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**Future Time Perspectives and Career Commitment. Does Age
Influence This? A Quantitative Examination of a New Zealand
Working Population.**

A thesis

submitted in partial fulfilment

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Abstract

The inability to commit to a career can have long-term negative consequences on the quality of life of individuals. Those who have obtained career success have been found to possess high levels of future time perspective, the capacity to not only place a high value on future goals but to also identify what actions are required to achieve future goals. To date, there has been no research conducted examining the relationship between future time perspective and career commitment in a working New Zealand population; nor has any research investigated if there are any differences between different age cohorts of New Zealanders. This study examined this relationship by conducting correlation, regression, analysis of variance, and moderation analyses on data taken from 96 employed New Zealand citizens/residents who participated in an online survey. The correlational analysis suggests that connectedness and valence are positively associated with commitment-making and identification, and negatively associated with self-doubt, and flexibility. Regression analysis suggests that connectedness influences flexibility, and valence influences commitment-making, identification, and flexibility. ANOVA analysis shows that there is a difference between individual's aged 16 – 44, and 45 – 75+ concerning commitment-making, self-doubt, and flexibility. Moderation analysis results suggest that age has a buffering effect on the relationship between connectedness and self-doubt in those aged 16 – 44 years old, and an enhancing effect in those aged 45 – 74+. Method of participant recruitment, categorisation of age cohorts, and the constraint of this study examining a single time period contribute to this studies limitations. Future research and practical implications of the current study are discussed.

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Chapter One: Introduction

Background

A person's vocation contributes to a considerable portion of their self-identity. Individuals yearn to establish and maintain who they are, their identities, and their self-meanings. The results of a persons' self-assessment, and the impressions they incur from others, in the context of their vocation, influences the quality of their self-esteem (Jaret, Reitzes, & Shapkina, 2005). Individuals who suffer from a conflict of vocational identity have been found to be disconnected with their career goals, unable to identify what is required to achieve their goals, and lack the drive required to move past the difficulty of discovering vocational options (Porfeli, Lee, Vondracek, & Weigold, 2011).

This conflict of vocational identity has been found to be present throughout multiple stages of life development. As early as the beginning of adolescents, positive and negative occupational relationships influence the development of adolescent mental health (Vaughn, Drake, & Haydock, 2016). Healthy mental states of early adolescents have been found to be associated with higher academic success and in turn, higher occupational attainment (Slominski, Sameroff, Rosenblum, & Kasser, 2011). However, those who struggle academically find difficulties exploring careers that they identify with and wish to pursue. In essence, they struggle to navigate the reality of the demands of their future vocational worlds. Those unable to reconcile the disassociation between the content of their careers and the practical implications to achieve their goals are more likely to consider their expectations to be unmet. This realisation can lead to

individuals becoming unsatisfied with their jobs, be less committed, and more likely to leave their employment (Yang, Johnson, & Niven, 2018).

The long-term consequences of being unable to find enjoyable, fulfilling careers can be found in the quality of lives of those reaching the age of retirement. Individuals who have reached the age of 65, and have disengaged from the workforce due to mental health issues are expected to accumulate a significantly smaller amount of savings (Schofield et al., 2011). Individuals that disengage due to depression, in addition to other factors, have even worse projected futures. This indicates that mental health issues associated with the quality of occupational engagement can have long-term, severe, detrimental effects on the quality of a person's life.

This lack of direction and lack of occupational engagement can have significant long-term detrimental effects on the quality of lives of not only individuals but entire populations. Low socio-economic populations suffer from increased stress, higher crime rates, and higher counts of domestic violence (Blustein, 2008). Individuals that do not have a stable career effectively miss out on a significant portion of their life that can benefit them greatly from employment stability and low employment strain (Clarke, Lewchuk, de Wolff, & King, 2007). This strain of intermittent work has been found to contribute to the detrimental effects on a person's well-being and their psychological health. Individuals aged between 25 and 50 have been found to suffer from increased levels of anxiety, being very tense while at their location of employment, and are more likely to report their health as gradually deteriorating more than those who were in stable, developing, employment (Clarke et al., 2007). These individuals were found to continually worry about money, the future of their jobs, and their

incomes. The perceived financial strain of unstable employment has been found to be negatively correlated with positive mental health (Selenko & Batinic, 2011).

The stress that can come from being unable to find engaging, nourishing employment can contribute to the deterioration of mental health. In a future study, Selenko and Batinic (2013) found that the negative relationship between mental health and job security was partially explained by the perception of a lack of benefits gained from employment. This interactive relationship may explain how the perceived lack of employment opportunities may contribute towards the degradation of mental health and the loss of job security. Unemployment and poor education have been found to partially explain the relationship between increases in mental health challenges, and the consumption of anti-depressants, that mirror the increasing rise of suicide rates and reported cases of depression in an English sample (Barr, Kinderman, & Whitehead, 2015). This relationship suggests that poor employment opportunities and a lack of skills may contribute to an increasing volume of mental health issues and suicide rates that cannot be prevented with pharmaceutical solutions alone. These problems bring to our attention how poor occupational engagement may contribute to perpetuating long-term detrimental effects on low socio-economic populations.

The detrimental cyclical nature of poor vocational engagement may also be reflected by revolving poor-occupation economies. Ananat, Gassman-Pines, Francis, and Gibson-Davis (2017) suggest that the loss of jobs within a population may have resonating repercussions on following generations that perpetuate the cycle of poor education and low socio-economic status. The poor quality employment of parents may contribute to low levels of academic achievement and poor mental health in the following adolescents, and this in-turn may inhibit the

attainment of higher levels of academic achievement. Thus, this results in greater income inequality, and this leads to the perpetuation of a cycle of poor employment opportunities for the following generations. Ananat et al. (2017) propose that the poor mental health and low academic performance of adolescents is an overlooked mediator on the relationship between job losses and low socioeconomic statuses.

The above trends suggest that the inability to commit to a career or find beneficial employment can have serious detrimental consequences to a person's future. Those unable to establish beneficial occupational purpose, suffer, compared to those who are successful. For example, those individuals who can commit to their careers benefit from higher levels of social contact, better structures of time, increased sense of purpose, and more significant levels of productivity; factors that contribute to a greater sense of self-worth, and better future occupational opportunities (Paul & Batinic, 2010). These trends warrant the importance of asking what makes successful people commit to their careers. What common factor do successful people possess that encourages them to continue to be committed to their careers, thus making them continue to be successful.

Previous research suggests one common factor that may contribute to long-term academic and occupational success; how much value a person places on long-term goals. Otherwise known as future time perspective (FTP), previous research that has examined how levels of FTP predict future measures of success have found the ability to identify what actions are required to achieve future rewards are higher in academics that achieve better results (De Volder & Lens, 1982; Husman, Hilpert, & Brem, 2016; Jung, Park, & Rie, 2015; Lang & Carstensen, 2002). In terms of occupational success, FTP has been found to be

associated with decreased levels of anxiety when making career decisions (Jung et al., 2015), higher confidence in the choice of careers (Walker & Tracey, 2012), and higher levels of resilience toward loss over a persons lifetime (Strough et al., 2016). Although it must be acknowledged that there are a number of other personality traits and environmental factors that can contribute to one's success in committing to a career (for example; socio-economic status, optimism, resilience, intelligence), FTP appears to be a beneficial construct that contributes to, and has been found to influence future chances of success in academic and occupational success, across different cultures, statuses of mental health, and different ages. FTP is distinctly different from typical personality traits and environmental influences as it aims to measure the value that individuals place on future goals.

Occupational success may also be influenced by the age of an individual. In the early stages of one's career, opportunity can be bountiful, and individuals have time to progress along their career paths. However, when a person begins to become older, opportunities may become scarce, and the acknowledgment of mortality arises. It would not be unreasonable to consider that an increase in age can alter one's priorities and influence the direction of one's occupational goals. A concept that has been found to alter peoples decision-making processes (Ho & Yeung, 2016), and has been found to predict the intention of retirement in older workers (Adams, 1999). So as it appears, a persons age may also contribute to the decision-making process of whether to commit to a career.

The consequences of poor occupational commitment can have long-term negative consequences on the quality of lives of individuals. Poor career decisions lead to low levels of income and a more inferior quality of life. This can then lead to higher levels of anxiety, lower levels of self-confidence, and higher levels of

depression which have economic consequences that impact the quality of retirement and can have resonating effects on the lives of the following generations. Thus, it is for these reasons that we should make it a priority to examine how levels of FTP influence levels of career commitment, and how age changes this relationship, in a general New Zealand population. It is concerning that to date, there has been no research that has examined the influence of FTP on levels of career commitment, nor has there been any research to date that has examined whether the age of an individual influences this relationship in an employed general New Zealand population. Research that focuses on identifying trends between differently aged New Zealanders may provide insight into how the value that New Zealanders place on their occupational futures may influence their levels of career commitment. The information learned from identifying particular relationships that quantify how New Zealanders motivate themselves to achieve may help to inform and warrant future changes in public policy, and in the application of interventions. It is for these reasons that this research should be warranted.

Purpose of this Study

This research aims to evaluate the relationships between how much a person values future goals and their level of career commitment. Furthermore, this research aims to investigate if this value of future goals is related to future levels of career commitment. Finally, this research aims to investigate if there are any significant differences between age cohorts regarding both the value of future goals and their levels of career commitment, and whether age moderates this relationship.

The goal of this research is to produce evidence that may better inform researchers and organisational practitioners of the specific factors that impact individuals within their particular age cohorts. Having this information available will hopefully provide empirically validated reasoning for the continued support of individuals throughout the length of their vocational journey, not just during the beginning. By understanding what New Zealanders use to drive their motivations to commit to their careers, we can begin to change the way in which individuals commit to their careers to achieve occupational success.

Literature Review

The following literature review will begin by discussing a key theoretical developmental framework that may provide an explanation of why people make certain decisions regarding their futures; how FTP fits within this framework, and how outcomes of career commitment indicate the results of this influence. A proposed theoretical model will then be suggested, depicting how age may influence the relationship between FTP and career commitment. Following this will be a more in-depth examination of FTP, age, and career commitment. How they are defined, and what variables constitute these constructs.

Conceptual framework - Socio-emotional Selectivity Theory.

A theoretical developmental framework that may help us understand how individuals orient their decisions for their futures is socio-emotional selectivity theory (SST) a theory of motivation that recognises how perceptions of time and limitations affect people's selection of goals.

Socio-emotional selectivity theory (SST), developed by Laura Carstensen (1999), is a lifespan theory of motivation that suggests that the selection of goals

is influenced on whether an individual perceives their remaining time to be constrained or open-ended. As people grow, an awareness of their time running out begins to become acknowledged. Social contracts become superficial in contrast to the deepening meaning of already established close relationships. Eventually, the decisions to pursue more emotionally meaningful goals are chosen over superficial future goals that may only offer diminishing returns.

SST is based on three central assumptions (Carstensen, & Lang, F., 1997). The first is that humans require social interaction to survive. Second, humans work to achieve goals. Third, humans compare multiple goals at once, the selection of specific goals are indicative of future actions. SST proposes that the motivation to acquire future goals falls into two social classes, a) the acquisition of knowledge, or b) the regulation of emotion. Acquisition of knowledge refers to the cognitive decision to pursue goals that expand on current knowledge, develop new relationships, and contribute to developing future career plans. Regulation of emotion refers to achieving goals that deliver an immediate emotionally favourable return; such goals include investing more time and energy in emotionally meaningful relationships, devoting time towards hobbies and interests, or investing time contributing towards helping others.

SST assumes that the assessment of time is critical in the way in which people assess their goals and execute their behaviours accordingly. The assessment of time helps to balance the benefits of long and short-term goals so that individuals can adapt to the shifting nature of life-related circumstances. Carstensen (2006) argues that there is a systematic association between age and the sizes of time horizons stating that “because goal-directed behaviour relies

inherently on perceived future time, the perception of time is inextricably linked to goal selection and goal pursuit” (p.1913).

According to SST the size of individuals perceived time horizon is inversely linked to the remaining years of life they believe to possess (see figure 1). For example, a younger individual in their early twenties may perceive their time left to live as long, and so they would be considered as having a large time horizon. Individuals that are entering into their late fifties or sixties may perceive their time left to live as short, and so their time horizons are perceived as being very small.

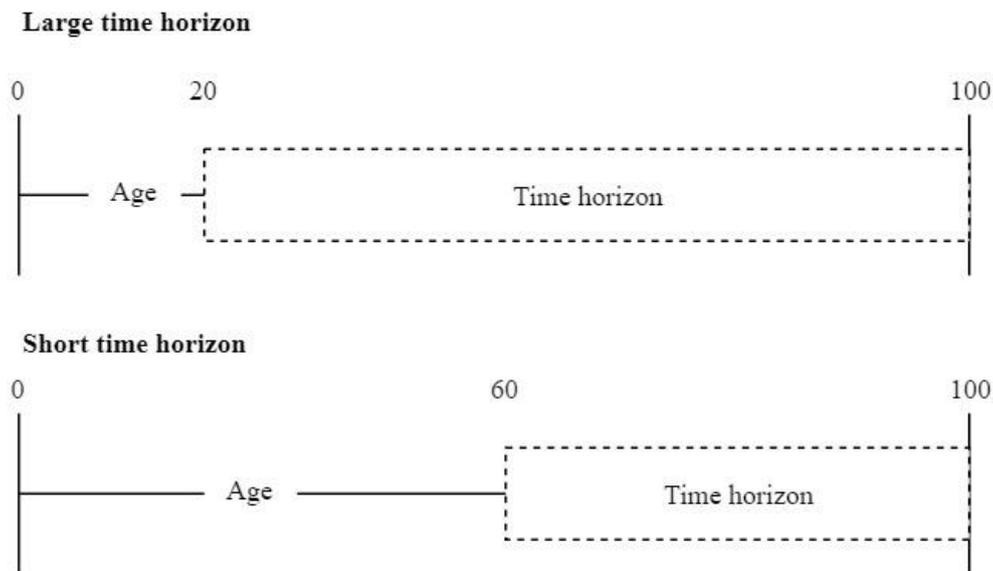


Figure 1. Differences of time horizons at different ages according to SST.

This distinction is important to this study as it helps us to understand the expected behaviours of those with perceived long or short time horizons. SST suggests that it is not age itself but the age-associated shift in time perspective that contributes to the gradual change in a person’s priorities. This change in goals is a function of the changing sizes of future time horizons. People with large time horizons perceive their remaining time as open-ended and are more likely to be

focused on preparatory goals orientated on acquiring knowledge, garnering new experiences, and planning solutions to problems that may occur in their future (Carstensen, 2006). Forward thinking, career planning, and the development of new social relationships are typical of those with large time horizons. In contrast, individuals with perceived small time horizons are more likely to be focused on goals that help regulate their emotions, such as investing more time into emotionally gratifying relationships (Miche, Huxhold, & Stevens, 2013), a suggestion supported by Yeung, Fung, and Kam (2012) who found that younger people do tend to use more problem-focused strategies in decision making. In contrast, older people were found to use more emotion-regulatory strategies. These trends were found to be mediated by the individuals' FTP.

Using the SST theory as a framework for this study helps us understand the nature in which age may facilitate the interactive relationship between FTP and career commitment. As previously mentioned FTP is the measure of value an individual places on future goals and the actions that will lead to achieving those goals (Shell & Husman, 2001). According to SST, younger individuals' motivation to achieve goals will be more knowledge-driven rather than emotion driven. This means that younger people may possess a higher level of FTP than older people, as they may place a higher value on future goals and may identify current actions that would return them greater rewards in their future. High levels of FTP in younger individuals compared to older individuals may indicate that there is a difference in the perceptions of the future goals between younger and older people. In contrast, SST proposes that older individuals are more emotion-driven; they seek to achieve goals that have an immediate emotionally favourable return. This means that older individuals may be more likely to possess lower

levels of FTP than younger people as they may be perceiving their time horizons as shorter and thus may consider their futures as constrained. Low levels of FTP in older individuals could indicate that there may be a time/age that individuals recognise the reality of their mortality and the value of future goals depreciates in favour of focusing on more immediate emotionally favourable goals. This theory has been supported by Ho and Yeung (2016) who found that with increasing age, individuals' occupational FTP gradually became more limited which influenced the individuals to become more focused on emotionally meaningful goals rather than knowledge-related goals.

This distinction between different decision-making motivations is important if we follow SST which suggests that the changes in a person's time horizon influence their perceptions of future goals (Carstensen, Isaacowitz, & Charles, 1999). These changes to the perceptions and values of future goals may then affect the depth of commitment an individual has with their career in which they wish to achieve said goals. Thus, age may act as an unacknowledged moderator between future time perspectives and career commitment. What these changes may be is unclear. According to Porfeli et al., (2011), career commitment is composed of four different aspects that reflect the total level of an individual's strength of commitment to their career (of which will be discussed in detail later). SST suggests that younger individuals seek more knowledge-focused goals based on the assumption they perceive their future time horizons to be large and open-ended. As such, these goals are aimed at expanding knowledge and developing new relationships. These perspectives may lead younger individuals (16 – 19 years old) to possess more doubts in their chosen careers, and they may see themselves as more flexible in their careers than middle-aged individuals as they

are still exploring their options and their vocationally related skills are yet to be fully developed. As individuals reach their middle age (20 – 44 years old), time horizons may be considered to be of equal measure. The capacity to commit to a career and their personal connection to their career may be stronger in individual's who reach these ages as this is a time in which the establishment of new careers has passed, and the majority of people in their careers are now working towards saving for retirement and have developed workplace skills and relationships. As individuals reach their late stages of life (45 – 75+ years old) they consider their futures to be limited and the time to pursue their goals as short (Carstensen, & Lang, 1997). As such, we may find that their commitment to their career and the identity they obtain from being in their occupations decreases, and their doubts about their careers may increase. This may reflect older individuals' perception of their time horizons becoming shorter and the investment of time and energy in more meaningful ventures, other than work, becoming more favourable.

These proposed trends have been supported by Chung and Lee (2017) who examined the percentages of time use among differently aged Korean citizens. Data was taken from Statistics Korea for the years of 1999, 2007, and 2009. This study found that in a Korean context, individuals aged between 10 – 19 years of age invested most of their time in education. Individuals aged between 20 – 44 years of age invested most of their time in paid work. Individuals aged between 44 – 75+ years of age invested more time in developing relationships and enjoying leisure time. These trends were incredibly uniform throughout all three years. Neither gender nor the year in which the data was examined contributed to a deviation in the trends. These trends suggest that there is a uniformity to the ages that indicate when significant changes in life management occur.

Although Chung and Lee's (2017) study only evaluated trends in a Korean context, Carstensen et al., (1999) argue that the appreciation of time and mortality is a universal human trait, and the eventuality of individuals compromising future goals for emotionally based ones is influenced more by cultural, and religious social interpretations that trigger the consideration of the end of one's life. Cultural and time-relevant changes only help define cultural and time-specific differences between different societies. Blanchard-Fields, Chen, and Norris (1997) suggest that younger and older adults face different types of problems throughout their lives, and the relative importance of these problems are different across these age groups. Indeed, perceptions of the encroaching concerns of retirement change the way in which individuals are concerned with the control of their own futures (Smith, Conley, & You, 2015). As individuals grow older their perceptions and beliefs about what is important to their own development become increasingly multifaceted (Heckhausen, Dixon, & Baltes, 1989). With experience comes a deeper understanding of life-span development factors such as personal beliefs, goals, and limitations.

In summary, the SST framework provides justification for the decision-making process that some individuals make by suggesting that the perception of time-left-to-live contributes to one's career decision process. In essence, age matters. Thus, a proposed theoretical framework is suggested (see figure 2).

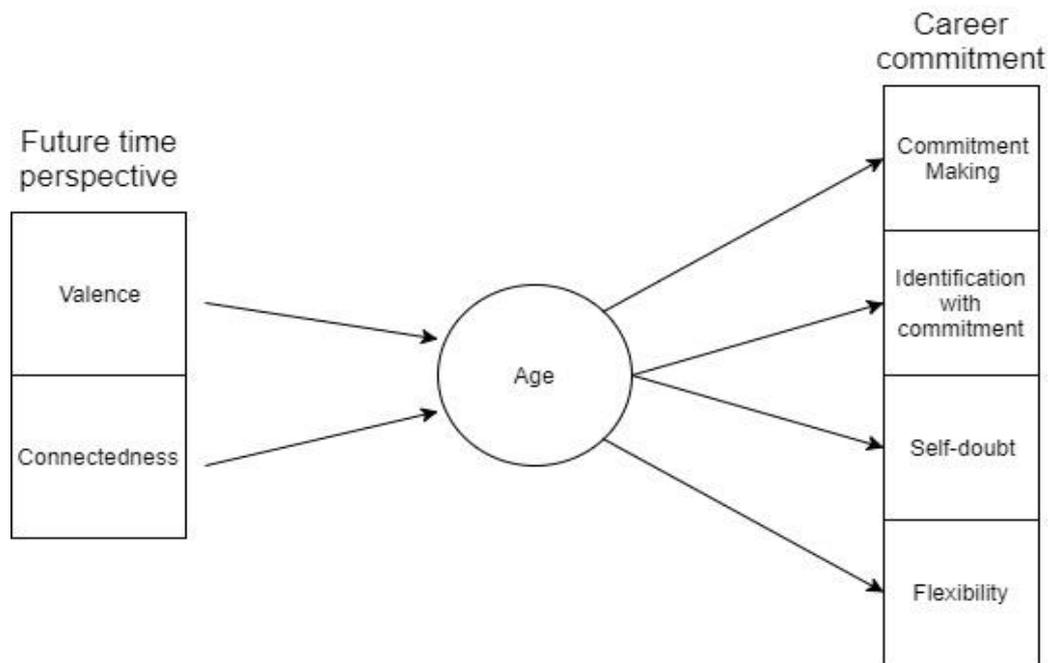


Figure 2. Proposed theoretical model showing the relationships between variables

The values of FTP are projected through a lens of aging, which influences the depth of career commitment. The outcome of career commitment changes based on how age influences this relationship. For example, when people are young, they may exhibit low levels of FTP, which may be related to high levels of self-doubt in their careers. However, as a person ages, their level of career self-doubt may decrease as they age and their levels of FTP change.

Variables

The following sections will aim to provide a more in-depth examination of FTP, career commitment, and age. The variables that constitute these constructs, and how these variables have been found to interact within academic and occupational contexts. Each of these sections will finish with the proposed hypotheses of the interactions between each of these variables.

Future Time Perspective

Studies that examine how individual's value future goals have previously been measured using instruments that evaluate a person's future time perspective (FTP). Shell and Husman (2001) define FTP as a measure of a person's conceptualisation of the future and their connection to that future. FTP is an aspect of the human psyche that contributes to our rationalisation of future goals and risk management (Teuscher & Mitchell, 2011). In other words, FTP can be understood as a measure of how much an individual values future goals and the actions that would help them acquire more significant rewards in the future. When evaluating measures of FTP, the majority of previous research concerned with FTP has preferred to use the Zimbardo Time Perspective Inventory (Eren, 2012; Lyu & Huang, 2016; Zimbardo & Boyd, 1999). However, the following research that will be discussed suggests that the Future Time Perspective Scale (FTPS) by Shell and Husman (2001) is a viable alternative. The FTPS instrument breaks down FTP as a construct by providing two sub-scales that comprise FTP. Thus this instrument was chosen over the Zimbardo Time Perspective Inventory.

Shell and Husman (2001) suggest that FTP is composed of two contributing factors; a) valence and b) connectedness (see figure. 3). Valence is

the disposition to associate a high value on future goals, for example, someone may hold substantial value for a future with strong financial stability.

Connectedness is the disposition to anticipate, in the present, what the long-term consequences of current actions are. Miller and Brickman (2004) argue that perceptions of future circumstances change the connectedness of an individual's learning behaviour. For example, anticipating that putting in extra hours of work, and developing beneficial relationships now will have the consequence of stronger future financial stability, which will lead to an individual pursuing these options (Shell & Husman, 2001). The combined total levels of a person's valence and connectedness help quantify their total level of FTP. To study this relationship Shell and Husman (2001) examined 198 American undergraduate students to examine the relationships between FTP, academic achievement, and the students control beliefs. Specifically, self-efficacy and the student's perception of their locus of control. Correlational analysis results suggest that not only was connectedness positively associated with students study time and study effort but also positively associated with students locus of control; a student's own measure of their perceptions that outcomes are contingent on their own personally controlled actions. Supporting this result students' perception that success can occur due to external causes out of their control was negatively correlated with connectedness. Students' valence was positively associated with the belief that success is due to some external causes. This result may be interpreted as the belief that future goal attainment needs to be achieved or validated from something beyond the students' individual control. This study suggests that connectedness and valence tend to be associated with personality traits that favour taking control

of one's own actions and deciding which actions are best for achieving future goals.

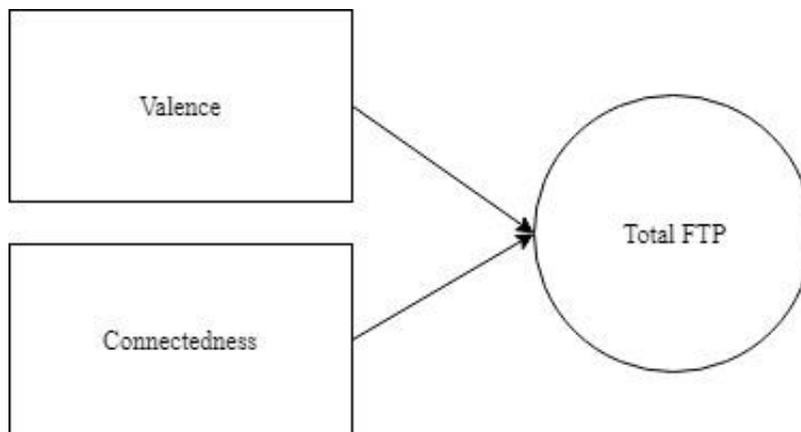


Figure 3. Concept of total future time perspective.

Initially, FTP was first theorised to predict academic achievement in high school and university students. De Volder and Lens (1982) proposed that students with high FTP would be more motivated to achieve as they could ascribe high valence to goals in the future and should be able to acknowledge the long-term consequences of current actions. Examining 251 Dutch-speaking high-school students, De Volder and Lens (1982) found that students that had higher valence to future goals and higher connectedness to investing more time into studying became more invested in their study methods and did obtain better academic results. The positive correlation between high levels of FTP and academic achievement appears to be a robust trend that occurs in many studies. For example, Shell and Husman (2001) found that high levels of valence and connectedness were positively associated with better self-regulation of emotions and academic achievement. Mello and Worrell (2006) examined 722 academically gifted children to examine whether FTP was associated with academic

achievement. The results of the study suggest that high FTP was associated with higher achievement and higher future positive attitudes.

The positive correlational relationship between academic success and high levels of FTP appear to be attributed to the behavioural capacity to self-identify current behaviours and to adjust these actions accordingly to achieve sought-after future goals (Shell & Husman, 2008). These behaviours have also been found to be vulnerable to the quality of the learning environments in which students develop their perceptions of their future careers (Husman, C. Hilpert, & K. Brem, 2016). Perceptions of the future, perceived connections to the future, and the identifiable actions that would lead to future goals, have been found to all be significant predictors of career connectedness. All three of these factors have been found to be influenced by the environment in which individuals learn about their future careers. This suggests that environmental factors such as the quality of the education provider, socio-economic status, and cultural expectations, may influence the development and strength of FTP. This factor is important to acknowledge as it suggests that a person's FTP is not set in stone. FTP is susceptible to external environmental inputs and can change accordingly. This provides support for the idea that FTP can be improved by positive reinforcement, as well as be diminished by adverse circumstances that inhibit the healthy development of valuing long-term, delayed rewards.

Past FTP research has been mainly concerned with investigating the impact that levels of FTP have on the success of individuals within an academic environment. Higher levels of academic success have been attributed to higher levels of FTP, specifically connectedness. One limitation of FTP research stems from the origin of the participant pools and the context of academic achievement.

The primary goal of individuals in academics is to achieve higher grades with the future goal of achieving greater rewards beyond their years in education. As such, the environment of academia continually encourages the development of high FTP. The need to identify what actions to adopt to increase academic achievement and to value long-term rewards are naturally found in this environment. It is for this reason that levels of connectedness and valence would be naturally high. In light of this limitation, there is merit in examining FTP in a participant sample whose primary activity is not academia.

While there is previous research that has examined FTP in non-academic focused studies, examples are scarce. Research concerning FTP outside of academics has focused on the success of a person's career and how FTP influences workplace attitudes and practices. High levels of FTP have been found to positively correlate with beneficial factors that contribute to higher levels of career success. Individuals that possess high levels of FTP have been found to be more open to opportunities to learn and are more prone to having more extensive social networks. The size of one's social network provides multiple opportunities to develop relationships with others that can lead to increased income, a better quality of social support, and improved chances to connect with better employment. Lang and Carstensen (2002) suggest that the strength of an individual's FTP positively correlates with the size and quality of a person's social network. Examining 480 German adults aged between 20 to 90 years of age, Lang and Carstensen (2002) discovered that the way in which individuals select their goals and their social networks was in accordance to their perceptions of the future. Those with high FTP had more extensive social networks. Lang and Carstensen (2002) suggest that "seeking to have success in one's career, wanting

to become knowledgeable, or seeking social partners who express their acceptance and trust seem to be important goals when individuals perceive their future as expansive" (p.136). Growing future opportunities appears to be a similar trend in individuals that possess high levels of FTP. As more opportunities become available individuals can choose more freely which options in their career would better deliver them to their intended future goals. Using FTP as a measure of a person's perception of opportunities and limitations, Froehlich, Beausaert, and Segers (2015) hypothesised that participants that exhibit high levels of FTP would be more open to learning experiences. Examining 215 Austrian consultancy workers, the findings of the research found that FTP was positively correlated with anticipation, optimisation and personal flexibility, and negatively correlated with limitation focus and age. These findings appear to support the SST framework. Openness to new opportunities, seeking larger social networks are all positive outcomes of those with typically large time horizons. This suggests that FTP may contribute to the drive to create new opportunities and to develop more relationships to pursue better career opportunities.

Research also suggests that FTP plays a significant role in the mediation of future expectations, and the commitment to organisations. At the individual-level, FTP has been found to contribute to the mediation between the influences that human resources management practices have on the perceived quality of job satisfaction and levels of organisational commitment (Korff, Biemann, & Voelpel, 2017). FTP appears to help individuals persist in roles that are not always preferable. The influence of FTP also helps encourage the divergence of goal selection (Hicks, Trent, Davis, & King, 2012). As the strength of ones FTP shrinks, other sources of importance are given up, such as the pursuit of long-term

goals, in favour of goals that provide more emotionally meaningful rewards. In this context, FTP has been found to help develop a better understanding of what is meaningful in one's life. This theory has been supported by Strough et al., (2016) who found that adults tended to focus on future opportunities until the age of 60 where a significant psychological shift occurs and this relationship becomes reversed where the perception of limited time and fewer opportunities becomes stronger. Yet Strough et al., (2016) also found that older adults with high FTP were less concerned with past adverse events regardless of the perceptions of fewer opportunities and limited time.

In the previously mentioned studies, the evidence suggests that FTP is a robust psychological construct that makes significant contributions to some factors that are positively associated with academic and career success. It helps us understand how individuals construct the perceived value of future goals, and how individuals modify their behaviours to achieve future goals. The evidence of this can be seen in the positive correlations between high levels of FTP and future academic/career success. FTP is not an immutable construct. It is vulnerable to the environment in which individuals learn about and construct their perceptions of their future goals. This aspect of FTP can be seen in the context of the workplace in which it helps mediate challenges that may make individuals consider alternative options in reaching their goals (Korff, Biemann, & Voelpel, 2017). Finally, FTP helps facilitate the transition into retirement. As the perception of the limited time left becomes stronger, FTP helps to justify the abandonment of some goals in favour of the pursuit of more emotionally meaningful goals. Although the majority of previous FTP research has been limited by the use of students as

participants, this limitation warrants future research that focuses on the impact of FTP in a non-academic focused study.

In light of the previous research it is expected that;

Hypothesis 1: Connectedness will be positively correlated with Valence.

The following section will discuss career commitment and the sub-factors that career commitment is composed of, followed by suggested hypotheses.

Career Commitment

The majority of research that examines the relationship one has with one's occupation is primarily evaluated using instruments that measure a person's level of career commitment. There have been different definitions, interpretations, and measures of career commitment suggested by various researchers. For example, Hall (1971) defines career commitment as "the strength of one's motivation to work in a chosen career role" (p.59). Porter, Steers, Mowday, and Boulian's (1974) characterisation of career commitment was that of the development of personal career goals involving personal attachment, and identification with career goals that transcended occupations. Blau (1988) defined career commitment simply as "one's attitude towards one's profession or vocation" (p.284). Career commitment has been measured using many psychometric instruments. For example, Blau's (1988) career commitment instrument included measures of career commitment, job involvement, and organisational commitment. However, Blaus' research aimed to show that there is a statistical difference between organisational commitment and career commitment rather than a focus on the factors that compose career commitment. Colarelli and Bishop (1990) used a modified version of Porter et al.'s (1974) organisational commitment, job

satisfaction, and turnover instrument to investigate the relationships of situational and personal characteristics with career commitment. This instrument seemed unsuitable for the current research as the words of the instrument were modified to change the context of the measure from organisational commitment to career commitment.

A more detailed representation of a person's commitment to their career has been researched by Porfeli et al., (2011) who developed and evaluated the reliability of the Vocational Identity Status Assessment (VISA) which measured six aspects of an individual's capacity to explore their careers. Using the framework of James Marcia's (1966) model of identity status as a bases, Porfeli et al., (2011) developed the VISA as a means to help provide a better understanding of the relationships between students' ego-identity status and their depth of career commitment. Porfeli et al., (2011) adopted James Marcia's interpretation of career commitment to be the degree of personal investment an individual exhibits towards a growing occupational ideological commitment (as cited in Marcia, 1966), of which this current study has adopted. Marcia suggests the development of a person's identity can be determined by the commitments and choices one makes in terms of particular social and personal traits (David, 2014). Porfeli et al., (2011) suggest that an individual's identity may be related to their degree of career commitment and that this commitment is composed of four distinct categories; career commitment, identification with a career, career self-doubt, and flexibility (see figure 4). Clearly defining these different categories of career commitment provides a better evaluation of how an individual's career commitment is connected to their age and their levels of FTP. Clearly defined constructs and measures are important for the current research as it aims to evaluate the

relationships between the factors that compose the constructs of FTP and career commitment in an employed general New Zealand population. Clearly defined constructs allow for a more in-depth analysis of the relationships between each sub-variable and not the general influence of the entire construct. Examining each construct at the variable level also provides more opportunity to examine how age changes specific relationships between FTP and career commitment.

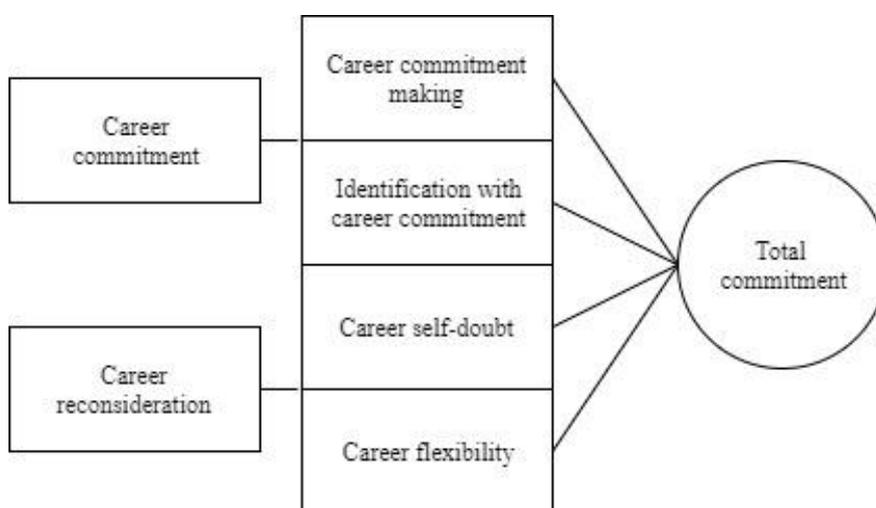


Figure 4. Interpretation of the vocational identity status assessment

Following will be a discussion of each of the variables of career commitment, in which each variable will be discussed in further detail below in addition to the results that Porfeli et al., (2011) discovered.

Commitment

The development of a career is an intimate construct that contributes to a sense of self-searching and the validation of a person's authenticity, their belief that they are authoring the direction of their own life (Blustein, 2008). Career commitment is more self-focused than organisational commitment. The

commitment to a career helps in establishing a vocational identity, a construct considered to be essential in the development of self-identification (Kroger, 1986). Individuals that have committed to a career have been found to be more confident in their skills and possess lower levels of anxiety (Crocetti, Klimstra, Keijsers, Hale, & Meeus, 2009), than those who are undecided (Kidwell, et al., 1995), and achieve greater levels of career success (Ballout, 2009). Individuals committed to their career are more orientated on the reward that their own future goals can provide rather than those of the organisation (Ok & Vandenberghe, 2016).

Commitment making. Commitment making refers to the making of a choice (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005). Commitment making is a representation of a person's capacity to pursue a specific career, for example choosing to become a nurse over a veterinarian nurse. Commitment making is generally considered a positive process that promotes the transition from a person learning about the world-of-work to a person who is actively engaging with it. The choice of committing to a career is an act that portrays the significance of making a decision. The choice to earnestly pursue a career indicates that a person has made a decision to work towards a future goal. Not only is it the reward of a future goal that contributes to this decision but it is also a sign that they have considered what steps are needed in order to achieve their goals.

Identification with career commitment. Identification with career commitment is the degree in which an individual is personally connected to their career decision, such as the depth of meaning and expected fulfilment that being a nurse may be to someone (Luyckx et al., 2005). Recalling the previous example,

the person who chooses to become a nurse over a veterinarian nurse may perceive their choice to be better suited to their own morals, or they may believe they could make a more significant difference to other people's lives. Identification with career commitment has been found to be a substantial factor in the career commitment of nurses due to the high emotional investment of the career (Mauren Pimentel et al., 2015). Thus, making a commitment to pursue a career partially consists of the individual identifying something in that role that they identify with and this, in turn, contributes to the individuals' opportunity to achieve their future goals. The development of this vocational identity is a significant contributor to the career development process (Diemer & Blustein, 2007).

Reconsideration.

Career reconsideration is defined as the “comparison between current commitment and other possible alternatives” (Crocetti, Rubini, Luyckx, & Meeus, 2008, p. 985). Career reconsideration involves “releasing current commitments, comparing and contrasting alternative commitments, and a willingness to conduct in-breadth exploration” (Porfeli et al., 2011, p. 855). Porfeli et al., (2011) propose that career reconsideration consists of two sub-categories, career flexibility and career self-doubt.

Career self-doubt. Career self-doubt is defined as the uneasiness or worry in regard to one's career choice (Porfeli et al., 2011). This self-doubt is regarded as a negative consequence that hinders future career commitment and vocational exploration. High levels of career self-doubt in students aged between 14 and 17 years of age have been found to be positively associated with the increased suffering from an identity crisis, increased confusion, disturbed thinking patterns

and increased conflict in personal and vocational relationships (Kidwell et al., 1995).

Career flexibility. Career flexibility is defined as an ongoing and active consideration of employment alternatives and a recognition that one's interests and values may change due to the consequences of learning and having new experiences (Porfeli et al., 2011). Career flexibility represents a more positive rationale for remaining uncommitted to a career. Individuals who exhibit high levels of career flexibility may acknowledge that they have a lot to understand and are open to doing so.

Porfeli et al., (2011) state that 2004 U.S. Department of Labour data indicates that adults aged 18 to 40 years of age change jobs approximately ten times with a large portion of these jobs ending within a year. Comparatively, 2011 New Zealand labour statistics data indicate that individuals were likely to spend between one to three months employed before changing jobs. Individuals aged 15 to 24 years old would likely change jobs during their three-month employment term (Statistics NZ. 2018), although this trend may be due to the 90-day trial employment legislation introduced in April 2011. In contrast, individuals aged 40 years and over had much lower turnover rates,

Employment laws, labour markets, and employment type accessibility are just a number of factors that contribute to the evaluation of future careers. Where one may feel as though they should be free to author their own careers, more than likely their choices will be inhibited in some way by the labour market. Therefore, individuals who recognise their flexibility as a source of positivity should be more confident when circumventing the challenges of finding employment in pursuit of

their ideal career. Although flexibility can be interpreted as a positive way in which to view the decision-making process, it remains an aspect of the doubt in which one has with making a commitment to a particular career (Porfeli et al., 2011).

These four defined categories of career commitment help to quantify and explain the various contributing factors that influence the overall quality and depth of meaning of a person's career commitment. The choice to commit to a career, to identify with a career, to have doubt in one's career choices, and to remain open to new vocational opportunities, are all factors that can contribute to the total quality of a person's career commitment. The following will be a discussion of what previous literature has revealed of the nature of career commitment, and hypotheses proposing how FTP may interact with career commitment will be suggested.

In their 2011 study, Porfeli et al., (2011) argued that from a developmental perspective, university students would exhibit more commitment making and identification than high-school students due to the university students being closer to the age in which adolescents should be making the transition to adulthood, however this was not the case. Their findings indicated that the age variance between the two samples explained for very little of the variance between the sub-scales (no more than 2%). Both age categories of students indicated that the strength of their career commitment was similar to one another. This finding indicated that the VISA sub-scales were robust enough to measure career commitment across different ages and that the depth of career commitment in individuals is not a fickle construct that changes through a period of growth. It is a present, stable construct that is considered throughout the entirety of the high-

school-university-adulthood transition and it is a reliable predictor of a person's level of achievement. In addition, Porfeli et al. 's., (2011) findings indicated that levels of career exploration, commitment, and reconsideration did help to differentiate individuals who had either achieved a sense of commitment to an identity, who were currently experiencing a struggle to make a commitment, those who were conforming to the expectations of others, or who felt no need to make a commitment (David, 2014).

Porfeli et al. 's., (2011) study indicated that an individual's degree of career commitment is related to the development of their self-identity and that this interactive relationship is a stable construct, present throughout an individual's life-span. Perceptions of one's career commitment have also been found to be related to the psychological health of individuals. Using the VISA, Lannegrand-Willems, Perchec, and Marchal (2016), aimed to examine the relationship between vocational identity and both positive and negative psychological adjustment (depression, satisfaction with life) in 1077 French students. The researchers hypothesised that there would be a difference between positive and negative psychological statuses in relation to perceived vocational identity. The findings revealed that identification with career commitment was positively correlated with satisfaction with life, and self-doubt was positively correlated with depression and negatively correlated with satisfaction with life. Which suggests that an individual's psychological health can be attributed to their perceptions of the status of their career. If an individual is committed to their career, they may be more likely to possess a healthier level of positive psychological health. If an individual is doubtful of their career, they may be more likely to develop unhealthy psychological conditions. The consequences of dysfunctional career

thinking such as commitment anxiety and decision-making confusion have been found to contribute to increased degrees of depression and hopelessness in undergraduate and graduate students (Dieringer, Lenz, Hayden, & Peterson, 2017). In contrast, individuals that have a strong commitment to their career have a much better chance of career success (Ahmad Tisman, Kamal Ab, & Arfan, 2017), and are more content with the success of their careers and what their careers provide for them (Pan & Zhou, 2013). These factors are very similar to those who possess high levels of FTP. High levels of FTP are associated with individuals who achieve higher academic standards and are more open to new experiences, factors that are associated with individuals who enjoy greater satisfaction with their careers.

In consideration of the previously mentioned research, it is expected that FTP has a beneficial relationship with positive career commitment outcomes. As such, it is expected that the positive aspects of career commitment (commitment making, identification) will be positively related to FTP and to each other within the career commitment construct, thus;

Hypothesis 2: Commitment making will be positively associated with a) connectedness, and b) valence.

Hypothesis 3: Identification will be positively associated with a) connectedness, b) identification, and c) commitment-making.

In contrast, the evidence suggests that the negative aspects of career commitment may be negatively related to increases in FTP. It is also expected that self-doubt and flexibility would be positively related with one another; thus, the research suggests that;

Hypothesis 4: Self-doubt will be negatively associated with a) connectedness, b) valence, c) commitment making, and d) identification.

Hypothesis 5: Flexibility will be negatively associated with a) connectedness, b) valence, c) commitment making, and d) identification; and be positively associated with e) self-doubt.

Considering the relationship between FTP and career commitment as suggested by the current literature, it is expected that FTP can predict future levels of career commitment. Thus it is expected that;

Hypothesis 6: Connectedness can predict levels of a) commitment making, b) identification, c) self-doubt, and d) flexibility.

Hypothesis 7: Valence can predict levels of a) commitment making, b) identification, c) self-doubt, and d) flexibility.

Age.

Future Time Perspective and Age.

Research examining the influence of age on the relationship between FTP and career commitment has found either weak relationships or produced conflicting evidence. One reason may be due to the limited age ranges of participants, a factor acknowledged by Mello and Worrell (2006). For example, Porfeli et al., (2011) examined career commitment and identity status with two groups of participants, whose average age was 16.5 and 21.7 years of age respectively. Walker and Tracey (2012) examined career decision making with a participant pool whose average age was only 19.7 years of age.

Considering these difficulties, what we do know can be derived from the correlations found in studies that have investigated FTP and career commitment with other factors. For example, Froehlich et al., (2015) found a negative correlation between opportunity focus (FTP) and age, and a positive correlation between limitation focus and age in a sample of participants aged between 18 to 59 years of age ($M = 40.80$). This suggests that as individual's age, their focus on opportunities decreases and their focus on limitations increases. A suggestion also supported by Lang and Carstensen (2002) and Korff et al., (2017) who found that greater chronological age was strongly negatively correlated with FTP. Weiss, Job, Mathias, Grah, and Freund (2016) found that age was negatively correlated with FTP, and even the perceived threat of aging was negatively correlated with FTP. These trends share commonalities with SST; a shift in decision making priorities may be due to a person's perception of their increasing age. These findings suggest that as individuals grow older, their focuses change, and their FTP decreases.

Career Commitment and Age.

In 1987 Jon Lorence argued that previous research examining the influence age has on the psychological attachment to work involvement has received no real consensus. Lorence (1987) suggests that there is no "adequate explanation that describes how or why work involvement orientations vary by age" (p.549-550). For example 'job reward' and 'work conditions' were found to better predict work involvement in male workers than age alone (Lorence, 1987). In contrast, more recent research has found that higher age was positively associated with career commitment, and career satisfaction in MBA students that had a minimum of two years' work experience (Pan & Zhou, 2013). Higher career

commitment among human service professionals was found to be positively associated with greater age (Cherniss, 1991). Arora and Rangnekar (2016) found that age was positively associated with career identity, career resilience, and career planning. An increase in age has been found to account for a large portion of the variance in retirement intentions (Adams, 1999). Colarelli and Bishop (1990) argue that there are three reasons as to why age may strengthen effective career commitment. First, career commitment should increase as an individual's occupational identity develops. Second, as people grow older, they become more invested in their careers. Third, as a person settles into a career, by doing so, they close off other possibilities of future job opportunities. There is less time to learn new skills or develop new working relationships that will earn them better future long-term rewards. Colarelli and Bishop (1990) suggest that the relationship between career commitment and age should overall be positive until an individual begins to approach retirement. This research suggests that levels of FTP and career commitment can change as people age; thus it is expected that;

Hypothesis 8: There will be a significant difference between age cohorts regarding a) connectedness, and b) valence.

Hypothesis 9: There will be a significant difference between age cohorts regarding a) commitment-making, b) identification, c) self-doubt, and d) flexibility.

Lastly, the research previously discussed suggests that FTP and age have a negative relationship, and career commitment and age have a positive relationship up until an age closer to retirement. Thus, it is suggested that age may contribute towards an interaction effect on the relationship between FTP and

career commitment. As individuals get older, the strength of the relationship between FTP and career commitment becomes weaker. Thus, it is expected that:

Hypothesis 10: Age moderates the relationship between FTP and career commitment.

Summary of Hypotheses

Hypothesis 1: Connectedness will be positively correlated with valence.

Hypothesis 2: Commitment making will be positively associated with a) connectedness, and b) valence.

Hypothesis 3: Identification will be positively associated with a) connectedness, b) identification, and c) commitment-making.

Hypothesis 4: Self-doubt will be negatively associated with a) connectedness, b) valence, c) commitment making, and d) identification

Hypothesis 5: Flexibility will be negatively associated with a) connectedness, b) valence, c) commitment making, and d) identification; and be positively associated with e) self-doubt.

Hypothesis 6: Connectedness will predict levels of a) commitment making, b) identification, c) self-doubt, and d) flexibility.

Hypothesis 7: Valence will predict levels of a) commitment making, b) identification, c) self-doubt, and d) flexibility.

Hypothesis 8: There will be a significant difference between age cohorts regarding a) connectedness, and b) valence.

Hypothesis 9: There will be a significant difference between age cohorts regarding a) commitment-making, b) identification, c) self-doubt, and d) flexibility.

Hypothesis 10: Age moderates the relationship between FTP and career commitment.

Chapter Summary

This chapter presented evidence that examined the relationship FTP has with levels of career commitment and examined the likelihood of age influencing the relationship between these two variables. FTP appears to be a robust construct that is related to the long-term success of individuals. FTP has been found to be conducive to greater academic and career success. The purpose of this research is to investigate how FTP influences levels of career commitment in an employed general New Zealand sample. The methods used to examine these relationships are presented in the following chapter. Afterwards, the results of this research will be detailed followed by a discussion of the findings.

Chapter Two: Method

Participants

Participants in this study were recruited from a general New Zealand population that were currently employed and were New Zealand citizens or residents. 151 participants took part in the online questionnaire (see Appendix A) between the dates of December 20, 2017, to March 7, 2018. Fifty-five incomplete data sets were excluded, leaving 96 complete responses. Leaving a successful response rate of 64%. According to Friedman (1982), a sample size of 96 provides a level of significance of .05 with a power of .50. Recorded ages of participants were limited to cohorts of ages. 10 participants were 16 – 19 years of age, 56 participants were 20 – 44 years of age, 28 participants were 45 – 64 years of age, and 2 responses were 65 – 74 years of age. The median age cohort of participants was the 20 – 44 years old. Gender and ethnicity of participants was not recorded.

Procedure

Participant recruitment was carried out using a combination of both convenience sampling and snowball sampling. Convenience sampling is a form of non-probability sampling in which the researcher selects potential participants from their available contacts who meet the appropriate criteria (Powers & Knapp, 2010). Convenience sampling was initially used to recruit potential participants via Facebook, LinkedIn, and private email. Convenience sampling consisted of the researcher publishing a public invitation on Facebook and LinkedIn in which members of the Facebook and LinkedIn community could volunteer to participate. Participants were also asked to suggest anyone else on their friend's list they thought would be interested in participating. This step created a form of snowball

sampling. Snowball sampling consists of including an initial sample of research participants who were then asked to forward or nominate other potential participants (Goodman, 1961). When used in tandem with Facebook, this method has the potential to be the most effective and most affordable way of participant recruitment that offers the best available opportunity to access an extensive and diverse pool of potential participants (Kosinski, Matz, Gosling, Popov, & Stillwell, 2015).

The general limitation of social media is that it is considered to be used more by the young, and well educated (Kosinski et al., 2015). As such, entire groups, such as the elderly, or non-social media users, may be excluded from research that uses social media as a distribution and recruitment tool.

Acknowledging these concerns motivated the consideration of approaching individuals to be recruited via private email. Discussions were conducted between the researcher and potential participants on the topic of the research and the relationships it aimed to examine. If the individual expressed interest in participating, the individual supplied the researcher with a valid email in which the researcher could send a link to the questionnaire.

As this research focused on examining a general New Zealand population, acquiring a broad collection of participants from different ages and different occupations was important. Focusing solely on particular occupations or particular age groups would not allow for a more robust test of the instruments chosen, nor would it allow for a much broader range of age groups than previous research has used. Thus for these reasons, these formats and recruitment methods were chosen to complete this research.

Measures

Data for this research was collected by means of an online survey which was constructed using previously validated measures (see Appendix B). The questionnaire was constructed and distributed using the online survey software Qualtrics (2018). In total there were 48 questions that measured participants' connectedness, valence, commitment making, identification, self-doubt, and flexibility. Screening questions and demographic questions were also used to measure age, if the participant was currently employed, and if they were New Zealand residents/citizens.

Screening questions. Two demographic questions regarding the participant's current employment status, and current New Zealand citizenship/resident status, were used to control the selection of participants. These questions were placed at the beginning of the survey. Participants were asked "*Are you a New Zealand citizen or resident?*" and "*Are you currently employed?*" If the participant answered 'yes' to both questions, they continued to the instrument portions of the questionnaire, if they answered 'no', they would be taken to a secondary conclusion of the questionnaire thanking them for their time but explaining that the questionnaire was limited to a New Zealand sample who are currently employed.

Future time perspectives (FTP). The FTP (valence and connectedness) of participants was measured using the Future Time Perspective Scale (FTPS) by Shell and Husman (2001). The FTPS is a 25-item instrument. This instrument uses two variables that give a measure of how much an individual values long-term goals and the current actions that contribute to long-term rewards.

Participants were asked to rate how much they either agree or disagree with particular statements on a five-point Likert type scale ranging from 'strongly disagree' to 'strongly agree'. The connectedness scale consists of 16 statements that assess an individual's perceptions of the instrumental relationship between current behaviour and future goal attainment. Examples of connectedness statements include; "*Realizing a long-term goal is worth some sacrifices today*", and "*What one does today will have little impact on what happens ten years from now*". The valence scale consists of 9 questions that assess the individual's perception of the importance of obtaining short or long-term goals. Examples of valence statements include; "*What happens in the long-run is more important than how one feels right now*", and "*Given the choice, it is better to get something important in the future than something you want today*". Total connectedness and valence scores were calculated by using the mean of the participants' scores for each variable. For example, connectedness was calculated as: $\text{sum of connectedness scores} / \text{number of connectedness questions} = \text{average connectedness}$. Shell and Husman (2001) reported the previous Cronbach's α reliability scores of the connectedness and valence scales were .83 and .77 respectively which can be considered within acceptable parameters of reliability (Kline, 2010).

Career commitment. Career commitment was measured using two 10-item commitment and reconsideration scales from Porfeli et al. 's., (2011) Vocational Identity Status Assessment (VISA). Participants were asked to rate how much they either agreed or disagreed with particular statements on a five-point Likert type scale ranging from 'strongly disagree' to 'strongly agree'. Career commitment was measured using five questions evaluating commitment making

“No other career is as appealing to me as the one I expect to enter”, and five questions evaluating commitment identification *“Becoming a worker in my chosen career will allow me to become the person I dream to be”*. Career reconsideration was measured using five questions evaluating career self-doubt *“Thinking about choosing a career makes me feel uneasy”*, and career flexibility *“My career choice might turn out to be different than I expect”*. Participant scores were calculated by using the mean scores of each sub-scale to indicate the strength of each of the respective variables. From their previous research Porfeli et al., (2011) reported the Cronbach α scores for commitment making (.84), commitment identification (.76), self-doubt (.79), and commitment flexibility (.83) were all within acceptable levels of reliability (Kline, 2010).

Age. The demographic question regarding the participants' age was placed at the end of the questionnaire to compensate for the sensitivity of disclosing ones age some individuals may have. The age question was stated *“What age are you?”* with the participant selecting an appropriate age category from three predetermined age cohort categories. Age was designated into categories used previously by Chung and Lee (2017). This study suggested that these age categories are indicators of robust trends within particular ages. These trends were found to be stable occurrences within these age categories and across three different years of evaluation. The suggested age categories were 16 – 19 years of age, 20 – 44 year of age 45 – 64 years of age, 65 – 74 years of age, and 75+ years of age. After the collection of data was completed it was decided that the age categories of 45 – 65, 65 – 74, and 75+ years of age would be combined due to the limited number of respondents. This left three distinct categories to use for analysis; 16 – 19 years of age, 20 – 44 years of age, and 45 – 74+ years of age.

Ethical concerns

Ethical consideration was focused on developing a questionnaire that was respectful of the self-identification an individual possess toward their career and the progress they have made in relation to their relevant age. Due to the delicate nature of asking a person to disclose their age, the question of age was placed at the end of the survey. Consideration of previous test samples used was examined, and both research articles in which the two psychometric instruments were developed indicated no ethical concerns or warned of any expected prolonged psychological distress. Participants were informed that their continuance of the questionnaire beyond the introduction screens would indicate their acceptance of giving their informed consent. Therefore, formally signed consent was not required by participants however consent was considered to be given upon the completion of the questionnaire. Participants were informed that they were under no obligation to complete the questionnaire and if they chose to leave before completing the questionnaire, the data they provided would not be used in the analysis of this research. This study was completely confidential, and participants were informed that no identifying information would be collected. Evaluation of the proposed questionnaire was submitted and reviewed by the University of Waikato's Faculty of Arts and Social Sciences Human Research Ethics Committee. Changes were suggested and completed before ethical approval was granted.

Data Analysis

Internal Consistency

The first step in analysing the data was to test the internal reliability of the two measures. Cronbach alpha tests were conducted on both FTP and career commitment measures. Any measure above .7 was considered to be of high internal validity. Determining internal reliability is important as it validates the source of the data and provides information on the effectiveness of the instruments applicability to a non-academic focused employed general New Zealand sample.

Correlational Analysis

Pearson's correlation was used to examine the strength of the relationships between the variables of FTP and career commitment and was used to test the hypotheses: 1, 2. a), b) 3. a), b), c). 4. a), b), c), 5.a), b), c), d), e). These hypotheses predicted the expected correlational relationships each variable would have with one another.

Regression Analysis

Regression analysis was used to test if connectedness and valence had a causal influence on levels of commitment making, identification, self-doubt, and flexibility. This method was used to test hypotheses 6. a), b), c), d) and 7. a), b), c), d) as they predicted that connectedness and valence did have a causal relationship with career commitment.

Analysis of Variance

Two one-way analysis of variance (ANOVAs) were conducted to examine if there were any statistically significant differences between the different age cohorts regarding connectedness, valence, commitment making, identification, self-doubt, and flexibility. One was conducted to test for FTP and another to test for career commitment. This step was used to test hypotheses: 8. a), b), and 9. a), b), c), d).

Moderated Multiple Regression Analysis

Eight moderated multiple regression analyses were conducted using the PROCESS plugin (Hayes, 2018) for the IBM SPSS Statistics 25 statistical analysis software to examine if age moderated the relationship between FTP and career commitment variables. FTP variables, connectedness and valence, were used as independent variables and age cohorts was used as the moderator variable, while career commitment variables were used as the outcome variables. One moderation analysis was conducted for each of the pairs of FTP variable and commitment variable (for example, connectedness, commitment-making, age. Or, valence, commitment-making, age). Moderation analysis was used to test hypothesis 10.

Chapter Summary

This chapter described the methods that were used to collect the data and each method of analysis. The following chapter aims to present and describe the results from these analysis procedures.

Chapter Three: Results

This chapter will present the findings of this study.

Descriptive statistics

Means, standard deviations, and Cronbach alphas were similar to those of previous studies (see table 1). Connectedness and valence means and standard deviations of the current study were similar to connectedness ($M = 3.88$, $SD = .45$) and valence ($M = 3.03$, $SD = .58$) reported in Shell and Husman (2001). Connectedness ($M = 4.03$, $SD = .41$), and valence ($M = 3.16$, $SD = .62$) from Shell and Husman (2008) were also found to be similar to the current study's results. Valence was found to be slightly higher. Career commitment variables of the current study were also found to be similar to the commitment making ($M = 3.45$, $SD = .83$), identification ($M = 3.98$, $SD = .64$), self-doubt ($M = 2.37$, $SD = .78$), and flexibility ($M = 2.98$, $SD = .78$) variables reported by Porfeli et al., (2011). Flexibility was the only variable to be slightly higher.

The internal reliability of the instruments was measured using Cronbach's alpha tests. The Future Time Perspective Scale instrument was composed of two subscales numbering 25 items in total. The connectedness sub-scale consisted of 16 items, and the valence sub-scale consisted of 9 items. The total FTP inventory was found to be highly reliable ($\alpha = .84$). Cronbach alphas for connectedness and valence in the current study were similar to connectedness ($\alpha = .86$) and valence ($\alpha = .83$) reported by Shell and Husman (2008).

The Vocational Identity Status Assessment (VISA) instrument was composed of four sub-scales numbering 20 items in total. Each of the four sub-scales consisted of 5 items. Commitment making, identification, self-doubt, and

flexibility were all found to be highly reliable. The career commitment variables of the current study were also similar to the commitment making ($\alpha = .82$), identification ($\alpha = .79$), self-doubt ($\alpha = .81$), and flexibility ($\alpha = .81$) variables of Porfeli et al., (2011). However, total reliability, when all sub-scales were contributed to the reliability analysis, indicated poor reliability ($\alpha = .43$) of the VISA as a whole. Therefore, it was determined that only subscales would be used in the following analyses rather than using the total of the entire VISA construct in the following analyses.

Table 1

Means, SD's, Cronbach Alphas of FTP and Career Commitment Variables

Variables	<i>N</i>	<i>M</i>	<i>SD</i>	<i>α</i>
<u>FTP</u>				
Connectedness	96	3.78	.44	.79
Valence	96	3.27	.65	.84
<u>Career Commitment</u>				
Commitment making	96	3.08	.96	.79
Identification	96	3.69	.90	.83
Self-doubt	96	2.53	1.00	.85
Flexibility	96	3.67	.76	.74

Correlations

Correlation analysis was conducted to examine the relationships between connectedness, valence, commitment-making, identification, self-doubt, and flexibility (See table 2), testing hypotheses 1 to 5 e).

Hypothesis 1 proposed that connectedness would be positively correlated with valence and was supported ($r = .349, p < .01$). This suggests that as a person's capacity to identify what actions are required to achieve future goals increases, their value of future goals also increases.

Hypothesis 2 proposed that commitment-making would be positively associated with a) connectedness, but the results did not support this ($r = .11, p = .277$), and b) valence which was supported ($r = .303, p < .01$). This suggests that as a person's capacity to commit to a career increases, their value of future goals also increases.

Hypothesis 3 proposed that identification would be positively associated with a) connectedness, but the results did not support this ($r = .137, p = .183$), b) valence which was supported ($r = .319, p < .01$), and c) commitment-making which was supported ($r = .611, p < .01$). These results suggest that as a person's connection to their career increases, their value of future goals and their ability to commit to their career also increases.

Table 2

Inter-correlations between FTP Variables and Career Commitment Variables

Variables	1	2	3	4	5
1. Connectedness					
2. Valence	.35**				
3. Commitment making	.11	.30*			
4. Identification	.13	.32**	.61**		
5. Self-doubt	-.18	-.07	-.55**	-.36**	
6. Flexibility	-.26**	-.25*	-.65**	-.38**	.54**

*Note: Sample size = 96. * $p < .05$, ** $p < .01$*

Hypothesis 4 proposed that self-doubt would be negatively associated with a) connectedness, which was not supported ($r = -.183, p = .075$), b) valence which was not supported ($r = -.075, p = .465$), c) commitment-making which was supported ($r = -.555, p < .01$), and d) identification which was supported ($r = -.369, p < .01$). These results suggest that as a person becomes more doubtful about their career choices and their belief in themselves, their ability to commit to a career and their connection with their career, decreases.

Hypothesis 5 proposed that flexibility would be negatively associated with a) connectedness which was supported ($r = -.264, p < .01$), b) valence which was supported ($r = -.254, p < .05$), c) commitment-making which was supported ($r = -.650, p < .01$), d) identification which was supported ($r = -.388, p < .01$). In addition, flexibility was proposed to be positively associated with e) self-doubt which was supported ($r = .540, p < .01$). These results suggest that, as people believe themselves to be more adaptable in multiple roles, their ability to identify what actions are required to obtain future goals, their value they place on future goals, their ability to commit to a career, and their connection with their career, decreases. These results also suggest that, as people believe themselves to be more flexible, their doubt in their career decisions and their abilities also increase.

Regression Analysis

Multiple regression analyses were used to test if connectedness and valence significantly predicted participants' ratings of commitment-making, identification, self-doubt, and flexibility (see table 3) testing hypotheses 6. a) to 7. d). To test this concept, eight multiple regression analyses were conducted using connectedness and valence as the predictor variables, and each of the career

commitment variables as outcomes (commitment-making, identification, self-doubt, flexibility). Out of the eight tests, four significant prediction models were found. Connectedness was found to significantly predict flexibility, and valence was found to significantly predict levels of commitment-making, identification and flexibility.

Table 3

Regression Analysis Results between FTP and Career Commitment Variables

Variables	Connectedness					Valence				
	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Commitment making	.24	.22	.11	1.09	.27	.44	.14	.30	3.07	.003
Identification	.27	.20	.13	1.34	.18	.43	.13	.31	3.26	.002
Self-doubt	-.41	.23	-.18	-1.80	.07	-.11	.15	-.075	-.73	.46
Flexibility	-.44	.16	-.26	-2.65	.009	-.29	.11	-.25	-2.54	.01

Hypothesis 6 proposed that connectedness would predict levels of a) commitment-making, b) identification, and c) self-doubt which were not supported. However, a significant regression equation was found ($F(1,94) = 7.030, p < .01, 95\% \text{ CI} [-.785, -.113]$) with connectedness predicting 7% of the variance in d) flexibility. This result suggests that connectedness does predict levels of flexibility. Thus hypothesis 6 was only partially supported.

Hypothesis 7 proposed that valence would predict levels of a) commitment-making which was supported ($F(1,94) = 9.469, p < .01, 95\% \text{ CI} [.157, .727]$), with valence predicting 9% of the variance in commitment-making. A significant regression equation was found for b) identification ($F(1, 94) = 10.676, p < .01, 95\% \text{ CI} [.172, .706]$), with valence predicting 10% of the variance

in identification. No significant relationship was found for c) self-doubt, however a significant regression equation was found for d) flexibility ($F(1, 94) = 6.486, p < .05, 95\% \text{ CI } [-.519, -.064]$) with valence predicting 5% of the variance in flexibility. These results suggest that valence can predict levels of commitment-making, identification, and flexibility, but not self-doubt. Thus, hypothesis 7 was partially supported.

Analysis of Variance

Two Analysis of Variance tests were conducted to examine if there were significant differences between age cohorts regarding FTP and career commitment variables testing hypotheses 8. a), b), to 9. d). The first test was to examine the impact of age on levels of connectedness and valence, as measured using the Future Time Perspective Scale (FTPS). The second test was to examine the impact of age on levels of commitment-making, identification, self-doubt, and flexibility, as measured using the Vocational Identity Status Assessment (VISA). Participants were divided into three age cohorts (Group 1: 16 – 19yrs, Group 2: 20 – 44yrs, Group 3: 45 – 74+yrs). Table 4 shows the means and standard deviations of each variable. Means and standard deviations are similar to the results of Shell and Husman (2001), and Porfeli et al., (2011) which indicate good reliability.

Table 4

Means and SD's of Variables Categorised by Age Cohorts

Variables	Age cohorts					
	16 - 19		20 - 44		45 -74+	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
FTP						
Connectedness	3.78	.35	3.79	.43	3.80	.49
Valence	3.26	.85	3.29	.63	3.24	.66
Career commitment						
Commitment-making	3.20	1.06	2.86	.95	3.43	.84
Identification	3.70	1.07	3.77	.79	3.63	1.05
Self-doubt	2.10	1.19	2.75	1.04	2.20	.76
Flexibility	3.40	1.12	3.96	.62	3.40	.75

Hypothesis 8 proposed that there would be significant differences between age cohorts regarding a) connectedness ($F(2,93) = .018, p = .982$), and b) valence ($F(2,93) = .044, p = .957$) which were unsupported.

Hypothesis 9 proposed that there would be significant differences between age cohorts regarding a) commitment-making, which was supported, b) identification, which was unsupported, c) self-doubt, which was supported, and d) flexibility which was supported. The results of the second ANOVA will be discussed in more detail below (see figure 5).

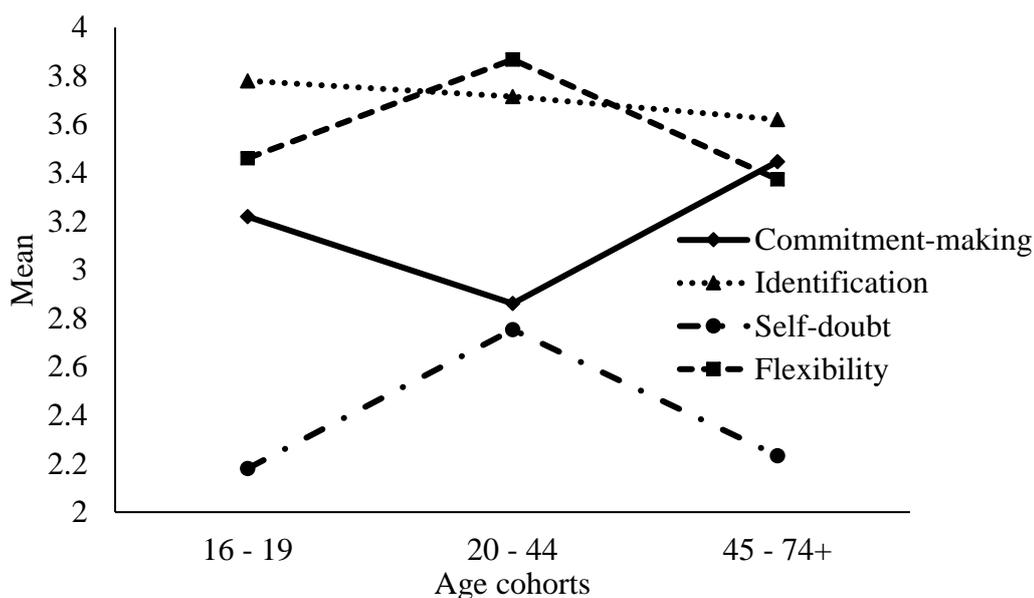


Figure 5. Changes in career commitment variables between age cohorts

There was a significant main effect of age on commitment-making ($F(2,93) = 3.960, p < .05$). Thus, hypothesis 9 a) was supported. A medium effect size of .08 was calculated using eta squared. Bonferroni post-hoc analysis indicated that this main effect was reflected between two age cohorts. A p value of .02 for the difference between 20 – 44, and 45 – 75 age cohorts shows that this difference was significant. The associated trend between age cohorts indicates that commitment-making decreases between the age cohorts of 16 – 19, and 20 – 44 yrs, and increases in the 45 – 74+ age cohort.

There was no main effect of age found on identification ($F(2,93) = .156, p = .856$). Thus hypothesis 9 b) was rejected.

There was a significant main effect of age on self-doubt ($F(2,93) = 3.439, p < .05$). A medium effect size of .07 was calculated using eta squared. However, Bonferroni post-hoc analysis indicated that this main effect was not reflected in significant differences between the three age cohorts. A p value of .065 for the

difference between the 20 – 44, and 45 – 74+ age cohorts shows that this difference approached significance. Thus hypothesis 9 c) was partially supported. The associated trends between age cohorts indicate that self-doubt increased in ages within 20 – 44, and decreased within the 45 – 74+.

There was a significant main effect of age on flexibility ($F(2,93) = 4.976$, $p < .01$) Thus, hypothesis 9 d) was supported. A medium effect size of .10 was calculated using eta squared. Bonferroni post-hoc analysis indicated that this main effect was reflected between two age cohorts. A p value of .01 for the difference between the 20 – 44, and 45 – 75 age cohorts shows that this difference was significant. The associated trends between the age cohorts indicate that flexibility increased within the 20 – 44 age cohort, and decreased within the 45 – 74+ age cohort.

Moderated Multiple Regression Analysis

Hypothesis 10 proposed that age moderates the relationship between FTP and career commitment. To test this hypothesis eight hierarchal moderated multiple regression tests were conducted using the PROCESS plug-in by (Hayes, 2018) examining the relationship between each of the variables of FTP (Connectedness, valence) and career commitment (commitment-making, identification, self-doubt, flexibility). Only one significant result was found in the interactions between connectedness, age, and self-doubt. The following is a breakdown of the process conducted to discover this result.

Hierarchal regression analysis was conducted using centred variables to avoid multicollinearity. Two models were created to test for the presence of a moderation effect. Model 1 was constructed with connectedness as the predictor

and self-doubt as the outcome. A p value of .06 indicated that Model 1 accounted for 2.5% of variance of self-doubt that approached significance ($F(1,94) = 3.407$). Next, an interaction term was created using connectedness and age. The interaction term between connectedness and age was added to the regression model to create Model 2. Model 2 accounted for a 6% of the variance of self-doubt ($F(1,93) = 4.416, p < .05$). These results indicate that the interaction term of connectedness and age improved the overall model ($\Delta R^2 = 0.034, \Delta F(1,93) = 1.009, p < .05$). The results of this analysis indicated that there was a form of moderation present.

Next, a moderated multiple regression (MMR) analysis was run to determine the nature of the impact age has on the relationship between connectedness and self-doubt. The results of the MMR indicated that connectedness and age accounted for 9% of the variance in self-doubt ($F(3,92) = 3.006, p < .05$). The interaction effect contributed to an increase in the accounted for variance ($\Delta R^2 = .046, \Delta F(3,92) = 4.643, b = .065, t(92) = 2.1548, p < .05$).

An examination of the interaction plot (see figure 6) suggests that the age cohorts 16 - 44 have a buffering effect on the interaction between connectedness and self-doubt. As connectedness and age increases, self-doubt decreases. In contrast, age appears to have an enhancing effect on the interaction between connectedness and self-doubt in the age cohort of 45-74+. As connectedness and age increases, self-doubt increases. Thus, hypothesis 10 was partially confirmed.

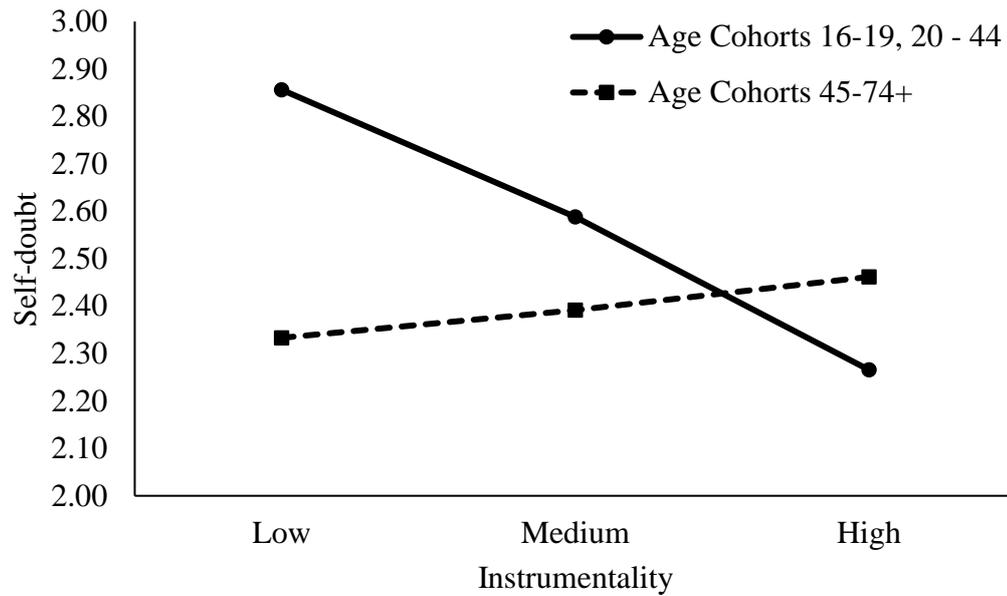


Figure 6. *Interaction effect age has on connectedness and self-doubt.*

Chapter Summary

This chapter aimed to report the statistical findings of the analysis. The next chapter will aim to break down each of these findings and discuss how these findings compare to trends found in previous research. The implications of these findings on current theoretical frameworks will also be discussed. Finally, the strengths and limitations of this research and suggestions for future research will be suggested.

Chapter 4: Discussion

This research aimed to examine the impact FTP has on levels of career commitment in an employed general New Zealand population. Specifically, the aim was to examine whether the value of future goals and the capacity to identify the steps required to achieve future goals are personality traits that influence levels of career commitment, in a non-academically composed sample. Previous research warrants this research as the limitations to previous research investigating FTP was the young and often academically focused participants. As such, the participants in this study were composed of individuals from various backgrounds of employment who were New Zealand citizens/residents. Furthermore an examination of the extent to which age moderates the relationship between FTP and career commitment was also undertaken.

An individual's career consumes a large portion of one's life which helps to construct a sense of self-identity and contributes as a source of value (Kroger, 1986). Yet when individuals enter the world of work, they are introduced to the realities of a world expecting much of them. This introduction to the world-of-work helps to expand the current knowledge of younger individuals, but also provides the often confronting reality of the expectations of working (Lewko, 1987). This can create a sense of conflict with their personally held ideas of the prospective futures they idolise. This conflict then leads to the inability to choose a career to begin their occupational journey. This inability to choose a career can have long-term negative consequences that resonate throughout one's life. This inability to commit often leads to lower levels of self-esteem (Rosenberg, 1965), lower long-term incomes for their future families (Coley, Lohman, Votruba-Drzal, Pittman, & Chase-Lansdale, 2007), lower levels of education, and lower socio-

economic achievement (Blustein, 1997). Thus it is important to investigate whether FTP influences the outcome of a person's career commitment so that we may better understand how to improve one's FTP.

The goal of this study was to produce empirical evidence of the relationships between FTP, career commitment, and age in an employed general New Zealand sample so that future researchers and practitioners would be better informed of how the specific factors of FTP correlate with factors of career commitment, and how these factors differ between age cohorts.

This chapter aims to discuss the significant findings and how they either support or contradict currently known theories. The practical and theoretical implications are also discussed. This chapter will then conclude with the limitations of the current study and suggestions for future research.

Reliability of Measures

This study began by examining the internal reliability of the instruments used to measure levels of FTP and career commitment. FTP was measured using the Future Time Perspective Scale (FTPS) by Shell and Husman (2001). Career commitment was measured using a modified version of the Vocational Identity Status Assessment by Porfeli et al., (2011). The results of the Cronbach's alpha tests returned positive findings from all the instruments tested. These results suggest that these measures are valid in a New Zealand population and reinforce the reliability of these tests as has been found in previous studies (Aleni Sestito et al., 2015; Lannegrand-Willems et al., 2016; Negru-Subtirica, Pop, & Crocetti, 2015; Öngen, 2014; Walker & Tracey, 2012).

Future Time Perspectives Relationship with Career Commitment

To investigate the relationships between FTP and career commitment the FTFS and VISA instruments provided subscales that enabled a more detailed examination of the interplay between these constructs. FTP was composed of the two variables connectedness and valence, while career commitment was composed of the four variables commitment-making, identification, self-doubt, and flexibility.

The variables of FTP, connectedness and valence, were found to be strongly associated with one another. Indicating that the ability to identify the steps necessary to achieve future goals and the predicted value of future goals are inextricably related within an employed general New Zealand sample. It appears that a benefit to either factor improves the other. This confirms previous work by Walker and Tracey (2012) who found connectedness and valence were also highly correlated, as well as previous research that indicates that high standards and the desire to achieve, are positively associated with career exploration and career commitment (Öngen, 2014).

Career commitment variables provided a more in-depth picture of the relationships between FTP and career commitment. Commitment-making was found to be positively related to the value of future goals, and a deeper connection to a career. Indicating that as New Zealanders commit to their career, and they develop a more profound sense of meaning with their career, their value of future goals increases. As a commitment is made, the benefits of long-term goals become more favourable. These trends echo those of Walker and Tracey (2012) who found that career decisions, choices, and levels of commitment were all

significantly correlated with the value of future goals, and Hirschi, (2012) who suggest that increased identification with one's occupation increases the deeper sense of one's occupation being a significant component of one's identity.

This strong relationship is supported by the strong positive relationship found between New Zealander's connection with their careers and with their ability to commit to their career. High levels of identification were found to be positively related to the ability to career commitment-making. The development of a vocational identity is a significant contributor to the career development process (Diemer & Blustein, 2007). Blustein et al., (1989) have previously argued that career exploration and commitment contribute to the formation of a person's identity. The intensity for which one identifies with one's career directly impacts the depth in which individuals explore and commit to their careers. This trend also supports the proposal of SST which states that humans evaluate our options and choose based on our perception of time-left-to-live. A more valuable reward, in theory, would motivate one to decide to commit to a career. It would not be unassuming to believe that once an individual has been provided with the means to achieve their goals, they would be more likely to dream of being able to afford a better life and to develop a deeper sense of identity based on the context of their occupation.

The implications of these trends suggest that the value of future goals and the connection New Zealanders have with their careers is of great importance to their future occupational commitment. An individual's commitment to their career is generative of the desire to value future goals. The connection one develops with one's career also encourages a higher value placed on future goals. The more connected people are to their career the more they will enjoy their time in their

careers. This, in turn, will benefit the long-term quality of their lives through the social and economic advantages that being committed to a career entails.

These relationships bring to our attention the importance for people to find a connection with their careers that consists of more than the responsibility to earn an income. If an individual lacks this connection, it is likely that they will not be able to value future goals due to not being able to identify with the meaning or purpose of their career. It appears that the questions “who am I?” and “what is the point of my job?” are more connected than we have previously believed. As such this research supports the suggestions of Solberg, Howard, Blustein, and Close (2002) who call for there to be more resources dedicated to designing and implementing interventions that focus on helping youth build up their skills and competencies so that they can have a better chance at navigating the school-to-work transition.

To highlight the need for extra-occupational support further, the results of the current research found that the doubt which New Zealanders feel toward their career decisions was found to be negatively related with the likelihood of them committing to their career, their ability to create a deeper connection with their career, and was found to be positively related to their perception that they can remain flexible in their career options.

This finding fits in line with previous research that has found that self-doubt is significantly negatively associated with identification (Negru-Subtirica et al., 2015; Porfeli et al., 2011). This result is not surprising considering the positive association that career identification has with commitment-making, and the negative association commitment-making has with self-doubt. It appears that an

increase in self-doubt may be due to individuals not being able to commit to a career nor being able to identify with one.

Carroll, Arkin, and Shade (2011) found that self-doubt originates more from the lack of a strong desired self. Carroll et al., (2011) defined a strong desired self as a psychological construct that, "with prospective success, can sustain ongoing feelings of self-confidence and competence by effectively organising, energising, and guiding goal-directed action" (p.191). Thus, Carroll et al., (2011) suggest the inability to commit to a career stems from the lack of sustainable feelings of confidence and goal-oriented direction. It is important to identify if an individual is doubtful about their future careers and to tackle this problem head-on before the consequences of inaction enable a lifetime of negative repercussions. Practical solutions that are composed of practical and achievable goals may decrease an individual's self-doubt about their chosen careers.

The correlations concerning flexibility suggest relationships that are both in agreement and are in conflict with previous findings. Flexibility was found to be negatively associated with connectedness, valence, commitment-making, and identification; and positively associated with self-doubt. Porfeli et al., (2011) introduced career flexibility as a more positive way in which to interpret career self-doubt. Career flexibility entailed the perspective that doubts in one's career may be a positive way in which to express someone's ability to be multi-skilled and to be capable of being able to adapt to changing work circumstances. However, the results of this analysis indicate that flexibility has very little to do with remaining positive and adaptable. Career flexibility was negatively associated with the ability to identify what actions are required to achieve future goals and was negatively associated with the value that individuals place on future

goals. Flexibility was also negatively associated with a person's propensity to commit to a career and was negatively associated with the ability of an individual to find some personal connection to identify with their career. To highlight this association further, flexibility was strongly positively associated with the doubt in which one feels about their career decisions. These results appear to mirror previous findings by Negru-Subtirica et al., (2015), and Porfeli et al., (2011) who also found similar associations between career commitment variables.

These results suggest that a measure of a person's flexibility is a valuable indicator of their inability to plan for the future, to value future goals, to commit to a career, and their inability to identify with their career. As it was found that flexibility was positively related with career self-doubt, and negatively related with the value of future goals, the ability to identify what actions are required to achieve future goals, career commitment-making and career identification. This would suggest that being flexible is detrimental to the future of one's vocational success. These relationships would also suggest further that the measure of a person's flexibility is only another way in which to express ones doubt in one's career.

This negative relationship is in conflict with research by Rudolph, Lavigne, and Zacher (2017) who found that career adaptability was positively associated to career exploration, career decision-making, self-efficacy, and career planning and contributed to greater senses of subjective well-being. It may be that being adaptive and flexible could be contributing to a healthy level of occupational exploration. However, when adaptability and flexibility begin to prevent people from committing to a role, then flexibility becomes detrimental to the long-term success of a career. Perhaps, the constructs of adaptability and

flexibility measure different values of alternative approaches to career commitment.

The implications of these relationships emphasise the importance to identify those individuals that score high in flexibility. Those that do score highly are more likely to need a higher level of professional support and education to help them make difficult decisions about their future.

Summary

The correlations of FTP and career commitment in a working general New Zealand population indicate that New Zealanders benefit from valuing future goals, and learning how to achieve their future goals. This would suggest that the value of future goals New Zealanders possess provides them with the encouragement to commit to a career and to develop a deeper connection to their chosen career. Those who consider themselves to be flexible in their careers are more likely to suffer from increased levels of self-doubt and the inability to commit. These trends suggest that working New Zealanders use the value placed on the rewards of future goals as a source of encouragement. This should be considered when developing interventions to increase individual's commitment and identification to their careers.

Does Future Time Perspective Influence Career Commitment?

To examine if FTP influences levels of career commitment, eight regression analyses were conducted to evaluate FTP's (connectedness and valence) influence, on career commitment (commitment-making, identification, self-doubt, and flexibility).

The results of the analyses indicated that connectedness could significantly predict levels of flexibility. For every increase in connectedness, flexibility was predicted to decrease. As a person's ability to identify what actions are required to achieve future goals decreased a person's capacity to consider themselves adaptable and able to change effectively between occupational circumstances decreased. Flexibility can be considered a representation of a person's inability to commit to a future and their inability to identify with their careers, when considering the significant relationships discussed in previously.

Thus, it would not be unfit to predict that an increase in connectedness would improve a person's ability to commit to their careers. One theory that may explain this relationship is suggested by Ferraro, Prussia, and Mehrotra (2018) who found that high career youth norms (CYN's) significantly buffered the relationship between career commitment and the intention to pursue career goals. CYN's refer to the perceived suitable age of individuals for specific careers. These age perceptions influence the ability to identify how to navigate the progression of careers. Ferraro et al., (2018) suggest that high perception of CYN's encourage flexibility of career choices based on individuals self-censoring themselves to their career opportunities. Helping individuals identify their career options can reduce the perceived limitations of the CYN's of particular roles.

The value of future goals was also found to predict three career commitment outcomes significantly. A discussion of each of these interactions follows. The value of future goals was found to predict levels of commitment-making, identification and flexibility significantly. For every increase in valence, commitment-making and identification were predicted to increase, and flexibility was predicted to decrease. These relationships indicate that as a person's value of

future goals increases, their capacity to commit to a career, and the depth of their connection to their career would also increase. Valence was also found to predict levels of flexibility significantly. For every increase in valence, flexibility was predicted to decrease. This finding suggests that as a person's value of future goals increases, their capacity to change between roles, decreases.

Previous research by Adams (1999) shares similarities with these results. Adams (1999) examined the relationship between career-related variables on planned retirement age. The findings of Adams research suggest that career commitment and occupational goal attainment significantly influence the decision-making process when individuals consider retirement. Career commitment was found to be related to an increased likelihood that individuals would retire later in their careers than those who are less committed. Occupational goal attainment was found to have a negative relationship with retirement intentions, which suggests that those who wish to continue pursuing highly valued future goals would retire later in life compared to those who have achieved their occupational goals and were expected to be more likely to retire early. Adams (1999) suggests that the value of future goals influences the likelihood of individuals committing to their careers, identifying more with their career and whether they remain committed to their career.

These relationships between FTP and career commitment reinforces the relationships, and the practical implications discussed earlier. An investment in developing and encouraging New Zealanders value of future goals would actively encourage their ability to commit to a career, to increase their perceptions of the value of having future goals, and reduce their capacity to consider themselves to be flexible. The term flexible can be considered as the perception that an

individual is not confident about their choice of career, but maintains a sufficient amount of experience in which to be adaptable to many jobs. An increase in the value of future goals may inhibit this perception of adaptability by reducing a person's propensity to disengage from their employment if they are pursuing a future goal as the findings of Adams (1999) suggests. Changing between jobs frequently would not adequately serve the function of pursuing future goals such as a comfortable retirement.

The acknowledgement of these predictive trends should be discussed within a New Zealand context. To date, there has been no research conducted that examines how FTP may predict future aspects of career commitment in a New Zealand sample. This current research indicates that New Zealanders may benefit from an increase in knowledge concerning how to achieve future goals. An increase in connectedness significantly predicted 7% of the variance in flexibility. Although relatively low, this result suggests that an increase in connectedness may reduce the chances of a person remaining in a sense of indecision concerning their future careers. New Zealanders may also benefit from an increase in the value of future goals. Valence was found to predict 9% of the variance in commitment-making, and 10% of the variance in identification. It appears that the value of future goals itself is a factor that may positively encourage New Zealanders to make a commitment to a career and to begin to develop a personal connection with that career. Thus, in a New Zealand context, the value of future goals and the knowledge to take action to achieve future goals may influence the quality of New Zealanders occupational futures.

Summary

The findings of the regression analysis provide further evidence of the strength of the relationships between FTP and career commitment variables. The results also indicate that by increasing the values of connectedness and valence, New Zealanders may be able to increase their ability to commit to a career, help them develop a more meaningful connection with their career, and encourage them to stay invested in their career to achieve their desired future goals.

Statistical Differences and Trends between New Zealand Age Cohorts

To examine if there were any statistically significant differences between differently aged people regarding FTP and career commitment, two one way analyses of variance (ANOVA) were conducted. The first ANOVA was conducted to examine the FTP variables connectedness and valence. The results of this test indicated that although there were differences in levels of connectedness and valence between age cohorts, these were not statistically significant. This would suggest that FTP is not age restricted. There may be no particular age in which levels of FTP are significantly different. A favorable interpretation of this result would suggest that individuals, regardless of their age, can place value on future goals and are capable of identifying what actions are required to achieve said goals.

The second ANOVA was conducted to examine the career commitment variables commitment-making, identification, self-doubt, and flexibility. The results of this test indicated that there were significant differences between age cohorts regarding commitment-making, self-doubt, and flexibility in a New Zealand sample. Levels of commitment-making were found to be significantly

different between the 20 – 44 and 45 – 75+ age cohorts. The trend lines of the ANOVA analysis indicated that levels of commitment-making in the 20 – 44 age cohort were lower compared to levels in the 45 – 74+ age cohort. According to Chung and Lee (2017), in a Korean sample, individuals within this age cohort primarily invest their time into their occupations, are more concerned with their future retirements, and spend less time on extra-curricular activities. Thus it was expected that commitment-making would only increase as individuals commit to their careers during this phase of their lives. As such it was expected that levels of commitment-making would increase from the 16 – 19 cohort, to the 20 – 44 cohort. However, the results of this research indicate that within an employed general New Zealand population, an individual's capacity to commit to a career is at its lowest point within the 20 – 44 age cohort. These low levels of commitment-making may be due to a number of reasons. For example, an abundance of occupational and academic options may confound a person's ability to make a dedicated decision to pursue a career. In addition, the realities of the real world-of-work may inhibit occupational exploration and commitment as young individuals learn of the challenges that are required to achieve their ideal career goals (Lewko, 1987). This unexpected trend is concerning considering that the ages between 20 and 44 are the primary years of earning and career development. These results suggest that this age cohort is the age at which most New Zealander's require help. In contrast, individuals within the 45 – 74+ cohort had higher levels of commitment-making. This may be due to the increased understanding of the job market and the realities of what can be achievable by committing to specific career choices.

Regarding self-doubt, the ANOVA discovered a significant difference between the age cohorts of 20 – 44, and 45 – 74+. The trends between these cohorts indicate that self-doubt is high in the 20 – 44 cohort, and significantly lower in the 45 – 74+ cohort. This result suggests that those New Zealanders aged between 20 and 44 suffer from a higher amount of career self-doubt until they reach an age closer to retirement in which self-doubt decreases. This result reinforces the trend found with commitment-making in this age cohort previously mentioned. As individuals reach this age cohort, the realities of the world-of-work and its challenges become abundantly clear to them. As such, thoughts of doubt may enter into a person's consideration. The path to reach one's goals becomes unclear, and so levels of self-doubt would increase. In contrast, individuals within the 45 – 74+ age cohort, may have already achieved their career goals, or are at least are more confident due to what they have already accomplished.

Finally, flexibility was found to be significantly different between the age cohorts of 20 – 44, and 45 – 74+. The trends between age cohorts indicate that individuals within the 20 – 44 age cohort have a high comparative level of flexibility in contrast to the 45 – 74+ cohort. This suggests that younger individuals believe themselves to be able to adapt better to changing work circumstances. As individuals get older, their self-reported evaluation of their ability to adapt becomes lower. This result comes with a sense of mixed implications. High levels of flexibility within the cohort of 20 – 44 would, at first, indicate a group of individuals high in occupational capital that are capable of navigating between and within jobs due to their breadth of skills and experience. However, the results of the previous analyses suggest that flexibility also shares high correlations with self-doubt, the inability to commit to a career, and the

inability to develop a personal connection with a career. Thus it would not be difficult to propose that those within this age cohort are actually at the most risk of being lost within their career goals. In contrast, the age cohort of 45 – 74+ reflect a lower level of career flexibility. This would suggest that older individuals consider themselves to be less adaptable than younger workers. This may be due to the lack of desire to upskill, or that older individuals have already attained their desired levels of success. These results suggest that there are high levels of uncertainty towards career attachment, and development within the 20 – 44 age cohort.

Summary

The ANOVA analyses conducted for this study helps to paint a picture of the occupational psyche of New Zealand individuals within the 20 – 44, and the 45 – 74+ age cohorts. Within the 20 - 44 age cohort it was found that individuals suffer from the highest mean levels of self-doubt and flexibility and also the lowest levels of commitment-making. Not only are they less capable of committing to a career, but they are also more doubtful about their career decisions and in their skills. The high level of flexibility within this cohort is indicative of the relationships previously discovered by the correlation analysis. Flexibility has been found to be negatively related to connectedness, valence, and commitment-making, and positively associated with self-doubt. Thus, those who identify as being very flexible should be prioritised as those who require the most help. Within the 45 – 74+ age cohort commitment-making was found to be rather high, self-doubt was relatively low, and flexibility was found to be low in comparison to the 20 – 44 age cohort. These trends suggest that older individuals have reached a level of achievement that indicates they have been either

successful or have at least acquired enough knowledge and understanding to feel confident about their careers. The implications of these results warrant more investment in occupational education and support focused solely on supporting individuals. Providing these resources would aim to give individuals the ability to commit to a career earlier and thus increase the chances of them having a better long-term quality of life and income. Greater investment in career education, and in encouraging people to seek out career advice that develops plans to achieve significant, and achievable goals continuously through their career development should aim to reduce levels of self-doubt and increase the ability to commit to a career.

Moderation Effect of Age.

Age was found to be a moderator on the relationship between FTP and career commitment. The results of the moderated multiple regression analysis revealed two distinct influences. First, between the ages of 16 and 44, age has a buffering effect on the interaction between connectedness and self-doubt. As connectedness and age increased, self-doubt decreased. This finding suggests that as a person grows older, the ability to identify what actions are required to achieve future goals decreases the levels of self-doubt one would feel concerning their careers and their occupational decisions. The second trend revealed that between the ages of 45 and 74+, age has an enhancing effect on the interaction between connectedness and self-doubt. As connectedness and age increased, self-doubt increased. This result suggests that the older a person becomes, the ability to identify what actions are required to achieve future goals increases their doubts about their careers and themselves. This distinction between age groups was also confirmed from the previously mentioned ANOVA that indicated that levels of

self-doubt were different between the 20 – 44, and 45 – 74+ age cohorts. In light of these results, these trends appear to support current literature which suggests that as individuals grow older levels of self-esteem increase until a certain point in which increasing age contributes to decreases in levels of self-esteem (Shaw, Liang, & Krause, 2010; Strough et al., 2016). Furthermore, individuals generate a large portion of their self-esteem from their occupation (Jaret et al., 2005). Specifically from their own and from other people's appraisals of their age, race, and social class in a workplace context. Thus, this interpretation suggests that as individuals reach an age closer to retirement, they are more likely to begin distancing themselves from their careers, which has the unfortunate side effect of lowering levels of self-esteem and increasing levels of self-doubt in their decisions.

The practical implications of these findings are varied. The initial implication of these findings suggests that young adults benefit the most from being so young. Their levels of self-doubt are lower as they benefit from age buffering the relationship between connectedness and self-doubt. From an intervention perspective, younger people would benefit the most from initiatives that are designed to increase connectedness. The more a young person learns about how to achieve their desired future goals the less amount of career self-doubt they are likely to possess. The second finding of this research suggests that older adults do not benefit from their increased age. As age and connectedness increased so too did self-doubt. Age enhances the relationship between connectedness and self-doubt. It would be beneficial to suggest that I/O and occupational consultants be aware that an increase in age will more than likely make people more aware of the limitations of their retirement and the

consequences of essentially giving up a significant part of their identity for a future that is not guaranteed to be as rewarding as pursuing achievement in one's career. To counter this, it is suggested that professionals help older adults find meaning in sources outside of occupational settings.

Socio-emotional Selectivity Theory in New Zealand

The results of the current research provide the context in which to help understand the developmental theoretical framework of socio-emotional selectivity theory (SST) between specific age cohorts in an employed general New Zealand sample. SST proposes that a person's decision-making processes are determined by their perceptions of how long they have left to live, their time horizons. The size of a person's time horizon is inversely related to the self-perception of a person's age. Those with large time horizons would typically be young and would base the majority of their decision-making processes on knowledge expanding outcomes. For example planning for the long term on how to gather enough capital to survive in the future, i.e., developing relationships, improving careers, saving money. Those with small time horizons would typically be older and would base their decision making processes on more immediate emotionally rewarding outcomes. Such as spending less time in employment to enjoy time with loved ones, and using the time to enjoy hobbies.

The results of this research provide context that helps to understand SST within the considerations of differently aged people. The results of the ANOVA analysis provide us context in which to understand the trends found between New Zealand age cohorts. FTP variables were found to not be significantly different between age groups, a finding that echoes that of Porfeli et al., (2011) but in a

much larger range of ages. This may indicate that no matter at what age a person may be, they are capable of identifying what they need to do to achieve future goals and are always able to place a value on future goals. This detail could be incredibly valuable to one of the fundamental assumptions of SST: Humans regard multiple goals at once, the selection of specific goals is indicative of future action. This assumption would suggest that humans evaluate goals and their expected outcomes, throughout one's life, as opportunities are afforded to us. The results of this study suggest that the ability of humans to value future goals may not be inhibited by their age.

The differences found between career commitment variables also provide a picture of the differing concerns at different stages of the human life-span. Significant differences were found between 20 – 44, and 45 – 74+ age cohorts regarding commitment-making, self-doubt, and flexibility. According to SST younger individuals would be concerned with identifying the right career to pursue to ensure their continued survival. They would typically have larger time horizons and would adopt a knowledge-expanding approach. They would evaluate each option given to them, evaluate their skills and achievements in comparison, and evaluate the likelihood of success. The results of this research discovered that mean levels of commitment-making were found to be lower in the 20 – 44 cohort compared to the 45 – 74+ cohort. This trend suggests that those aged between 20 – 44 years old struggle to commit to a career compared to their older counterparts. Mean levels of self-doubt were found to be higher in the 20 – 44 cohort compared to the 45 – 74+ cohort. This trend indicates that people aged between 20 – 44 years old also don't have much confidence in their career decisions, and their vocational competencies. These findings are reinforced by the

trend found regarding flexibility. Mean levels of career flexibility were found to be higher in the 20 – 44 cohort compared to the 45 – 74+ cohort. This would suggest that younger people believe themselves to be more adaptable between jobs, yet unable to commit to a single career as they explore or keep their options open.

In contrast to the 20 – 44 age cohort, those individuals within the 45 – 74+ cohort were found to have higher commitment-making, lower self-doubt, and lower flexibility. According to SST older individuals would typically possess smaller time-horizons and would adopt more emotionally rewarding decision making approaches. Older individuals that are more positive about their futures have been found to interpret challenges in a more positive way and are more content with the previous negative experiences that led them to where they are (Reed, Chan, & Mikels, 2014). The results of this would be an older group of individuals who are more confident in their career choices, who are less doubtful about their futures and have decided to pursue their identified goals. The evidence found by this study suggests that older individuals possessed lower levels of self-doubt, higher levels of commitment-making, and lower levels of flexibility; all factors that are representative of individuals who are confident in their career success.

The difference in the trends between the 20 – 44, and 45 – 74+ age cohorts was also evident in the results of the moderation analysis. The results of the moderation analysis found increasing age had a buffering effect on the relationship between connectedness and self-doubt in the 20 – 44 age cohort. The increase in age and connectedness would decrease levels of self-doubt. However in the 45 – 74+ age cohort an enhancing effect was found. The increase in age and

connectedness would increase levels of self-doubt. These trends become a little clearer when examined through the lens of SST. According to SST, younger individuals would pursue more options to expand their knowledge and gather capital to ensure a better future for themselves. As younger individuals age their knowledge on how to identify and achieve their goals would expand. Obtaining a better understanding of how to achieve one's goals would contribute to their sense of self-worth and thus decrease their levels of vocational self-doubt.

In contrast, age was found to have an enhancing effect on levels of self-doubt and connectedness in the 45 – 74+ age cohort. As individuals grew older, their levels of self-doubt would increase. This trend is compatible with SST as it suggests that as people get older, they shift their decision-making strategy away from knowledge expansion toward emotionally rewarding. The shift in the nature of moderation age has between connectedness and self-doubt is indicative of the shift toward more emotionally rewarding actions and goals. As a person ages, their capacity to pursue capital gaining goals diminishes for a number of reasons. Decreasing levels of health, the realisation of missed opportunities, or financial struggles, are all factors that may contribute to increasing levels of vocational self-doubt the more people increase in age.

The culmination of these trends suggests that younger and older individuals do evaluate their options and are impacted by age as would be expected according to SST. However, the differences between the age cohorts is concerning. Specifically, the evidence raises concerns about the challenges the 20 – 44 age cohort face when developing their vocational identity. The results suggest that younger individuals during the primary years of their career development, currently make decisions about their futures within a situation of

peril. They are making decisions about their careers in which they do not appear to be very confident, they lack the drive to commit to a career, and this is reflected in their lower capacity to commit to a career. The patterns found in the moderation analysis suggest that these factors can be curbed as the younger individuals age and learn about how to achieve their goals. An increase in age, and in identifying what actions are required to achieve goals, reduces levels of vocational self-doubt. In comparison, older individuals appear to be more capable of committing to their vocational decisions, have less doubt about the decisions, and are more committed to the pursuit of their goals. The moderation analysis suggests that older individuals suffer an increase in self-doubt the more they age, and the more they learn about what is required of them to achieve their goals. This pattern may be indicative of an older individual's realisation of their mortality and the limitations that drive the change from a knowledge-expanding to an emotionally rewarding decision-making strategy.

Overall, the current study reveals a number of exciting findings when viewed through the lens of ageing with an SST perspective. It was not surprising to discover that employed New Zealanders evaluate their options throughout their occupational journey. A concerning trend found was that employed New Zealanders aged between 20 and 44 years of age suffer the most from the highest levels of self-doubt and lack of commitment to a career. According to the literature, this age cohort consumes the majority of the most prime time in a person's life to gather resources and prepare for the future. However, young New Zealanders appear to benefit from their increasing age and their increasing ability to identify what is needed to achieve their future goals which, in turn, reduces their feelings of doubt in themselves, and their career decisions. This study

supports the assumption of SST, that individuals are agentic creatures, who evaluate multiple goals and decide on the most appropriate courses of action. It also supports the assumption that age matters. A person's perspective of their time-left-to-live does make a meaningful impact on the priorities of their careers. What those priorities are appear to be the most difficult to choose from within the most valuable time in which to prepare for the future. It may be that providing additional vocational support for adolescent New Zealanders may help to alleviate the distress from being unable to find a stable career path to follow.

The following sections will discuss the limitations, future research, and the practical implications of the current research. Lastly, a conclusion will summarise the intentions of this study and what has been found by this research.

Limitations

There were a number of limitations that are worth addressing for future research. The option to categorise the ages of participants by cohorts limited more in-depth analysis between differently aged individuals. The justification for categorising age cohorts into significantly different groups was justified by previous research that indicated that during particular ages individuals are focused, in general, on major domains of concern. For example, middle-aged individuals focusing on employment, preparing for retirement, and spending less time enjoying their hobbies. In hindsight, this categorisation could have occurred after data had been collected by a more detailed means. This limitation impacted the value of this research for it can only comment on the trend of the age cohorts, not on specific ages.

Little demographic data was collected by this research which limited the overall applicability of generalisation to a larger population. Previous research examining FTP and career commitment has been limited by the small range of ages of participants, or explanations of results have been attributed solely to gender, or nationality/culture, which limits generalisation. As such this study aimed to focus solely on a larger range of ages and to recruit only those who were employed. In hindsight, collecting a broader range of demographic data helps to justify the composition of the participant sample. This not only helps to identify the composition of the participants but can also provide insight into peculiar findings that may arise due to the demographics. Due to this limitation, these findings should be understood as coming from a general New Zealand employed sample only.

The methods of participant recruitment may have also impacted the statistical accuracy of these findings. The composition of the participants was similar to the age of the researcher. A common flaw found in the nature of convenience and snowball sampling. The distribution of the questionnaire may have also impacted the viability of the researcher to recruit older and younger participants. The medium of digital online distribution can inhibit the recruitment of older participants. It was due to this problem that recruitment of older participants was a challenge to achieve.

Finally, this data was collected during a single time period. As such the trends found by this research should be understood within this context. It may be that different findings may be found at different times of the year, or a longitudinal study may be needed to confirm these initial findings.

Future Research

Although this research has its limitations, the results of this study warrant further research to be conducted. Further, more in-depth examination of the relationship between FTP and career commitment variables at more specific ages should be conducted. Furthermore, the lack of demographic data encourages future research to investigate if the same trends are evident within various cultures within a New Zealand population.

Further research is also encouraged to examine what aspects of tertiary education connects the contexts' between curriculum requirements and world-of-work realities. Young individuals with poor education are more likely to end up in manually intensive jobs or roles within production facilities (Tello et al., 2005). Roles that are associated with low incomes and higher rates of unemployment. Examining the links between specific aspects of tertiary education and occupational requirements may improve the perceptions of young adults of their world-of-work and thus improving their connectedness and valence for their futures.

Finally, further research is encouraged to examine the correlation between positive personality traits, FTP, and career commitment. Personality traits such as optimism, resilience, well-being, and mindfulness have been found to contribute towards adopting better coping strategies (Scheier & Carver, 1985), being open to new experiences (Arora & Rangnekar, 2016), and to mediate the relationships between career commitment and career decisiveness (Shukla & Katpeth, 2016). All of these factors have been found to contribute towards a better quality vocational identity and higher levels of career commitment. Thus it would be

beneficial to investigate whether positive traits are correlated, and could predict, FTP or vice-versa.

Practical Implications

The results of this research have implications for future researchers and practitioners. The findings of this study aim to help shape a better understanding of the occupational needs of individuals of particular ages. The results of this research highlight the need for occupational consultants to re-evaluate the needs of their clients during their vocational journey. Previous assumptions involved acknowledging that younger individuals are unaware of what they want to do, or whom they want to become. However, the current research suggests that younger people do know what steps are required to achieve their intended goals. Only when younger individuals enter the beginning of their careers, do they then have an awareness of the world-of-work and the challenges that it represents in achieving their goals. This suggests that therapists and consultants would benefit their clients more by changing the goal of their consultations from discussing various job possibilities to encouraging and supporting occupational choices by discussing and establishing effective plans of action. It should be the goal of therapists to not overwhelm their clients with possibilities but to listen and discover what their clients already intend to do, understand their goals, and help them develop steps of action, that are practically feasible.

Encouraging people to believe in themselves and to pursue their desired futures would provide suitable support for individuals making a commitment towards their futures. Young adults that have been found to have weak educational commitments have been found to also have higher levels of

vocational self-doubt (Negru-Subtirica and Pop, 2018). School engagement has been found to be a significant outcome predicted by levels of career decision-making, career planfulness, and teacher support (Kozan, Fabio, Blustein, & Kenny, 2014). Thus programs that promote the benefits of achieving higher academic commitment will have long-term benefits for the futures of young adults as their levels of vocational self-doubt may decrease, and they may be more likely to commit to a career.

Professional identity development has been found to require the inclusion of knowledge containing advanced specialisations and skills in education that are in relation to the intended career (Hirschy, Boyle, Wilson, Pasquesi, & Liddell, 2015). Hirschy et al., (2015) suggest that the inclusion of professionals from related careers can help foster the development of more robust professional identities. Thus, better occupationally focused education may improve the likelihood of young people recognising the realities of the world early and developing a deeper commitment to their career if they are made aware of the requirements earlier.

The implications of this research also call for there to be greater support for those who are continuously searching for their new career. The greater concern should be afforded to those individuals who 'flutter' between jobs throughout their career. This may be an indicator of a lack of commitment and connection to any career with substance. This lack of commitment can lead to episodes of precarious employment in which individuals suffer the most from lack of income, lack of identity, and lack of purpose. This suggestion is supported by Clarke et al., (2007) who suggest that allowing those in the most precarious of employment situations be allowed greater access to occupational and social support systems.

Research Summary

This research aimed to examine the relationships between FTP and career commitment in an employed general New Zealand population. The secondary goal was to investigate if age moderated the relationship between these constructs. The results of this research indicate that connectedness and valence were significantly associated with the career commitment variables of commitment-making, identification, self-doubt, and flexibility. Regression analysis found that connectedness could predict levels of flexibility, while valence was found to predict levels of commitment-making, self-doubt, and flexibility. Two ANOVA analyses discovered that there were no statistical differences between age cohorts regarding FTP; however, there were statistical differences between the 20 – 44, and 45 – 74+ age cohorts regarding commitment-making, self-doubt, and flexibility. The moderation analysis found that age has a buffering effect on the relationship between connectedness and self-doubt in those aged between 20 – 44, and an enhancing effect in those aged between 45 – 74+. This evidence contributes empirical support in favour of the SST life-span development framework. This research also contributes to the discussion regarding the psychometric construct of flexibility. First proposed as a new, positive, perspective of doubt towards career decision-making, flexibility was found to be negatively related toward positive career variables and was supportive of career self-doubt. It is suggested that individuals who score high in flexibility should be regarded as high risk and may benefit from being provided more in-depth occupational education. The implications of the current research emphasise the re-evaluation of intervention and consultation practices when determining suitable methods in which to help encourage a more healthy development of vocational

identity and occupational success. As this research has discovered, an increase in the ability to identify what actions are required to achieve future goals may reduce feelings of occupational doubts as people increase in age. As such, there may be a need for vocational consultants and human resource professionals to continue encouraging and supporting at-risk individuals aged between 20 and 44 years old throughout the years of their vocational journey, beyond their initial acquisition of beneficial, meaningful, employment.

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Appendix A

Questionnaire Introduction

Introduction Screen

Welcome

The aim of this research is to examine the relationship between future time perspectives, and career commitment, and to examine how this relationship is influenced by age, in a New Zealand working population. The following questionnaire is composed of 48 questions in total and should take less than 20 minutes to complete. The information collected will be used to publish a master's thesis.

Consent

If you wish to proceed with this questionnaire you are providing consent for us to use your data. However, you are in no way obligated to complete this questionnaire and you are free to withdraw from answering at any time. If there is any question you do not wish to answer, simply click the next button at the lower right of the questionnaire. If you wish to change your answers, click the lower left button to return to the previous question.

Privacy

Personal identifying information will not be collected during this questionnaire. Demographic information such as age, employment status, and nationality will be used for analysis purposes only. No information will be used by, or distributed to, third parties. Data collected will be kept secure and will not be accessed by any other individual apart from the lead researcher.

Ethics approval

This research project has been approved by the faculty of Arts and Social Sciences Human Research Ethics Committee, University of Waikato. Any questions about the ethical conduct of this research may be sent to the Chair of this committee, Dr Colin Mcleay (Ph: 07 838 9174, email: colin.mcleay@waikato.ac.nz).

Reminder Screen

If you choose to proceed, you will not be able to withdraw your answers from the study. You are under no obligation to complete the questionnaire and are free to leave at any time, however this will mean that your data will not be included in the analysis of this study.

If you consent; please click the next arrow to proceed.

Appendix B

Future Time Perspective Scale (Shell & Husman, 2001)

Connectedness scale

1. Planning for the future is a waste of time.
2. What one does today will have little impact of what happens ten years from now (-)
3. Realizing a long-term goal is worth some sacrifices today.
4. It's the small steps one takes today which determine one's future security.
5. What will happen in the future is an important consideration in deciding what action to take
6. It is important to have goals for where one wants to be in five or ten years.
7. Life is too uncertain to worry much about the future (-)
8. What one does today really does not matter much in the long run (-)
9. Immediate gain is more important than possible future gains (-)
10. It's not really important to have future goals for where one wants to be in five or ten years (-)
11. One shouldn't think too much about the future (-)
12. The best choice of action is one which pays off right now rather than one which might pay off in the future (-)
13. What might happen in the long-run should not be a big consideration in making decisions (-)
14. Immediate pleasure is more important than what might happen in the future (-)
15. One should be taking steps today to help realize future goals.
16. The future is too uncertain to be used as a guide to action today (-)

Valence scale

1. What happens in the long-run is more important than how one feels right now
2. It is important to go without now to reach long range goals.
3. The most important thing in life is how one feels in the long-run.
4. The most satisfaction in life comes from realizing a long-range goal.
5. Given the choice, it is better to get something important in the future than something you want today.
6. Long range career satisfaction is more important than how much one makes on the job now.
7. It is more important to save for the future than to buy what one wants today.
8. Long range goals are more important than short range goals.
9. It is better to be considered a success at the end of one's life than to be considered a success today

Note: Items that are reverse scored are indicated by (-).

Vocational Identity Status Assessment items (Porfeli et al., 2011)

Career Commitment

Career Commitment-making

1. I know what kind of work is best for me.
2. No other career is as appealing to me as the one I expect to enter.
3. I have known for a long time what career is best for me.
4. No one will change my mind about the career I have chosen.
5. I have invested a lot of energy into preparing for my chosen career.

Identification with Career Commitment

1. My career will help me satisfy deeply personal goals.
2. My family feels confident that I will enter my chosen career.
3. Becoming a worker in my chosen career will allow me to become the person I dream to be.
4. I chose a career that will allow me to remain true to my values.
5. My career choice will permit me to have the kind of family life I wish to have.

Career Reconsideration

Career Self-Doubt

1. Thinking about choosing a career makes me feel uneasy.
2. When I tell other people about my career plans, I feel like I am being a little dishonest.
3. People who really know me seem doubtful when I share my career plans with them.
4. I doubt I will find a career that suits me.
5. I may not be able to get the job I really want.

Career Flexibility (Newly added in the present study)

1. My work interests are likely to change in the future
2. What I look for in a job will change in the future.
3. I will probably change my career goals.
4. My career choice might turn out to be different than I expect.
5. I need to learn a lot more before I can make a career choice.

Demographics

Both demographic questions will be measured by assigning a category via multi-choice question and will be used as controls for data analysis

1. Are you a New Zealand citizen or resident?
2. Are you currently employed?
3. What is your age?