*Federation of Business Disciplines Journal*

Volume 12, 2022 30-44

**MODIFICATIONS TO CAREER THEORY MODELS AS APPLIED TO THE FIELD OF ACCOUNTING**

**Brian Lee Johnson**

*George Fox University*

Newberg, OR 97132

USA

**ABSTRACT**

In this paper, I examine John Holland’s theory of vocational choice as it applies to the field of accounting. I propose modifications to Holland’s career theory model and other models based on his theory in order to improve their usefulness. Specifically, I propose expansion of these models to include job seniority within professional accounting careers. With this change, these models may be used for career progression, making them more transitionary in nature. Additionally, I propose that *routes* be added to the models to better demonstrate how accountants must modify their personalities throughout their careers, focusing on how environmental influences affect an accountant’s personality. I suggest that accountants normally follow a certain primary personality type route while avoiding other primary personality type categories. I will end with a discussion on how this paper contributes to the knowledge outstanding on this topic and the future research that could stem from this writing.

**Keywords**: accounting, career theory, personality type, personality development

**INTRODUCTION**

John Holland’s theory of vocational choice has significantly influenced the psychology of career counseling (Nauta, 2010). (Nauta 2013)Specifically, his career theory model, based on this theory (hereafter referred to as Holland’s model), is best used to assist individuals in their career selection process by matching them to their work environments based on their personality (Nauta, 2013). When it comes to personalities, accountants have historically been categorized as primarily conventional in nature (Chen et al., 2012). This categorization may be true for entry-level accountants; however, I suggest that an accountant’s primary personality type should change as they progress in their career. As one author jokingly exclaimed, it is somewhat misleading to presume that “once paired, people and environments will remain static and happily married until retirement do them part” (Lent, 2013, p. 4).

Many professional accountants start their careers as staff accountants and progress through an organization to obtain a more senior-level job. As these individuals advance, they are expected to exhibit certain personality types to better fit their roles. These expectations may come from different sources, including peers, supervisors, and clients. As accountants’ personality types must evolve as they progress throughout their career, Holland’s model and other models based on his theory should include personality categories of different seniority levels within the field of accounting. Employees and employers can use this new information to determine what qualities should be possessed at each seniority level.

This modification transforms these models from being somewhat stationary to transitionary in nature. They may then be used not only by those who are starting out in or changing careers to accounting, but also by accountants who are already in the workforce and are looking to advance in their careers. Additionally, these models may then be modified to show how individuals should follow a certain *route* through the models as they advance in their careers. In Holland’s model, accountants would follow the conventional-enterprising-social primary personality type route, while avoiding the artistic, realistic, and investigative primary personality type categories. Using this transitory version of Holland’s model to determine mandatory personality changes for accountants throughout their careers is a new way of using his model. Before we dive into this new way of using this model, we must first fully understand the history behind the model, how it is currently used and where accountants currently fall within it.

# **LITERATURE REVIEW**

Holland originated his career theory in 1959 in an article titled *A Theory of Vocational Choice* (Holland, 1959; Nauta, 2010, 2013). Nauta (2013) noted that Holland wanted to create a model for career selection purposes that would be easy for career counselors to use, but still be detailed and explanatory in nature. Holland made multiple adjustments to his model throughout his lifetime (Nauta, 2010), with the latest version of his model included in *Making vocational choices: A theory of vocational personalities and work environments (3rd ed.)* (Holland, 1997; Nauta, 2010). In his original writing on his theory, Holland (1959) distinguished between multiple *Occupational Environments* (p. 35). These environments included the following: motoric, intellectual, supportive, conforming, persuasive, and esthetic(pp. 35-36). Holland did not refer to professional accountants in his original writing on his theory, but bookkeepers were referenced and included in the conforming environment (Chen et al., 2012; Holland, 1959).

In a subsequent writing, Holland (1962) replaced the occupational environments with personality types by declaring that “six personality types have been identified: Realistic, Intellectual, Social, Conventional, Enterprising, and Artistic” (p. 1). With this update, Holland’s original conforming category was changed to conventional, and the persuasive category was changed to enterprising, along with other category name changes (Holland, 1962). Intellectual was subsequently changed to investigativein a later writing(Nauta, 2010). Holland’s model is popularly known by the acronym RIASEC, which is based on the first letters of the personality types identified (Nauta, 2010, 2013). The RIASEC personality types were placed in a hexagonal shape on a visual representation of the model, and those types that were close to one another on the hexagon were most alike in nature, while those opposite one another were least alike (Nauta, 2013).

Holland’s model is commonly used by career counselors to establish an individual’s primary, secondary, and tertiary RIASEC personality types, which are normally indicated by a three-letter code (e.g., CES) termed the *Holland Code* (Nauta, 2010, 2013). Work environments are also assigned RIASEC types (Nauta, 2013), and most environments are given a three-letter Holland Code, as listed in the *Dictionary of Holland Occupational Codes* and online at O\*Net (Holland & Gottfredson, 1996; National Center for O\*NET Development, n.d.-b). These codes are based on the type of work done in an environment or the typical personality types of individuals who work in that environment (Nauta, 2013). The Holland Code of an individual is compared to work environments that share the same or similar Holland Codes to determine which career may be best for that individual (Nauta, 2013).

Holland’s model is not limited to career counseling alone. For instance, Saadullah et al. (2017) studied college accounting students to determine their RIASEC personality categories. The authors then analyzed whether these students performed well in specific accounting classes (e.g., audit, financial, and managerial) related to their personality categories. Another study reviewed how college students perceive different jobs, the stabilities of those perceptions over time, and whether the structure of those perceptions aligned with Holland’s model (Shivy et al., 1999). These examples demonstrate that Holland’s model is versatile and can be used in ways other than its primary purpose.

Also, modifications have been proposed for Holland’s model over time. Prediger (1976) modified Holland’s model to include the dimensions of *data, ideas, people,* and *things* (p. 202). Data and ideas were opposite dimensions from one another, as were people and things (Prediger, 1976). Data included working with facts and numbers in an impersonal manner (Prediger, 1976), and accounting work was within this dimension (Prediger & Vansickle, 1992). Ideas involved expressing something in a novel way, people involved working with other individuals, and things involved working with tools and equipment (Prediger, 1976). Another researcher proposed a hierarchical setup for Holland’s model instead of the original hexagonal shape (Gati, 1991). Tracey and Rounds (1995) modified Holland’s model to include concentric circles. These modifications show how important Holland’s model is for career theory in general, as Holland’s model was a jumping off point for these researchers.

Holland’s model is not without issues, even in the field of accounting. The Holland Codes listed in the *Dictionary of Holland Occupational Codes* for accounting careers include those for accountant, accounting clerk, auditor, audit clerk, bookkeeper, tax accountant, and tax preparer, among others (Holland & Gottfredson, 1996). Those listed online at O\*Net include accountant and auditors; bookkeeping, accounting, and auditing clerks; and tax preparers (National Center for O\*NET Development, n.d.-d). Although these listings capture a broad range of accounting careers, they are not all classified in detail by seniority level. Regarding these careers, the only supervisory levels noted were accounting clerks supervisors and audit clerks supervisors (Holland & Gottfredson, 1996, p. 588). These supervisory positions are considered clerical and nonprofessional in nature and are excluded from the focus of this paper.

Additionally, based on the literature reviewed, there seems to be confusion about which Holland Codes those careers within the subcategories of accounting should entail. For instance, in the *Dictionary of Holland Occupational Codes*, accountants were classified as CSI and auditors as EIS when comparing the Dictionary of Occupational Titles (DOT) occupations to Holland Codes (Holland & Gottfredson, 1996, pp. 363, 372). In the same literature, *accountants and auditors* were classified as CEI when comparing Occupational Employment Statistics (OES) Occupations to Holland Codes (p. 632). CEI remains the same code for *accountants and auditors* as currently listed on O\*Net (National Center for O\*NET Development, n.d.-a). Aranya et al. (1981) discussed the confusion surrounding which specific RIASEC types apply to accountants. From their literature review, they determined that “five (i.e., RISEC) out of the six letters have been found to describe them [accountants]” (p. 16).

Furthermore, in the research of Chen et al. (2012), the authors set out to see if Holland’s model perpetuated a stereotype that all accountants fit within the conventional personality type. The authors opined that Holland’s data and model were not comprehensive enough regarding professional accountants, and that Holland’s model may perpetuate a *Beancounter-Bookkeeper* stereotype of accountants (Chen et al., 2012, p. 370). With this in mind, one can see that further modifications may be warranted regarding Holland’s model and those models based upon his theory when it comes to accountants and accounting careers.

# **PROPOSED MODIFICATIONS TO CAREER THEORY MODELS**

As previously stated, Holland’s model is useful when selecting a career (Nauta, 2013). One may ask: If Holland’s model and those based on his theory are useful for career selection purposes, can they also be modified to be used for career progression purposes? I propose that the answer to this question is yes; these models can be altered so that more individuals benefit from using them throughout their careers. To modify these models, transitionary elements of career development must be considered. It is understood that with Holland’s model, his original intent was for the model to not be too complicated so that it would be easy to use (Nauta, 2013). However, I suggest that complications are necessary to expand the use of these models. One complication is the incorporation of the seniority levels of various professional accounting careers into the models.

This is comparable to and somewhat builds upon what Feldman and Arnold (1985) discussed in their research paper. The authors stated that Holland’s original description of *accountant* is very broad in nature, and that “there is sometimes as much variance in work experiences *within* a profession as *between* professions” (p. 205). The authors discussed how it was necessary to further include different jobs within accounting in Holland’s model to apply personality types to those jobs. As noted in the literature review section of this paper, different accounting jobs have now been somewhat classified within the *Dictionary of Holland Occupational Codes* and online at O\*Net (Holland & Gottfredson, 1996; National Center for O\*NET Development, n.d.-d). As Feldman and Arnold (1985) focused on classifying the different types of jobs within accounting, the focus of this paper is on the requirement of the addition of seniority levels for professional accounting careers in Holland’s model. If there is no detail in a model of what personality type the next level of a career requires, then one has nothing to use to determine what qualities they should possess as they advance through their career.

## **Seniority Level Attributes**

Research has shown that different career seniority levels require different personality attributes. For example, in a study using the Myers-Briggs model, Briggs et al. (2007) observed a difference between the personality attributes of accounting students and managers tested. It is noted that the managers were not specifically accounting managers. Their results showed there was a much higher percentage of intuitive managers compared to the percentage of intuitive accounting students. The authors determined that because of this difference, the accounting students did not possess all the qualities required to be successful managers someday. This study showed that there was a gap between the personality attributes possessed by the students (who were to potentially become new accountants) and what was expected of them if they were to become managers.

Another interesting study reviewed accounting career advertisements to show that different skills are required for different seniority levels. Tan and Laswad (2018) compared the skills required for experienced and inexperienced accounting jobs in a sample of advertisements. The authors determined that the experienced accounting jobs required the CA (Chartered Accountant) or CPA (Certified Public Accountant) designations. Experienced job advertisements required more interpersonal skills, whereas non-experienced job advertisements required more routine, intellectual, and personal skills. For clarification purposes, the authors defined personal skills as controlling oneself in difficult and evolving situations. The summation of this research leads to the following propositions:

*Proposition 1a: If Holland’s career theory model and other models based on his theory are to be used as tools for making accounting career choices, then the seniority levels of accounting careers should also be included in the models, as different levels of seniority require different personality types.*

*Proposition 1b: If these career theory models are modified to include seniority levels of accounting careers, then the models will change from being somewhat stationary to transitionary in nature.*

*Proposition 1c: If these career theory models become transitionary in nature, then they may now be used for accounting career progression purposes.*

## **Personality Development**

Holland’s model determines the personality of an individual (the proverbial horse) and matches the individual to careers that align with their personality (the cart). Additional questions to ask are: Why can the cart not come before the horse? Can the personality requirements of careers be determined first, and can individuals then modify their personalities to align themselves with those requirements? As stated in the first set of propositions, each specific seniority level of an accountant (e.g., staff accountant, senior accountant, manager, and partner) should be included in the models. For Holland’s model, these career levels need to be assigned specific Holland Codes.

This idea of shifting personalities is similar to the discussion by Feldman and Arnold (1985). In their research, they opined that accountants who are already in the workforce with *theory-inconsistent* personalities (codes R, I, and A) for their career may modify their “self-perceptions and behaviors to be more like perceptions and behaviors of other people in the occupation” (p. 204). The authors focused on the shifts that can occur with accountants so that they may better align themselves with their coworkers and occupations as a whole. Conversely, I suggest that accountants shift their personality types as they progress throughout their careers.

To align themselves with a new level of seniority, one would need to change their personality type (Holland Code), and this change should occur gradually. An accountant would still keep the same three letters of a Holland Code (for instance, C, E, and S); however, the order of the letters would need to change for the individual to successfully adapt to their new position (for instance, CES to ECS or ECS to SEC). One would not lose the personality type that they are shifting away from; the type would become secondary or tertiary in nature.

This idea contradicts the view of Holland (1997) who believed that an individual’s personality remains fairly consistent over time. He felt that environments are the ones that usually change, not personalities, and even if one was to change their personality, that change would not last for a long period of time. I argue that one remains consistent in their top three Holland Codes, but the order of these codes should change throughout one’s career. The belief that the Holland Code of a senior audit partner is the same as that of an audit staff accountant is not considered realistic. The two may share the same Holland Code letters, but not essentially in the same order. In order to determine if one’s Holland Codes can be reordered, we must turn to the research that is available on personality development.

### ***Personality Development Research***

To understand personality development research, one must first understand the general structure of personality research. Psychology normally splits personality research into two focuses: the study of personality types and personality traits (Hutteman & Van Aken, 2016). “A variable-centered tradition… examines personality traits, and a person-centered approach … examines personality types” (p. 703). The Big Five traits are an example of personality traits. The *Dictionary of Psychology* (Corsini, 2001) defined a personality trait as “a relatively stable and consistent behavior pattern which is considered to be a characteristic component of an individual’s personality” (p. 713). Although Holland’s model and those based on his theory involve personality types, many personality studies have focused on personality traits. Therefore, it may be helpful to review the research on personality traits when discussing the development of one’s personality as a whole.

Furthermore, we must also determine whether it is possible for one’s personality to change throughout one’s lifetime. Can a core part of who we are change as we age? If so, do these changes occur only at certain points in our lives? Or as William James stated, “It is well for the world that in most of us, by the age of thirty, the character has set like plaster, and will never soften again” (James, 2017, p. 144).

Research on personality traits shows that our personality can and does change throughout our lifetime and that it is not completely set at any age. Roberts and Mroczek (2008) pointed to studies that showed that personality traits change throughout an individual’s life in multiple ways. They discussed how there can be *mean level* changes as well as *individual differences in change* in personality traits (p. 31). Mean level changes are changes in personality at the macro level for the entire population of individuals, while individual changes are at a micro level and refer to how some people may change more or less compared to the mean level change of their population.

Moreover, many studies have shown that personality changes occur in individuals at different stages of their lives. Roberts et al. (2003) demonstrated personality trait changes in younger workers aged 18 to 26 years. Srivastava et al. (2003) determined that personality traits are not set by the age of 30 years and can gradually change throughout one’s lifetime. The individuals tested by Lucas and Donnellan (2011) showed increasing stability of the Big Five traits throughout adolescence and adulthood, with a decline in stability in those who were elderly. According to Schwaba and Bleidorn (2019), personality traits can change because of retirement in older individuals. One set of authors summed it up nicely by concluding that “their relatively stable nature notwithstanding, personality traits can and do change throughout the life span” (Bleidorn et al., 2019, p. 1060). Overall, the culmination of this research supports the idea that one’s personality is malleable throughout one’s life.

The next question to ask is: How does one’s personality change? The traditional approach to understanding how stable and flexible one’s personality can be is to analyze either genetic or environmental influences on that individual (Wagner et al., 2020). Dweck (2008) presented an insightful example of how one’s genetics and environment can both influence one’s personality. The author provided multiple examples of identical twins that were separated at birth and reunited later in life. Curiously, one set of twins shared multiple interests and scored alike in some aspects of a personality test. Another set of twins wore comparable clothing and had similar mannerisms. Examples such as these bolster the belief that personality is influenced mostly by genetics. However, the author pointed to research that suggested that this may not be entirely accurate. “Studies of twins often highlight (a) specific preferences and habits and (b) broad traits of personality and temperament… however, they often neglect the levels in between, and yet these are arguably the most important part of who we are” Dweck (2008, p. 391). Hence, even though genetics have been shown to influence one’s personality, environmental influences may also impact the personality of an individual and will be the focus of this paper.

### ***Environmental Effects on Personality***

Multiple types of environmental influences can produce changes in an individual’s personality. First, Bleidorn et al. (2018) discussed how certain life events can cause personality changes. When an individual starts working for the first time, they now have behaviors that they must fulfill to meet the requirements of their new job. These requirements include arriving at work on time, completing various tasks in a timely manner, among others. This may be something that the individual has not had to do before, and this change may lead to a personality trait change for the individual (in this case, an increase in conscientiousness). Interestingly, the authors opined that some personality changes may occur because of promotions (e.g. to management positions), but further research needs to be conducted to support this conclusion.

Second, personality traits of different work environments can lead to changes in personality. Wagner et al. (2020) discussed how individuals choose workplaces and careers due to their personalities and can subsequently “alter their behavioral styles to better fit into those environments (e.g., by becoming more reliable and organized in the workplace)” (Wagner et al., 2020, p. 439). Roberts et al. (2003) showed that an individual’s personality traits helped determine the type of work that individual would do over the period of the authors’ testing (from ages 18 to 26). Moreover, the work that was performed helped to determine what type of personality trait changes these individuals had. This study showed a somewhat circular relationship between personality and work experiences. Work experiences can influence personality, and personality can influence work experiences.

 Third, the degree to which one is committed to work may have an effect on any personality changes that one may go through. Hudson et al. (2012) focused on the link between *social investment* and changes in personality traits. Social investment is defined as “the act of cognitively and emotionally committing to one’s job” (p. 334). According to the authors, when one truly commits to their employment and work roles, they are socially invested in their workplace. The authors’ study indicated that changes in various personality traits were positively associated with changes in social investment at work. In addition, the authors opined that “personality traits remain malleable across the lifespan” (p. 334) based on their observation that the personality changes they observed did not change based on the different age groups that they observed.

Lastly, Bleidorn et al. (2019) stated that an *intervention* of some type can lead to modification of personality traits. Although the *intervention* focus of the authors was on the effects of psychotherapy, the authors mentioned other studies that used training-type programs for intervention purposes. Overall, one can see that there are multiple types of environmental influences that can produce personality changes in an individual.

### ***Personality Development of Accountants***

Consequently, the aforementioned research may be applied to the idea of personality changes in accountants as they advance in their careers. That which is required of an accountant due to a change in career seniority may be viewed as a life event in line with Bleidorn et al. (2018), an accountant aligning themselves with the various personality traits of a new seniority-level work environment agrees with that of Wagner et al. (2020), and the fact that an accountant’s work experiences and personality traits influence one another with Roberts et al. (2003). If accountants are socially invested in their work, their personality traits may adjust as they progress in their careers, as discussed by Hudson et al. (2012). In addition, when considered in the context of accountants’ careers, an intervention (Bleidorn et al., 2019) may be personality training that an accountant takes as part of their career advancement.

Moreover, it is noted that in Holland’s original writings on his theory, Holland (1959) may have unknowingly suggested a natural progression of an accountant’s personality throughout their career. Holland (1959) applied the conventional category to lower-level accounting careers (e.g., bookkeepers) and the enterprising category (formerly persuasive (Holland, 1962)) to higher-level careers (e.g., business executives). It is unclear whether Holland’s original definition of business executives included upper-level accountants. However, many accountants have historically worked in executive positions, so this may be accurate. If one were to progress from a lower-level career to an executive-level career, their primary personality type may need to shift as well. Therefore, it seems that a natural accounting career progression may have been alluded to in Holland’s model from the offset. With this in mind, the following proposal is made:

*Proposition 2: If accountants progress in their careers, then they must modify their primary personality type to correspond with the primary personality type requirements of each level of seniority obtained.*

## **Proposed Routes through the Models**

Because of the aforementioned personality progression, I propose that Holland’s model and those models based on his theory should be updated to include accounting career *routes*. It should be noted that some professional accounting careers may not belong on a route. This is because these careers may not be part of the typical progression that one takes in an accounting organization. For example, an individual may work in public accounting until they are a senior associate, and then transition into teaching to become an accounting professor. An internal auditor may work at a smaller institution and there may not be much room for advancement for that individual; therefore, their job may be stagnant in nature. With these exceptions in mind, it is assumed that many accounting careers follow a standard career path and will be the focus of this paper henceforth.

For example, one may start as an audit or tax staff accountant at a public accounting firm, then become a senior accountant, manager, and eventually a partner (American Institute of CPAs, n.d.-b). A similar advancement could occur for individuals in corporate accounting but with different job titles and duties. One may advance from being a staff accountant to a senior accountant, assistant controller, controller, and chief financial officer of an entity (American Institute of CPAs, n.d.-a). It should be noted that these examples are not exhaustive; they are provided only to demonstrate the method involved. In both of these scenarios, the individual would transition their primary personality type from conventional (staff accountant) to enterprising (senior, manager, assistant controller, controller) to social (partner, chief financial officer) along the route.

## **Routes of Accountants**

 Cewińska et al. (2017) noted in their survey of upper-level accounting majors that the leading primary personality type of the students tested was conventional, followed by enterprising and then social. Aranya et al. (1981) surveyed CPAs and CAs to determine their primary personality types. The authors arrived at a similar conclusion in that the leading primary personality type of the individuals surveyed was conventional, followed by enterprising and social. Feldman and Arnold (1985) surveyed CAs and found the same primary code order for the individuals that they surveyed. From this evidence, it can be understood that most accountants possess some combination of the letters C, E, and S as their primary, secondary, and tertiary Holland Codes.

### ***Start at Conventional***

Many employees who work in lower-level accounting careers are expected to possess conventional personality type qualities. According to the American Counseling Association (2015), conventional personality types are not natural leaders, prefer rules and structure, and want complete instructions for every assignment they are given. Furthermore, a website that uses the RIASEC model noted that jobs that are conventional in nature involve data manipulation (National Center for O\*NET Development, n.d.-c). Entry-level tax and audit staff positions are considered conventional in nature. These individuals do not have much freedom in their decision-making at work. Their days are mostly structured, and they usually have a senior or manager in charge of them who provides them with their duties for that day. If there are difficult or gray areas to a tax return or audit procedure, those individuals will most of the time defer to their senior or manager for an answer. Overall, one can see that lower-level accounting careers are primarily conventional in nature.

### ***Travel through Enterprising***

Individuals are expected to shift to more of an enterprising mindset as they transition from a staff accountant to a senior accountant. The American Counseling Association (2015) stated that enterprising types enjoy leadership responsibilities, are affable, and are effective public speakers. Additionally, enterprising types are usually involved in assignment commencement and execution (National Center for O\*NET Development, n.d.-c). Senior accountants are expected to be a leader on audit and tax teams. They lead staff accountants by answering their questions and providing guidance. Communication skills are emphasized more for a senior accountant than for a staff accountant because a senior accountant has more contact with the client and with those in management and partner positions within an accounting firm. Furthermore, senior accountants are usually required by their employers to give public speeches and be more of an ambassador for their firm than staff accountants. Additionally, they are often responsible for collaborating with management regarding the timing of audit and tax return procedures. Senior accountants’ days are usually less structured than those of staff accountants, demonstrating a shift away from the conventional personality mindset. For example, a part of a senior accountant’s day may involve reviewing the work of several different staff accountants or updating management regarding the status of a project. That being said, a senior accountant may need to be somewhat flexible in nature. In brief, individuals need to possess a primary enterprising personality type to be successful in the senior accountant position.

Managers need to have a primary enterprising personality type and a strong secondary social personality type. As the name implies, managers manage individuals underneath them; therefore, they must be strong leaders. In the audit realm, managers are many times responsible for starting and completing an audit on time, which is indicative of an enterprising personality. Managers, like senior accountants, may not always have structure in their day-to-day activities. Complex errors or other issues may be discovered during the audit process, and it is often up to the manager to resolve these issues with the client. When an individual becomes a manager, they are expected to have even more social contact with their clients and the community than senior accountants. This contact could occur through public speaking, attending career events, recruiting, and attending conferences in order to network with other managers. Many of these activities are also expected of lower-level staff, but not to the same extent. Managers have plenty of social contact, but their main job responsibilities are not that of being the face of the company. Instead, this responsibility is that of the partners. Altogether, the personality requirements of a manager represent a further shift away from a primarily conventional personality towards an enterprising and social personality.

### ***End at Social***

The pinnacle of most audit or tax careers is the partnership level within a public accounting firm. Partners may have conventional aspects of their career and personality, but these are usually less in comparison to the enterprising and social aspects required of them. Feldman and Arnold (1985) opined that “perhaps enterprising and social personality types may make better partners…” (p. 204). Partners must be enterprising, which includes leading their employees and performing strategic planning. However, it may be argued that the social characteristics of being a partner are more important than the enterprising ones. For reference, social personality types enjoy relationships with other people, team building (American Counseling Association, 2015), and assisting those around them (National Center for O\*NET Development, n.d.-c).

Partners are often the face of an accounting firm. For instance, audit partners usually present and discuss the findings of an audit to the board of an entity. The partner is the top contact for the firm’s clients and partners usually make themselves available to these clients whenever needed. Quality partners should always focus on how they can team up with their clients to assist them with the issues they face. Audit partners should be concerned with the aspects of an audit team and how well the team works together to complete the audit. Additionally, partners are the main salespeople of the firm and should be concerned with drumming up new business and keeping existing business through socialization. In all, partners should have a primary social personality.

Previous research seems to refute the route proposed in this paper, including the research performed by Adler and Aranya (1984). The authors surveyed CPAs and classified them into different age groups. The authors then determined that those individuals who were closer towards the end of their CPA careers (for example partners) demonstrated the conventional category as their primary category more often than the younger CPAs. This study can be rebutted in several ways. For example, this study employed a cross-sectional method. Essentially, older individuals were compared with younger individuals instead of performing the test longitudinally. The personality types of each individual were not assessed and compared over time; therefore, the conclusion of whether an accountant becomes more conventional throughout his or her career may not be accurate. Additionally, the social personality type category was not reviewed in this study; therefore, one cannot determine how that aspect changes for an individual during their career. Furthermore, as the career opportunities and responsibilities of accountants have changed over the last three decades since this research was performed, it can be presumed that the general primary personality types of accountants may have changed as well.

Considering all that has been mentioned, there appears to be a progression of the primary personality requirements of an accountant on a route through Holland’s model from the conventional to enterprising to social types. This leads to the following additional propositions:

*Proposition 3a: If these career theory models are to be modified for use in accounting career progression, and accountants must modify their primary personality type to correspond with the primary personality type requirements of each level of seniority obtained, then an individual’s career personality transition requirements may be viewed as routes through the models.*

*Proposition 3b: If routes are added to these career theory models, then the routes of advancement for an accountant using Holland’s model would normally follow the conventional-enterprising-social primary personality type route.*

## **Artistic, Realistic, and Investigative Categories**

The required primary personality types of an accountant would normally not fall within the artistic, investigative, or realistic categories of Holland’s model. I do not suggest that all accountants lack attributes from within these categories. Nor do I imply that these attributes are detrimental to accountants. The field of accounting contains a wide spectrum of individuals who possess an array of qualities that are beneficial in different ways. For example, investigative attributes can be beneficial for an auditor. In contrast, I propose that these personality types are not necessary as primary personality types for accountants.

As the name implies, someone who is artistic is involved in the arts and the field of accounting involves little to no artistic requirements. Additionally, the artistic environment has never been included as an accounting work environment category in the “empirically based versions” of Holland’s model (Chen et al., 2012, p. 378). O\*NET, a website that provides general information on a wide variety of professions (National Center for O\*NET Development, n.d.-b), uses Holland’s RIASEC codes to describe careers (National Center for O\*NET Development, n.d.-c). The descriptions for accountants and auditors did not include the artistic category (National Center for O\*NET Development, n.d.-a). Other careers listed within the realm of accounting included bookkeeping, accounting, and auditing clerks; tax preparers; treasurers and controllers (National Center for O\*NET Development, n.d.-d). The artistic category was not included as a descriptor for any of these careers as well. A similar thought process can be used for the realistic personality type category. Realistic types prefer working with tools and equipment and being outdoors, and do not prefer to work with data (American Counseling Association, 2015). Accountants rarely work with tools (unless a calculator can be classified as one); they perform most of their tasks indoors and many accountants’ jobs involve data manipulation.

One may think that there is a stronger argument that accountants should possess an investigative primary personality type compared to the artistic and realistic types. According to the American Counseling Association (2015), individuals with investigative personalities are fond of the areas of math and science, they like to work on difficult problems and often like to work alone. Some accountants may fit into the first two descriptions; however, the last description does not accurately describe most accountants and their work. For example, Briggs et al. (2007) found that approximately half of the accounting students they tested in their study were extroverts. The authors stated that this contradicts the stereotype that accountants are reclusive with little interpersonal skills. Chen et al. (2021) compared the attributes of accounting work with those of other careers (engineering, medicine, and law) based on the U.S. Department of Labor website. Their results showed that accounting jobs shared many of the same qualities as the other professions reviewed. Specifically, accounting required similar amounts of social interaction as law, medicine, and engineering did.

Furthermore, in the aforementioned study on accounting job advertisements, the authors indicated that interpersonal skills were the top skills listed as required for accounting jobs (Tan & Laswad, 2018). This included the ability to work with coworkers and clearly present ideas. Leadership skills were also commonly requested. These skills are in line with the enterprising and social type categories of Holland’s model. In summary, artistic, realistic, and investigative personality types are normally not required for an accountant’s route, which leads to the final proposition:

*Proposition 4: If routes are added to these career theory models, then the routes of advancement for an accountant using Holland’s model would normally not include the artistic, realistic, and investigative personality type categories.*

# **FUTURE RESEARCH**

The modifications proposed in this paper would benefit from being tested in multiple ways. For instance, a longitudinal test could be performed on accountants at different stages in their career (e.g. staff accountant, senior, manager, partner, etc.) to determine whether they shift from one primary personality type category to another along their route. Testing could also be performed to see if individuals with primary personality types that are different from what is required of them for their current career level are content in their career. The individuals could be surveyed to determine if they feel they need to change their personality to better fit with their career status. Additional testing could include surveying upper-level accounting professionals (including managers, partners, and chief financial officers) to determine the type of primary personalities they prefer for their employees at different seniority levels. These preferences by seniority level could then be compared to the positions on the route proposed in this paper. These modifications may also be applied to other business areas outside of accounting, along with completely different career fields (e.g., engineering and medicine). As Holland’s model was used as an example for this paper, other research could involve analyzing specific theoretical changes to other career theory models based on Holland’s theory.

# **CONTRIBUTIONS AND CONCLUSIONS**

The modifications proposed in this paper can also be used in a practical manner. For instance, accounting employers could compare the personality type categories of an individual against those required for a specific senior-level job when interviewing potential candidates. This information can be used to determine whether a candidate is a good fit for the job in a manner similar to how Holland’s model is currently used. Additionally, accounting employers may use this modification to determine where their employees lie on a route for career assessment purposes, and employers may expect individuals to adjust their personalities as they advance in their careers. Accountants may use the modification proposed in this paper to determine where they lie on a route, and what personality category they should work towards in order to achieve the next career level (if that is their goal).

In conclusion, there is an inherent difference between a staff accountant and a partner. Both perform accounting work; however, the requirements for each job are very different. The two jobs require different personality types to fulfill each job requirement; hence, they should not be classified in the same personality type category. As accountants transition through their career, their personality alignment on Holland’s model and those models based on his theory should change as well. With some new modifications, these models may be used not only for career choices or career changes, but also for a lifetime of career decisions.

**REFERENCES**

Adler, S., & Aranya, N. (1984). A comparison of the work needs, attitudes, and preferences of professional accountants at different career stages. *Journal of vocational behavior*, *25*(1), 45-57. https://doi.org/https://doi.org/10.1016/0001-8791(84)90035-6

American Counseling Association. (2015). H. In *The ACA Encyclopedia of Counseling* (pp. 255-274). https://doi.org/https://doi.org/10.1002/9781119221548.ch8

American Institute of CPAs. (n.d.-a). *Positions in Business and Industry Accounting*. Retrieved 08/13/2021 from https://www.aicpa.org/career/careerpaths/corporateaccounting.html

American Institute of CPAs. (n.d.-b). *Positions in Public Accounting*. Retrieved 08/13/2021 from https://www.aicpa.org/career/careerpaths/publicaccounting.html

Aranya, N., Barak, A., & Amernic, J. (1981). A test of Holland's theory in a population of accountants. *Journal of vocational behavior*, *19*(1), 15-24. https://doi.org/https://doi.org/10.1016/0001-8791(81)90045-2

Bleidorn, W., Hill, P. L., Back, M. D., Denissen, J. J. A., Hennecke, M., Hopwood, C. J., Jokela, M., Kandler, C., Lucas, R. E., Luhmann, M., Orth, U., Wagner, J., Wrzus, C., Zimmermann, J., & Roberts, B. (2019). The policy relevance of personality traits. *American Psychologist*, *74*(9), 1056-1067. https://doi.org/https://doi.org/10.1037/amp0000503

Bleidorn, W., Hopwood, C. J., & Lucas, R. E. (2018). Life Events and Personality Trait Change. *Journal of Personality*, *86*(1), 83-96. https://georgefox.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=127273204&scope=site

Briggs, S. P., Copeland, S., & Haynes, D. (2007). Accountants for the 21st Century, where are you? A five-year study of accounting students’ personality preferences. *Critical Perspectives on Accounting*, *18*(5), 511-537. https://doi.org/https://doi.org/10.1016/j.cpa.2006.01.013

Cewińska, J., Grzesiak, L., Kabalski, P., & Kusidel, E. (2017). Holland’s personality types versus preferences in accounting. *Zeszyty teoretyczne rachunkowości*, *2017*(93(149)), 23-60. https://doi.org/https://doi.org/10.5604/01.3001.0010.3188

Chen, C. C., Garven, S. A., Jones, K. T., & Scarlata, A. N. (2021). Is career guidance sending the right message about accounting work? Comparing accounting with competing professions. *Accounting Education*, 1-30. https://doi.org/https://doi.org/10.1080/09639284.2021.1913615

Chen, C. C., Jones, K. T., Scarlata, A. N., & Stone, D. N. (2012). Does the Holland model of occupational choice (HMOC) perpetuate the Beancounter-Bookkeeper (BB) stereotype of accountants? *Critical Perspectives on Accounting*, *23*(4), 370-389. https://doi.org/https://doi.org/10.1016/j.cpa.2011.10.006

Corsini, R. (2001). *The Dictionary of Psychology*. Taylor & Francis Group. http://ebookcentral.proquest.com/lib/georgefox/detail.action?docID=4758773

Dweck, C. S. (2008). Can Personality Be Changed? The Role of Beliefs in Personality and Change. *Current Directions in Psychological Science*, *17*(6), 391-394. https://doi.org/10.1111/j.1467-8721.2008.00612.x

Feldman, D. C., & Arnold, H. J. (1985). Personality Types and Career Patterns: Some Empirical Evidence on Holland's Model. *Canadian journal of administrative sciences*, *2*(1), 192-210. https://doi.org/https://doi.org/10.1111/j.1936-4490.1985.tb00401.x

Gati, I. (1991). The structure of vocational interests. *Psychological Bulletin*, *109*(2), 309-324. https://doi.org/https://doi.org/10.1037/0033-2909.109.2.309

Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, *6*(1), 35-45. https://doi.org/https://doi.org/10.1037/h0040767

Holland, J. L. (1962). Some explorations of a theory of vocational choice: I. One- and two-year longitudinal studies. *Psychological monographs*, *76*(26), 1-49. https://doi.org/https://doi.org/10.1037/h0093823

Holland, J. L. (1997). *Making vocational choices: a theory of vocational personalities and work environments* (3rd ed.). Psychological Assessment Resources.

Holland, J. L., & Gottfredson, G. D. (1996). *Dictionary of Holland Occupational Codes* (3rd ed.). Psychological Assessment Resources.

Hudson, N. W., Roberts, B. W., & Lodi-Smith, J. (2012). Personality trait development and social investment in work. *Journal of Research in Personality*, *46*(3), 334-344. https://doi.org/https://doi.org/10.1016/j.jrp.2012.03.002

Hutteman, R., & Van Aken, M. A. G. (2016). Personality Types Versus Personality Traits. In Harold L. Miller Jr. (Ed.), *The SAGE Encyclopedia of Theory in Psychology* (pp. 702-704). SAGE Publications, Inc. https://doi.org/http://dx.doi.org/10.4135/9781483346274.n243

James, W. (2017). *Psychology: Briefer Course*. Project Gutenberg. (1892)

Lent, R. W. (2013). Career-Life Preparedness: Revisiting Career Planning and Adjustment in the New Workplace. *The Career Development Quarterly*, *61*(1), 2-14. https://doi.org/https://doi.org/10.1002/j.2161-0045.2013.00031.x

Lucas, R. E., & Donnellan, M. B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology*, *101*(4), 847-861. https://georgefox.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2011-13116-001&scope=site

National Center for O\*NET Development. (n.d.-a). *13-2011.00 - Accountants and Auditors*. O\*NET OnLine. Retrieved 3/4/2022 from https://www.onetonline.org/link/summary/13-2011.00

National Center for O\*NET Development. (n.d.-b). *About O\*NET*. O\*NET Resource Center. Retrieved 07/25/2021 from https://www.onetcenter.org/overview.html

National Center for O\*NET Development. (n.d.-c). *Interests*. O\*NET OnLine. Retrieved 07/24/2021 from https://www.onetonline.org/find/descriptor/browse/Interests/

National Center for O\*NET Development. (n.d.-d). *Quick Search*. O\*NET OnLine. Retrieved 3/4/2022 from https://www.onetonline.org/find/result?s=ACCOUNTING&a=1

Nauta, M. M. (2010). The development, evolution, and status of Holland’s theory of vocational personalities: Reflections and future directions for counseling psychology. *Journal of Counseling Psychology*, *57*(1), 11-22. https://doi.org/https://doi.org/10.1037/a0018213

Nauta, M. M. (2013). Holland’s Theory of Vocational Choice and Adjustment. In S. D. Brown & R. W. Lent (Eds.), *Career Development and Counseling : Putting Theory and Research to Work* (2nd ed.). John Wiley & Sons, Incorporated. http://ebookcentral.proquest.com/lib/georgefox/detail.action?docID=1104490

Prediger, D. J. (1976). A World of Work Map for Career Exploration. *The Vocational guidance quarterly*, *24*(3), 198-208. https://doi.org/https://doi.org/10.1002/j.2164-585X.1976.tb00921.x

Prediger, D. J., & Vansickle, T. R. (1992). Locating occupations on Holland's hexagon: Beyond RIASEC. *Journal of vocational behavior*, *40*(2), 111-128. https://doi.org/10.1016/0001-8791(92)90060-D

Roberts, B. W., Caspi, A., & Moffitt, T. E. (2003). Work experiences and personality development in young adulthood. *Journal of Personality and Social Psychology*, *84*(3), 582-593. https://doi.org/10.1037/0022-3514.84.3.582

Roberts, B. W., & Mroczek, D. (2008). Personality Trait Change in Adulthood [Article]. *Current Directions in Psychological Science*, *17*(1), 31-35. https://doi.org/10.1111/j.1467-8721.2008.00543.x

Saadullah, S. M., Shawish, Z. K. A., & Abdulbasith, A. (2017). Personality Types and Accounting Subfields. *Academy of Accounting and Financial Studies Journal*, *21*(1), 65-80. https://www-proquest-com.georgefox.idm.oclc.org/docview/2126525026?accountid=11085

Schwaba, T., & Bleidorn, W. (2019). Personality trait development across the transition to retirement. *Journal of Personality and Social Psychology*, *116*(4), 651-665. https://georgefox.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2018-03572-001&scope=site

Shivy, V. A., Rounds, J., & Jones, L. E. (1999). Applying vocational interest models to naturally occurring occupational perceptions. *Journal of Counseling Psychology*, *46*(2), 207-217. https://doi.org/https://doi.org/10.1037/0022-0167.46.2.207

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*(5), 1041-1053. https://doi.org/https://doi.org/10.1037/0022-3514.84.5.1041

Tan, L. M., & Laswad, F. (2018). Professional skills required of accountants: what do job advertisements tell us? *Accounting Education*, *27*(4), 403-432. https://doi.org/https://doi.org/10.1080/09639284.2018.1490189

Tracey, T. J. G., & Rounds, J. (1995). The arbitrary nature of Holland's RIASEC types: A concentric-circles structure. *Journal of Counseling Psychology*, *42*(4), 431-439. https://doi.org/https://doi.org/10.1037/0022-0167.42.4.431

Wagner, J., Orth, U., Bleidorn, W., Hopwood, C. J., & Kandler, C. (2020). Toward an Integrative Model of Sources of Personality Stability and Change. *Current Directions in Psychological Science*, *29*(5), 438-444. https://doi.org/10.1177/0963721420924751

**ABOUT THE AUTHOR**

**Brian Johnson** is a Certified Public Accountant (CPA) and a Certified Fraud Examiner (CFE). He has a Bachelor of Business Administration (BBA) and Masters of Accountancy from Baylor University, and he is currently a Doctor of Business Administration (DBA) student at George Fox University. Brian is a teacher at a small private preparatory school in Central Texas, as well as an adjunct professor at a local university. He enjoys researching and writing on a variety of topics within the field of accounting.