**									
Career Self-Explor	.543**	1	.422**	.324**	.022	-.022	.138**	-.138**	-.015	-.044	.054	.049	.049	.043	-.088*	.049	.038	.023	.480**									
Env Career Exploration	.461**	.422**	1	.306**	.016	-.016	-.001	.001	.022	-.022	.038	.039	.039	.003	.038	.063	.063	.023	.480**									
Vol Human Capital Dev	.421**	.324**	.306**	1	.082*	-.082*	.107**	-.107**	.005	-.031	.024	.027	.027	.016	.048	.039	.039	.023	.480**									
Govt Employee	.028	.022	.016	.082*	1	-.1000**	.104*	-.104*	.035	.033	.049	.026	.026	-.069	.006	.006	.006	.006	.391**									
Private Employee	-.028	-.022	-.016	-.082*	-.1000**	1	-.104*	.104*	-.035	-.033	.026	-.026	-.026	.069	-.006	-.006	-.006	-.006	.391**									
Female	.060	.138**	-.001	.107**	.104*	1	-.1000**	.104*	-.014	.014	.026	-.026	-.026	.072	.015	.015	.015	.015	.391**									
Male	-.060	-.138**	.001	-.107**	-.104*	-.1000**	1	.104*	.014	.014	.026	-.026	-.026	-.072	-.015	-.015	-.015	-.015	.391**									
18-25	.043	.048	.013	.005	.035	-.035	.014	.014	1	-.042	-.116**	-.021	-.021	-.067	.051	.051	.051	.051	.396**									
26-40	-.015	-.044	-.034	.004	.033	-.033	-.026	.026	-.042	1	-.486**	-.067	-.067	.026	.015	.015	.015	.015	.396**									
41-60	.070	.054	.038	.024	.049	-.049	.148**	-.148**	1	-.486**	-.701**	-.009	-.009	.026	.015	.015	.015	.015	.396**									
60+	-.075	-.036	-.018	-.031	.089*	-.089*	.142**	-.142**	-.701**	1	-.069	.069	.069	.008	.026	.026	.026	.026	.396**									
High School	.005	.049	-.039	.027	.026	-.026	.099*	-.099*	-.021	-.067	-.009	1	-.098*	-.092*	.039	.039	.039	.039	.396**									
Some College	-.003	.043	.003	.016	-.069	.069	.072	-.072	-.046	-.046	.008	-.098*	1	-.195**	.001	.001	.001	.001	.396**									
Cert/ Assoc	.055	.038	-.021	.048	.052	-.052	.121**	-.121**	.004	-.076	.045	-.092*	-.195**	1	.021	.021	.021	.021	.396**									
Bachelors	-.088*	-.115**	-.009	-.100*	.060	-.060	.162**	-.162**	.044	.105**	-.065	-.193**	-.411**	.382**	1	.092*	.092*	.092*	.396**									
Masters	.060	.038	.063	.039	-.077	.077	.046	.046	-.042	.039	-.037	-.092*	-.195**	-.382**	1	.074	.074	.074	.396**									
Doctorate	.017	.023	-.022	.039	.001	-.001	.034	-.034	-.046	.013	.026	-.037	-.080*	-.156**	-.181**	1	.073	.073	.396**									
Career Success	.545**	.480**	.391**	.396**	.006	-.006	.015	-.015	-.028	-.082*	.051	.015	.039	-.001	.021	-.122**	.092*	.073	1									

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

type, age, and most educational levels. However, career planning, career self-exploration, and voluntary human capital development behaviors do correlate significantly with the Bachelor's Degree education level. Additionally, career self-exploration and voluntary human capital development correlate with gender. However, all predictive variable correlations are below 0.60 indicating a moderate or less correlation (Field, 2018). Furthermore, members within employment and gender groups negatively correlate significantly with each other indicating that there may not be a significant difference between the members within the two groups. Lastly, the members within the age and educational level groups correlate negatively with one another. Some members show a significant negative correlation, therefore, supporting the discriminant validity of the model.

Research Questions

This section further reveals the conclusions concerning the five research questions of this study.

Research Question 1: Is there and what is the relationship between career planning and career success for tax assessors?

The participants were asked one question using a five-point Likert scale concerning the extent that which they had developed plans and goals concerning their career success in the past six months. As illustrated in table 3, using the scale from table 2 and a sample of 612 participants, most of the participants, 436 individuals or 71.2%, responded that they have developed plans and goals for their career future "often" or "very often". The descriptive data in table 4 discussed previously show that the reported mean and median scores are 3.90 (often) and 4.00 (often) respectively with a standard deviation of 0.995 and a 95% confidence interval of 3.82 - 3.98. The correlation matrix in table 15 reported that the correlation between employee career planning and career success has a large significant effect size, $r = 0.545$, $p < 0.05$ (Field, 2018). The regression model reported in table 11 resulted in the investigator rejecting the null hypothesis of no relationship and accepting the alternative hypothesis that career planning has

a significant positive impact on employee career success, $\beta = 0.311$, $t = 7.495$, $p < 0.05$.

Therefore, employee career planning has a positive significant impact on perceived career success for tax assessors.

Research Question 2: Is there and what is the relationship between employee career self-exploration and career success for tax assessors?

The participants were asked one question using a five-point Likert scale concerning the extent that which they had used career self-exploration relating to their career success in the past six months. As illustrated in table 3, from a sample of 612 participants, the majority of participants, 472 or 77.1%, responded that they conducted career self-exploration “often” or “very often”. The descriptive data in table 4 discussed previously show that the reported mean and median scores are 4.04 (often) and 4.00 (often) respectively with a standard deviation of 0.943 and a 95% confidence interval of 3.97- 4.12. The correlation matrix in table 15 reported that the correlation between employee career self-exploration and career success has a large significant effect size, $r = 0.480$, $p < 0.05$ (Field, 2018). The regression analysis reported in table 11 resulted in the investigator rejecting the null hypothesis of no relationship and accepting the alternative hypothesis that career self-exploration has a significant positive impact on employee career success, $\beta = 0.212$, $t = 5.389$, $p < 0.05$. Therefore, employee career self-exploration has a positive significant impact on perceived career success for tax assessors.

Research Question 3: Is there and what is the relationship between employee environmental career exploration and career success for tax assessors?

The participants were asked one question using a five-point Likert scale concerning the extent that which they had used environmental career exploration relating to their career success in the past six months. As illustrated in table 3, from a sample of 612 participants, most of the participants, 353 or 57.7%, responded “neutral” or “often” that they participated in environmental career exploration. The participation ratings were lower than the other three PCMBs.

The descriptive data in table 4 show that the reported mean and median scores are less than the other PCMBs at 3.16 (neutral) and 3.00 (neutral) respectively with a standard deviation of 1.29 and a 95% confidence interval of 3.06 - 3.26. The correlation matrix in table 15 reported that the correlation between employee environmental career exploration and career success has a medium significant effect size, $r = 0.391$, $p < 0.05$ (Field, 2018). The regression model reported in table 11 resulted in the investigator rejecting the null hypothesis of no relationship and accepting the alternative hypothesis that environmental career exploration has a significant positive impact on tax assessor perceived career success, $\beta = 0.108$, $t = 2.90$, $p < 0.05$. Therefore, environmental career exploration has a positive and significant impact on career success for tax assessors.

Research Question 4: Is there and what is the relationship between voluntary human capital and career success for tax assessors? If there is a relationship, how does the relationship influence the development of additional training?

The participants were asked one question using a five-point Likert scale concerning the extent that which they had participated in voluntary human capital relating to their career success in the past six months. As illustrated in table 3, from a sample of 612 participants, the majority of participants, 518 or 84.6%, responded that they conducted voluntary human capital development “often” or “very often”. The descriptive data in table 4 show that the reported mean and median scores are greater than the other PCMBs at 4.29 (often) and 5.00 (very often) respectively with a standard deviation of 0.938 and a 95% confidence interval of 4.21 - 4.36. The correlation matrix in table 15 reported that the correlation between employee voluntary human capital development and career success has almost a large significant effect size, $r = 0.396$, $p < 0.05$ (Field, 2018). The regression analysis reported in table 11 resulted in the investigator rejecting the null hypothesis of no relationship and accepting the alternative hypothesis that voluntary human capital development has a significant positive impact on employee career success, $\beta = 0.163$, $t = 4.5554$, $p < 0.05$. Therefore, employee voluntary

human capital development has a positive significant impact on the perceived career success of tax assessors.

The investigator concludes from the data that even though tax assessors are required in most jurisdictions to complete courses offered by the International Association of Assessing Officers (IAAO), they may perceive the opportunity of taking the courses as voluntary because most jurisdictions pay for the courses. Additionally, they may perceive that the courses impact their career success because many jurisdictions offer bonuses and advancements for completing the courses. The demand for courses has influenced the IAAO professional department to overhaul and expand course offerings in the past five years.

Research Question 5: Are the perceptions of tax assessors employed by government offices different than tax assessors employed by private sector business contractors regarding the relationship between their overall proactive career management behaviors and career success? If so, to what extent and in what way(s) are they different?

Using the CRQ, the participants were asked 40 questions using a five-point Likert scale concerning their career success. As illustrated in table 3, from a sample of 612 participants, 543 participants include tax assessors employed by government agencies and 69 participants include tax assessors employed by private sector organizations. When asked about their career planning behaviors, most government tax assessors, 224 participants or 41.3% of the total responded that they participate “often” while 169 participants, or 31.1% responded, “very often”. Concerning career self-exploration behavior, 224 participants, or 41.3% of the government tax assessors responded that they participate in the behavior ‘often’ while 197 participants or 36.3% responded: “very often”. One hundred and fifty-two participants or 38.0% of the government-employed tax assessors responded “neutral” to participating in environmental career exploration while 161 or 29.7% of the participants responded that they do it “often”. Additionally, 180 or 33.1% of the government tax assessors reported that they participate in voluntary human capital

development “often” while 287 or 52.9% of the participants responded that they do it “very often”.

On the other hand, 21 private sector tax assessors, or 30.4% report that they participate in career planning “neutral” and 23 respondents, or 33.3% participate “often”. Thirty or 43.5% of the private sector tax assessors participate in career self-exploration “often” while 21 participants or 30.4% participate “very often”. Concerning environmental career exploration, 19 respondents, or 27.5% of the private sector tax assessors reported that they participate “neutral” while 21 or 30.4 % responded “often”. Lastly, 19 or 27.5% of the respondents reported that they participate in voluntary human capital development “often” while 32 or 46.4 participants responded, “very often”. The frequency of respondents for each question appears similar for each group.

Table 4 illustrates the overall averages, government tax assessor averages, and private-sector averages of respondents to the PCMB questions, the CES containing the PCMBs, and the CRQ measuring career success. The average responses of the three categories are similar for each employee group. Additionally, the average environmental career exploration response, as an aggregate, appears lower than the other three PCMBs for both groups. Also, the average responses of the private-sector assessors were noticeably less than that of the government tax assessors concerning voluntary human capital development behavior.

Based on the correlation data reported in the correlation matrix from table 15 a minimal negative insignificant relationship exists between government and private sector tax assessors and employee career success reporting $r = 0.104$ and $r = -0.104$ respectively. The regression model illustrated in table 11 reports that the government and private-sector binary variables were dropped from the model for insignificance. Therefore, the investigator can conclude that no significant difference exists between government and private-sector tax assessors’ perceptions of their perceived career success.

Impact of Research Questions on Additional Groups

The impact of the PCMBs on career success was also analyzed and compared for gender, age, and educational groups.

Gender Group

In table 5, 73.3% of the female tax assessors reported that they participate in career planning either “often” or “very often” while 69.8% of the male tax assessors do the same. Female and male tax assessors report participating in career self-exploration somewhat differently with 83.4% of females and 72.9% of males participating in the career behavior either “often” or “very often”. Concerning environmental career exploration, both groups report participating less than the other career behaviors. Fifty-nine-point-five percent of the female tax assessors report participating in environmental career exploration as “neutral” or “often” while 56.4% of the male tax assessors report the same. Lastly, concerning voluntary human capital development, 89.9% of the female tax assessors and 81.1% of the male tax assessors participate in career behavior either “often” or “very often”. In table 6, the mean scores for career planning and environmental career exploration are similar for both gender groups. However, regarding career self-exploration and voluntary human capital development, some differences may exist.

Illustrated in table 14, the correlation matrix reported that female and male gender groups did not have a significant relationship to perceived career success $r = -0.015$, $p > 0.05$ and $r = 0.015$, $p > 0.05$ respectively. Additionally, the regression model illustrated in table 11 reported that both the female and male binary gender variables were dropped from the model for insignificance. Therefore, the investigator concludes that there is not a significant difference between female and male gender perceptions regarding career success.

Age Group

Table 7 illustrates that the percentage of tax assessors across age categories report similar frequencies regarding career planning. Age categories 26 - 40, 41 - 60, and 60+ years

old reported that 73.7%, 73.6%, and 64.4% respectively participate in the career behavior either “often” or “very often”. Likewise, the age categories of 26 - 40, 41 - 60, and 60+ years old reported that 70.4%, 80.7%, and 73.1% respectively participate in career behavior either “often” or “very often”. Regarding environmental career exploration, the age categories 26 - 40, 41 - 60, and 60+ years old reported that 53.9%, 59.6%, and 54.6% respectively participated in the career behavior either “neutral” or “often”. Lastly, regarding voluntary human capital development, the age categories 26 - 40, 41 - 60, and 60+ years old reported that 84.6%, 86.1%, and 81.6% respectively participated in the career behavior either “often” or “very often”. In table 8, the mean scores for the PCMBs, career engagement, and career success are somewhat different. However, the 95% confidence intervals for each have significant overlap and the differences in mean scores between groups may not be significant. The 41 - 60-year-old category also has the highest average for each PCMB, career engagement score, and career success score.

In table 15, the correlation matrix reported that only the 26 - 40-year-old age category had a significant but low and negative correlation with career success ($r = -0.82$, $p < 0.05$). The regression model illustrated in table 11 reported that all binary age group variables were dropped from the model due to insignificance. Therefore, the investigator concludes that there is not a significant difference between tax assessor age groups’ perception of their career success.

Education Level Group

As illustrated in table 9, the percentage of tax assessors that participate in career planning is similar across educational categories. The frequency of tax assessors that reported participating in career planning “often” or “very often” across education levels high school, some college, certification or associate degree, bachelor’s degree, master’s degree, or doctorate or professional degree are reported 70.3%, 68.9%, 75.5%, 68.9%, 76.6%, and 72.2% respectively. Regarding career self-exploration, the education level groups reported 85.1%, 89.2%, 80.9%,

73.7%, 78.8%, and 77.8% respectively to participating “often” or “very often”. Relative to environmental career exploration, the education groups reported 51.8%, 63.2%, 60.7%, 57.5%, 53.2%, and 44.4% respectively to participating “neutral” or “often”. Lastly, regarding voluntary human capital development, the education level groups reported 88.9%, 84.9%, 89.4%, 80.6%, 88.3%, and 94.4% respectively to participating “often” or “very often” in the behavior.

The correlation matrix illustrated in table 15 reports that tax assessors with a bachelor’s degree have a significantly low negative correlation to career success perceptions. Also, tax assessors with a master’s degree have a significantly low positive correlation to career success perceptions. Additionally, other education level groups have no significant correlation to career success perceptions. The regression model illustrated in table 11 reports that all binary education level variables were dropped from the model due to insignificance. Therefore, the investigator concludes that the perceptions of tax assessors are not significantly different between educational levels regarding the impact of PCMBs on career success.

Chapter Five: Summary, Conclusions, and Recommendations

This study explored the relationships between PCMBs and career success perceptions of tax assessors. The researcher also investigated whether a significant difference existed concerning the PCMB and career success relationship based on the perceptions of government tax assessors and those employed by private-sector employers. The PCMBs and career success were also investigated by tax assessors' gender, age, and education level differences. This chapter discussed and summarized the results of the study, elaborated on conclusions supported by the study results, and provided further research recommendations.

The results of this study may help both government and private tax assessment organizations with the understanding of employee PCMBs and career success relationship perceptions. Assisting with the employee's PCMBs by organizations can lead to improved career satisfaction and career success for the employees (Barnett & Bradley, 2007; Lent & Brown, 2006). Government and private-sector tax assessor institutions alike can benefit from employee-improved career satisfaction and success through better public service to taxpayers and improved ability at meeting organizational objectives (Christensen et al., 2017). Not identifying these determinants of career success may lead to less motivation and engagement from employees, increased budgets from government tax assessment entities, and less profit for private-sector tax assessment organizations (Barnet & Bradley, 2007; Lent & Brown, 2006). Understanding the impact of PCMBs based on gender, age, and education level groupings may assist managers and organizations with fulfilling the needs of the individuals belonging to each grouping.

Study Summary

The theoretical framework of the study begins with motivation theory attempting to explain an individual's willpower that contributes to the direction, magnitude, and perseverance while at work. Vroom's Expectancy Theory theorizes that an individual's action is determined by the probability that work intention will lead to desired task performance and the degree of that

performance will result in a valued reward or degree of career success for the individual (Arthur et al., 2005; Vroom, 1964). Based on career theory, an individual's career motivation changes throughout his career lifespan (Hall, 2002; Super, 1957). Furthermore, career success is the accumulation of all the career experiences during the individual's career lifespan (Arthur et al., 2005). These career theory concepts are increased relative to the changing definitions of career and career success in the workplace caused by shifting individual and organizational needs. The need of the individual to not be confined by organizational structure and to be in charge of her career, also known as boundaryless and protean career theory, is desired as a complement to the individual's flexible lifestyle need. These boundaryless and protean career needs of the individual are supported by a psychological contract between the employee and employer based on mutual expectations about employee contributions and employer benefits. Additionally, the psychological contract addresses employee career success and the employer's support of the employee's career success (Arthur et al., 2005; Arthur & Rousseau, 1996; Hall et al., 2018; Schein, 1965).

This study is also grounded in how an individual manages and develops his career as outlined in career management and career development theory (Greenhaus, 2000; Sharf, 2010). Additionally, social cognitive theory (SCT) and social cognitive career theory (SCCT) support this study by outlining how individuals logically rationalize when planning and developing their careers (Bandura, 1986; Lent et al., 1994; Lent & Brown, 2006). SCCT is used as the foundation for the model of proactive behaviors which attempts to explain the relationship between proactive career management behaviors (PCMBs), organizational support, and career success (Barnett & Bradley, 2007). The understanding of the PCMB/career success relationship was advanced by identifying and testing the relationship between six career management behaviors of career engagement and the development of the career engagement scale ([CES]; Hirschi et al., 2014). Additionally, Hirschi et al. (2018) developed a tool for measuring career success with the career resource questionnaire (CRQ). However, recommendations from both

studies suggested that further research should be completed to investigate the relationship between the aggregate effect of the CES and career success and between individual career management behaviors and career success (Hirschi et al., 2014; Hirschi et al., 2018).

Therefore, this study investigated the gap in research while also considering that government-employed tax assessors may be motivated differently than private-sector tax assessors based on their public service motivation ([PSM; Harari et al., 2017; Homberg et al., 2015).

The researcher of this study used a quantitative research methodology and two questionnaires to investigate tax assessor perceptions of the relationship between PCMBs and career success. The CES was used to measure the PCMBs researched in this study: career planning, career self-exploration, environmental career exploration, and voluntary human capital development (Hirschi et al., 2014). The validity of the CES was established by Hirschi et al. (2014) and was confirmed in this study. Career success was measured using the CRQ (Hirschi et al, 2018). Additionally, the study used both questionnaires to investigate whether a significant perception difference was evident concerning the PCMBs/career success relationship of government tax assessors and private-sector tax assessors. A significant difference in the PCMB/career success relationship for gender, age, and education level groups was also tested.

The study included surveying 8000 tax assessor professionals using the two online questionnaires and analyzing the perceptions of 612 participants. Demographical, descriptive, and inferential statistical techniques were used to analyze the data collected. Demographical percentages were reported for employment type, age, gender, and educational groups. Descriptive measures including mean, median, standard deviation, and 95% confidence intervals were used with the aggregate sample and the data were stratified by employment, gender, age, and educational level group.

Multiple regression was used to analyze the impact of the independent or predictor variables of the PCMBs, employment group, gender, age, and education level on the dependent variable career success. The effect of data bias on parameter estimates, confidence intervals,

and significance testing was analyzed by testing for normality and homogeneity of variance using the residuals of the regression outcomes.

Discussion

The investigator determined that the normality of the data is not a significant issue. The model fit is conducted using the least squares method of model determination which will minimize errors, therefore providing a reliable model regardless of normality. Normality is important only if the investigator chooses to use the most optimal model possible. Secondly, non-normality will affect the accuracy of confidence interval estimates, standard errors, and significance testing but not regression outcomes due to the least squares method mentioned previously. Lastly, the investigator of this study determined that the outcome residuals followed a normal distribution. Therefore, the data meet the assumption of normality (Field, 2018).

Using the two assessments (the CES and the CRQ) together was unique to this study and was suggested by Hirschi et al. (2014; 2018). Two different surveys being sent, collected, and matched to participants was a significant research methodology application. The participants who completed both instruments provided invaluable, useful data for analysis. The two instruments contributed to clearly understanding and providing validity and reliability to the relationship between the four PCMBs and career success.

Research Question 1: Is there and what is the relationship between career planning and career success for tax assessors?

Most of the respondents (71.3%), stated that they participate in career planning often or very often, $M = 3.90$, $Mdn = 4.00$, 95% CI [3.82, 3.98]. Additionally, the typical participant agreed with having perceived career success, $M = 3.76$, $Mdn = 3.78$, 95% CI [3.72, 3.80]. The correlation matrix showed a significant positive relationship between career planning and career success ($r = 0.545$, $p < 0.05$). Additionally, the multiple regression model outcome also resulted in a significant positive relationship ($\beta = 0.311$, $t = 7.495$, $p < 0.05$) with the investigator rejecting the null hypothesis of no relationship and accepting the alternative hypothesis that career

planning has a significant positive impact on employee career success. While the testing cannot prove causation, it can be concluded that the proactive career planning behavior of tax assessors' in this study impacts their career success. Therefore, supporting previous literature claiming an individual who proactively plans her career will more likely experience relative career success. Additionally, an organization that promotes proactive career planning can contribute to the individual's perceived career success (Barnett & Bradley, 2007; Hirschi et al., 2014).

The results supported that there is a relationship between career planning and career success for the specific tax assessor respondents within this study. Regardless of gender, age, or educational level, the relationship existed as described in the results. Knowing that this relationship exists improves the opportunity for tax assessors to be more involved in their own career planning and ultimately their career success.

Research Question 2: Is there and what is the relationship between employee self-career exploration and career success for tax assessors?

Most of the respondents (77.1%), stated that they participate in career self-exploration often or very often, $M = 3.83$, $Mdn = 4.00$, 95% CI [3.97, 4.12]. Additionally, the typical participant agreed with having career success, $M = 3.76$, $Mdn = 3.78$, 95% CI [3.72, 3.80]. The correlation matrix resulted in a significant positive relationship between self-career exploration and career success ($r = 0.480$, $p < 0.05$). Additionally, the regression model outcome also resulted with a significant positive impact ($\beta = 0.212$, $t = 5.389$, $p < 0.05$). Therefore, the investigator rejected the null hypothesis of no relationship and accepted the alternative hypothesis that self-career exploration has a significant positive impact on employee career success. Therefore, it can be concluded that the tax assessors' self-career exploration behavior shown in this study impacts their career success. The tax assessor participants in this study revealed that if they participate in self-career exploration, they expect to experience career success. These results supported the results from the literature that suggested that an

organization that promotes self-career exploration will contribute to the individual's perceived career success (Barnett & Bradley, 2007; Hirschi et al., 2014). Although organizations were not specifically studied, all of this study's tax assessor participants were members of organizations. A future study may want to examine tax assessors within specific organizations to see if there is consistency within the organizations that allow tax assessors to engage in career exploration.

Research Question 3: Is there and what is the relationship between employee environmental career exploration and career success for tax assessors?

Only 42% of the respondents stated that they participate in environmental career exploration often or very often reporting $M = 3.16$, $Mdn = 3.00$, 95% CI [3.06, 3.26]. Additionally, the typical participant agreed with having career success, $M = 3.76$, $M = 3.78$, 95% CI [3.72, 3.80]. The correlation matrix was used to analyze the relationship between employee environmental career exploration and career success reporting ($r = 0.391$, $p < 0.05$). Additionally, the linear regression model outcome also resulted with a significant positive relationship ($\beta = 0.108$, $t = 2.90$, $p < 0.05$). Therefore, the investigator rejected the null hypothesis of no relationship and accepted the alternative hypothesis that environmental career exploration has a significant positive impact on employee career success. Furthermore, it can be concluded that the tax assessors' environmental career exploration found in this study impacts their career success. The tax assessor participants in this study who revealed that they participated in environmental career exploration also perceived themselves to have experienced relative career success. These results also aligned with the literature that suggested that an organization that promotes employee environmental career exploration will contribute to the individual's career success (Barnett & Bradley, 2007; Hirschi et al., 2014). Despite employee environmental career exploration receiving the lowest average ranking of any of the specific PCMBs, it was still important to these tax assessor participants. One reason why this outcome may have been lower than the other three PCMBs is that individuals do not like change. Because they do not like change, they may not want to change careers so there may be a lack

of interest in career exploration. This can be detrimental if the organization wants to promote from within more than they want to bring in outsiders for open positions. One of the only motivators for an individual to change jobs, internally or externally is if their current job or career is extremely uncomfortable. This is supported by research that suggests that individuals will not search for another job outside the organization based on the perceived psychological contract between the organization and the employee (Hall, 2002; Schein, 1965). It is also counterintuitive for an organization to support an employee's boundaryless career and risk the possibility of losing a valued employee (an employee who follows the rules, policies, and regulations of the organization and meets required job specifications) (Arthur & Rousseau, 1996; Hall, 2002). Valued employees must be understood by leaders within their organization. The results of this study can assist leaders in understanding their employees if they were to administer this survey within their organization.

Research Question 4: Is there and what is the relationship between voluntary human capital development and career success for tax assessors? If there is a relationship, how does the relationship influence the development of additional training?

Most of the tax assessor respondents in this study (84.6%) revealed that they participated in career planning often or very often, $M = 4.29$, $Mdn = 5.00$, 95% CI [4.21, 4.36]. Additionally, the tax assessor participants within this study's sample agreed with having career success, $M = 3.76$, $Mdn = 3.78$, 95% CI [3.72, 3.80]. The correlation matrix used to analyze the relationship between voluntary human capital development and career success resulted in a significant positive relationship ($r = 0.396$, $p < 0.05$). Additionally, the linear regression model outcome also resulted with significant positive contribution ($\beta = 0.163$, $t = 4.554$, $p < 0.05$). Therefore, the investigator of this study rejected the null hypothesis of no relationship and accepted the alternative hypothesis that voluntary human capital development has a significant positive impact on employee career success. It can be concluded for this specific group of tax assessor respondents that voluntary human capital impacts career success. Therefore, the

individuals within this study who responded that they proactively volunteer for human capital development will more likely experience relative career success. These findings support the previous literature regarding organizations' support of volunteer human capital development and its contribution to the individual's career success (Barnett & Bradley, 2007; Hirschi et al., 2014). Voluntary human capital development received the highest score of all PCMBs measured. Although not directly examined within this study, certification requirements may explain why voluntary human capital development received the highest score of the PCMBs. Certification is required of tax assessors in many jurisdictions. The certification requires relative coursework; therefore, if the individual is interested in a career within the industry, he will need to take the coursework. This industry career interest by the tax assessor results in the coursework completion being voluntary and proactive. The higher rankings may also be caused by the professional development support of the International Association of Assessing Officers (IAAO). Many jurisdictions determine their certification criteria based on the offerings of the professional development department at IAAO. Additionally, the professional development department promotes its offerings to students, education coordinators, and current IAAO members. Organizations that want their employees to be participants in voluntary human capital development to strengthen the overall organization may want to increase accessibility to certifications and professional development for tax assessors.

Research Question 5: Are the perceptions of tax assessors employed by government offices different than tax assessors employed by private sector business contractors regarding the relationship between their overall proactive career management behaviors and career success? If so, to what extent and in what way(s) are they different?

The data analysis results determined that the frequency of responses was similar between government and private-sector tax assessors who responded within this study. The frequency of government tax assessors that responded that they participated in career planning, career self-exploration, environmental career exploration, and voluntary human capital

development either often or very often was 72.4%, 77.6%, 45.0%, and 86.0% respectively. Similarly, private-sector tax assessors responded 62.3%, 73.9%, 42.0%, and 73.9% respectively. Therefore, the frequencies appear similar especially when it comes to career planning and voluntary human capital development.

When comparing the average responses to each of the PCMB questions for government tax assessors and private-sector tax assessor respondents in this study's sample, the researcher determined that the results appear similar. Relative to career planning, the average response of government tax assessors was $n = 543$, $M = 3.91$, $Mdn = 4.00$, 95% CI [3.83, 4.00] compared to private-sector tax assessors $n = 69$, $M = 3.83$, $M = 4.00$, 95% CI [3.59, 4.06]. When contrasting the two groups based on career self-exploration, government tax assessors reported $n = 543$, $M = 4.05$, $Mdn = 4.00$, 95% CI [3.97, 4.13] while the private-sector tax assessors resulted with $n = 69$, $M = 3.99$, $Mdn = 4.00$, 95% CI [3.77, 4.20]. Contrasting the two groups on whether they participated in environmental career exploration, the government tax assessor participants responded $n = 543$, $M = 3.17$, $Mdn = 3.00$, 95% CI [3.06, 3.26] while private-sector tax assessor participants reported $n = 69$, $M = 3.10$, $Mdn = 3.00$, 95% CI [2.81, 3.40]. The average responses to participation in environmental career exploration were noticeably lower than the other PCMBs for both groups.

With respect to voluntary human capital development, the average response of government tax assessor participants reported ($n = 543$, $M = 4.31$, $M = 5.00$, 95% CI [4.24, 4.39]) when compared to private-sector tax assessor participants ($n = 69$, $M = 4.07$, $M = 4.00$, 95% CI [3.81, 4.33]). The average responses to participation in voluntary human capital development were significantly greater than the other PCMBs for both groups.

When analyzing the difference between government and private-sector tax assessors in a regression model, it was shown that collinearity exists between the two groups resulting in the government tax assessor variable being excluded from the model. Both government and private-sector tax assessor variables were excluded from the model when stepwise regression

was performed. Therefore, the results revealed no difference between the perceptions of government and private-sector tax assessor participants in this study's sample regarding perceived career success.

Gender, Age, and Education Level Groups

Gender Group. This study also investigated questions one through four concerning the relationship of the four PCMBs to career success based on the individual's gender. The study included 247 female and 365 male responses. In relation to career planning, the responses from female (M = 3.98, Mdn = 4.00, [3.85, 4.10]) and male (M = 3.985, Mdn = 4.00, [3.75, 3.96]) tax assessors in this study's sample appear similar. However, with regards to career self-exploration, the female tax assessors' responses outcome was M = 4.20, Mdn = 4.00, [4.09, 4.31] and their male counterparts reported M = 3.91, Mdn = 4.00, [3.84, 4.04]. The outcome from female and male tax assessors in response to environmental career exploration was M = 3.16, Mdn = 3.00 for both groups with the female and male 95% confidence intervals being [3.00, 3.32] and [3.03, 3.29] respectively. Related to voluntary human capital development, female and male participants reported M = 4.41, Mdn = 5.00, [4.31, 4.51] and M = 4.21, Mdn = 4.00, [4.10, 4.31] respectively. Lastly, regarding career success, female and males responded M = 3.77, Mdn = 3.83, [4.70, 3.84] and M = 3.75, Md = 3.75, [3.70, 3.81] respectively.

The regression model showed collinearity between the male and female gender variables resulting in the female gender variable being excluded from the model. Both the female and male gender variables were excluded from the model when stepwise regression analysis was conducted. Therefore, the results revealed that the perceptions do not differ between the female and male gender groups regarding the impact of PCMBs on career success.

Age Group. This study also investigated questions one through four concerning the relationship of the four PCMBs to career success based on the individual's age group. The age groups that were investigated include 18 - 25, 26 - 40, 41 - 60, and 60+ years old. The 18 - 25-

year-old category was not further analyzed due to the sample size of two participants. The career planning PCMB ratings were reported for the 26 - 40, 41 - 60, and 60+ years old at $n = 91$, $M = 3.87$, $Mdn = 4.00$, [3.65, 4.09]; $n = 352$, $M = 3.96$, $Mdn = 4.00$, [3.87, 4.06]; and $n = 163$, $M = 3.78$, $Mdn = 4.00$, [3.61, 3.95] respectively. For career self-exploration, ratings for the 26 - 40, 41 - 60, and 60+ years old groups were $n = 91$, $M = 3.95$, $Mdn = 4.00$, [3.73, 4.16]; $n = 352$, $M = 4.09$, $Mdn = 4.00$, [3.99, 4.18]; $n = 163$, $M = 3.99$, $Mdn = 4.00$, [3.84, 4.13] respectively. The environmental career exploration ratings reported for the 26 - 40, 41 - 60, and 60+ year old groups were $n = 91$, $M = 3.06$, $Mdn = 3.00$, [2.778, 3.34]; $n = 352$, $M = 3.20$, $Mdn = 3.00$, [3.07, 3.34]; $n = 163$, $M = 3.12$, $Mdn = 3.00$, [2.92, 3.32] respectively. The voluntary human capital ratings were reported for the 26 - 40, 41 - 60, and 60+ year old groups as $n = 91$, $M = 4.30$, $Mdn = 5.00$, [4.09, 4.50]; $n = 352$, $M = 4.31$, $Mdn = 5.00$, [4.21, 4.40]; $n = 163$, $M = 4.24$, $Mdn = 5.00$, [4.09, 4.39] respectively. Lastly, for career success, the age groups of 26 - 40, 41 - 60, and 60+ year old groups reported $n = 91$, $M = 3.65$, $Mdn = 3.73$, [3.54, 3.77]; $n = 352$, $M = 3.78$, $Mdn = 3.80$, [3.73, 3.84]; $n = 163$, $M = 3.77$, $Mdn = 3.75$, [3.69, 3.86]. Age group data appear similar among the three PCMB groups and for career success. Like the overall ratings, the average ratings for environmental career exploration were lower for all age groups while voluntary human capital development ratings were higher for all age groups.

This study also compared the relationship between the age groups using a regression model. All age group variables were excluded from the regression model because they were not found significant with $p < 0.05$. Therefore, the data revealed no significant difference existed between the perceptions of tax assessor participants by age group concerning the impact of their PCMBs on their career success.

Education Level Group. This study also investigated questions one through four concerning the relationship of the four PCMBs to career success based on the individual's education level. Career planning was rated the highest by individuals with master's degrees followed by those with post-secondary certification or associate degrees reporting $M = 4.04$,

Mdn = 4.00, [3.85, 4.24] and M = 4.03, 4.00, [3.83, 4.23] respectively. Career self-exploration was rated the highest by individuals with a high-school diploma reporting M = 4.26, Mdn = 4.00, [3.98, 4.54] but may be influenced by the small sample size of the group. The some college, post-secondary certification or associate degree and master's degree groups rated career self-exploration similarly with M = 4.13, Mdn = 4.00, [3.97, 4.29], M = 4.13, Mdn = 4.00, [3.94, 4.32], and M = 4.13, Mdn = 4.00, [3.93, 4.33] respectively. Environmental career exploration was rated highest by persons with a master's degree reporting M = 3.35, Mdn = 4.00, [3.08, 3.62]. Voluntary human capital development was rated highest by individuals with a post-secondary certificate or associate degree reporting M = 4.39, Mdn = 5.00, [4.22, 4.57]. In summary, individuals in the post-secondary certificate or associate degree education group ranked each PCMB the highest or next highest except for environmental career exploration. Contrastingly, individuals with bachelor's degrees rated career planning, career self-exploration, and voluntary human capital development the lowest of all education groups. Lastly, the average career success ratings were highest with individuals with a master's degree with M = 3.88, Mdn = 3.91, [3.77, 3.98].

The highest education level obtained by tax assessor participant groups was also tested using a regression model. All education level variables were excluded from the model due to significance below $p < 0.05$. The results revealed that there is no significant difference in tax assessor participants' perceptions between education level groups.

Conclusions

Theoretical Implications

This study used previous theoretical ideas introduced by Hirschi et al. (2014; 2018) to examine four PCMBs that contributed to career engagement. Although this study did not directly measure career engagement, the relationship between specific PCMBs and career success was examined and was found to support the theoretical conclusions in ways similar to that of Hirschi et al. (2014; 2018). This study's area of interest was specifically on the behaviors of tax

assessors. The theoretical framework chosen to support this study has been proven to be the appropriate theoretical framework to examine the behaviors of the tax assessor participants in this sample.

Further, the literature supported that human capital development could be enhanced by tax assessors on their own accord or with the help of their organizations (Barnett & Bradley, 2007). Barnett and Bradley's (2007) assertion regarding the organization's support was also confirmed by the tax assessor participants. While attempting to determine the most valuable PCMBs that contributed to the career success of tax assessors, these tax assessor participants revealed that voluntary human capital development was the most valuable for their career success. The voluntary human capital development results are in contrast to the Hirschi et al. (2014; 2018) studies, where career self-exploration was the most valuable for the career success of their study participants.

Although this study did not directly measure aspects of SCCT, the literature (Barnett & Bradley, 2007; Hirschi et al., 2014; Hirschi et al., 2018) suggested that PCMBs are by-products of personality traits and self-efficacy expectations. The results of this study showed positive relationships between PCMBs and career success and can possibly contribute to the SCCT literature regarding conscientiousness because of the voluntary human capital development of the participants. Meaning that their own conscientiousness regarding their efforts in their own human capital development contributed to their career success. Future studies can seek to measure the extent that voluntary human capital development relates to conscientiousness.

Barnett and Bradley (2007) found that proactive personality and career management behaviors are positively related to career satisfaction. The outcome of this study shows a positive significant relationship between PCMBs and career success; however, it did not measure career satisfaction. A future study could examine the extent to which individuals align career success with career satisfaction.

Practical Implications

The result of this study suggests that some tax assessor organizations should develop formal and informal educational programs that promulgate and support the PCMB/career success relationship. Based on the outcomes of this study, the CES and the CRQ are two useful measurement tools that can be used in conjunction with one another for assisting organizations with some tax assessor employee assessment.

Because voluntary human capital development was the most valuable PCMB for this sample of tax assessors, it may be beneficial for organizations to consider providing performance incentives and developing a corporate culture that supports human capital development. Should organizations make these investments, they should measure the impact. Some possible impacts supported in the literature include improved employee morale and productivity (Hirschi et al., 2014; 2018)

This study's results can provide support for HRD practitioners and tax assessor leaders as it relates to HRD practitioners' expertise in human capital development and tax assessor leaders' ability to coach their employees who seek to voluntarily participate in their own development. The other three PCMB results can be used by tax assessor leaders and HRD practitioners to analyze and develop the individual's career development behavior strategy.

Future studies can continue to test the use of the two instruments (the CES and the CRQ) to add to the literature on the relationship between PCMBs and career success. This use of these scales can be used alongside career development interventions. For example, a pre and post-test design could be used where the assessments are administered before and after the career development intervention to evaluate the effectiveness of the program. A strong perceived relationship between the individual's PCMB and career success during pre-testing would indicate that career development intervention is not needed. However, minimal or insignificant findings during pre-testing would suggest that the employee does not perceive a strong relationship between their career management behavior and their career success. In this

case, career development assistance may be needed. A significant relationship at post-testing may indicate an intervention's success.

When comparing outcomes between genders for tax assessors in this study, a couple of practical conclusions emerged. The average responses for career self-exploration and voluntary human capital development were noticeably greater for the female respondents. The fact that females responded greater than males concerning career self-exploration and voluntary human capital development is consistent with Sharf's (2010) research using SCCT. Sharf's (2010) findings suggested that career development for females was different than for males due to different environmental factors such as gender discrimination and home-life roles. While female respondents in this study were not asked about gender discrimination or home-life roles, these may have been contributing factors and should be examined in future studies. Additionally, because collinearity was found between male and female responses and the male variable was found to be significant to career success, it can be concluded that regardless of differences in motivation, both genders have similar perceptions regarding career success.

When analyzing the average PCMB and career success ratings, scores between age groups were similar. Even though career development needs are different between age groups (Sharf, 2010; Super, 1957), average responses regarding career planning, career self-exploration, environmental career exploration, career engagement in general, and career success were reported to be similar among all age groups. Additionally, the regression model determined that age was not a determinant of career success. Therefore, regardless of the difference in career development needs between age categories, all age category participants in this study's sample perceived career success similarly.

While Ng et al. (2005) found that education level has a strong positive relationship with career success, this study found that the average response to the PCMBs was similar across all educational levels. Additionally, the regression model found that only individuals with a master's degree had a significant perception of career success. However, the sample size was small for

the doctorate and professional degree educational group. Therefore, additional research may need to be conducted with a larger sample size to see if those with doctorates or professional degrees have a stronger perception of career success.

Recommendations for Further Research

The following are recommendations for future research.

1. Generalization Outside of the Ad Valorem Industry

This study focused exclusively on the perceptions of individuals who work as tax assessors. However, other industries require different employee career success motivations (Sharf, 2010). Further research should be conducted in other industries to compare the outcomes with this study. Additionally, similar research could be conducted regardless of the participants' employment industry.

2. Other Countries Outside of the United States

This study included tax assessors located exclusively in the United States. However, the meaning of work and career success motivations differ based on the individual's country of origin (Sharf, 2010; Tang, 2019). Therefore, the important PCMBs of this study may not be relevant in other countries. As a result, additional research should include an international study that compares specific PCMBs and career success by country. The research will assist practitioners with identifying and addressing the important PCMBs that contribute to the career success of individuals based on each country's norms. This may be extremely beneficial to international organizations.

3. Perceptions Based on Different Education Levels

The outcome of this study is contrary to the research that espouses that career success is related to increased educational level (Guo et al., 2012). From an SCCT perspective, individuals investing in higher levels of education are participating in greater PCMBs based on the individual's particular traits, self-efficacy, outcome expectations, and motivations (Lent et al., 1994). However, the average career

success ratings of this study were highest with individuals with a master's degree and lowest with a bachelor's degree, therefore not correlating with educational level. Additionally, the study results reported that education level did not impact perceptions of career success. Therefore, future research should be conducted regarding education level and career success. This research will assist the practitioner with identifying and developing specific PCMBs and gauge the level of career engagement present with current employees based on an individual's education. It may also help the practitioner with assessing important career characteristics of new hires.

4. Perceptions Based on Different Career Stages

This study investigated career stages based on age ranges recommended by lifespan theory (Super, 1957). Based on lifespan theory, individuals are motivated by different factors based on their career development stage. Persons entering the workforce may be interested in whether they fit their future careers. In contrast, future retirees are motivated by self-fulfillment (Sharf, 2010; Super, 1980). However, in this study the average responses across age categories were similar and significant differences were not found. Therefore, additional research should include comparing specific PCMBs by career life stage. Identifying important PCMBs for each career life stage will assist practitioners with the career development of the employee by focusing on the most important PCMBs based on his or her career life stage. This will lead to a greater level of career success for the employee resulting in increased productivity.

5. Perceptions Over Time

One limitation of this study is that it is only a snapshot in time of the participants' perceptions. As discussed previously, based on the career life-span theory, individual perceptions will differ based on the person's career stage. Therefore,

further longitudinal research should be conducted to measure the progression of participant perceptions over time. It would also be advantageous to compare the longitudinal outcomes with known outcomes from previous literature (Hirschi et al., 2018, Sharf, 2010; Super, 1980).

6. Perceptions Based on Gender Differences

In this study, tax assessors' genders reported similarly regarding the PCMBs and career success. Additionally, no significant differences based on gender were determined related to the PCMB/career success regression model. However, the traits, self-efficacy, outcome expectations, and motivations of women continue to change in the workforce (Sharf, 2010; Tang, 2019). These factors contribute to changing PCMBs and the definition of career success among women (Sharf, 2010; Tang, 2019). Therefore, additional research is needed to measure the difference in the PCMB/career success relationship based on gender differences. Understanding these differences will help practitioners identify and develop valuable PCMBs related to career success that is dictated by gender.

7. Perceptions Based on Race/Ethnicity Differences

Race/ethnicity differences were not investigated in this study. Systematic differences concerning the perceptions of the PCMB/career success relationship exist for the different race/ethnicity populations (Hirschi et al., 2018). These differences may influence the career outcome expectations, self-efficacy, and motivations of particular individuals. Therefore, further research should include investigating the similarity and differences of perceptions regarding the PCMB/career success relationship between races and ethnicities to assist practitioners with developing career success within those groups.

8. Testing Additional Proactive Career Management Behaviors (PCMBs)

While this study accomplished its purpose of measuring the relationship between specified PCMBs and career success, additional PCMBs such as career positioning and networking should be studied. This study focused on a limited number of PCMBs that are easily measurable and meaningful to both the individual and the organization. However, additional PCMBs that also meet the criteria should be identified and measured to fully understand all of the PCMBs that contribute to an individual's career success.

9. Testing Additional Constructs

While the creators of the CES measured the scale against other scales to establish concurrent, discriminant, and predictive validity, additional research should evaluate its relation to additional constructs such as self-directed career management orientation or career aspirations (Hirschi et al., 2014). The purpose of the additional research should be to determine whether the scale better identifies constructs that are similar to career engagement. Additionally, while the developers of the CRQ used well-established constructs for career success, the framework may not be exhaustive. Therefore, further research should be conducted to identify and measure additional constructs that may describe career success (Hirschi et al. 2018).

10. Testing Performance

This study uses two measurement tools where the outcomes are based on the self-reporting of the participant. The participant response may be biased for many reasons ranging from "looking good" for the survey to misunderstanding the survey question (Rosenman et al., 2011). Therefore, further research should be conducted to measure the predictive validity of the two scales by comparing the participants' self-reported outcomes with their performance evaluated through the qualitative data collection from personal interviews.

11. Additional Testing of Private-Sector Tax Assessors

Even though the sample size of 69 from private-sector tax assessors is large enough for reliable results based on the central limit theorem, the small sample size may be problematic. In smaller samples, large differences between groups may result in non-significant testing outcomes (Field, 2018). Therefore, future research should include a larger sample of private-sector tax assessors, especially when testing for differences with government-employed tax assessors.

12. While this study did not examine whether the participants exhibited proactive behaviors, consideration for future studies could be to measure the proactive behaviors of tax assessors. Since this study's participants were all voluntary members of IAAO, which is an organization that supports career development, it would suggest that the participants are proactively interested in their own career development. Should there be a positive relationship between proactive behaviors and career success as some literature suggested (Barnett & Bradley, 2007), then organizations may seek to examine the proactive behaviors of tax assessors throughout their careers.

References

- Abele, A.E., Spurk, D., & Volmer, J. (2011). The construct of career success: Measurement issues and an empirical example. *ZAF, 43*, 195-206. <https://doi.org/10.1007/s12651-010-0034-6>
- Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R.W.B. (2013). Competencies for contemporary career: Development and preliminary validation of the career competencies questionnaire. *Journal of Career Development, 40*(3), 245-267. <https://doi.org/10.1177/0894845312467501>
- Akkermans, J., Richardson, J., & Kraimer, M.L. (2020). The Covid-19 crisis as a career shock: Implications for careers and vocational behavior. *Journal of Vocational Behavior, 119*, 1-5. <https://doi.org/10.1016/j.jvb.2020.103434>
- Akkermans, J., Seibert, S.E., & Mol, S.T. (2018). Tales of the unexpected: Integrating career shocks in the contemporary careers literature. *SA Journal of Industrial Psychology, 44*, <https://doi.org/10.4102/sajip.v44i0.1503>
- Aloysius, S.M.C.M. (2015, June 11 - 12). Protean career orientation and career success among early career graduates [Conference session]. International Conference on Contemporary Management (ICCM), Jaffna, Northern, Sri Lanka. <http://conf.jfn.ac.lk/iccm/wp-content/uploads/2018/10/2015-Organization-2.pdf>
- Alreck, P.L., & Settle, R.B. (1995). *The survey research handbook: Guidelines and strategies for conducting a survey*. McGraw-Hill.
- Arthur, M.B., Khapova, S.N., & Wildrom, C.P.M. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior, 26*(2), 177 - 202. <https://doi.org/10.1002/job.290>
- Arthur, M.B., & Parker, P. (2002). Technology, community and the practice of HRM. *Human Resource Planning, 25*(4), 38-47.
- Arthur, M.B., & Rousseau, D.M. (1996). *The boundaryless career*. Oxford University Press.
- Ashford, S.J., Caza, B.B., & Reid, E.M. (2018). *From surviving to thriving the gig economy: A research agenda for individuals in the new world of work*. *Research in Organizational Behavior, 38*, 23-41. <https://doi.org/10.1016/j.riob.2018.11.001>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*(9), 1175-1184.
- Bandura, A. (1991). Human agency: The rhetoric and the reality. *American Psychologist, 46*, 157-162.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman.

- Barley, S. R. (1989). Careers, identities, and institutions: The legacy of the Chicago School of Sociology. In M.B. Arthur, D.T. Hall, & B.S. Lawrence (Eds.), *Handbook of career theory* (pp. 41-65). Cambridge University Press.
- Barnett, B.R., & Bradley, L. (2007). The impact of organizational support for career development on career satisfaction. *Career Development International*, 12(7), 617-636.
- Bartlett, J.E., Kotrlik, J.W., & Higgins, C.C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning and Performance Journal*, 19, 43-50.
- Bartlett, K.R. (2005). Survey research in organizations. In R.A. Swanson & E.F. Holton III (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 97-113). Barrett-Koehler.
- Baruch, Y. (2006). Career development in organizations and beyond: Balancing traditional and contemporary viewpoints. *Human Resource Management Review*, 16, 125-138.
- Blessings, J. D. (2005). *Physician assistance guide to research and medical literature*. (2nd ed.). F. A. Davis.
- Blokker, R., Akkermans, J., Tims, M., Jensen, P., & Khapova, S. (2019). Building a sustainable start: The role of career competencies, career success, and career shocks in young professionals' employability. *Journal of Vocational Behavior*, 112, 172-184. <https://doi.org/10.1016/j.jvb.2019.02.013>
- Bowerman, B.L., O'Connell, R.T., & Murphree, E.S. (2014). *Business statistics in practice*. (7th ed.). McGraw-Hill.
- Boyce, C.J., Wood, A.M., Daly, M., & Sedikides, C. (2015). Personality change following unemployment. *Journal of Applied Psychology*, 100, 991-1011.
- Bureau of Labor Statistics (n.d.). Employment projections. Retrieved April 13, 2021. <https://www.bls.gov/emp/documentation/education/tech.htm>
- Cantor, N., & Sanderson, C.A. (1999). Life task participation and well-being: The importance of taking part in daily life. In D. Kahneman, E. Diener, & N. Schwartz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 230-243). Russell Sage Foundation.
- Cantarelli, P., Belardinelli, P., & Belle, N. (2016). A meta-analysis of job satisfaction correlates in the public administration literature. *Review of Public Personnel Administration*, 36(2), 115-144. <https://doi.org/10.1177/0734371X15578534>
- Carlson, K.D., & Herdman, A.O. (2012). Understanding the impact of convergent validity on research results. *Organizational Research Methods*, 15(1), 17 - 32. <https://doi.org/10.1177/1094428110392383>
- Christensen, R.K., Paarlberg, L., & Perry, J.L. (2017). Public service motivation research: Lessons for practice. *Public Administration Review*, 77(4), 529-542. <https://doi.org/10.1111/puar.12796>

- Claes, R., & Ruiz-Quintamilla, S.A. (1998). Influences of early career experiences, occupational group and national culture on proactive career behavior. *Journal of Vocational Behavior*, 52, 357-378.
- Clarke, M. (2009). Plodders, pragmatists, visionaries and opportunities: Career patterns and employability. *Career Development International*, 14(1), 8-28.
<https://doi.org/10.1108/13620430910933556>
- Cochran, W. (1977). *Sampling techniques*. (3rd ed.). John Wiley & Sons.
- Coetzee, M., Ferreira, N., & Potgieter, I. (2019). Future fit career wellbeing: An introductory chapter. In I.L. Potgieter, N. Ferreira & M. Coetzee (Eds), *Theory, research and dynamics of career wellbeing: Becoming fit for the future* (pp. 1-11). Springer.
https://doi.org/10.1007/978-3-030-28180-9_1
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Routledge.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
<https://doi.org/10.1037/0033-2909.112.1.155>
- Costa, P.T., & McCrae, R.R. (1994). Set like plaster: Evidence for the stability of adult personality. In T.F. Heatherton & J.L. Weinberger (Eds.), *Can personality change?* (pp. 21-40). American Psychological Association.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462.
- Cronbach, L.J. and Meehl, P.E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281–302.
- Dawis, R.V., & Lofquist, L.H. (1984). *A psychological theory of work adjustment*. University of Minnesota Press.
- De Vos, A., & Soens, N. (2008). Protean attitude and career success: The mediating role of self-management. *Journal of Vocational Behavior*, 73, 449 - 456.
<https://doi.org/10.1016/j.vb.2008.08.007>
- Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method*. John Wiley & Sons, Inc.
- Drucker, P.F. (1954). *Practice of management*. HarperCollins Publishers.
- Drucker, P. F. (1973). *Management: Tasks, responsibilities, practices*. Harper & Row.
- Eckert, J.K., Gloudemans, R.J., & Almy, R.R. (1990). *Property appraisal and assessment administration*. The International of Assessing Officers.
- Erdogan, B., Kraimer, M.L., & Liden, R.C. (2004). Work value congruence and intrinsic career success: the compensatory roles of leader-member exchange and perceived organizational support. *Personnel Psychology*, 57(2), 305-332.

- Feldman, D.C., & Ng, T.W.H. (2007). Careers: Mobility, embeddedness, and success. *Journal of Management*, 33, 350-377.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics: North American edition* (5th ed.). Sage.
- Forrest, M.L., & Dougherty, T.W. (2001). Correlates of networking behavior for managerial and professional employees. *Group Organization Management*, 26, 283-311. <http://doi.org/10.1177/1059601101263004>
- Gattiker, U.E., & Larwood, L. (1988). Predictors for managers' career mobility, success, and satisfaction. *Human Relations*, 41(8), 569-591.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 11.0 update (4th ed.). Allyn & Bacon.
- Gould, S. (1979). Characteristics of career planners in upwardly mobile occupations. *Academy of Management Journal*, 22, 539-550.
- Gould, S., & Penley, L.E. (1984). Career strategies and salary progression: A study of their relationships in a municipal bureaucracy. *Organizational Behavior and Human Performance*, 34, 244-265. [http://doi.org/10.1016/0030-5073\(84\)90006-0](http://doi.org/10.1016/0030-5073(84)90006-0)
- Glass, G.V., & Hopkins, K.D. (1996). *Statistical methods in education and psychology* (3rd ed.). Simon & Schuster Company.
- Greenhaus, J.H., Callanan, G.A., & Godshalk, V.M. (2000). *Career management* (3rd ed.). Harcourt College Publishers.
- Greenhaus, J.H., Callanan, G.A., & Godshalk, V.M. (2010). *Career management* (4th ed.). Sage Publications, Inc.
- Greenhaus, J.H., & Kossek, E.E. (2014). The contemporary career: A work-home perspective, *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 361-388. <http://doi.org/10.1146/annurev-orgpsych-031413-091324>
- Greenhaus, J. H, Parasuraman, S. J., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33, 64-86.
- Guo, W., Xiao, H, & Yang, X. (2012). An empirical research on the correlation between human capital and career success of knowledge workers in enterprise. *Physics Procedia*, 25, 715 – 725. <https://doi.org/10.1016/j.phpro.2012.03.148>
- Hackett, G., & Betz, N.E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18, 326-336.
- Hackett, G., & Lent, R.W. (1992). Theoretical advances and current inquiry in career psychology. In S.D. Brown & R.W. Lent (Eds.), *Handbook of counseling psychology* (2nd ed., pp. 419-451). Wiley.

- Hall, D.T. (2002). *Careers in and out of organizations*. Sage.
- Hall, D.T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior*, 65(1), 1-13. <https://doi.org/10.1016/j.jvb.2003.10.006>
- Hall, D.T., & Chandler, D.E. (2005). Psychological success: When the career is a calling. *Journal of Organizational Behavior*, 26(2), 155-176.
- Hall, D. T., & Mirvis, P. H. (1995). The new career contract: developing the whole person at midlife and beyond. *Journal of Vocational Behavior*, 47, 269-289. <https://doi.org/10.1006/j.jvb.1995.0004>
- Hall, D.T., Yip, J., & Doiron, K. (2018). Protean careers at work: Self-direction and values orientation in psychological success. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 129-156. <https://doi.org/10.1146/annurev-orgpsych-032117-104631>
- Harari, M.B., Herst, D.E.L., Parola, H.R., Carmona, B.P. (2017). Organizational correlates of public service motivation: A meta-analysis of two decades of empirical research. *Journal of Public Administration Research and Theory*, 27(1), 68-84. <https://doi.org/10.1093/jopart/muw056>
- Hartung, P.J., & Blustein, D.L. (2002). Reason, intuition, and social justice: Elaborating on Parsons career decision-making model. *Journal of Counseling and Development*, 80, 41-47.
- Heslin, P. A. (2003). Self- and other-referent criteria of career success. *Journal of Career Assessment*, 11(3), 262-286.
- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior*, 26(2), 113-136.
- Hess, N., Jepsen, D. M., & Dries, N. (2012). Career and employer change in the age of the boundaryless career. *Journal of Vocational Behavior*, 81, 280 - 288. <https://doi.org/10.1016/j.jvb.2011.10.009>
- Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behavior*, 74, 145-155. <https://doi.org/10.1016/j.jvb.2009.01.002>
- Hirschi, A. (2012). The career resources model: An integrative framework for career counselors. *British Journal of Guidance & Counseling*, 40(4), 369 - 383. <https://doi.org/10.1080/03069885.2012.700506>
- Hirschi, A. (2014). Hope as a resource for self-directed career management: Investigating mediating effects on proactive career behaviors and life and job satisfaction. *Journal of Happiness Studies*, 15(6), 1495-1512. <https://doi.org/10.1007/s10902-013-9488-x>
- Hirschi, A., Freund, P.A., & Herrmann, A. (2014). The career engagement scale: development and validation of a measure of proactive career behaviors. *Journal of Career Assessment*, 22(4), 575-594. <https://doi.org/10.1177/1069072713514813>

- Hirschi, A., Nagy, N., Baumeler, F., Johnston, C.S., & Spurk, D. (2018). Assessing key predictors of career success: Development and validation of career resources questionnaire. *Journal of Career Assessment*, 26(2), 338-358. <https://doi.org/10.1177/106907271595584>
- Hobfoll, S.E., Halbesleben, J., Neveu, J.P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103-128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Holland, J.L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Prentice-Hall.
- Homberg, F., McCarthy, D., & Tabvuma, V. (2015). A meta-analysis of the relationship between public service motivation and job satisfaction. *Public Administration Review*, 75(5), 711-722. <https://doi.org/10.1111/puar.12423>
- Hughes, E.C. (1958). *Men and their work*. Free Press.
- Hughes, E.C., & Coser, L.A. (1994). *On work, race, and the sociological imagination*. The University of Chicago Press.
- IAAO (n.d.) *IAAO's history, vision & mission*. <https://iaao.org>
- Ismail, A., Nowalid, W.A.W.M., & Baker, R.A. (2016). Proactive behavior as a mediator of the relationship between career management and career satisfaction. *Jurnal Pengurusan*, 48, 99 - 110.
- Judge, T.A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, 87, 797-807.
- Kenny, D.A. (1976). An empirical application of confirmatory factor analysis to the multitrait-multimethod matrix. *Journal of Experimental Social Psychology*, 12(3), 247-252. [https://doi.org/10.1016/0022-1031\(76\)90055-X](https://doi.org/10.1016/0022-1031(76)90055-X)
- Kossek, E. E., Roberts, K., Fisher, S, & DeMarr, B. (1998). Career self-management: A quasi-experimental assessment of the effects of a training intervention. *Personnel Psychology*, 51(4), 935-962.
- Kuijpers, M.A.C.T., Schyns, B., & Scheerens, J. (2006). Career competencies for career success. *The Career Development Quarterly*, 55, 168-178.
- Lazarova, M., & Taylor, S. (2009). Boundaryless careers, social capital, and knowledge management: Implications for organizational performance. *Journal of Organizational Behavior*, 30, 119 - 139.
- Lent, R.W., & Brown, S.D. (2006). Integrating person and situation perspectives on work satisfaction: A social-cognitive view. *Journal of Vocational Behavior*, 69, 236-247.

- Lent, R.W., & Brown, S.D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology, 60*(4), 557-568. <https://doi.org/10.1037/a0033446>
- Lent, R.W., Brown, S.D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance, *Journal of Vocational Behavior, 45*, 79 - 122.
- Lent, R.W., Larking, K.C., & Brown, S.D. (1989). Relation of self-efficacy to inventoried vocational interests. *Journal of Vocational Behavior, 34*, 279-288.
- Lent, R.W., Singley, D., Sheu, H., Gainor, K. A., Brenner, B.R., Treistman, D., & Ades, L. (2005). Social cognitive predictors of domain and life satisfaction: Exploring the theoretical precursors of subjective well-being. *Journal of Counseling Psychology, 52*(3), 429-442.
- Lodi-Smith, J.L., & Roberts, B.W. (2007). Social investment and personality: A meta-analytic analysis of the relationship of personality traits to investment in work, family, religion, and volunteerism. *Personality and Social Psychology Review, 11*, 68-86.
- Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of research design and methodology*. John Wiley & Sons, Inc.
- McIlveen, P., Brooks, S., Lichtenberg, A., Smith, M., Torjul, P., & Tyler, J. (2011). Career development learning frameworks for work-integrated learning. In S. Billett & A. Henderson (Eds.), *Developing learning professionals: Integrating experiences in university and practice settings* (pp. 149-165). Springer.
- Menard, S. (2002). *Applied logistic regression analysis* (2nd ed). SAGE Publications, Inc.
- Merriam-Webster. (n.d.). Merriam-Webster.com dictionary. Retrieved January 18, 2021, from <https://www.merriam-webster.com/>
- Mitchell, L.K., & Krumboltz, J.D. (1990). Social learning approach to career decision making: Krumboltz's theory. In D. Brown & L. Brooks (Eds.), *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 145-196). Jossey-Bass.
- Multon, K.D., Brown, S.D., & Lent, R.W. (1991). Relation of self-efficacy beliefs to academic outcomes: a meta-analytic investigation. *Journal of Counseling Psychology, 38*, 30-38.
- Murray, J. (2013). Likert data: What to use, parametric or non-parametric? *International Journal of Business and Social Science 4*(11), 258-264.
- Nabi, G.R. (2000). Motivational attributes and organizational experiences as predictors of career-enhancing strategies. *Career Development International, 5*(2), 91-98.
- Nabi, G.R. (2003). Situational characteristics and subjective career success: The mediating role of career-enhancing strategies. *International Journal of Manpower, 24*(6), 653-671.

- Nagy, N., Froidevaux, A., & Hirschi, A. (2019). Lifespan perspectives on careers and career development. In B.B. Baltes, C.W. Rudolph, & H. Zacher (Eds.), *Work Across the Lifespan* (Vol. 1, pp. 235-259). Elsevier.
- Ng, T.W.H., Eby, L.T., Sorensen, K.L., & Feldman, D.C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, *58*, 367-408.
- Ng, T.W.H., & Fieldman, D.C. (2014a). A conservation of resources perspective on career hurdles and salary attainment, *Journal of Vocational Behavior*, *85*, 156-168. <https://doi.org/10.1016/j.vb.2014.05.008>
- Ng, T.W.H., & Fieldman, D.C. (2014b). Subjective career success: A meta-analytic review. *Journal of Vocational Behavior*, *85*, 169 - 179. <https://doi.org/10.1016/j.vb.2014.06.001>
- Noe, R.A. (1996). Is career management related to employee development and performance? *Journal of Organizational Behavior*, *17*(2), 119-133.
- Nye, C.D., & Roberts, B.W. (2019). A neo-socioanalytic model of personality development. In B.B. Baltes, C.W. Rudolph & H. Zacher (Eds.), *Work across the lifespan*. (pp. 47-79). <https://doi.org/10.1016/B978-0-12-812756-8.00003-7>
- Orpen, C. (1994). The effects of organizational and individual career management on career success. *International Journal of Manpower*, *15*(1), 27-37.
- Parsons, F.A. (1909). *Choosing a vocation*. Houghton Mifflin.
- Patton, W., & McMahon, M. (2006). *Career development and systems theory: Connecting theory and practice*. Sense Publishers.
- Park, Y. (2010). The predictors of subjective career success: An empirical study of employee development in a Korean financial company.
- Pope, M. (2000). A brief history of career counseling in the United States. *Career Development Quarterly*, *48*, 194-211.
- Roberts, B.W. (2006). Personality development and organizational behavior. In B.M. Staw (Ed.), *Research on organizational behavior*. (pp. 1-41) Elsevier Science/JAI Press.
- Ronkko, M., & Cho, E. (2020). An updated guideline for assessing discriminant validity. *Organizational Research Methods*, 1-42. <https://doi.org/10.1177/1094428120968614>
- Rosenman, R., Tennekoon, V., & Hill, L. (2011). Measuring bias in self-reported data. *International Journal of Behavioral and Healthcare Research (IJBHR)*, *2*(4), 320-332. <https://doi.org/10.1504/IJBHR.2011.043414>
- Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Sage Publications.
- Rowold, J., & Staufienbiel, K. (2010). The validity of a German version of the career exploration survey. *International Journal for Educational and Vocational Guidance*, *10*, 21-34. <https://doi.org/10.1007/s10775-009-9169-9>

- Russell, J.E.A. (2001). Vocational psychology: An analysis and directions for the future. *Journal of Vocational Behavior, 58*, 226-234.
- Sadri, G., & Robertson, I.T. (1993). Self-efficacy and work-related behavior: A review and meta-analysis. *Applied Psychology: An International Review, 42*, 139-152.
- Salant, P., & Dillman, D.A. (1994). *How to conduct your own survey*. John Wiley & Sons, Inc.
- Savickas, M.L. (2012). Life design: A paradigm of career intervention in the 21st century. *Journal of Counseling and Development, 90*, 13-19.
- Savickas, M.L., & Porfeli, E.J. (2012). Career adapt-abilities scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior, 80*(3), 661-673. <https://doi.org/10.1016/J.Jvb.2012.01.011>
- Schein, E. (1965). *Organizational psychology*. Prentice-Hall.
- Schermerhorn, J.R., Hunt, J.G., & Osborn, R.N. (2008). *Organizational behavior* (10th ed.). John Wiley & Sons, Inc.
- Seibert, S.E., & Kraimer, M.L. (2001). The five-factor model of personality and career success. *Journal of Vocational Behavior, 58*, 1-21.
- Seibert, S.E., Kraimer, M.L., Crant, J.M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology, 54*(4), 845-874.
- Seibert, S.E., Kraimer, M.L., Holtom, B.C., & Pierotti, A.J. (2013). Even the best laid plans sometimes go askew: Career self-management processes, career shocks, and the decision to pursue graduate education. *Journal of Applied Psychology, 98*(1), 169-182. <https://doi.org/10.1037/a0030882>
- Sharf, R.S. (2010). *Applying career development theory to counseling* (5th ed.). Cengage.
- Shockley, K. M., Ureksoy, H., Rodopman, O.B., Poteat, L.F., & Dullaghan, T.R. (2016). Development of a new scale to measure subjective career success: A mixed-method study. *Journal of Organizational Behavior, 37*(1), 128-153. <https://doi.org/10.1002/job.2046>.
- Sills, S. J., & Song, C. (2002). Innovations in survey research. *Social Science Computer Review, 20*, 22-30.
- Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P., & Tyler, J. (2009). *Career development learning: Maximizing the contribution of work-integrated learning to the student experience*. Australian Learning & Teaching Council final project report. University of Wollongong.
- Srivastava, S., John, O.P., Gosling, S.D., & Potter, J. (2003). Development of personality in early and middle adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology, 84*, 1041-1053.

- Stebbins, R. A. (1970). Career: The subjective approach. *Sociological Quarterly*, 11, 32-49.
- Stumpf, S.A., Colarelli, S.M., & Hartman, K. (1983). Development of the career exploration survey (CES). *Journal of Vocational Behavior*, 22, 191-226.
[https://doi.org/10.1016/0001-8791\(83\)90028-3](https://doi.org/10.1016/0001-8791(83)90028-3)
- Sturges, J., Guest, D., Conway, N., & Davey, K. M. (2002). A longitudinal study of the relationship between career management and organizational commitment among graduates in the first ten years at work. *Journal of Organizational Behavior*, 23(6), 731-748.
- Sullivan, S.E. (1999). The changing nature of careers: A review and research agenda. *Journal of Management*, 25(3), 457-484. doi: <http://doi.org/101016/j.jvb.2005.09.001>
- Super, D.E. (1957). *The psychology of careers*. Harper & Row.
- Super, D.E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16, 282-298.
- Super, D.E., Thompson, A.S., Lindeman, R.H., Jordaan, J.P., & Myers, R.A. (1981). *Career development inventory*. Consulting Psychologists Press.
- Swanson, R.A., & Holton, E.F. (2009). *Foundations of human resource development* (2nd ed.). Berrett-Koehler Publishers, Inc.
- Tang, M., (2019). *Career development and counseling: Theory and practice in a multicultural world*. Sage.
- U.S. Bureau of Labor Statistics. (n.d.). *Occupational employment and wage statistics*. Retrieved April 8, 2021, from https://www.bls.gov/oes/special.requests/oes_research_2020_sec_99.xlsx
- Van Mannen, J., & Barley, S.R. (1984). Occupational communities: Culture and control in organizations. In B. Straw & L. Cummings (Eds.), *Research in organizational behavior* (pp. 287-365). JAI Press.
- Volmer, J., & Spurk, D. (2011). Protean and boundaryless career attitudes: Relationships with subjective and objective career success. *ZAF*, 43, 207-218.
<https://doi.org/10.1007/s12651-010-0037-3>
- Vroom, V.H. (1964). *Work and motivation*. Wiley.
- Warr, P. (1999). Well-being and the workplace. In D. Kahneman, E. Diener & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 392-412). Russell Sage Foundation.
- Westbrook, L., & Saperstein, A. (2015). New categories are not enough: Rethinking the measurement of sex and gender in social surveys. *Gender & Society*, 29(4), 534-560.
<https://doi.org/10.1177/0891243215584758>

- Westen, D., & Rosenthal, R. (2003). Quantifying construct validity: Two simple measures. *Journal of Personality and Social Psychology, 84*(3), 608 - 618. <https://doi.org/10.103/0022-3514.843.608>
- Wiese, B.S., Freund, A.M., & Bates, P.B. (2002). Subjective career success and emotional well-being: Longitudinal predictive power of selection, optimization and compensation. *Journal of Vocational Behavior, 60*(3), 321-335.
- Wilhelm, F., & Hirschi, A. (2019). Career self-management as a key factor for career well-being. In I.L. Potgieter, N. Ferreira & M. Coetzee (Eds), *Theory, research and dynamics of career wellbeing: Becoming fit for the future* (pp. 117-137). Springer. https://doi.org/10.1007/978-3-030-28180-9_1
- Wolff, H.G., & Moser, K. (2009). Effects of networking on career success: A longitudinal study. *Journal of Applied Psychology, 94*, 196-206. <https://doi.org/10.1037/a0013350>

Appendix A

Career Resources Questionnaire

Please select the answer that most closely reflects your opinion of the statement based on the scale of 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree.

1.	Others see me as an expert in my occupation.	1	2	3	4	5
2.	I possess profound knowledge in my occupation.	1	2	3	4	5
3.	I have a very high level of expertise and skill in my occupation.	1	2	3	4	5
4.	I have a good knowledge of the job market.	1	2	3	4	5
5.	I have a lot of knowledge about the current labor market.	1	2	3	4	5
6.	I have a good overview of employment trends in the labor market.	1	2	3	4	5
7.	I have many skills that I could use in a range of different occupations.	1	2	3	4	5
8.	I possess many competencies that are also helpful in various other occupations.	1	2	3	4	5
9.	Besides pure expert knowledge, I possess many skills and competencies that are important in different jobs.	1	2	3	4	5
10.	My organization offers interesting career opportunities for me.	1	2	3	4	5
11.	My organization holds many interesting positions for my future career.	1	2	3	4	5
12.	My current employer offers interesting career advancement opportunities for me.	1	2	3	4	5
13.	My organization actively supports my career development.	1	2	3	4	5
14.	My current employer supports my intended career.	1	2	3	4	5
15.	I feel fully supported in my career development by my current employer.	1	2	3	4	5
16.	My work allows me to fully utilize my professional skills.	1	2	3	4	5

17.	My current job fully challenges my skills.	1	2	3	4	5
18.	I know many people who support me in my career development.	1	2	3	4	5
19.	My friends support me in my career development.	1	2	3	4	5
20.	I receive a high level of career support from my social environment.	1	2	3	4	5
21.	My co-workers support me in my career development.	1	2	3	4	5
22.	My work is a central part of my identity.	1	2	3	4	5
23.	Work is an essential part of my life.	1	2	3	4	5
24.	I feel strongly attached to my work.	1	2	3	4	5
25.	I am capable of successfully managing my career.	1	2	3	4	5
26.	When I set goals for my career, I am confident that I can achieve them.	1	2	3	4	5
27.	I believe that I can successfully manage career-related challenges.	1	2	3	4	5
28.	I can successfully develop my career.	1	2	3	4	5
29.	I have a clear understanding of what I want to achieve in my career.	1	2	3	4	5
30.	I have clear career goals that reflect my personal interests and values.	1	2	3	4	5
31.	I have clear career goals.	1	2	3	4	5
32.	I always try to be connected in my professional field.	1	2	3	4	5
33.	I frequently build contacts with other people who are important for my career development.	1	2	3	4	5
34.	I frequently utilize contacts with other people to advance in my career.	1	2	3	4	5
35.	I regularly collect information about career opportunities.	1	2	3	4	5
36.	I constantly stay up-to-date about employment opportunities in the labor market.	1	2	3	4	5

- | | | | | | | |
|-----|--|---|---|---|---|---|
| 37. | I regularly stay up-to-date about possible job opportunities. | 1 | 2 | 3 | 4 | 5 |
| 38. | I use every opportunity to expand my professional knowledge. | 1 | 2 | 3 | 4 | 5 |
| 39. | I continuously develop my work-related abilities. | 1 | 2 | 3 | 4 | 5 |
| 40. | I make sure that my work-related abilities and knowledge are up-to-date. | 1 | 2 | 3 | 4 | 5 |

Appendix B

Career Engagement Scale

Please select the answer that most closely reflects your opinion of the statement based on the scale of 1 = Almost never, 3 = Neutral, 5 = Very often.

To what extent have you in the past 6 months...

1.	Actively sought to design your professional future	1	2	3	4	5
2.	Undertook things to achieve your career goals	1	2	3	4	5
3.	Cared for the development of your career	1	2	3	4	5
4.	Developed plans and goals for your future career	1	2	3	4	5
5.	Sincerely thought about personal values, interests, abilities, and weaknesses	1	2	3	4	5
6.	Collected information about employers, professional development opportunities, or the job market in your desired area	1	2	3	4	5
7.	Established or maintained contacts with people who can help you professionally	1	2	3	4	5
8.	Voluntarily participated in further education, training, or other events to support your career	1	2	3	4	5
9.	Assumed duties or positions that will help you progress professionally	1	2	3	4	5

Appendix C

Career Success Survey

Thank you for participating in the following survey! Your opinions are greatly valued. While you are not required to answer every question, please remember that your answers are completely confidential. Please closely consider the following statements and questions and intuitively select the answer that most closely resembles your opinion.

1. Employed with:

Government Agency _____

Private Sector Employee _____

2. Age

18 - 25 years _____

26 - 40 years _____

41 - 60 years _____

+60 years _____

3. Educational Background (Select the highest level completed)

Less than high school

High School, GED, or equivalent

Some education past high school but no degree or certifications

Postsecondary Certification

Associate Degree

Bachelor's Degree

Master's Degree

Doctoral or Professional Degree

4. Gender

Male

Female

Other

Appendix D

Career Resource Questions and Cronbach's Corresponding Average Alpha Levels

CRQ Factor	Question	Average Cronbach's Alpha
Occupational Expertise	1. Others see me as an expert in my occupation.	0.83
	2. I possess profound knowledge in my occupation.	
	3. I have a very high level of expertise and skill in my occupation.	
Job Market Knowledge	1. I have a good knowledge of the job market.	0.91
	2. I have a lot of knowledge about the current labor market.	
	3. I have a good overview of employment trends in the labor market.	
Soft Skills	1. I have many skills that I could use in a range of different occupations.	0.85
	2. I possess many competencies that are also helpful in various other occupations.	
	3. Besides pure expert knowledge, I possess many skills and competencies that are important in different jobs.	
Career Opportunities	1. My organization offers interesting career opportunities for me.	0.94
	2. My organization holds many interesting positions for my future career.	
	3. My current employer offers interesting career advancement opportunities for me.	
Organizational Career Support	1. My organization actively supports my career development.	0.90
	2. My current employer supports my intended career.	
	3. I feel fully supported in my career development by my current employer.	
Job Challenge	1. My work allows me to fully utilize my professional skills.	0.86
	2. My current job fully challenges my skills.	
Social Career Support	1. I know many people who support me in my career development.	0.87
	2. My friends support me in my career development.	
	3. I receive a high level of career support from my social environment.	
	4. My co-workers support me in my career development.	
Career Involvement	1. My work is a central part of my identity.	0.87
	2. Work is an essential part of my life.	
	3. I feel strongly attached to my work.	
Career Confidence	1. I am capable of successfully managing my career.	0.90
	2. When I set goals for my career, I am confident that I can achieve them.	
	3. I believe that I can successfully manage career-related challenges.	
	4. I can successfully develop my career.	
Career Clarity	1. I have a clear understanding of what I want to achieve in my career.	0.90

	2. I have clear career goals that reflect my personal interests and values.	
	3. I have clear career goals.	
Networking	1. I always try to be connected in my professional field.	0.89
	2. I frequently build contacts with other people who are important for my career development.	
	3. I frequently utilize contacts with other people to advance in my career.	
Career Exploration	1. I regularly collect information about career opportunities.	0.90
	2. I constantly stay up-to-date about employment opportunities in the labor market.	
	3. I regularly stay up-to-date about possible job opportunities.	
Learning	1. I use every opportunity to expand my professional knowledge.	0.88
	2. I continuously develop my work-related abilities	
	3. I make sure that my work-related abilities and knowledge are up-to-date.	

Appendix E

INFORMED CONSENT DOCUMENT

Project Title:

An Investigation of Tax Assessors' Perception of the Relationship Between Proactive Career Management Behaviors (PCMBs) and Career Success: Determining the most Valuable Career Management Behaviors

Researcher:

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Purpose:

The purpose of the study is to determine the relationship between proactive career management behaviors and career success for individuals working in the tax assessing industry. You are being asked to participate due to being an employee in the tax assessing field. The goal of the study is to understand your perceptions about your proactive career management behaviors and how they contribute to your career success.

Procedures:

Because you are a property tax professional, you are invited to participate in two separate survey questionnaires. The first questionnaire should take approximately 10 minutes to complete. You will receive the second questionnaire approximately three weeks after completing the first questionnaire and it will take approximately 20 minutes to complete.

Risks of Participation:

There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

Benefits:

No direct benefits are associated with this research. However, results may be used for further research.

Confidentiality:

The survey will not be linked to your name or email to protect your identity and maintain confidentiality. The responses and their analysis will only be used for research purposes.

The data will be kept for a minimum of 1 year. There are no foreseeable risks in maintaining confidentiality. All data obtained from participants will be kept confidential to the fullest extent of the law and University of Arkansas policy.

Compensation:

No compensation will be offered for participation in this study.

Contacts:

For questions about this research, you may contact the following persons:

For questions about this study, contact Daniel K. Berry, 11 North 3rd St., Suite G., Van Buren, AR 72956, Tel. (479) 409-7875, Email dkb002@uark.edu dberry@arcamatech.com.

For concerns about this study, contact Dr. Claretha Hughes, Professor of Human Resource and Workforce Development Education, Department of Rehabilitation, Human Resources, and Communication Disorders, College of Education and Health Professions, 133B Graduate Education Building, University of Arkansas, Fayetteville, AR 72701, Tel 479-575-2047. Email chbanks@uark.edu.

For information on subjects' rights, contact Ro Windwalker, Compliance Coordinator, 109 MLKG Building, University of Arkansas, Fayetteville, AR 72701, Tel. 479-575-2208, Email irb@uark.edu.

Participant Rights:

As a participant in this research, you are entitled to know the nature of my research. You are free to decline to participate, and you are free to stop the survey or withdraw from the study at any time. No penalty or risks are associated with withdrawing your participation. Feel free to ask any questions at any time about the nature of the research activity and the methods being used. At the conclusion of the study, you may request a summary of the results.

Participant Consent:

I have read the above statement and I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand I can print or download a copy of this consent form for my records if I choose. I understand that by completing this survey, I am giving my consent for my responses to be used in this research.

Appendix F

Introductory Email 1

Fellow Tax Assessors,

I am looking for your help to answer a survey about your career success. My name is Daniel Berry, CAE. I am a State and National IAAO member and have worked in the tax assessment field for 25 years with a private contractor. I am also a student at the University of Arkansas working on a research study for my dissertation as partial fulfillment of a doctorate degree in Human Resource and Workforce Development Education.

The name of the study is called *An Investigation of Tax Assessors' Perception of the Relationship Between Proactive Career Management Behaviors (PCMBs) and Career Success: Determining the most Valuable Career Management Behaviors.*

The purpose of the study is to determine the relationship between four proactive career management behaviors of individuals in the ad valorem industry and their perceptions of career success. These career management behaviors include individual career planning, career self-exploration, environment career exploration, and voluntary human capital development. The goal is that if individuals understand this relationship, they can better plan and develop their careers. Additionally, if organizations understand the relationship, they can better assist individuals with career planning and development for the benefit of the individual and the organization.

As a fellow member of the ad valorem industry, I am asking for your help with this study. You will receive the first survey by email in approximately a week. It will have a total of 13 questions and should take about 10 minutes to complete. The second survey will be distributed approximately three weeks later, contains 44 questions, and will take approximately 20 minutes to complete. Additionally, once you start the survey, you will have the option to quit at any time and may contact me or my advisor if you have any questions.

If you have any questions before starting the survey, please feel free to contact me.

Daniel K. Berry, CAE, MBA, Ed.D. Candidate, Appraisal Manager, Certified in Arkansas, Louisiana, Oklahoma
Appraisal Director, NWA Commercial Director, SPSS Ratio Study Director

11 North 3rd St., Suite G.
Van Buren, AR 72956
Phone: (479) 474-6600 X 401
Fax: (479) 474-6606

Appendix G

Introductory Email 2

Fellow Tax Assessors,

I am looking for your help to answer a survey about your career success. My name is Daniel Berry, CAE. I am a State and National IAAO member and have worked in the tax assessment field for 25 years with a private contractor. I am also a student at the University of Arkansas working on a research study for my dissertation as partial fulfillment of a doctorate degree in Human Resource and Workforce Development Education.

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As a fellow member of the ad valorem industry, I am asking for your help with this study. The survey has a total of 13 questions and should take about 10 minutes to complete. The link is provided below. Additionally, once you start the survey, you will have the option to quit at any time and may contact me or my advisor if you have any questions.

Please click on the link below to start the survey. If you have any questions before starting the survey, please feel free to contact me.

Daniel K. Berry, CAE, MBA, Ed.D. Candidate, Appraisal Manager, Certified in Arkansas, Louisiana, Oklahoma
Appraisal Director, NWA Commercial Director, SPSS Ratio Study Director

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Appendix H

Introductory Email 3

Fellow Tax Assessors,

I am following up on a previous email looking for your help to answer a survey about your career success. My name is Daniel Berry, CAE. I am a State and National IAAO member and have worked in the tax assessment field for 25 years with a private contractor. I am also a student at the University of Arkansas working on a research study for my dissertation as partial fulfillment of a doctorate degree in Human Resource and Workforce Development Education.

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As a fellow member of the ad valorem industry, I am asking for your help with this study. You will receive the first survey by email in approximately a week. It will have a total of 13 questions and should take about 10 minutes to complete. Additionally, once you start the survey, you will have the option to quit at any time and may contact me or my advisor if you have any questions.

Please click on the link below to start the survey. This survey opportunity will close in one week. If you have any questions before starting the survey, please feel free to contact me.

Daniel K. Berry, CAE, MBA, Ed.D. Candidate, Appraisal Manager, Certified in Arkansas, Louisiana, Oklahoma
Appraisal Director, NWA Commercial Director, SPSS Ratio Study Director

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Appendix I

Introductory Email 4

Fellow Tax Assessors,

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As a fellow member of the ad valorem industry, I am asking for your help with this study. You will receive a survey by email in approximately a week. It will contain 44 questions and will take approximately 20 minutes to complete. Additionally, once you start the survey, you will have the option to quit at any time and may contact me or my advisor if you have any questions.

If you have any questions before starting the survey, please feel free to contact me.

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Appendix J

Introductory Email 5

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As a fellow member of the ad valorem industry, I am asking for your help with this study. The survey contains 44 questions and will take approximately 20 minutes to complete. Additionally, once you start the survey, you will have the option to quit at any time and may contact me or my advisor if you have any questions.

Please click on the link below to start the survey. If you have any questions before starting the survey, please feel free to contact me.

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Appraisal Director, NWA Commercial Director, SPSS Ratio Study Director

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Appendix K

Introductory Email 6

Fellow Tax Assessors,

I am following up on a previous email looking for your help to answer a survey about your career success. My name is Daniel Berry, CAE. I am a State and National IAAO member and have worked in the tax assessment field for 25 years with a private contractor. I am also a student at the University of Arkansas working on a research study for my dissertation as partial fulfillment of a doctorate degree in Human Resource and Workforce Development Education.

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As a fellow member of the ad valorem industry, I am asking for your help with this study. The survey contains 44 questions and will take approximately 20 minutes to complete. Additionally, once you start the survey, you will have the option to quit at any time and may contact me or my advisor if you have any questions.

Please click on the link below to start the survey. This survey opportunity will close in one week. If you have any questions before starting the survey, please feel free to contact me.

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Appendix L

Institutional Review Board Approval Letter



To: Daniel Keith Berry
From: Justin R Chimka, Chair
IRB Expedited Review
Date: 12/20/2021
Action: **Exemption Granted**
Action Date: 12/20/2021
Protocol #: 2110367423
Study Title: An Investigation of Tax Assessors' Perception of the Relationship Between Proactive Career Management Behaviors (PCMBs) and Career Success: Determining the most Valuable Career Management Behaviors

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Claretha Hughes, Investigator