

GENERATIONAL DIFFERENCES IN THE FREQUENCY
AND IMPORTANCE OF MEANINGFUL WORK

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Abstract

This thesis aimed to investigate generational differences in the frequency and importance of meaningful work in employees based on the 7 facets of the Map of Meaning. Hypotheses were tested through Analysis of Variance of secondary data. 395 participants self-reported levels of meaningful work on the Comprehensive Meaningful Work Scale. Results indicated that Generation Y had significantly lower levels of meaningful work. Generation Y had significantly lower levels of Unity (importance), Serving (frequency and importance), Expressing full potential (frequency), Reality (frequency and importance) and Inspiration (frequency). Significant differences occurred mainly between Generation Y and Baby boomers, with some significant differences between Generation Y and Generation X and no significant differences between Generation X and Baby boomers. Results showed that overall frequency and importance levels were significantly lower for Generation Y. Overall frequency levels were lower than overall importance levels, which suggests that employees' desire for meaningful work may not be satisfied. In light of this evidence, it is suggested that to improve organisational outcomes such as engagement, retention and performance, managers should provide opportunities for employees to engage in meaningful work with particular focus on Generation Y. Employees themselves should take responsibility to find meaning in their own work and life because engagement in meaningful activities can lead to satisfaction, belonging, fulfilment and a better understanding of one's purpose in life.

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1 Introduction

1.1 Preface

The thesis will investigate generational differences in the frequency of meaningful experiences in the workplace, and the importance of experiencing meaningful work; which will be introduced in this chapter. This chapter will present the purpose of this study and introduce the topic of meaningful work and its advantage to individuals and organisational life. The introduction will also discuss why it is important to understand potential differences in meaningful work across generations, the implications meaningful work can have for managers and employees and the value of this research. The introduction will conclude with a preview of the thesis structure.

1.2 Research purpose

The purpose of this research is to uncover possible generational differences in meaningful work. Specifically, this research aims to uncover significant differences in the frequency and importance of the seven facets of meaningful work between generations. Results from this research may reveal variability in the workforce, which will allow Human Resource (HR) professionals to tailor HR practices suitable for each generation's requirement to improve levels of meaningful work where needed, which can in turn improve organisational performance (Fairle, 2011; Michaelson, Pratt, Grant, & Dunn, 2013). This research will have originality and value through contributions to the academic understanding of generational diversity by investigating potential generational differences in meaningful work.

1.3 Meaningful work and generational diversity

Meaningful work is a multidimensional concept that concerns a deeper purpose to what we do through alignment of values, goals, actions, relationships and skills (Lips-Wiersma & Morris, 2011).

Meaningful work is a fundamental human need (Yeoman, 2014) and can be beneficial for organisational outcomes and personal wellbeing, which highlights the importance of a sound understanding of the nature of meaningful work and how it can be attained. Meaningful work is important to organisational life because it contributes to engagement, motivation, retention, work attitudes and organisational performance. Arguably more importantly, on an individual level meaningful work contributes to satisfaction, wholeness, fulfilment, belonging,

alignment of values and actions, a deeper understanding of one's purpose and a more meaningful life (Lips-Wiersma & Morris, 2011).

Although meaningful work is a relatively new concept in management literature and has only emerged in the late 20th century, it is gaining increasing attention for HR professionals and employees alike. In a western command-and-control society based on maximising outputs, it is important to stay attached to the deeper meaning of one's work and life. Increasingly, labourers are seeking out jobs that are meaningful and have a deeper purpose and that give them a more meaningful life (Ciulla, 1998). HR professionals should be wary of this demand from employees, and utilize the concept of meaningful work to improve engagement, motivation and productivity of employees, which can enhance an organisation's competitive advantage and bottom line (Munn, 2013).

Literature shows that it is possible to find meaning in any job, even supposedly meaningless jobs such as cleaning, working in the fishing industry and other dirty work. A seminal paper on meaningful work by Bunderson and Thompson (2009) reports how zookeepers find their work to be deeply meaningful and often highly sought after, even though they are poorly paid, have little opportunity for career advancement and often do unglamorous, dirty work. This reinforces that it is vital for individuals to strive to find meaning in their work, and not let the full responsibility lie with the organisation, job task, or employer (Michaelson, 2011).

Meaningful work and generational differences are connected through differences in work values and attitudes, which can vary from generation to generation (Becton, Walker, & Jones-Farmer, 2014; Cennamo & Gardner, 2008). Generational differences are important to understand because generational diversity can affect work relationships and the effectiveness of communication, engagement, and performance management strategies.

There is currently an ageing population (Ball, 2009; Barrett, Redmond, & von Rohr, 2012) and multiple generations are working side-by-side in the workplace (Truxillo, 2009). Possible generational differences may impact the way workers interact with each other and may influence organisations' Human Resource Management strategies, which highlights the importance of this study, and shows the need to address generational diversity in an employment context. Generational differences in levels of meaningful work would have implications for managers and business practices such as engagement, retention and motivation strategies, stress and performance management strategies, workforce planning, job design, and broader organisational goals and expectations.

Links in the academic literature between meaningful work and generational diversity are largely unexplored, with results for related fields being inconclusive and leaving many research gaps unanswered. While there are several studies addressing generational differences and work values (Cennamo & Gardner, 2008; Gursoy, Chi, & Karadag, 2013; Gursoy, Maier, & Chi, 2008; Hansen & Leuty, 2012; Smola & Sutton, 2002), there are no known studies on the relationships between generation and meaningful work.

This thesis will explore meaningful work from an academic perspective, with a specific focus on generational differences in the frequency and importance of meaningful work occurring in the workplace. Because there are many research gaps surrounding meaningful work and generational differences, this research will contribute to the current literature as it delves into trends of the frequency and importance of meaningful work in workplaces and its variability and/or relationship with age, which will also be useful to both organisations and individuals. Not only is the workforce getting older, but workers are demanding more than just a pay check from work. They want meaning in their life, and work that gives them a higher purpose rather than simply the explicit purpose of the job task.

By studying the frequency and importance of meaningful work occurring in the workplace, conclusions may be drawn regarding where there are shortages in the prevalence of meaningful work. Differences between frequency and importance may reveal discrepancies on perceptions, understanding, value and response towards meaningful work occurring in the workplace, which could reveal where improvements in engagement with meaningful work need to be made.

The research will be useful to help leaders and managers better understand the ageing workforce and the meaningful experiences they have at work. This research will contribute to meaningful work literature with generational differences in meaningful work being previously unexplored. My findings will contribute empirical evidence that may help understanding of generational trends of job mobility, engagement levels, motivation, job performance and why older people stay in the labour market.

1.4 Thesis structure

This thesis is comprised of seven chapters which aim to fill the research gap and uncover and explain the importance of understanding generational differences in meaningful work. Chapter one provides an introduction to this study and a justification for why it is important

to study meaningful work. Chapter two explores current academic literature relevant to the concepts of meaningful work and generations. Meaningful work will first be defined and discussed, with an integration of selected related topics such as motivation and engagement. This will be followed by a definition of generation and a discussion of generational cohorts and their characteristics. Chapter three explains the research framework and presents the seven hypotheses and their rationale. Chapter four discusses the quantitative research methods utilized in this study including an explanation of the research design, data collection and meaningful work measures. Chapter five provides a comprehensive report of the results, of statistical tests, and is followed by chapter six which discusses these results and their significance, as well as any implications for managers and employees. Chapter six also discusses the limitations of the study and provides suggestions for future research, finishing with a conclusion of the thesis.

2 Literature Review

2.1 Introduction

This literature review examines various perspectives and empirical research relating to two subject areas. The chapter will begin with a discussion of relevant meaningful work literature. A definition of meaningful work will be given, followed by an overview of related concepts and a discussion of the significance of meaningful work and current meaningful work research trends. The second section of this literature review explores literature on generation and generational differences. A definition and history of generation studies will be given with a breakdown of the importance of generational studies. The section will conclude with an explanation of the four current generations and their shared experiences and characteristics.

The key topics that can be found in the current meaningful work literature include the nature and significance of meaningful work and related concepts such as intrinsic work motivation, calling, and employee engagement. Generational cohort grouping will also be discussed, with an examination of the four generations in the current workforce.

2.2 Meaningful work

2.2.1 Defining ‘meaning’

The concept of meaningful work has been studied in some form or other for many years (Fairle, 2011), however, interest from a Human Resource Development perspective has been significantly increasing over the last 20 years (Lips-Wiersma & Morris, 2009).

The term ‘meaning’ can be difficult to define and measure (Eakman, 2012), furthermore, the term meaningful work can be subjective (Beadle & Knight, 2012) and is understood differently between individuals and organisations (Bassuck & Goldsmith, 2009). Chalofsky (2003b) distinguishes a difference in ‘meaning in work’ and ‘meaning at work’ where ‘meaning in work’ “implies a sociological and anthropological concern for the role of work in a society; in terms of the norms, values and traditions of work in the day-to-day life of people”, and ‘meaning at work’ “implies a relationship between the person and the organisation or the workplace, in terms of commitment, loyalty and dedication” (p. 73).

Fairle (2011) identifies common elements of meaning such as “having purpose or goals, living according to one’s values and goals, autonomy, control, challenge, achievement, competence, mastery, commitment, engagement, generativity or service to others, self-

realisation, growth and fulfilment” (p. 509). Meaningful work is deeper than job satisfaction (Chalofsky, 2003a) and engagement (Steger, Dik, & Duffy, 2012), furthermore “it gives essence to what we do and brings a sense of fulfilment to our lives” (Chalofsky, 2010, p. 19). Meaningful work is said to be far deeper than these constructs because it is “the way we live our lives”... “The alignment of purpose, values, relationships and activities that we pursue in life” (Chalofsky, 2003b, p. 80).

2.2.2 The Map of Meaning

The current literature agrees that meaningful work is a multidimensional construct (Fairle, 2011; Lips-Wiersma & Morris, 2009; Steger et al., 2012). Lips-Wiersma and Morris (2009) delve into this further with the ‘Map of Meaning,’ identifying four dimensions of meaningful work: developing the inner self, unity with others, service to others, and expressing full potential, and as a consequence of these dimensions there can be tensions between self and others, and between being and doing (Lips-Wiersma & Morris, 2009). The Map of Meaning has two axes – a continuum between self and others, and between being and doing, which forms the four quadrants (Figure 1). In this research, Lips-Wiersma & Morris’s (2009) Map of Meaning will serve as the underlying theory because it reflects the comprehensive and multidimensional nature of meaningful work and is the basis for the Comprehensive Meaningful Work Scale (Lips-Wiersma & Wright, 2012).

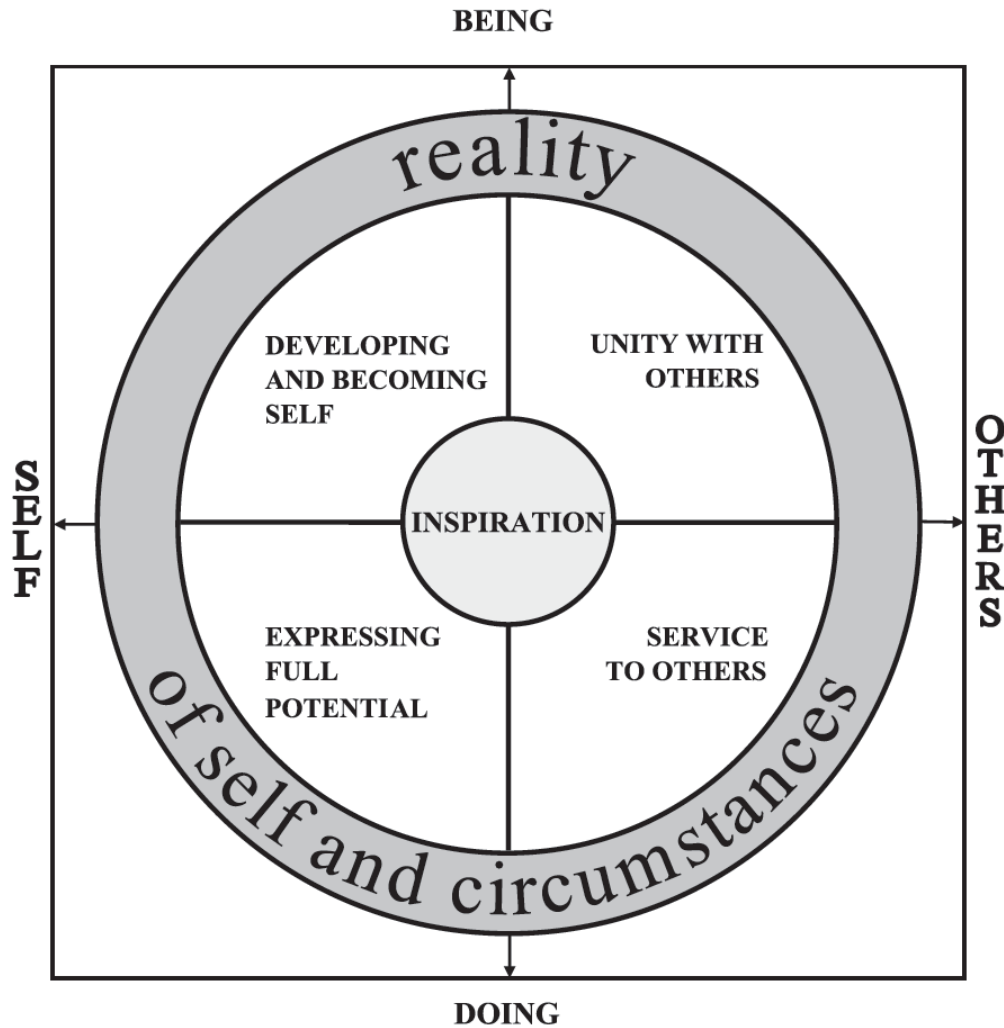


Figure 1. The Map of Meaning (Lips-Wiersma & Morris, 2009, 2011; Lips-Wiersma & Wright, 2012)

Unity refers to meaningfulness that comes from working and living with other humans. This construct is founded around the understanding that “humanity is essentially one, and experiencing this is what enriches our humanity” (Lips-Wiersma & Morris, 2011, p. 25). The three sub-themes of unity are: working together and the joy that comes with this, shared values and a deeper understanding of one another, and a sense of belonging or feeling deeply at home in work groups.

Serving or service to others can refer to helping one individual, through to making a difference in the wider world. This construct considers the human need to improve things and make a positive contribution to the wellbeing of others (Lips-Wiersma & Morris, 2011). This construct includes two sub-themes: making a difference (that is, improving others’

experiences, wellbeing or conditions) and meeting the needs of humanity and the planet (that is, being useful in a wider context whether it be to the planet, the wider world, or wider groups outside the workplace).

Expressing full potential refers to “the meaningfulness of sounding our own note in the universe” (Lips-Wiersma & Morris, 2011, p. 30) and (unlike developing the inner self) is active and outwardly directed as opposed to being an inward and reflective process. This construct recognises the human need to create and accomplish and underpinning this is the notion that all humans are unique and “are responsible for bringing our unique gifts and talents into the world” (Lips-Wiersma & Morris, 2011, p. 30). The three sub-themes of expressing full potential are: the need to create and bring things into existence, achieving and the need to accomplish and carry things out to completion, and the power to influence and bring things about.

Developing self is the quadrant of the meaningful work model that refers to “who we are becoming as a result of being engaged in our life and work” (Lips-Wiersma & Morris, 2011, p. 20). It relates to inner qualities including but not limited to moral development, personal development, and being true to self.

Reality or reality of self and circumstances is the notion that “meaningfulness cannot be experienced when we pretend, either in relation to ourselves or to our circumstances” (Lips-Wiersma & Morris, 2011, p. 44). Reality refers to the ability to recognise the reality of what is happening in an organisation and awareness that we, like the world, are imperfect. It also includes humanity’s desire for authenticity and truth. At work it can be found in genuine emotion rather than pretence, and realistic and grounded goals rather than over-the-top expectations (Lips-Wiersma & Morris, 2011).

Inspiration refers to the meaningful experience that occurs “when an individual feels aligned with some form of ideal that germinates from the human desire to continually improve oneself and improve conditions for others” (Lips-Wiersma & Morris, 2011, p. 42). Inspiration can include grace, joy, faith, alignment, vision, love and hope and can be drawn from religious sources, uplifting relations with others, strong values or principles or nature.

Balancing tensions refers to the need to balance tensions that have occurred as a result of meeting the needs of the four pathways (unity, serving, expressing full potential and developing self). When too much focus is directed towards one of these constructs, a loss of

balance can occur, which often results in a loss of meaning. Meaning is found by following all four pathways whilst also balancing and addressing the tensions between these pathways. Tensions between Being and Doing and tensions between Self and Others are the two tensions that occur in relation to the Map of Meaning (Lips-Wiersma & Morris, 2011).

Being and Doing refers to the tensions between the need to be outward and active (Doing), and inward and reflective (Being). Being focuses on sense-making, reflectiveness, silence, patience, taking time and ‘thoughtful togetherness’ in relation to one’s self and with others. Doing refers to outward and active expression of Being and according to Lips-Wiersma and Morris (2011) “it is heard when we catch ourselves or others saying: ‘I just can’t wait to get my hands on that clay’ or ‘We’ve talked enough, let’s get on with it’” (p. 44).

Self and Others refers to “the ongoing challenge of meeting the needs of the self, while also meeting the needs of others” (Lips-Wiersma & Morris, 2011, p. 41). Self refers to the human need to develop and express one’s self, whilst Others refers to the human need to make a difference to others’ lives to make our lives feel more worthwhile. Tensions between Self and Others can be experienced at work when there are tensions between a focus on career and a focus and connection with others at work or home.

2.2.3 Sources of meaningful work

In the meaningful work literature there is some argument as to whether meaningful work is a product of workplace relationships, or an effect of one’s involvement in the job task’s content (Beadle & Knight, 2012). As such, there are many perspectives on what makes work meaningful. Wrzeniewski, Dutton, and Debebe (2003) also identify that there is some debate as to whether meaningful work is determined “internally (that is, within the individual) or externally (that is, by the job and wider environment)” (p. 96). Existential meaningfulness is achieved through experiencing a sense of wholeness or coherence, according to Lips-Wiersma and Wright (2012).

Some literature argues that meaning can be found in all jobs, even supposedly meaningless jobs such as cleaning and other dirty or menial work (Beadle & Knight, 2012; Bunderson & Thompson, 2009) which supports the notion that although meaningful work is impacted by personal circumstance, it is when peoples’ work contributes to society that work becomes more meaningful (Munn, 2013). A case contrary to this is found in research by Sievers (2010), who tells a story of the late 18th to mid-19th century American whaling industry.

Working conditions were poor; sailors were exploited, poorly paid, treated by their superiors as “subhuman creatures” (Sievers, 2010, p. 78), and work was dangerous and life-threatening. Although the young men were able to cope through instrumental meaning of work, that is, focusing on the purpose of the voyage and economic value, they were not able to experience existential meaning, (pertaining to the perception of one’s existence) which is at the core of our modern concept of meaningful work (Lips-Wiersma & Morris, 2011).

The brutal whaling culture depicted by Sievers (2010) leads to his conclusions that organisational culture also plays a part in whether work is meaningful. In many organisations the culture is to work because it is a duty and employees work to earn a pay check, whereas in other organisations employees work because they enjoy their job and are engaged with it (Munn, 2013), therefore meaningful work can often be a result of the work environment (Pavlish & Hunt, 2012).

Sievers’s (2010) article also addresses autonomy and power at work. He reports one of the factors hindering sailors ability to experience meaningful work was the “tyrannical discipline” (Sievers, 2010, p. 78) and authoritarian nature of work, which meant they were unable to make decisions and fearfully obeyed orders. Other scholars support this, such as Schwartz (1982) who argued that autonomy fosters meaningful work. Munn (2013) agrees, stating that meaningful work can also be influenced by one’s ability to express one’s self at work.

2.2.4 Measuring meaning

Lips-Wiersma and Wright (2012) developed a Comprehensive Meaningful Work Scale to measure meaningful work, taking into account the four dimensions of meaningful work ‘developing the inner self’; ‘unity with others’; ‘serving others’ and ‘expressing full potential’. The scale aims to fill the gap of specific tools to measure meaningful work which can be useful for HR professionals by showing the how the organisation can contribute to bring about meaningful work, as well as promoting the understanding of the different areas of the Map of Meaning to individuals. This reinforces the perspective that it is often important for individuals to identify where to find meaning in their work, as it is important for the individual to take a large part of the responsibility for finding meaning in their work (Michaelson, 2011). The Comprehensive Meaningful Work Scale will be applied in the current research because it is the measure used in the secondary data that is to be explored. Other scales measuring meaningful work are less comprehensive, such as the Work and

Meaning Inventory developed by Steger et al. (2012) which has possible selection bias and a need for further validation due to the sample being from a single organisation with participants who volunteered themselves to participate.

2.2.5 Related concepts

Meaningful work literature contains recurring links to concepts such as job enrichment (Serberhagen, 1972), work-life balance (Munn, 2013), calling (Duffy, Dik, & Steger, 2010), work motivation (Steger, Littman-Ovadia, Miller, Menger, & Rothmann, 2013) and employee engagement (Hirschi, 2012). Kordbacheh, Shultz, and Olson (2014) found positive links between meaningfulness, intrinsic motivation and employee engagement.

Calling and meaningful work are conceptually similar concepts (Duffy et al., 2010; Lips-Wiersma & Wright, 2012; Steger et al., 2012) and according to Bunderson and Thompson (2009) meaningful work is a concept that has evolved from the concept of calling. Calling in a work context can be described as a call to an area of work or career from an external ‘beyond the self’ force as well as a broader sense of meaning and purpose in life (Duffy et al., 2010) which differs from meaningful work. Meaningful work is seen as a much broader concept which encompasses “the way we live our lives” (Chalofsky, 2003a, p. 80) not just the job task itself. Empirical evidence shows that calling is positively correlated to meaning in life ($r = 0.49$) (Duffy et al., 2010) and according to Hirschi (2012), meaningfulness is a moderator of the relationships between calling and work engagement. Hirschi (2012) declares support for the hypothesis that “stronger presence of a calling relates to more work engagement indirectly through higher work meaningfulness” (p. 480) and finds this link to not be dependent on person-job fit. Links between age and calling are not evident in the literature.

Meaningful work is also linked with intrinsic work motivation. Motivation itself can be defined as “stable trait-like tendencies to be motivated by specific activities of the work environment or outcomes” (Inceoglu, Segers, & Bartram, 2012, p. 301). Intrinsic work motivation takes into consideration the motivation for personal reward (Gagné & Deci, 2005) which is a part of meaningful work but unlike meaningful work, it does not take into consideration a broader sense of purpose felt outside the job environment, nor does it consider the relationship between the individual and the organisation or place of work. Intrinsic motivation is related to calling and meaningful work, with research linking work motivation to job satisfaction, performance, work task significance and productivity (Beadle

& Knight, 2012; Chalofsky, 2003b; Duffy et al., 2010; Jordan, 1971; Lips-Wiersma & Wright, 2012; Roche & MacKinnon, 1970; Steger et al., 2013). Evidence shows differences in motivation between different age groups which reveal older people to be less motivated by extrinsic rewards (Inceoglu et al., 2012). Because of links between intrinsic work motivation and meaningful work, we would expect similar differences in levels of meaningful work for age and generation.

Links between employee engagement and meaningful work are also evident (Fairle, 2011; Lips-Wiersma & Wright, 2012), with Fairle (2011) finding that “meaningful work characteristics had the strongest relationships with engagement and most other employee outcomes, relative to other work characteristics” (p. 516). Geldenhuys, Laba, and Venter (2014) find that psychological meaningfulness predicts employee engagement. Employee engagement is defined by Harter, Schmidt, and Hayes (2002) as “the individual’s involvement and satisfaction with as well as enthusiasm for work” (p. 269). It is important to note that employee engagement differs from meaningful work in that it describes a state of mind rather than existential significance (Lips-Wiersma & Morris, 2009; Lips-Wiersma & Wright, 2012), and in reality, meaningful or self-actualising work can be overlooked as a *source* of engagement (Fairle, 2011). Evidence shows that older workers have higher levels of engagement (Haley, Mostert, & Els, 2013) so it is reasonable to expect that the experience of meaningful work may be more frequent in older workers.

2.2.6 The value of meaningful work

The study of meaningful work is crucial because employees are increasingly demanding more from their job than just a pay check (Chalofsky, 2003b; Munn, 2013) thus, meaning and purpose at work is becoming more of an issue. Meaningful work is irrefutably desirable (Arneson, 2009; Bassuck & Goldsmith, 2009; Chalofsky, 2003b; Ciulla, 1998; Drucker, 1999; Jordan, 1971; Michaelson, 2008; Serberhagen, 1972; Steger et al., 2012) and many people not only seek meaningful work, but a meaningful life (Michaelson et al., 2013). Workers demand work that serves a higher purpose rather than the explicit purpose of the job task, which is a characteristic similar to the concept of calling (Chalofsky, 2003b; Steger et al., 2012). Workforces are ageing (Inceoglu et al., 2012; Kanfer & Ackerman, 2004; Kooij, de Lange, Jansen, & Dikkers, 2007) and people are having longer work lives, which has created a need for more research in the area of meaningful work (Drucker, 1999; Maddox, 1996; Stamov-Roßnagel & Biemann, 2012).

Meaningful work has many benefits for employees and organisations. Research shows that meaningful work is good for wellbeing (Arnold, Turner, Barling, Kelloway, & McKee, 2007; Chalofsky, 2003b; Steger et al., 2012). Research also shows that meaning of work is the “single best predictor of job satisfaction” (Chalofsky, 2003a, p. 74) as it can bring about intrinsic rewards (Chalofsky, 2003a, 2003b). The perception of meaningful work has a positive correlation with job satisfaction and organisational commitment (Duffy et al., 2010) which has positive implications for Human Resource Development (Fairle, 2011).

There are many practical implications of meaningful work for Human Resource Development (Michaelson et al., 2013). Kooij et al. (2007) recommends several practices HR professionals can put in place to keep older workers engaged. Roche and MacKinnon (1970), Pavlish and Hunt (2012) and Bassuck and Goldsmith (2009) also suggest many ways leaders and managers can help foster meaningful work to engage and motivate lower level employees. Additionally, evidence shows a motivated workforce is a source of competitive advantage for organisations (Michaelson et al., 2013; Pavlish & Hunt, 2012; Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009). Munn (2013) attributes this to the notion that meaningful work and work-life balance go hand-in-hand. Engaging in meaningful work and having a positive work-life balance has been revealed to have an impact on the organisation’s bottom line through increased employee engagement and motivation (Munn, 2013; Pavlish & Hunt, 2012).

Organisations should have a moral and ethical obligation to provide meaningful work to employees, as meaningful work provides benefits for both the organisation and the employee (Pavlish & Hunt, 2012; Serberhagen, 1972; Steger et al., 2012). Organisations need to capture the essence of meaningful work so they can benefit from the outcomes (Fairle, 2011). Fairle (2011) goes further to suggest that it should be HR professionals’ responsibility to help change employees mind-sets about their jobs, which could result in a win-win situation of improved morale, engagement and organisational and individual performance (Schwartz, 1982; Tummers & Knies, 2013). Fillion et al. (2009) found evidence echoing these conclusions, which showed that meaning centred organisational interventions improved job perceptions among palliative care nurses, and suggested that these interventions were a promising tool to improve job satisfaction and quality of life.

Furthermore, research shows that a *lack* of meaningful work leads to disengagement (Fairle, 2011) and dissatisfaction (Serberhagen, 1972), with evidence of a positive correlation

between meaningful work and engagement, job satisfaction and organisational commitment (Fairle, 2011). Meaningless work can also be associated with burnout, apathy and detachment from work, and employees who are ‘burnt out’ can often see no meaning in their work (Lips-Wiersma & Wright, 2012). Considering these effects of meaningless work, it is clear that meaningful work is important to maintain because it influences engagement, satisfaction, motivation and stress reduction (Lips-Wiersma & Wright, 2012) and can be good for organisational success (Roche & MacKinnon, 1970).

2.2.7 Meaningful work and age

Research shows that interesting work is important across all age groups (Chalofsky, 2003a) and that work values change between older and younger workers (Loscocco & Kalleberg, 1988), between generations (Hansen & Leuty, 2012), and gender (Inceoglu et al., 2012). Work values are said to be a similar concept to meaningful work, however links are vague (Lips-Wiersma & Wright, 2012) or indirect through motivation (Inceoglu et al., 2012). Inceoglu et al. (2012) tested several motivation and work attitude scales and found the overall effect of age to be significant but small, with an average partial eta squared value of .012 and concluded that within the literature, links between extrinsic motivation and age were not consistent.

Stamov-Roßnagel and Biemann (2012) conclude that “age was positively associated with motivation for generativity-related, but not growth-related tasks” (p. 459). Generativity-related tasks refer to the passing on of knowledge and skills to others, and growth-related tasks refer to achievement, recognition, power and status. Similarities can be seen here between generativity-related tasks and aspects of the Map of Meaning such as unity with others, service to others, and between growth-related tasks and expressing full potential and developing self, so we could expect age to be more strongly linked to unity with others and service to others.

Kanfer and Ackerman (2004) conclude that age related changes in personality, interests, values and self-concept have an impact on work motivation and generational differences, but there is no evidence that motivation declines over the life course. The notion that meaning at work changes over the life course requires longitudinal research for verification, as it may be a result of generational differences rather than ageing and adult development (Inceoglu et al., 2012; Loscocco & Kalleberg, 1988).

The term ‘age’ can also be a difficult term to define, as workers’ chronological age, performance based age, subjective age, organisational age, and life span age can be different (Kooij et al., 2007), and each of these conceptualisations can have different effects on work attitudes. Kooij et al. (2007) tested each of these five measures of age and found they effected work motivation differently.

A study by Loscocco and Kalleberg (1988) conducted in the manufacturing industry found that older employees proved to be more committed to their job than younger employees. This dissimilarity could be due to the way they were socialised, that is, the time period in which they grew up. Loscocco and Kalleberg’s (1988) results were evident both in Japanese and American manufacturing industries. Furthermore, in both countries younger employees seemed to value extrinsic rewards more than their older counterparts. Loscocco and Kalleberg (1988) acknowledge the sociocultural and sociohistorical perspective of age, where the sociocultural view states that age shows limitations and possibilities in work and non-work activities, and sociohistorical age takes into account socialisation and societal change. The current research will be based largely around the sociohistorical perspective of age because it will better reflect the generational differences in meaningful work, as different generations and age groups have undergone socialisations in different environments and contexts over the years.

2.3 Generational diversity

Generational grouping is “an attempt to distinguish a group of people in a time frame into distinct subgroups based on certain significant external events/forces” (Srinivasan, 2012, p. 52). Mannheim’s generation theory alludes to generation as a sociological issue (rather than biological) (Mannheim, [1928] 1952), and his theory, as cited in Joshi, Dencker, and Franz (2011) is “the idea that every generation collectively encounters a set of events during young adulthood that shapes their consciousness and distinguishes them from younger and older generations” (p. 180). Mannheim, although criticised on methodology, remains a powerful legacy in generational studies.

Generational grouping segments people by age, aiming to group people who have had similar lifestyles and experienced the same significant events at a similar developmental age (Becton et al., 2014; Costanza, Badger, Fraser, Severt, & Gade, 2012; Kupperschmidt, 2000; Macky, Gardner, & Forsyth, 2008; Noble & Schewe, 2003; Noble, Schewe, & Kuhr, 2004; Park & Gursoy, 2012; Parry, 2014; Smola & Sutton, 2002). Significant events can be political, social,

cultural and environmental and could include wars, natural disasters, new technology and changes to work and family patterns (Srinivasan, 2012).

As generations undergo socialisation and mature through these significant events, they develop a unique set of characteristics that differentiate them from other generations. These characteristics can be seen in personality traits, values, attitudes and motivations (Becton et al., 2014; Costanza et al., 2012; Macky et al., 2008; Noble et al., 2004; Smola & Sutton, 2002; Srinivasan, 2012) which forms the basis for generational differences. Values and attitudes differ from generation to generation, and the values and attitudes of adjacent generations can influence characteristics of another generation (Gursoy et al., 2008; Kupperschmidt, 2000). The concept of generational differences implies that work ethics, goals and aspirations vary from generation to generation (Smola & Sutton, 2002; Wong, Gardiner, Lang, & Coulon, 2008).

There have been significant changes in the global demographics which means that interest in generational differences is increasing (Srinivasan, 2012). In the United States, the 76 million births between 1946 and 1964 and the increasing life span (Noble et al., 2004) means the average age of the US workforce is increasing (Becton et al., 2014; Noble et al., 2004). Similar patterns are found across western countries, where there is an ageing population (Srinivasan, 2012). Workforces are becoming more diverse (Chi, Maier, & Gursoy, 2013) with different generations working side-by-side for the first time in the history of the modern workforce (Gursoy et al., 2013; Gursoy et al., 2008). In today's workforce, all generations are competing for the same jobs, when traditionally generations had been separated by job description and/or hierarchy. Nowadays it is not uncommon for younger generation employees to be supervisors of older employees (Gursoy et al., 2008; Kogan, 2007).

2.3.1 Defining the four current generations

Currently there are four generations in the workforce: Veterans, Baby boomers, Generation X and Generation Y (Macky et al., 2008; Smola & Sutton, 2002; Weingarten, 2009). With the retirement of the Veteran generation, some academics claim the three main generations in the workforce are the Baby boomers, Generation X and Generation Y (Becton et al., 2014; Noble & Schewe, 2003). Kupperschmidt (2000) goes further to say that generations can be divided into five to seven year gaps: the first wave, core group and last wave. Empirical research carried out by Noble and Schewe (2003) also splits Baby boomers into first and second wave groups. There is some discrepancy in the age ranges that define each generation due to the

gradual change in culture and that people who border on the edge of two generations may have characteristics of both. Because these discrepancies in birth years are not major and shared experiences are recognised as the same between studies, studies can be reconciled to build more comprehensive definitions of each generation.

2.3.2 Veterans

Birth years that classify Veterans and can range from 1920-25 to 1943-45 (Smola & Sutton, 2002; Srinivasan, 2012). Kupperschmidt (2000) defines veterans as those who were born before 1940. Other age brackets include 1922-1945 (Weingarten, 2009), 1925-1944 (Wong et al., 2008) and 1925-1945 (Cennamo & Gardner, 2008). In Cennamo & Gardner's (2008) study, Veterans accounted for 3% of sample size, therefore they were not included in the main analysis. Smola and Sutton (2002) also excluded Veterans due to small sample sizes. Veterans witnessed World War II and the Great Depression as well as the emergence of mass marketing and television networks (Cennamo & Gardner, 2008; Kupperschmidt, 2000; Noble et al., 2004; Srinivasan, 2012; Weingarten, 2009). Kupperschmidt (2000) elaborates to explain that in the hard times, Veterans witnessed great leaders guiding the nations which influenced the way Veterans view authority.

In their working lives, Veterans commonly like structure and formality (Kupperschmidt, 2000; Noble et al., 2004) and a predicted career ladder (Srinivasan, 2012). Safe working conditions, job security and benefits are common values and job satisfaction for Veterans often comes from doing the job well (Kupperschmidt, 2000). Veterans are often known to be hardworking, dedicated, consistent, frugal and loyal to organisations and managers (Kupperschmidt, 2000; Srinivasan, 2012; Weingarten, 2009). It is common for Veterans to believe in 'we' not 'me' (Noble et al., 2004) and empirical evidence shows high importance is placed on social obligation and personal and financial safety, with the opposite being true for Generation Y (Noble & Schewe, 2003).

2.3.3 Baby boomers

Birth years classifying Baby boomers range from 1940-46 to 1960-69, with the later years signalling a decline in the birth rate. Birth years include 1943-60 (Gursoy et al., 2008), 1940-60 (Becton et al., 2014; Kupperschmidt, 2000), 1940-46 to 1960-64 (Smola & Sutton, 2002), 1946-64 (Chi et al., 2013; Gursoy et al., 2013; Weingarten, 2009), 1943-46 to 1960-69 (Costanza et al., 2012), 1945-64 (Wong et al., 2008), 1946-61 (Cennamo & Gardner, 2008). The label 'Baby boomers' is due to the increased birth rate in the 1940s-60s (Noble &

Schewe, 2003), with Baby boomers representing about two-thirds of the United States' workforce in 2013 according to Chi et al. (2013). Significant experiences include post-war stress and prosperity, involvement in radical social change such as the civil rights movement and the women's rights movement, Watergate, the assassination of President Kennedy and Martin Luther King Jr., sexual revolution, educational expansion and rapid technology change (Becton et al., 2014; Kupperschmidt, 2000; Noble et al., 2004; Park & Gursoy, 2012; Smola & Sutton, 2002; Srinivasan, 2012; Weingarten, 2009).

Baby boomers can be described as workaholics (Gursoy et al., 2013; Kupperschmidt, 2000), with evidence showing that work centrality (importance placed on work) is significantly higher in Baby boomers than other generations (Gursoy et al., 2013; Gursoy et al., 2008; Park & Gursoy, 2012; Smola & Sutton, 2002). Baby boomers tend to exhibit fewer job mobility behaviours than Generations X and Y (Becton et al., 2014) which indicates why Boomers are known to be loyal (Chi et al., 2013; Gursoy et al., 2008; Wong et al., 2008). While some research indicates Baby boomer respect authority and hierarchy (Chi et al., 2013), other research concludes that Boomers question leadership (Noble et al., 2004) and value supervisory relationships and authority less than Generations X and Y (Gursoy et al., 2013; Kupperschmidt, 2000; Smola & Sutton, 2002; Srinivasan, 2012). Evidence finds Baby boomers to be diligent and significantly more optimistic than Generation X (Weingarten, 2009; Wong et al., 2008). They are also known to be more self-absorbed and self-gratifying than other generations (Srinivasan, 2012) and often work for personal fulfilment (Weingarten, 2009).

Some research suggests Boomers have a higher desire for greater responsibility than other generations (Becton et al., 2014; Park & Gursoy, 2012), whilst other research concludes Boomers are significantly less motivated by progression than other generations (Wong et al., 2008). Baby boomers tend to be highly motivated by extrinsic rewards (Kupperschmidt, 2000; Noble et al., 2004; Smola & Sutton, 2002; Srinivasan, 2012), although a more recent literature review by Gursoy et al. (2013) concludes that Boomers place the highest value on achievement and intellectual stimulation and are also able to wait for rewards for hard work (Chi et al., 2013; Gursoy et al., 2008).

2.3.4 Generation X

Birth years used to classify Generation X include, 1965-80 (Chi et al., 2013; Gursoy et al., 2013; Park & Gursoy, 2012), 1961-80 (Gursoy et al., 2008), 1960-80 (Kupperschmidt, 2000),

1965-79 (Becton et al., 2014), 1965-80 (Weingarten, 2009), 1965-81 (Wong et al., 2008), 1962-79 (Cennamo & Gardner, 2008). Some authors recognise this ambiguity and report broader birth years such as 1961-65 to 1975-81 (Costanza et al., 2012), 1961-65 to 1975-83 (Srinivasan, 2012) or the early 1960s to 1975-82 (Smola & Sutton, 2002). Shared experiences of Generation X include economic prosperity and stress as a consequence of the 1980s recession, downsizing, high divorce rates of parents, family insecurity, rapid change, high diversity and lack of solid traditions (Kupperschmidt, 2000; Park & Gursoy, 2012; Smola & Sutton, 2002; Srinivasan, 2012; Weingarten, 2009).

Evidence suggests that Generation X value social liberalism and environmentalism (Srinivasan, 2012) as well as autonomy and freedom from supervision at work (Park & Gursoy, 2012). Generation X are often individualistic and can be disloyal and many Generation Xers place their own careers above organisation commitment (Gursoy et al., 2008; Park & Gursoy, 2012), asking themselves ‘what’s in it for me?’ (Smola & Sutton, 2002). They are also found to often believe loyalty is not rewarded with job security (Becton et al., 2014; Kupperschmidt, 2000). They often aim to maximise their own individual goals while doing a good job, and a common belief among Generation X is that working hard is seen an indication of one’s worth (Smola & Sutton, 2002).

Generation X often respond poorly to authority, can be rebellious, prefer to make their own decisions (Gursoy et al., 2008; Noble et al., 2004) and can be sceptical of the system (Chi et al., 2013; Gursoy et al., 2013). Work-life balance has a higher importance among Generation X and life outside of work is valuable (Chi et al., 2013; Gursoy et al., 2008; Park & Gursoy, 2012; Srinivasan, 2012). Generation X are known to be risk takers, entrepreneurial, comfortable with diversity, change and competition (Gursoy et al., 2013; Kupperschmidt, 2000; Srinivasan, 2012). Generation X are often realistic, market savvy, fun loving and technology-literate (Srinivasan, 2012). Empirical evidence shows Generation X are more likely to strive for power than other generations (Gursoy et al., 2013) and to have a stronger desire to be promoted more quickly than Baby Boomers (Smola & Sutton, 2002). Common desires at work among Generation X include teamwork, empowerment, the ability to learn new things, autonomy and flexibility (Gursoy et al., 2013).

2.3.5 Generation Y

Generation Y (or Millennials) were born in birth years that range from 1977-2000 (Srinivasan, 2012), 1981-99 (Park & Gursoy, 2012), 1980-2000 (Cennamo & Gardner, 2008;

Weingarten, 2009), 1982-2000 (Wong et al., 2008), 1979-94 (Smola & Sutton, 2002) or born after 1980-83 (Becton et al., 2014). Shared experiences for Generation Y include globalisation, employment outsourcing, foreign investments, spread of information and communication technology, social networking, natural disasters such as tsunamis and earthquakes, and terrorist attacks such as 9/11 (Chi et al., 2013; Park & Gursoy, 2012; Srinivasan, 2012; Weingarten, 2009; Wong et al., 2008).

Generation Y share similar attributes such as being globally educated and more radical and diverse (Becton et al., 2014). In comparison to other generations, they tend to be more goal oriented and idealistic, and like to voice their opinions, use social networking, have higher expectations of themselves and employers, can be confident, demanding, impatient, social, and are generally the most technologically adept (Gursoy et al., 2013; Gursoy et al., 2008; Park & Gursoy, 2012; Srinivasan, 2012; Weingarten, 2009). They often place higher importance on accomplishment and excitement, and less on social obligations and safety issues – the opposite of Veterans (Noble & Schewe, 2003).

Generation Y are thought to be the generation who are the least motivated by power (Wong et al., 2008) and they are often more committed to their work than the organisation itself (Srinivasan, 2012). A higher focus on work-life balance than work allows room for leisure (Park & Gursoy, 2012; Srinivasan, 2012) and family, which are often priorities for Generation Y (Becton et al., 2014). To gain freedom and autonomy at work (Chi et al., 2013) they are known to challenge the eight to five work day (Gursoy et al., 2013). Empirical evidence shows Generation Y has higher values for freedom than Boomers and Generation X (Cennamo & Gardner, 2008). Generation Y desire challenging work opportunities, sound company policies, responsibility and independence and achievement (Srinivasan, 2012). They also tend to desire social responsibility (Srinivasan, 2012), collective action, teamwork (Gursoy et al., 2008), structured jobs, benchmarking from managers to guide them (Chi et al., 2013), and crave recognition and respect significantly more than other generations (Gursoy et al., 2013).

Self-esteem, narcissism, anxiety and depression levels are higher in Generation Y (Macky et al., 2008; Twenge & Campbell, 2008). Twenge & Campbell's (2008) meta-analysis shows that as a result of this, managers are often having to deal with employees who have unrealistically high expectations, need a lot of praise, can't deal with criticism, need to be more creative at work, and have low organisational commitment and retention. Generation Y

are generally optimistic about the future, and trust centralised authority (Gursoy et al., 2008), and are significantly more conscientious than Generation X (Wong et al., 2008). Results are inconsistent as to the extent of the value placed on meaningful work by Generation Y, however a lower level of work engagement has been reported (Park & Gursoy, 2012). A more recent study by Becton et al. (2014) concludes that Generation Y has a strong desire for meaningful work.

2.3.6 Current generational literature trends

A meta-analysis by Twenge and Campbell (2008) finds that rather than sudden generational shifts or cycles, there are steady linear changes due to gradual culture changes which slowly emerge in peoples' personality traits and attitudes. Independent empirical evidence shows no differences between groups on intrinsic or social values or perceived organisation values (Cennamo & Gardner, 2008).

Extensive research by Smola and Sutton (2002) leads to the conclusion that “generational work values do differ” and “to a lesser degree, the results suggest that work values also change as workers grow older” (p. 363). Gursoy et al. (2013) find similar results – that there is a move away from company loyalty and an association of self-worth with one's job. Gursoy et al. (2013) find generational differences between Baby boomers and Generation X – currently the two largest employee groups. Further results from Smola & Sutton's (2002) seminal paper show that ‘pride in craftsmanship’ and ‘moral importance of work’ change as workers grow older, not as an effect of generational differences. However, a meta-analysis by Costanza et al. (2012) does “not support the notion that there are systematic, substantive differences among generations in work-related outcomes” (p. 391). There were some weak changes found such as older generations being more satisfied with their jobs than younger generations, and moderate differences relating to commitment with older generations less likely to leave their job, however these differences could be related to chronological age not generational differences. Although both studies were cross-temporal, that is, they compared groups at different times when they were the same age, differences in methodologies may account for the difference in findings. Smola and Sutton (2002) compared means of generational groups from secondary data collected in 1974 to their own data from 1999 which used a similar survey to the original data. Costanza et al. (2012) analysed 20 studies, including published and unpublished works, that were conducted between 1995 and 2009. The studies used different age groupings to define generations, which poses methodological

problems when conducting meta-analyses. Variation in the birth years that are used to identify generations is also problematic when comparing studies (Cennamo & Gardner, 2008; Costanza et al., 2012; Srinivasan, 2012; Twenge & Campbell, 2008).

Limited empirical research exists regarding generations, their experiences and values (Noble & Schewe, 2003) especially on what differences do exist between generations (Costanza et al., 2012). Sparse literature shows that results are contradictory as to whether there are generation differences in work behaviours (Becton et al., 2014; Joshi et al., 2011) and results are mixed as to whether work values are influenced by generational experiences or whether they change over time with maturity (Smola & Sutton, 2002).

Academic literature and conceptualisation of the western generational groupings do not apply to some Asian cultures (Srinivasan, 2012). The majority of the current literature has been conducted in the US, UK and Canada and focuses on the four main generational groups: Veterans, Baby boomers, Generation X and Generation Y (Macky et al., 2008; Srinivasan, 2012). These generational groupings are only valid in societies where the same social and economic events have occurred and shaped society (Srinivasan, 2012). Other societies may have different generational groupings more appropriate to their own political, social and economic events and culture.

Although chronological age may not always be the most appropriate representative of age, it is suggested to be used when studying generational categories (Chi et al., 2013; Kooij et al., 2007). Rather than chronological age based generations, life stage or life course based generations could be used which assess a person's stage in life at a particular time in history. Chronological age based generations, although simpler to measure, rely on the assumption that people of the same age share similar values and attitudes (Joshi et al., 2011). Organisational approaches to generations include age in organisations and tenure in organisations, both of which group people into cohorts based on their 'age' (Joshi et al., 2011). Although people are split into generations, it is difficult to test whether differences are due to generation, ageing, experience, life stage or career stage (Cennamo & Gardner, 2008).

Generational differences in work values and demands, means that generational differences may play a role in the relationship between work engagement and its outcomes which poses implications for managers (Kupperschmidt, 2000; Park & Gursoy, 2012). Work values are defined as "what people believe to be fundamentally right or wrong" in a work setting (Smola & Sutton, 2002, p. 365). Managers' response to differing values of employees can affect

organisational values, which in turn can affect corporate issues such as ethics and culture (Smola & Sutton, 2002). Additionally, understanding and addressing generational differences can improve organisational outcomes such as productivity, organisational commitment, morale, retention, employee wellbeing & job satisfaction, communication, working relationships and even innovation (Becton et al., 2014; Joshi et al., 2011; Kogan, 2007; Kupperschmidt, 2000; Park & Gursoy, 2012; Smola & Sutton, 2002; Wong et al., 2008). Kupperschmidt (2000) advises that “effective managers must understand the times and generational characteristics of these employees and they must assure that employees understand and respect one another’s differences” (p. 65).

2.4 Conclusions

Research agrees that meaningful life is the good life (Ciulla, 1998; Duffy et al., 2010; Michaelson et al., 2013) because it brings about other benefits such as fulfilment and improved physical health. The desire for meaningful experiences is becoming increasingly apparent, particularly in the workplace. Human Resource professionals should aim to create opportunities for meaningful work, because the resulting employee engagement and worker motivation will have a positive impact on the organisation’s bottom line through employee retention and increased organisational commitment.

There are many unexplored avenues related to meaningful work and age which is the focus of this project. There are gaps in empirical knowledge on age and motivation (Kanfer & Ackerman, 2004). There is also a lack of knowledge about why older people stay in the labour market (Kooij et al., 2007) and previous research is conceptually diverse, which makes it difficult to collate and compare emerging theories. Ageing and adult development related to worker motivation is largely unexplored (Kanfer & Ackerman, 2004), age and work attitudes is also unexplored (Loscocco & Kalleberg, 1988) and evidence on generational differences in work attitudes, ethics, goals and aspirations is inconclusive (Gursoy et al., 2008; Kupperschmidt, 2000; Smola & Sutton, 2002; Wong et al., 2008).

Additionally, there is little consensus as to what meaningful work feels like, that is, the experience of meaningful work (Steger et al., 2012). There is also very little empirical research investigating differences in motivation for different age groups (Inceoglu et al., 2012).

The trend of an ageing workforce who desire meaningful work is something that we cannot ignore, and we must learn to understand how to cater for this large part of society. With the use of robust meaningful work measures such as Lips-Wiersma and Wright's 2012 scale, as well as accurate generational groupings that represent unique age cohorts, I aim to find out more about the differences in how work is perceived as meaningful between generations.

3 Rationale

The aim of this research is to explore the frequency and importance of meaningful work occurring in the workplace, and whether this significantly varies between generations. Because the current literature is inconclusive as to what generational differences exist, it is difficult to hypothesise which constructs of meaningful work may show differences between generations. Lack of relevant literature also means it is impossible to predict whether frequency and importance of the meaningful work facet occurring differs within or between generations. Differences in the frequency and importance of meaningful work occurring will help reveal the value placed on meaningful work and how often meaningful work is experienced in the workplace. Employee engagement with meaningful work is a responsibility of both managers and employees (Michaelson, 2011), but engaging in meaningful work does also rely on interpretation from employees, therefore it is expected that different generations may perceive work differently, and as a result there may be gaps between frequency and importance of meaningful work in any generation. Lower importance levels would indicate that employees may value meaningful work less than they experience it, which may mean that their needs are being met, or they have a misunderstanding of the nature of meaningful work. On the other hand, lower frequency levels could indicate a shortage of meaningful opportunities provided at work, or a misunderstanding of what meaningful experiences resemble, and how to maximise these positive experiences.

In an attempt to contribute to filling the gaps and inconsistencies in the current literature the research question that I have formulated to explore is: ‘what are the differences in the frequency and importance of meaningful work between different generations?’ The hypotheses that I have formulated to test to answer this research question follow:

Differing work values between older and younger workers (Loscocco & Kalleberg, 1988; Wong et al., 2008) and younger generations’ desire work for personal fulfilment (Weingarten, 2009) reflects a possibility for generational differences in the frequency and importance for Unity occurring in the workplace. Evidence of association between age and the passing on of knowledge and skills to others (Stamov-Roßnagel & Biemann, 2012) indicates a possibility for generational differences in value placed on working together and living with others and understanding one another, which are aspects of Unity (Lips-Wiersma & Morris, 2011). This generates the first hypothesis:

Hypothesis 1: *There are generational differences in the frequency and importance of Unity occurring in the workplace.*

Evidence also indicates that information sharing and helping others is related to age (Stamov-Roßnagel & Biemann, 2012), with younger generations preferring to serve others as well as maximising their own goals (Smola & Sutton, 2002) which indicates possible differences in frequency and importance of Serving occurring in the workplace between generations. Evidence also shows that younger generations value environmentalism more (Srinivasan, 2012) which indicates a desire to make a difference in the wider world, suggesting differences in the Serving aspect of meaningful work (Lips-Wiersma & Morris, 2011), therefore:

Hypothesis 2: *There are generational differences in the frequency and importance of Serving occurring in the workplace.*

Older workers are known to place higher importance on work than younger workers (Gursoy et al., 2013; Gursoy et al., 2008; Park & Gursoy, 2012; Smola & Sutton, 2002) which reflects the need to accomplish and create, and the desire to influence which are characteristics of the Expressing full potential aspect of the meaningful work model (Lips-Wiersma & Morris, 2011). These differences in work values suggest differences in Expressing full potential, which forms the third hypothesis:

Hypothesis 3: *There are generational differences in the frequency and importance of Expressing full potential occurring in the workplace.*

Evidence suggests older workers have higher levels of engagement (Haley et al., 2013), higher levels of intrinsic motivation (Inceoglu et al., 2012) and a higher desire for personal development and self-realisation (Kupperschmidt, 2000; Noble et al., 2004; Smola & Sutton, 2002; Srinivasan, 2012). This points to engagement in work and life, inner qualities and personal development which are features of the Developing self facet of meaningful work (Lips-Wiersma & Morris, 2011) and the differences found in the literature suggest possible differences in Developing self, which underlie the fourth hypothesis:

Hypothesis 4: *There are generational differences in the frequency and importance of Developing self occurring in the workplace.*

Younger generations are known to desire goals and benchmarking more than older generations, although they do like quick rewards and recognition (Chi et al., 2013) and evidence surrounding the age differences in values of supervisory relationships and authority is conflicting (Kupperschmidt, 2000; Wong et al., 2008). These conclusions point to differences in a desire for authenticity and truth as well as grounded goals rather than over-the-top expectations (relating to the Reality aspect of meaningful work (Lips-Wiersma & Morris, 2011)), which leads to the fifth hypothesis:

Hypothesis 5: There are generational differences in the frequency and importance of Reality occurring in the workplace.

Generation X's higher desire to serve others and the environment while maximising own goals (Smola & Sutton, 2002) alludes to differences in the Inspiration aspect of meaningful work in that it mentions a desire to continually improve one's self and the conditions of others. This forms the sixth hypothesis:

Hypothesis 6: There are generational differences in the frequency and importance of Inspiration occurring in the workplace.

Generational differences in desire for work-life balance show that younger generations place higher value on work-life balance (Chi et al., 2013; Gursoy et al., 2013; Gursoy et al., 2008). Evidence also shows that younger generations like to balance personal goals with making a difference to the wider world (Srinivasan, 2012). These findings suggest that there may be generational differences in meaningful work through differences in balancing tensions between being, doing, self and others and finding meaning in all pathways of the meaningful work model, not just focusing on one. This leads to the seventh and final hypothesis:

Hypothesis 7: There are generational differences in the frequency and importance of Balancing tensions occurring in the workplace.

Therefore, the null hypothesis for this research is that there are no differences in population means between the generations, that is, all meaningful work means between generations are equal. The alternative hypothesis is that there is at least one generation mean for meaningful work that is different.

4 Methodology

4.1 Overview

This chapter explains the methodology of the current research project. The chapter will first discuss the research design, data collection process and measures used, finishing with a discussion and summary of research quality.

4.2 Data collection

This research project involves an analysis of secondary data which was collected by Dr Sarah Wright and Professor Marjo Lips-Wiersma as part of a larger study on the antecedents of meaningful work. The original dataset is comprised of 402 online survey responses from a range of employees in various organisations, and professions, with an age range of 17 to 69. Employee participants were originally recruited by students. 500 surveys were distributed to students, who were incentivised by a monetary reward of \$5 per returned complete survey, with a maximum of 10 surveys per student. Participants were required to attach their email address to the survey, to verify that they had indeed completed the survey. Blue-collar workers, cultural balance and a gender balance were actively recruited for. Additional to the Comprehensive Meaningful Work Scale items, participants were required to submit information on gender, country of residence, age, ethnicity, qualifications, income, occupation, organisation size, type of employment contract, hours worked, tenure in role, and tenure in organisation.

Raw data was acquired from Dr Sarah Wright in the form of an SPSS data set, which minimised data entry errors of my own, but made it impossible to detect any data entry errors of the original researcher, a common limitation of the use of secondary data (Andersen, Prause, & Cohen Silver, 2011). Because the results of analysis of this data were published in a peer-reviewed journal, it is assumed that data was rigorously checked for errors, thus data entry errors were minimal.

Secondary data can be a useful tool as they can provide diverse samples, which is the case with the secondary data set used in this study. Participants are from New Zealand, the United States, India and other countries with a mix of ethnicities including Caucasian, Māori, Pacific Islander, Asian, African American and Indian. There is also a varying range of education levels, income, occupation, religion, organisation size. The use of secondary data in this

instance will enable the research to be more broadly representative of the different generations.

The use of secondary data is certainly not without limitations. The current researcher has no control over the content of the data (including subjects and measurement methods) – therefore data sets must be chosen carefully to ensure the data is appropriate and reliable for the method and research question. These limitations are minimised in this thesis as the data is robust, based on Lips-Wiersma and Morris' (2011) meaningful work model and will be used for hypothesis testing.

4.3 Research design

The data itself is cross-sectional, therefore the research and analysis was an observation of “what naturally goes on in the world without directly interfering with it” (Field, 2013, p. 13). Because there is no manipulation of variables in cross-sectional research, cross-sectional research has less opportunity for bias than experimental research, however without variable manipulation, causality will not be able to be demonstrated from the findings (Van der Stede, 2014).

As opposed to being longitudinal, cross-sectional research has its consequences as the findings of the hypothesis testing will not be able to be used to generalise for age or life stage, as it will be impossible to tell if the effects are from the socialisation process that differs between generations, or from the age differences that occur from ageing and adult development over the life course.

This research uses a deductive research approach with the use of hypotheses testing, which enables variability to be quantified and compared to determine whether there is enough evidence to support the notion of the frequency and importance of generational differences in meaningful work.

This research project will employ quantitative research methods to gain insights into statistical differences in levels of meaningful work. The use of quantitative data in the research gives the ability to statistically analyse means and variance between these means to look at variability between generations and the different constructs of meaningful work, as well as the option of regression analyses to look at the relationship between age and the different constructs of meaningful work.

The data will be analysed using the software Statistical Package for the Social Sciences (SPSS) which will give the ability to perform complex statistical analyses that explore the data for patterns. After analysis of descriptive statistics and tests for assumptions of statistical methods, ANOVA and Pearson's correlation analyses will be used.

4.4 The Comprehensive Meaningful Work Scale

The Comprehensive Meaningful Work Scale (CMWS) was developed by Lips-Wiersma and Wright (2012) to satisfy the need for a precise and comprehensive measure for meaningful work. The development of the scale identifies shortcomings of previous meaningful work measures and aims to address these to avoid a fragmented and incomplete scale (Lips-Wiersma & Wright, 2012). Qualitative data in the form of participant stories from previous research by Lips-Wiersma and Morris (2009) were used to generate the initial 91 items of the scale. Subject matter experts then assisted in the revision of these items, resulting in the reduction to 71 items. These 71 items were then administered in the pilot study, where for each item, participants had to report the importance of the item occurring, and the frequency of the item occurring in the workplace on a 1-5 Likert scale. This was distributed via email to the 167 participants. 40 items emerged as 'important' (that is, had means over 4.0 on the 1-5 Likert scale) and were retained for further analysis. These 40 items were then analysed through factor analysis, which revealed 6 factors of 28 items. Because the theme 'Inspiration' was too subtle, items were revised, rewritten, and new items were generated to form a 32 item scale.

To develop these items further, 500 surveys were distributed to full-time employees who were recruited by students. There were 405 responses. These responses were used for further factor analysis which revealed seven factors of 30 items. Convergent and divergent validity were tested for and results showed evidence of divergent and convergent validity of the scale (Lips-Wiersma & Wright, 2012). A confirmatory factor analysis was then carried out involving 275 participants who were recruited through an email database of New Zealand employees. Confirmatory Factor Analysis revealed seven factors comprised of 28 items, representing the seven different constructs of meaningful work. Internal consistency was $\alpha = 0.92$ and test-retest reliability was 0.80, $p < .01$ (Lips-Wiersma & Wright, 2012).

The final version of the Comprehensive Meaningful Work Scale requires participants to self-report their score for each item on a 1-5 Likert scale. The final scale contains 28 items which

measures the seven factors of meaningful work (Unity, Serving, Expressing full potential and Developing self, Reality, Inspiration, and Balancing tensions) (Appendix 1).

As with many measurement scales in the social sciences, this scale has its limitations. Data collected to develop the scale had a higher proportion of females than males in the initial study (this was more balanced in later samples), and the higher proportion of well educated workers. Although the scale relied on self-report data which can lead to method variance and measurement error, the effects of measurement error were statistically controlled for (Lips-Wiersma & Wright, 2012).

4.5 Variables

Sixteen dependent variables are measured and analysed in this study. These variables are continuous data because responses are placed on a 1-5 scale. It is appropriate to recognise Likert-type scales as continuous which gives the ability to calculate means, standard deviations and variance (Field, 2013; Tharenou, Donohue, & Cooper, 2007).

Each aspect of the meaningful work model is measured on frequency and importance (Lips-Wiersma & Wright, 2012). The variables are: Unity (frequency), Unity (importance), Serving (frequency), Serving (importance), Expressing full potential (frequency), Expressing full potential (importance), Developing self (frequency), Developing self (importance), Reality (frequency), Reality (importance), Inspiration (frequency), Inspiration (importance), Balancing tensions (frequency), Balancing tensions (importance), Overall frequency and Overall importance.

Frequency of meaningful work refers to the frequency that survey respondents found the behaviour in their workplace, and importance refers to the importance of that behaviour occurring in the workplace. These two dependent variables will be analysed separately to show evidence of the prevalence of meaningful work, how it is valued in the workplace, and how this varies between generations.

This research uses one categorical independent variable, which is generation. The generational groupings that will be used in this study are Veterans (born before 1946) (Cennamo & Gardner, 2008; Smola & Sutton, 2002; Srinivasan, 2012; Weingarten, 2009), Baby boomers (born in and between 1946 and 1964) (Chi et al., 2013; Costanza et al., 2012; Gursoy et al., 2013; Smola & Sutton, 2002; Weingarten, 2009), Generation X (born between 1965 and 1980) (Chi et al., 2013; Gursoy et al., 2013; Park & Gursoy, 2012) and Generation

Y (born after 1980) (Becton et al., 2014; Cennamo & Gardner, 2008; Weingarten, 2009) which reflects year groups commonly identified with each generation (Joshi et al., 2011; Noble et al., 2004; Wong et al., 2008)

Therefore, age groups¹ that will segment the sample into generations are < 31, 32-47, 48-66, 67 +, indicating Generation Y, Generation X, Baby boomers and Veterans respectively. After an analysis of frequency tables of aforementioned groups, it was evident that Veterans only accounted for 1.7% of the total sample (Appendix 2). Because of this small proportion, the responses are not substantial enough to infer population generalisations, therefore the age group will not be used in any further analysis as per the recommendations in the literature (Cennamo & Gardner, 2008; Smola & Sutton, 2002). This brings the total responses down to 395, with an age range of 17 to 66 (Appendix 3).

4.6 Ethical considerations

Because the data has already been collected, and the data collection process had been approved by the Human Ethics Committee of the University of Canterbury prior to the collection of that data, there is no need for ethical approval for this research.

The research poses no physical or emotional risk whatsoever; as there are no participants who will have contact with the researcher, simply, data that has already been collected for a separate purpose will be explored for patterns and relationships. There is also no deception involved in the research design which can often pose ethical problems (O'Leary, 2007). No information that could be used to identify participants is part of the dataset.

4.7 Summary and conclusions

Through analysis of the probability of finding an equally large or larger F-ratio (based on the variability between groups compared to the variability within groups), a one way ANOVA gives us the ability to determine whether mean meaningful work scores in generational groups are different in the population. The research questions and hypotheses reflect the quantitative nature of the descriptive statistics in the dataset as well as addressing the research gaps.

Researchers agree that a meaningful life is desirable (Ciulla, 1998; Duffy et al., 2010; Lips-Wiersma & Morris, 2011; Michaelson et al., 2013) because it can benefit individuals through fulfilment and improved health and wellbeing, and can benefit organisations through

¹ Age at time of data collection (the year 2012)

engagement, retention and increased organisational commitment from employees. Humanity's desire for meaningful work cannot be ignored, and it is important to understand differences in societal groups and how business practices can be tailored to cater to these differences. With the use of robust meaningful work measures such as Lips-Wiersma & Wright's (2012) scale, I aim to find out more about the frequency and importance of aspects of meaningful work in different generations.

The exploration of the difference between generations and the differences in the frequency and importance of meaningful work will fill the serious literature gaps, and it will help link age and meaningful work which will enable individuals and employers to understand the nature of the ageing population and workforce.

5 Results

5.1 Overview

The results section will report the results of statistical analysis on the data set. The section will begin with an overview of the descriptive statistics. An analysis of Pearson's correlation coefficients for meaningful work and age will then be reported. Tests for assumptions of the Analysis of Variance (ANOVA) test will be reported, with the results of the ANOVA itself and post-hoc testing. The section will finish with a measure of partial eta squared effect sizes and a summary of findings.

5.2 Demographic statistics

The sample was reasonably diverse. From a total of 395 surveys, 8.9% of participants were Asian, 75.2% were Caucasian, 4.6% were Māori, 2.5% were Pacific, 1.5 % were multi-racial, 2.5% were African-American, 0.8% were Indian and 4.1% were 'other' or preferred not to respond. 51.6% of participants were from New Zealand, 42.0% were from the US, 4.6% were from India, and 1.8% were from other countries, which shows a largely western sample.

Age ranged from 17 to 66 years with a median of 36, a mean of 37.87 and a standard deviation of 12.97. Participants were grouped into generational groups with 38.5% of participants were classed as Generation Y, 35.2% belonged to Generation X and 26.3% were Baby boomers. 48.9% of the sample was male with females as the remaining 51.1%.

15.4% of participants reported that they were blue collar/unskilled workers, 13.4% worked in retail, hospitality or managerial roles, 46.6% were admin/semi-professional and 24.6% were professional. Level of education varied but was largely well educated, with 0.5% of participants reporting that they did not complete high school, 4.1% completed high school only, 17.2% had had some tertiary education but had not gained a degree, 73.4% had a bachelor's degree or higher with the remaining 4.8% preferring not to respond.

With regards to organisation size, 30.4% worked in an organisation with 1-24 employees, 8.6% worked in an organisation with 25-39 employees, 8.9% worked in an organisation with 50-99 employees, 16.5% worked in an organisation with 100-499 employees, 14.4% worked in an organisation with 500-1999 employees and 21.3% worked in an organisation with 2000 or more employees. 69.1% of participants were permanent employees, 15.7% were contract employees and 15.2% were self-employed. 75.2% of the total sample worked full-time and

24.8% worked part time. With regards to tenure in the role, 14.7% of participants had spent less than 1 year in their current role, 25.3 % had spent 1-2 years in their role, 28.6% had spent 2-5 years in their role, 16.2% has spent 5-10 years in their role, and 15.2% had spent 10 or more years in their role.

5.3 Descriptive statistics

The overall group means were calculated for Unity (frequency) ($M = 3.64$, $SD = 0.76$), Unity (importance) ($M = 3.8$ ($SD = 0.73$), Serving (frequency) ($M = 3.81$, $SD = 0.81$), Serving (importance) ($M = 4.08$, $SD = 0.80$), Expressing full potential (frequency) ($M = 3.30$, $SD = 0.79$), Expressing full potential (importance) ($M = 3.83$, $SD = 0.77$), Developing self (frequency) ($M = 4.23$, $SD = 0.84$), Developing self (importance) ($M = 3.59$, $SD = 1.37$), Reality (frequency) ($M = 3.74$, $SD = 0.73$), Reality (importance) ($M = 3.89$, $SD = 0.76$), Inspiration (frequency) ($M = 2.85$, $SD = 0.97$), Inspiration (importance) ($M = 3.38$, $SD = 0.97$), Balancing Tensions (frequency) ($M = 3.40$, $SD = 0.80$), Balancing Tensions (importance) ($M = 3.81$, $SD = 0.72$), Overall frequency ($M = 3.54$, $SD = 0.59$) and Overall importance ($M = 3.79$, $SD = 0.56$). In general, these means show moderate levels of meaningful work, and generally lower scores for frequency than importance. Table 1 displays a more comprehensive report which shows the means for each generation in each facet of meaningful work, revealing generally lower scores for Generation Y and generally lower scores for frequency of an aspect occurring (compared to means for importance).

Table 1. Descriptive data

	Group	N	M	SD	SE	95% CI	Min	Max
Unity (frequency)	< 31 (Generation Y)	152	3.57	0.76	.06	3.45, 3.69	1.00	5.00
	32-47 (Generation X)	139	3.69	0.72	.06	3.57, 3.82	1.67	5.00
	48-66 (Baby boomers)	104	3.67	0.82	.08	3.51, 3.83	1.17	5.00
Unity (importance)	< 31 (Generation Y)	152	3.75	0.75	.06	3.63, 3.87	1.33	5.00
	32-47 (Generation X)	139	3.90	0.74	.06	3.78, 4.03	1.50	5.00
	48-66 (Baby boomers)	104	3.98	0.65	.06	3.86, 4.11	2.17	5.00
Serving (frequency)	< 31 (Generation Y)	152	3.57	0.83	.07	3.44, 3.70	1.00	5.00
	32-47 (Generation X)	139	3.91	0.77	.07	3.78, 4.04	1.00	5.00
	48-66 (Baby boomers)	104	4.01	0.74	.07	3.87, 4.16	2.00	5.00
Serving (importance)	< 31 (Generation Y)	152	3.86	0.89	.07	3.71, 4.00	1.00	5.00
	32-47 (Generation X)	139	4.18	0.74	.06	4.06, 4.31	1.50	5.00
	48-66 (Baby boomers)	104	4.29	0.66	.06	4.16, 4.42	1.75	5.00
Expressing full potential	< 31 (Generation Y)	152	3.16	0.88	.07	3.02, 3.30	1.25	5.00
	32-47 (Generation X)	139	3.33	0.70	.06	3.21, 3.45	1.25	5.00

(frequency)	48-66 (Baby boomers)	104	3.48	0.72	.07	3.34, 3.62	1.75	5.00
Expressing full potential (importance)	< 31 (Generation Y)	152	3.75	0.82	.07	3.62, 3.88	1.00	5.00
	32-47 (Generation X)	139	3.84	0.77	.07	3.71, 3.97	1.75	5.00
	48-66 (Baby boomers)	104	3.93	0.68	.07	3.80, 4.06	1.75	5.00
Developing self (frequency)	< 31 (Generation Y)	152	4.16	0.93	.08	4.01, 4.31	1.00	5.00
	32-47 (Generation X)	139	4.32	0.79	.07	4.19, 4.46	1.00	5.00
	48-66 (Baby boomers)	104	4.22	0.78	.08	4.07, 4.38	2.00	5.00
Developing self (importance)	< 31 (Generation Y)	152	3.75	1.33	.11	3.54, 3.96	1.00	5.00
	32-47 (Generation X)	139	3.40	1.37	.12	3.17, 3.63	1.00	5.00
	48-66 (Baby boomers)	104	3.59	1.41	.14	3.32, 3.86	1.00	5.00
Reality (frequency)	< 31 (Generation Y)	152	3.61	0.73	.06	3.49, 3.72	2.00	5.00
	32-47 (Generation X)	139	3.81	0.69	.06	3.70, 3.93	1.67	5.00
	48-66 (Baby boomers)	104	3.82	0.76	.07	3.68, 3.97	1.33	5.00
Reality (importance)	< 31 (Generation Y)	152	3.70	0.78	.06	3.57, 3.82	1.33	5.00
	32-47 (Generation X)	139	3.95	0.71	.06	3.84, 4.07	2.00	5.00
	48-66 (Baby boomers)	104	4.07	0.74	.07	3.92, 4.21	2.00	5.00
Inspiration (frequency)	< 31 (Generation Y)	152	2.69	0.99	.08	2.35, 2.85	1.00	5.00
	32-47 (Generation X)	139	2.88	0.92	.08	2.73, 3.04	1.00	5.00
	48-66 (Baby boomers)	104	3.03	0.97	.10	2.84, 3.22	1.00	5.00
Inspiration (importance)	< 31 (Generation Y)	152	3.30	0.98	.08	3.14, 3.45	1.00	5.00
	32-47 (Generation X)	139	3.46	0.88	.07	3.31, 3.61	1.00	5.00
	48-66 (Baby boomers)	104	3.42	1.05	.10	3.21, 3.62	1.00	5.00
Balancing tensions (frequency)	< 31 (Generation Y)	152	3.39	0.82	.07	3.26, 3.52	1.50	5.00
	32-47 (Generation X)	139	3.45	0.82	.07	3.31, 3.59	1.00	5.00
	48-66 (Baby boomers)	104	3.35	0.75	.07	3.20, 3.50	1.75	5.00
Balancing tensions (importance)	< 31 (Generation Y)	152	3.71	0.81	.07	3.58, 3.84	1.00	5.00
	32-47 (Generation X)	139	3.87	0.66	.06	3.76, 3.98	1.00	5.00
	48-66 (Baby boomers)	104	3.87	0.64	.06	3.74, 4.00	2.25	5.00
Overall frequency	< 31 (Generation Y)	152	3.43	0.61	.05	3.33, 3.52	2.11	5.00
	32-47 (Generation X)	139	3.60	0.56	.05	3.51, 3.70	1.75	4.93
	48-66 (Baby boomers)	104	3.63	0.58	.06	3.52, 3.74	1.86	4.86
Overall importance	< 31 (Generation Y)	152	3.69	0.57	.05	3.60, 3.78	1.57	5.00
	32-47 (Generation X)	139	3.82	0.52	.04	3.73, 3.91	2.50	4.96
	48-66 (Baby boomers)	104	3.89	0.57	.06	3.78, 4.00	2.46	5.00

5.4 Correlations

As part of the initial analysis, Pearson's correlation coefficients were calculated for age to measure the strength and direction of the relationship between age and the various constructs

of meaningful work. Serving and Reality aspects were the most strongly related to age, and although relationships were weak, results indicate interactions between age and levels of meaningful work. Correlations between age and overall frequency and age and overall importance were the same.

Weak significant positive relationships were evident between age and Unity (importance) ($r = 0.13, p = .009$), Serving (frequency) ($r = 0.22, p < .001$), Serving (importance) ($r = 0.23, p < .001$), Expressing full potential (frequency) ($r = 0.19, p < .001$), Expressing full potential (importance) ($r = 0.12, p = .022$), Reality (frequency) ($r = 0.11, p = .026$), Reality (importance) ($r = 0.21, p < .001$), Inspiration (frequency) ($r = 0.16, p = .002$), Overall frequency ($r = 0.15, p = .003$) and Overall importance ($r = 0.15, p = .003$) (Table 2).

Table 2. Pearson correlation coefficients between age and meaningful work facets

	<i>r</i>
Unity (frequency)	.05
Unity (importance)	.13**
Serving (frequency)	.22****
Serving (importance)	.23****
Expressing full potential (frequency)	.19****
Expressing full potential (importance)	.12*
Developing self (frequency)	.03
Developing self (importance)	-.08
Reality (frequency)	.11*
Reality (importance)	.21****
Inspiration (frequency)	.16***
Inspiration (importance)	.07
Balancing tensions (frequency)	-.01
Balancing tensions (importance)	.08
Overall frequency	.15***
Overall importance	.15***

* $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

5.5 Six assumptions of ANOVA

Analysis of Variance (ANOVA) is a linear model, thus it relies on underlying assumptions (Field, 2013; Tharenou et al., 2007). This section explains how each of these assumptions have been addressed. ANOVA assumes the dependent variable is measured at a continuous

level. This has been met with participant responses on the continuous Likert-type scale. The predictor variable consists of three categorical independent groups. These groups are the three generations (Generation Y, Generation X, Baby boomers), which satisfies the requirement of the ANOVA model that there must be two or more categories of the predictor variable. The assumption of independence of observations is also not violated as it is only possible for each participant to belong to one generational group because the grouping is based on age.

5.5.1 Outliers

ANOVA tests assume that there are no outliers. To test for outliers, boxplots were created for each dependent variable for each generation. Boxplots showed many outliers for each group, but only one extreme outlier overall. After examining the outliers they did not seem to be measurement or input errors in the data, but reflected patterns of a set of radical cases across several dependent variables. Following recommendations from (Ghosh & Vogt, 2012), the outliers were not removed or modified, but were kept in the data to avoid bias. Therefore, outliers were treated as normal data points in this study and the ANOVA test could be carried out because it is fairly robust to non-normal data with outliers (Field, 2013).

5.5.2 Normality

ANOVA tests also assume that the data is normally distributed. Normality can be tested through a Shapiro-Wilk's tests and exploring the data in SPSS. Shapiro-Wilk's tests on this data showed the data was not normal for most groups ($p < .05$) (Appendix 4). Variables that were normally distributed were:

Generation Y: Expressing full potential (frequency), Overall frequency

Generation X: Overall importance

Baby boomers: Overall frequency, Overall importance.

To normalise data, it can be common practice to transform the data through Log transformations, square root transformations, reciprocal transformations and reverse score transformations (Field, 2013). All of these transformations were carried out on the data, which only exacerbated the non-normality. Test comparisons were carried out on the original data against the transformed data and the number of outliers and extreme outliers had increased with the transformed data.

Non-parametric testing was considered but not used due to the comparatively lower statistical power and inability to carry out post hoc testing (Chan & Walmsley, 1997; Field, 2013). Furthermore, empirical research from Schmider, Ziegler, Danay, Beyer, and Bühner (2010) shows that parametric ANOVA testing can remain robust, even in situations when data is not normally distributed, thus, parametric ANOVA testing was used and data normality was assumed.

5.5.3 Homogeneity of variances

Parametric ANOVA tests assume homogeneity of variances. Tests for homogeneity of variance were done on each dependent variable, as assessed by Levene's test for equality of variances (Appendix 5). The assumption of homogeneity of variances was violated by Expressing full potential (frequency) ($p < .001$), and Balancing tensions (importance) ($p = .030$). Homogeneity of variance was met for all other variables ($p < .05$) (Appendix 5). Variables that had heterogeneous variances need to be assessed through a Welch's ANOVA (Appendix 6) which take homogeneity of variance into consideration, before analysis through Games-Howell post-hoc testing.

5.6 ANOVA

Results from the ANOVA showed statistically significant differences between generations for the following constructs of meaningful work: Unity (importance) $F(2,392) = 3.61, p = .028, M^2 = 0.02$, Serving (frequency) $F(2,392) = 11.63, p < .001, M^2 = 0.06$, Serving (importance) $F(2,392) = 11.17, p < .001, M^2 = 0.05$, Reality (frequency) $F(2,392) = 3.98, p = .019, M^2 = 0.02$, Reality (importance) $F(2,392) = 8.51, p < .001, M^2 = 0.04$, Inspiration (frequency) $F(2,392) = 3.97, p = .020, M^2 = 0.02$, Overall frequency $F(2,392) = 4.87, p = .008, M^2 = 0.02$, Overall importance $F(2,392) = 4.39, p = .013, M^2 = 0.02$ (Appendix 7).

Expressing full potential (frequency) also showed significant differences however due to non-homogeneity of variance they must be analysed through robust tests of equality of means (Welch's ANOVA). Results for the one-way Welch's ANOVA was statistically significant for Expressing full potential (frequency) ($F(2, 250.65) = 4.93, p = .008, M^2 = 0.03$) (Appendix 6) meaning further interpretation of these results could be carried out through the Games-Howell post hoc test to understand where differences may lie.

This reflects the strength of relationships found in Section 4.2, which is expected. Constructs which showed significant relationships with generation also showed significant differences

through the ANOVA. Constructs with the strongest relationships with generation (Serving and Reality) also had generational differences in both frequency and importance, and higher F statistics, that is, more variance in the means between groups.

There were no statistically significant differences between generations for Unity (frequency), Expressing full potential (importance), Developing self (frequency and importance), Inspiration (importance), Balancing tensions (frequency and importance).

5.7 Post hoc testing

To confirm differences and reveal explicitly between which generations the differences occurred, post hoc analysis was carried out (Appendix 8). Due to unequal sample sizes, Tukey-Kramer post-hoc tests were run for variables with homogenous variances. Games-Howell post hoc tests were run for variables with heterogeneous variances (that is, Expressing full potential (frequency) and Balancing tensions (importance)).

Analysis revealed differences primarily between Generation Y and Baby boomers, but differences between Generation Y and Generation X also occurred. Constructs which showed differences between Generation Y and Generation X also showed differences in Generation Y and Baby boomers, that is, there were no constructs which showed differences between Generation Y and Generation X alone. There were no differences between Generation X and Baby boomers.

Post hoc analysis revealed the following significant differences:

Scores for Unity (importance) were significantly lower for Generation Y ($M = 3.75$, $SD = 0.75$, 95% CI [3.63, 3.87]) than Baby boomers ($M = 3.98$, $SD = 0.65$, 95% CI [3.86, 4.11]) with a mean difference of -0.24, 95% CI [-0.45, -0.02] which was statistically significant ($p = .028$).

Scores for Serving (frequency) were significantly lower for Generation Y ($M = 3.57$, $SD = 0.83$, 95% CI [3.44, 3.70]) than Generation X ($M = 3.91$, $SD = 0.77$, 95% CI [3.78, 4.04]) with a mean difference of -0.34, 95% CI [-0.55, -0.12] which was statistically significant ($p = .001$). Generation Y scores were also lower than Baby boomers ($M = 4.01$, $SD = 0.74$, 95% CI [3.87, 4.16]) with a mean difference of -0.44, 95% CI [-0.68, -0.21] which was statistically significant ($p < .001$).

Scores for Serving (importance) were significantly lower for Generation Y ($M = 3.86$, $SD = 0.89$, 95% CI [3.71, 4.00]) than Generation X ($M = 4.18$, $SD = 0.74$, 95% CI [4.06, 4.31]) with a mean difference of -0.33, 95% CI [-0.54, -0.11] which was statistically significant ($p = .001$). Generation Y scores were also lower than Baby boomers ($M = 4.29$, $SD = 0.66$, 95% CI [4.16, 4.42]) with a mean difference of -0.43, 95% CI [-0.67, -0.20] which was statistically significant ($p < .001$).

Scores for Expressing full potential (frequency) scores were significantly lower for Generation Y ($M = 3.16$, $SD = 0.88$, 95% CI [3.02, 3.30]) than Baby boomers ($M = 3.48$, $SD = 0.72$, 95% CI [3.34, 3.62]) with a mean difference of -0.32, 95% CI [-0.55, -0.08] which was statistically significant ($p = .005$).

Scores for Reality (frequency) were significantly lower for Generation Y ($M = 3.61$, $SD = 0.73$, 95% CI [3.49, 3.72]) than Generation X ($M = 3.81$, $SD = 0.69$, 95% CI [3.70, 3.93]) with a mean difference of -0.21, 95% CI [-0.41, -0.01] which was statistically significant ($p = .042$). Generation Y scores were also lower than Baby boomers ($M = 3.82$, $SD = 0.76$, 95% CI [3.68, 3.97]) with a mean difference of -0.22, 95% CI [-0.44, -0.00] which was statistically significant ($p = .048$).

Scores for Reality (importance) were significantly lower for Generation Y ($M = 3.70$, $SD = 0.78$, 95% CI [3.57, 3.82]) than Generation X ($M = 3.95$, $SD = 0.71$, 95% CI [3.84, 4.07]) with a mean difference of -0.26, 95% CI [-0.46, -0.05] which was statistically significant ($p = .010$). Generation Y scores were also lower than Baby boomers ($M = 4.07$, $SD = 0.74$, 95% CI [3.92, 4.21]) with a mean difference of -0.37, 95% CI [-0.59, -0.15] which was statistically significant ($p < .001$).

Scores for Inspiration (frequency) were significantly lower for Generation Y ($M = 2.69$, $SD = 0.99$, 95% CI [2.53, 2.85]) than Baby boomers ($M = 3.03$, $SD = 0.97$, 95% CI [2.84, 3.22]) with a mean difference of -0.34, 95% CI [-0.63, -0.05] which was statistically significant ($p = .016$).

Scores for Overall Frequency were significantly lower for Generation Y ($M = 3.43$, $SD = 0.61$, 95% CI [3.33, 3.52]) than Generation X ($M = 3.60$, $SD = 0.56$, 95% CI [3.51, 3.70]) with a mean difference of -0.17, 95% CI [-0.34, -0.01] which was statistically significant ($p = .031$). Generation Y scores were also lower than Baby boomers ($M = 3.63$, $SD = 0.58$,

95% CI [3.52, 3.74]) with a mean difference of -0.20, 95% CI [-0.38, -0.03] which was statistically significant ($p = .017$).

Scores for Overall Importance were significantly lower for Generation Y ($M = 3.69$, $SD = 0.57$, 95% CI [3.60, 3.78]) than Baby boomers ($M = 3.89$, $SD = 0.57$, 95% CI [3.78, 4.00]) with a mean difference of -0.20, 95% CI [-0.37, -0.03] which was statistically significant ($p = .013$).

5.8 Effect size

Partial eta squared effect sizes were calculated for statistically significant pairs (Cohen, 1992; Field, 2013). These effect sizes reflected results from the correlations reported above which also showed larger effects from generation on Serving (frequency, importance) and Reality (frequency, importance). Table 3 shows Partial eta squared values of one-way between-subjects ANOVA.

Table 3. Partial eta squared values of one-way ANOVA between-subjects effects for generation

	df	M ²	F	η^2
Unity (frequency)	2	0.66	1.13	.006
Unity (importance)	2	1.88	3.61*	.018
Serving (frequency)	2	7.19	11.62****	.056
Serving (importance)	2	6.81	11.17****	.054
Expressing full potential (frequency)	2	3.13	5.15**	.026
Expressing full potential (importance)	2	1.00	1.68	.008
Developing self (frequency)	2	1.00	1.41	.007
Developing self (importance)	2	4.43	2.38	.012
Reality (frequency)	2	2.09	3.98*	.020
Reality (importance)	2	4.74	8.50****	.042
Inspiration (frequency)	2	3.67	3.97*	.020
Inspiration (importance)	2	1.03	1.10	.006
Balancing tensions (frequency)	2	0.30	0.47	.002
Balancing tensions (importance)	2	1.21	2.34	.012
Overall frequency	2	1.66	4.87**	.024
Overall importance	2	1.34	4.38*	.022

Note: η^2 = partial eta squared

* $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

5.9 Summary of results

This section has reported the results of statistical analysis on the dataset of 395 surveys. Results from correlation analysis, ANOVA and partial eta squared effect sizes reported significant differences between generation and the constructs of meaningful work. The most differences were found between Generation Y and Baby boomers, although differences were also found between Generation Y and Generation X. The main constructs which differed between generations were Serving and Reality. Overall, frequency levels were lower than importance levels, and generation had a stronger effect on frequency levels in this sample.

The following shows a summary of results of the support for hypothesis:

Hypothesis 1: *There are generational differences in the frequency and importance of Unity occurring in the workplace* – partial support – differences were found for Unity (importance) between Generation Y and Baby boomers only.

Hypothesis 2: *There are generational differences in frequency and importance of Serving occurring in the workplace* – partial support – differences were found for Serving (frequency and importance) between Generation Y and Generation X, and Generation Y and Baby boomers, but not between Generation X and Baby boomers.

Hypothesis 3: *There are generational differences in frequency and importance of Expressing full potential occurring in the workplace* – partial support – differences were found for Expressing full potential (frequency) between Generation Y and Baby boomers only.

Hypothesis 4: *There are generational differences in frequency and importance of Developing self occurring in the workplace* – not supported.

Hypothesis 5: *There are generational differences in frequency and importance of Reality occurring in the workplace* – partial support – differences were found for Reality (frequency and importance) between Generation Y and Generation X, and Generation Y and Baby boomers, but not between Generation X and Baby boomers.

Hypothesis 6: *There are generational differences in frequency and importance of Inspiration occurring in the workplace* – partial support – differences were found for Inspiration (frequency) between Generation Y and Baby boomers.

Hypothesis 7: *There are generational differences in frequency and importance of Balancing tensions occurring in the workplace* – not supported.

6 Discussion

6.1 Overview

This chapter begins with a discussion of the results presented in the previous section with specific reference to each hypothesis, and a discussion of the differences between the frequency and importance of meaningful work occurring. This will be followed by a discussion of the limitations of the research project, and a set of recommendations for managers and for future research. The chapter will conclude with suggestions for future research, and a chapter summary.

The research aimed to uncover whether there are differences in meaningful work between generations with particular focus on differences between frequency and importance. In order to address this question, this chapter will explore the findings from the seven hypotheses presented in the previous chapter. Results from tests of effect size, Pearson's correlation and Analysis of Variance in Chapter 5 as well as group means will be referred to.

6.2 Unity

Hypothesis 1 stated that there are generational differences in Unity. In partial support of this hypothesis, ANOVA results showed that only Unity (importance) varied significantly between Generation Y and the Baby boomers, with Generation Y scoring significantly lower and a small effect size. There was also a weak correlation between age and Unity (importance) which indicates that differences could be due to age or generation.

The results indicate that in general, aspects of Unity such as working with others, shared values and belonging are valued more by Baby boomers than by Generation Y. This implies that Generation Y tend to like teamwork, cooperation and mutual support and motivation less than their older counterparts. Baby boomers would be expected to value a sense of community at work and shared values and acceptance more than Generation Y. This difference does not mean that Generation Y has low meaningful work scores. On the contrary, Generation Y's group average, although significantly lower, was still relatively high for Unity (importance) ($M = 3.75$ on a scale of 1-5).

Literature indicates the existence of differing values placed on working together between generations, although the direction of these differences is unclear. Weingarten (2009) claims that Baby boomers tend to work for personal fulfilment, whereas Gursoy et al. (2013) and

Park and Gursoy (2012) characterise Generation X as individualistic. Srinivasan (2012) and Gursoy et al. (2013) describe Generation Y as social, which could translate to a desire to like working with others in a work context. The results of this research add clarification to these inconclusive findings through giving evidence of differences in the importance placed on Unity occurring in the work place, that is, Baby boomers place significantly more importance on Unity occurring in the workplace than Generation Y.

The fact that the overall mean for frequency was lower than the overall mean for importance suggests that workers do value the experience of unity with others at work but they experience it comparatively less. This means that there is a gap in workers needs for meaningful work which needs to be addressed. Employers could provide more opportunities for collaboration and teamwork, which would enable employees to experience feelings of unity, shared values and a sense of belonging in the workplace which may bridge the gap between frequency and importance of unity occurring in the workplace.

6.3 Serving

Results partially support Hypothesis 2, which stated that there are generational differences in Serving. Once again, Generation Y had significantly lower meaningful work scores, however this time the effect sizes were higher, and differences occurred for both frequency and importance between Generation Y and Generation X, and Generation Y and Baby boomers. Mean differences between Generation Y and Baby boomer's Serving (frequency and importance) scores were the largest for out of all seven facets of meaningful work at -0.44 and -0.43 respectively which indicates generation had the highest interaction with Serving. Furthermore, Pearson's correlation between Serving and age were also the highest out of all aspects of meaningful work. These differences indicate members of the older generations tend to value making a difference in others' lives in the workplace and making a difference in a wider context of humanity and the planet. Not only do they place a higher value on these aspects of Serving others but they experience them more frequently than younger generations. More implicitly, this suggests that Generation Y tend to enjoy teamwork less than older generations and may not like work that satisfies their colleagues' needs as much as Generation X and Baby boomers do. This however is not to say that the younger generation do not value service to others as the group mean was still high (3.86 on a scale of 1-5, the second highest mean for Generation Y out of all aspects of meaningful work).

These results clarified inconclusive evidence from the literature about work values related to serving self and others, which according to Lips-Wiersma and Morris (2011) pertains to making a difference in the wider world. Evidence in generational literature and research concerning age and work values showed that older workers did have higher levels of motivation to pass on knowledge and improve things (Stamov-Roßnagel & Biemann, 2012), and that narcissism levels tended to be higher in younger generations (Macky et al., 2008; Twenge & Campbell, 2008). Nevertheless, research does report that younger generations desire social responsibility (that is, meeting the needs of society and the environment) (Park & Gursoy, 2012) and Srinivasan (2012) found this to be true for both Generations Y and X. This is reflected in the high overall levels of frequency and importance of Serving ($M = 3.86$, $M = 4.08$ respectively), regardless of any group differences. This research project adds to this unclear evidence by determining that generational differences do in fact occur with regards to the Serving aspect of meaningful work, with Generation Y scoring significantly lower than Generation X and Baby boomers for both frequency and importance of Serving occurring in the workplace.

6.4 Expressing full potential

This research also shows partial support for Hypothesis 3, which stated that there are generational differences in Expressing full potential. Significant differences in the frequency of this aspect of meaningful work were found between Generation Y and Baby boomers, again with Generation Y scoring lower meaningful work scores, but with a small effect size. This means that Generation Y experience less Expressing full potential at work than Baby boomers, therefore would be less likely to experience feelings of expressiveness, creativeness and achievement in the workplace. This difference in meaningful work indicates that the Baby boomers feel responsible for making the most of their skills and talents and use creative outlets more often than Generation Y. Generation Y may tend to feel less recognised for their achievements and less power to influence than their older counterparts.

Although both the importance and frequency of Expressing full potential seemed to be weakly correlated with age, there was no evidence in significant variability between generations concerning the importance of this aspect occurring. This indicates that younger generations have difficulty expressing their full potential, even though they place similar importance on this aspect of meaningful work as older generations do. The reasons for this could be a fault of management, the job tasks, person-organisation fit or person-job fit, or

simply because of Generation Y's perception, that is, they may find it difficult to uncover or make sense of the meaning in their work. To bridge this gap, managers could provide opportunities for creativity and decision making to Generation Y, with appropriate recognition to provide a sense of success, benchmarking and improvement.

This generational difference was anticipated due to differences in work values such as older workers placing a higher importance on the work itself (Gursoy et al., 2013; Park & Gursoy, 2012). Baby boomers' higher work centrality (Gursoy et al., 2013; Kupperschmidt, 2000) and motivation for self-realisation (Kupperschmidt, 2000; Smola & Sutton, 2002; Srinivasan, 2012), achievement (Gursoy et al., 2013) and desire to gain responsibility (Becton et al., 2014) may also contribute to why these differences occur. The current research supports and strengthens these conclusions by providing evidence of generational differences in the frequency of Expressing full potential occurring in the workplace, which relates to similar aforementioned characteristics.

6.5 Developing self

Interestingly, there was no evidence of significant differences found between any of the three generations with regards to Hypothesis 4 which stated that there are generational differences in Developing self. Group means were the highest for the frequency of Developing self out of all seven facets of meaningful work, with the overall mean at 4.23 on the Likert scale of 1-5. Group means for the importance of Developing self occurring in the workplace were not as high as frequency means, with an overall mean of 3.59 on the Likert scale of 1-5. The consistently high level of frequency of developing the inner self occurring in the workplace is good news, and indicates that all generations experience a sense of moral development, personal growth, self-awareness and are able to stay true to them self whilst at work. The fact that frequency scores were higher than importance scores could indicate that worker's needs to develop the inner self in the workplace are being met as a result of opportunities for meaningful work given by managers, or workers' own abilities to engage in developing their inner self.

Generational literature indicates differences in work values relating to these inner qualities such as older workers' tendencies to have higher levels of intrinsic motivation (Inceoglu et al., 2012) and a higher need for personal development and self-realisation (Smola & Sutton, 2002; Srinivasan, 2012), however these differences did not translate to significant differences in meaningful work, rather, a consistently high level of meaningful work.

6.6 Reality

Hypothesis 5 stated that there are generational differences in Reality, which was partially supported by results which revealed that Generation Y scored significantly lower Reality scores than the older generations for both frequency and importance of Reality occurring in the workplace. Furthermore, Pearson's correlation and partial eta squared showed the effect size of generational differences on the importance of Reality occurring was stronger than the effect size on the frequency. This indicates that the older generations of workers generally have stronger beliefs that it is important to realise the world is not perfect, and things are not always going to go the way they would like it. The Generation Y's tendency to be less accepting of reality could be as a result of characteristics such as ambition or impatience, or due to age or life stage. The results also reveal that older workers more often experience this realisation than Generation Y. Generation Y will tend to place less importance on genuine conversations discussing when they may not live up to their personal values and goals, and they will have these conversations less than Generation X and Baby boomers. These older generations place a higher importance on these genuine conversations about the reality of work, and also have a stronger desire for desire authenticity and sincerity from their peers and managers.

These generational differences reflect conclusions drawn in previous research regarding generational differences in characteristics and attitudes, such as older workers tendencies to be less prone to excitement than younger workers (Noble & Schewe, 2003). The notion that Generation Y tend to be more idealistic (Gursoy et al., 2013), generally optimistic (Gursoy et al., 2008) and have a desire for quick rewards and fast progression (Srinivasan, 2012), suggests that Generation Y are less able to feel a sense of what is realistic and achievable considering one's limits. The results show older generations tend to dislike pretence, and value genuine emotion and realistic, grounded goals rather than over-the top expectations. This poses implications for managers, particularly when forming relationships with their employees and setting goals. Managers would need to ensure they are meeting the needs of the older generations by providing realistic expectations about what is possible in the organisation. For all three generations, differences group mean scores show average levels of importance are slightly higher than the average frequency that feelings of Reality are actually experienced at work, indicating it is possible that the needs for meaningful work for all generations are not being met.

6.7 Inspiration

With regards to Hypothesis 6, which stated that there are generational differences in Inspiration, there was only evidence of generational differences of the frequency of Inspiration occurring between Generation Y and the Baby boomers, with a small effect size. This evidence only provides partial support for Hypothesis 6, because while differences did exist, not all generations were significantly different, and the importance of Inspiration occurring was not significantly varied between any of the three Generations. These results allow us to conclude that Baby boomers would be more likely to experience feelings of alignment with higher order values. Generation Y tend to experience this type of meaningfulness, possibly as a result of being less familiar with personal considerations of faith, the divine or the order that underpins human's existence (Lips-Wiersma & Morris, 2011). This also shows that Generation Y tend to experience uplifting feelings of grace and joy less frequently and may also struggle to look toward a vision for their work that comes from the heart.

Inspiration is when people have a desire to improve conditions for others and for self-improvement (Lips-Wiersma & Morris, 2011) and the significant difference found between Generation Y and the Baby boomers reflects evidence in generational literature. Baby boomers' stronger desire for achievement and intellectual stimulation (Gursoy et al., 2013) and older workers' stronger desire to improve themselves and the world around them (Smola & Sutton, 2002) and empowerment (Gursoy et al., 2013) may also contribute to why this generational difference in meaningful work occurs, however it does not translate to significant differences in the value of meaningful work.

Furthermore, these inspiration scores were the lowest out of all the seven facets of meaningful work, with the group mean for frequency of inspiration occurring being 2.85 on a scale of 1-5. This indicates a need to look further into why inspiration is not occurring more frequently, and whether levels of inspiration can be improved by the organisation or by individuals themselves.

6.8 Balancing tensions

Finally, Hypothesis 7 stated that there are generational differences in balancing tensions. Results did not support this hypothesis as there were no significant differences between Generation Y, Generation X or Baby boomers with regards to the frequency or importance of balancing tensions occurring in the workplace. One reason for this is that although

Generation Y has significantly lower meaningful work scores, these scores are consistently lower across all aspects of meaningful work, thus no tensions are created, and Generation Y's lower meaningful work scores do not translate to a lack of balance. On the other hand the generally significantly higher levels of meaningful work for Baby boomers did not translate to a better balance of tensions, and Baby boomers balanced their focus for being, doing, self and others, just with higher scores than Generation Y. Although literature did suggest differences in work-life balance between generations (Chi et al., 2013; Gursoy et al., 2013), this did not translate to differences in the balance of tensions. The younger generation's tendency to like to balance personal goals with making a differences to the wider world (Srinivasan, 2012) did translate through to these results, however it is evident that the same statement can also apply to older generations.

A closer look at the components that contribute to the balance of tensions show significant generational differences in both aspects of serving others, but only one aspect of serving self (Expressing full potential). There are also significant generational differences in both pathways relating to doing, but only in one aspect of being (Unity). Differences in the levels of meaningful work pathways that contribute to tensions between being (Developing self and Unity) and doing (Expressing full potential and Serving) reinforce the results and show no major differences between group means within the two groups. Further examination of the group means show that there are no major differences within generations between the means for serving the self pathways (Developing self and Expressing full potential) nor for pathways that relate to serving others (Unity and Serving). This was unexpected, as literature indicated Generation Y's stronger focus on the self and tendency to be selfish and narcissistic (Macky et al., 2008; Twenge & Campbell, 2008) could have translated to a stronger focus on the self and an imbalance of tensions between self and others.

Group means do not reflect a serious struggle to balance tensions, with the overall mean for the importance of balancing tensions ($M = 3.81$) being higher than the frequency of balancing tensions occurring ($M = 3.40$). This shows that workers value a balance in the needs to reflect, to take action, to develop the self and to make a difference to the wider work, but it also indicates that workers may experience this balance less frequently than they desire.

6.9 Frequency vs. importance

Results showed significant differences occurred between Generation Y and Generation X, and Generation Y and Baby boomers for overall frequency, whilst significant differences for

overall importance were only found between Generation Y and Baby boomers. This showed that Generation Y experiences meaningful work less frequently than older generations, but they also place less importance on meaningful work than Baby boomers. An explanation for Generation Y's lower sense of meaningful work could be because Generation Y may find meaning from other areas of their lives outside of work and search for a meaningful life through their social lives, family or the community rather than just in their workplace. Lower work centrality may also explain Generation Y's lower frequency and importance of meaningful work and could indicate that Generation Y associate their work with their identity less than older generations do. This is an important finding as it suggests that workplaces may not be adapting to meet the needs of the younger generation as they develop into a substantial part of the workforce. As Generation Y gets older, it is expected that there will be a stage when they are the majority in the workforce and hold critical leadership and decision making roles. Because of their different attitudes towards work, they will have the power to change the nature of work into a system that better suits their own values and lifestyles. The younger generation's desire for more flexible working hours and accessibility to social media and the wider world during working hours could mean a change from the struggle to balance work and life, to an integration of work and life.

Generational differences in frequency occurred with four facets of meaningful work (Serving, Expressing full potential, Reality and Inspiration) and differences in Importance occurred with three facets of meaningful work (Unity, Serving and Reality). This reflects effect sizes, which show that although meaningful work's correlation with age was the same for overall frequency and overall importance, effect sizes, although small, showed that overall frequency had a stronger effect size than overall importance. Furthermore, all importance group means were higher than frequency group means, except for Developing self. For Developing self, this indicates that workers expectations may be exceeded with regards to the how frequently they experience meaningfulness from sources of engagement in a way that develops the inner self. For the remaining facets of meaningful work this indicates that workers are not experiencing meaningful work as much as they would like, that is, their needs are not being met. To solve this problem, managers should look at ways of facilitating employees in discovering meaningfulness in their work, as well as providing opportunities for employees to engage in meaningful work. Employees themselves should also take responsibility for finding meaningful work in their own work and life.

6.10 Limitations

As with any research, there are limitations to this study and many have been discussed throughout the thesis. Although the sample was diverse and included a range of demographics, 75.2% of the sample identified themselves as Caucasian and 93.0% were from either the US or New Zealand which means that results and conclusions from this research cannot be used to generalize for all cultures or ethnicities. The sample also only included full time employees, therefore the findings cannot be used to generalize for other types of work including part time and casual work. Unpaid volunteer work was also not included in the sample, and results may be very different for this type of work due to lack of extrinsic rewards, and generally a higher need for intrinsic motivation to stay in the job. Additionally, this research was based on a sample that was largely well educated (73.4% had a bachelor's degree or higher) and in semi-professional or professional roles (71.2% collectively). To minimise these limitations, the research could be carried out with a larger sample size which would allow for more diversity, higher representation of minority groups, so the research could make wider generalizations.

This study did not include the Veteran generation as the original sample was not large enough to make generalizations from. Although Veterans are classed as those who are now 70 years or older, they still may have a presence in the workplace. Studying Veteran's levels of meaningful work, or using Veterans when studying the relationship between meaningful work and age may help uncover reasons why Veterans or older workers stay in the labour market beyond the normal retirement age.

Literature's inconclusive and varied definition of the birth years that are used to classify each generation can pose methodological problems and difficulties when comparing results from studies that define generations differently. Furthermore, workers who are born in a year that is close to bordering on two generations may identify with the generation that they do not technically fall into which could be due to late or early socialisation factors compared to their similarly aged peers. This poses problems when grouping workers by generation as it would mean some workers may be incorrectly categorised because only birth year has been taken into consideration, not other characteristics such as values and attitudes or the year they started school or work. This may have contributed to why this research showed no differences between Generation X and Baby boomers. One way to investigate whether this has an effect on the result of generational differences would be to measure correlations

between age and meaningful work, life course and meaningful work, or tenure in organisation and meaningful work. On this note, it is important to recognise that with regards to social phenomenon such as variation in meaningful work, variability within groups can be as high as variability between groups.

Cross sectional research also poses methodological problems during analysis (Bowen & Wiersema, 1999) and the majority of generational studies are cross sectional. Longitudinal or sequential research could be useful in studies relating to ageing or life course and meaningful work, because they allow change within individuals over time to be studied (Hofer, Sliwinski, & Flaherty, 2002). This would allow researchers to gain an understanding of whether generational differences may be as a result of generational groupings, or whether they may be due to ageing and life course and would be a better indicator of what may cause these differences or changes.

While self-report scales often have risks of measurement error (Field, 2013), the Comprehensive Meaningful Work Scale is robust and maximises validity and reliability (Lips-Wiersma & Wright, 2012). Because this research is based on employee perceptions, one way to increase test-retest reliability would be to provide the survey to employees more than once, which may decrease bias that can occur simply because they are having a good or bad day. Alternatively, participants could be asked to declare whether there may be any external factors that may have caused them to have bias in their answers, although this still poses problems of self-report surveys such as honesty of participants.

With regards to related fields of study, further research is needed on situational factors and environment with relation to meaningful work, calling and work motivation (Inceoglu et al., 2012; Pavlish & Hunt, 2012), and attention needs to be paid to how the shift in motives and values effects other aspects of life such as wellbeing. Furthermore, there is a lack of knowledge about age and motivation, which is a serious research gap (Kanfer & Ackerman, 2004). There is also a deficiency of research focusing on why older people stay in the labour market (Kooij et al., 2007) and previous research is conceptually diverse, which makes it difficult to collate and compare emerging theories, and hypothesize for future research. Ageing and adult development related to worker motivation is also largely unexplored (Kanfer & Ackerman, 2004). This research poses questions of where Generation Y find meaning in their lives, assuming it is a fundamental human need, and whether this is adequate for their needs. This research also highlights the importance of studying generations as they

develop into the majority of the workforce, how this changes the nature of work, and whether the needs of those who are not in the majority generation are being fulfilled. Further research into what work itself may look like when Generation Y take on the majority of leadership roles would also be valuable, and may reveal less rigid boundaries in terms of working hours and contracts, social media connectivity, dress code and other traditional rules at work. In-depth qualitative research into why generational differences in meaningful work occur may improve our knowledge of differences in levels of meaningful work and how this varies between individuals and generations, and may help uncover better solutions to improving meaningful work for employees.

6.11 Recommendations

In general Generation Y experiences lower levels of meaningful work, which is a significant discovery that needs to be addressed. While Generation Y experience meaningful work less frequently and place less importance on meaningful work than older generations, this does not mean that meaningful work is not valued by Generation Y.

Because meaningful work is a source of employee engagement (Fairle, 2011), is good for wellbeing (Steger et al., 2012), and predicts job satisfaction and organisational commitment (Duffy et al., 2010) it is important to ensure all generations are considered when creating workplaces that foster meaningful work. From these conclusions, it is clear that Generation Y needs to be provided with opportunities to engage in work that they find meaningful. Furthermore, gaps in frequency and importance show that meaningful work needs to be fostered for all generations.

Michaelson's (2011) examination of 'whose responsibility is meaningful work' recognises that workers engagement in meaningful work is not entirely the responsibility of managers. While managers should not deprive workers of the opportunity to pursue meaningful work, employees themselves should take responsibility for choosing work that is meaningful, if that is what they desire. However, by creating meaningful workplaces and making meaningfulness more accessible, organisations will be able to attract and retain employees through having more productive, motivated and engaged employees. Research proves meaningful work is a strong predictor of work engagement (Steger et al., 2013) which in itself, can lead to improved business outcomes such as profit (Harter et al., 2002). Managers should use this discovery of generational differences in meaningful work to build appropriate engagement strategies, workforce planning, motivation strategies, and job design. Strategies

could include changes to teamwork, goal-setting or making time for self-reflection which may change the frequency of aspects such as Unity, Expressing full potential or Developing self respectively. The understanding of age related differences in meaningful work, calling and motivation will help managers understand their employees more, and help them to better cater to their workforce which will in turn foster good relationships between managers and their subordinates and colleagues.

Workers need to take responsibility for meaningful work levels themselves and strive to engage in meaningful work and meaningful activities in their lives, as it helps wellbeing (Arnold et al., 2007) and intrinsic reward (Chalofsky, 2003a, 2003b). Individuals should seek out work they find meaningful, seek to discover or create meaning in their current work by reflecting on the seven facets of meaningful work, and take opportunities to serve others and themselves, and be active and reflective in their work activities. Employees collectively taking responsibility for meaningful work also relates to purpose-beyond-profit (Lips-Wiersma & Morris, 2011) through challenging traditional business structures which in turn gives organisations the ability to outperform each other. Personal engagement in meaningful work is important for employees as it creates alignment with a deeper purpose through creating a more meaningful life.

6.12 Conclusion

This chapter discussed the findings of the current research project. Findings from the testing of the seven hypotheses showed partial support for the notion that there are generational differences in meaningful work. Generation Y scored significantly lower meaningful work scores for Unity, Serving, Expressing full potential, Reality and Inspiration, and had significantly lower overall frequency and importance levels of meaningful work. Study of the frequency and importance of meaningful work shows that in general, meaningful work occurs less than it is valued. From this, it is evident that there may be shortages in the frequency of meaningful work occurring in the workplace. More specifically, employees may be experiencing less Unity, Serving, Expressing full potential, Reality, Inspiration and Balancing tensions than they desire. Lower levels of frequency and importance could reveal differences on perceptions, understanding and response towards meaningful work occurring in the workplace, and reveal that improvements in engagement with meaningful work need to be made, with particular focus needed on Generation Y.

Although Becton et al. (2014) concluded that Generation Y had a strong desire for meaningful work, this research showed that Generation Y has lower levels of meaningful work compared with Baby boomers and Generation X. Considering recent research by Haley et al. (2013), Generation Y's lower meaningful work scores were expected, due to links between meaningful work and work engagement, with work engagement levels being higher among older workers.

From these results, it is clear that managers should foster meaningful workplaces, with particular focus on meeting the needs of Generation Y as they grow and develop in the workplace. Managers should use this knowledge of the current situation of generational differences to implement tailored HR practices to cater to the different needs and expectations from each generation. Because of links between meaningful work and organisational outcomes, the use of more generation-considerate HR practices may lead to improved employee engagement, motivation, job satisfaction and organisational performance.

Employees themselves should also take responsibility for finding meaning in their work to gain a more meaningful life and uncover their deeper purpose in life (Lips-Wiersma & Morris, 2011). Individuals' understanding of the nature of meaningful work may contribute to bridging the gap between frequency and importance of meaningful work through a better ability to engage in meaningful work.

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Appendices

Appendix 1 – Items and standardised factor loadings for the meaningful work scale

<i>Items and standardised factor loadings for the meaningful work scale</i>							
Item ^a	Unity with others	Serving others	Expressing full potential	Developing and becoming Self	Reality	Inspiration	Balancing tensions
I have a sense of belonging	.736	.100	.256	.039	.286	.249	.099
I can talk openly about my values when we are making decisions	.773	.213	.287	.047	.161	.087	.157
We talk about what matters to us	.842	.079	.113	.221	.078	.111	.235
We support each other	.768	.035	.132	.065	.161	.262	.268
We reassure each other	.779	.102	.224	.136	.091	.006	.009
We enjoy working together	.713	.071	.256	.130	.133	.222	.154
I feel I truly help our customers/clients	.071	.824	.094	.228	.006	.056	.048
We contribute to products and services that enhance human well-being and/or the environment	.166	.553	.104	.157	.092	.094	.092
What we do is worthwhile	.254	.719	.194	.165	.142	.096	.057
We spend a lot of time on things that are truly important	.079	.838	.113	.221	.078	.111	.090
I create and apply new ideas or concepts	.198	.194	.625	.102	.205	.296	.185
I make a difference that matters to others	.211	.046	.637	.195	.091	.229	.177
I experience a sense of achievement	.083	.015	.807	.202	.024	.193	.213
I am excited by the available opportunities for me	.276	.043	.739	.149	.195	.174	.178
At work my sense of what is right and wrong gets	.237	.191	.088	.618	.137	.064	.087

blurred (reverse scored)

I don't like who I am becoming at work (reverse scored)	.079	.094	.043	.829	.149	.195	.186
At work I feel divorced from myself (reverse scored)	.102	.231	.107	.806	.112	.088	.044
At work we face up to reality	.138	.098	.057	.153	.755	.127	.110
We are tolerant of being human	.263	.291	.093	.087	.673	.006	.057
We recognise that life is messy and that is OK	.097	.183	.101	.104	.798	.124	.069
I feel inspired at work	.133	.169	.068	.023	.057	.855	.164
The work we are doing makes me feel hopeful about the future	.282	.062	.097	.185	.119	.882	.096
The vision we collectively work towards inspires me	.001	.064	.027	.044	.040	.869	.112
I experience a sense of spiritual connection with my work	.043	.149	.195	.174	.152	.704	.088
In this work I have the time and space to think	.140	.171	.054	.152	.196	.151	.731
We have a good balance between focussing on getting things done and noticing how people are feeling	.102	.224	.136	.091	.006	.205	.786
I create enough space for me	.142	.082	.119	.055	.030	.131	.836
I have a good balance between the needs of others and my own needs	.120	.012	.127	.031	.085	.025	.733

a. Instructions for the scale: For each of the items please indicate the frequency at which the item occurs in your work. Please respond to the items with reference to your current workplace only. How frequently do you experience the following at work?

Appendix 2 – Generation group frequency

<i>Generation group frequency</i>		
Group	Frequency	Percent
< 31 (Generation Y)	152	37.8
32-47 (Generation X)	139	34.6
48-66 (Baby boomers)	104	25.9
67 + (Veterans)	7	1.7

Appendix 3 – Generation group frequency (with Veterans removed)

<i>Generation group frequency</i>		
Group	Frequency	Percent
< 31 (Generation Y)	152	38.5
32-47 (Generation X)	139	35.2
48-66 (Baby boomers)	104	26.3

Appendix 4 – Shapiro-Wilk's test for normality

Shapiro-Wilk's test for normality

		df	W
Unity (frequency)	< 24	152	.975**
	25 - 39	139	.969***
	40 - 54	104	.946*****
Unity (importance)	< 24	152	.957*****
	25 - 39	139	.943*****
	40 - 54	104	.934*****
Serving (frequency)	< 24	152	.975**
	25 - 39	139	.944*****
	40 - 54	104	.939*****
Serving (importance)	< 24	152	.912*****
	25 - 39	139	.886*****
	40 - 54	104	.882*****
Expressing full potential (frequency)	< 24	152	.983
	25 - 39	139	.962*****
	40 - 54	104	.961***
Expressing full potential (importance)	< 24	152	.955*****
	25 - 39	139	.954*****
	40 - 54	104	.960***
Developing self (frequency)	< 24	152	.827*****
	25 - 39	139	.820*****
	40 - 54	104	.872*****
Developing self (importance)	< 24	152	.834*****
	25 - 39	139	.884*****
	40 - 54	104	.849*****
Reality (frequency)	< 24	152	.967***
	25 - 39	139	.960*****
	40 - 54	104	.931*****
Reality (importance)	< 24	152	.954*****
	25 - 39	139	.946*****
	40 - 54	104	.909*****
Inspiration (frequency)	< 24	152	.967***
	25 - 39	139	.979*
	40 - 54	104	.959***
Inspiration (importance)	< 24	152	.971***
	25 - 39	139	.968***
	40 - 54	104	.946*****
Balancing tensions (frequency)	< 24	152	.978*
	25 - 39	139	.971***
	40 - 54	104	.965**
Balancing tensions	< 24	152	.953*****

(importance)	25 - 39	139	.955****
	40 - 54	104	.969*
Overall frequency	< 24	152	.993
	25 - 39	139	.981*
	40 - 54	104	.980
Overall importance	< 24	152	.967***
	25 - 39	139	.986
	40 - 54	104	.979

* $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Appendix 5 – Levene's test for homogeneity of variance

Levene's test for homogeneity of variance

	W	df1	df2
Unity (frequency)	0.44	2	392
Unity (importance)	1.80	2	392
Serving (frequency)	1.13	2	392
Serving (importance)	2.30	2	392
Expressing full potential (frequency)	6.90***	2	392
Expressing full potential (importance)	1.80	2	392
Developing self (frequency)	0.87	2	392
Developing self (importance)	0.09	2	392
Reality (frequency)	0.16	2	392
Reality (importance)	0.87	2	392
Inspiration (frequency)	0.54	2	392
Inspiration (importance)	1.73	2	392
Balancing tensions (frequency)	0.90	2	392
Balancing tensions (importance)	3.53*	2	392
Overall frequency	1.13	2	392
Overall importance	0.24	2	392

* $p < .05$, *** $p < .005$

Appendix 6 – Welch’s robust test for equality of means

Welch's robust tests of equality of means

	F	df1	df2
Unity (frequency)	1.17	2	241.55
Unity (importance)	3.71*	2	252.70
Serving (frequency)	11.31****	2	250.79
Serving (importance)	10.64****	2	256.28
Expressing full potential (frequency)	4.93**	2	250.64
Expressing full potential (importance)	1.77	2	254.01
Developing self (frequency)	1.39	2	251.69
Developing self (importance)	2.43	2	243.72
Reality (frequency)	3.94*	2	243.17
Reality (importance)	8.14****	2	247.36
Inspiration (frequency)	3.81*	2	245.95
Inspiration (importance)	1.15	2	240.87
Balancing tensions (frequency)	0.48	2	250.38
Balancing tensions (importance)	2.12	2	252.77
Overall frequency	4.70*	2	247.44
Overall importance	4.15*	2	245.28

* $p < .05$, ** $p < .01$, **** $p < .001$

Appendix 7 – Summary of one-way between groups ANOVA for Generation

Summary of one-way between groups ANOVA for Generation

	SS	df	M ²	F
Unity (frequency)	1.32	2	0.66	1.13
Unity (importance)	3.76	2	1.88	3.61*
Serving (frequency)	14.39	2	7.19	11.62****
Serving (importance)	13.63	2	6.81	11.17****
Expressing full potential (frequency)	6.27	2	3.13	5.14**
Expressing full potential (importance)	2.00	2	1.00	1.68
Developing self (frequency)	2.01	2	1.00	1.41
Developing self (importance)	8.86	2	4.43	2.38
Reality (frequency)	4.17	2	2.09	3.98*
Reality (importance)	9.48	2	4.74	8.50****
Inspiration (frequency)	7.34	2	3.67	3.97*
Inspiration (importance)	2.06	2	1.03	1.10
Balancing tensions (frequency)	0.60	2	0.30	0.47
Balancing tensions (importance)	2.42	2	1.21	2.34
Overall frequency	3.33	2	1.66	4.89**
Overall importance	2.68	2	1.34	4.38*

* $p < .05$, ** $p < .01$, **** $p < .001$

Appendix 8 – Tukey and Games-Howell post-hoc analysis for one-way between groups ANOVA of Generation

Tukey and Games-Howell post-hoc analysis for one-way between groups ANOVA for Generation

	Group 1	Group 2	Mean Difference	SE	95% CI
Unity (frequency)†	Generation Y	Generation X	- 0.13	.09	-0.34, 0.08
		Baby boomers	- 0.11	.10	-0.34, 0.12
	Generation X	Generation Y	0.13	.09	-0.08, 0.34
		Baby boomers	0.02	.10	-0.21, 0.25
	Baby boomers	Generation Y	0.11	.10	-0.12, 0.34
		Generation X	- 0.02	.10	-0.25, 0.21
Unity (importance)†	Generation Y	Generation X	- 0.16	.08	-0.35, 0.04
		Baby boomers	- 0.24*	.09	-0.45, -0.02
	Generation X	Generation Y	0.16	.08	-0.04, 0.35
		Baby boomers	- 0.08	.09	-0.30, 0.14
	Baby boomers	Generation Y	0.24*	.09	0.02, 0.45
		Generation X	0.08	.09	-0.14, 0.30
Serving (frequency)†	Generation Y	Generation X	- 0.34*****	.09	-0.55, -0.12
		Baby boomers	- 0.44*****	.10	-0.68, -0.21
	Generation X	Generation Y	0.34*****	.09	0.12, 0.55
		Baby boomers	- 0.11	.10	-0.35, 0.13
	Baby boomers	Generation Y	0.44*****	.10	0.21, 0.68
		Generation X	0.11	.10	-0.13, 0.35
Serving (importance)†	Generation Y	Generation X	- 0.33***	.09	-0.54, -0.11
		Baby boomers	- 0.43*****	.10	-0.67, -0.20
	Generation X	Generation Y	0.33***	.09	0.11, 0.54
		Baby boomers	- 0.11	.10	-0.34, 0.13
	Baby boomers	Generation Y	0.43*****	.10	0.20, 0.67
		Generation X	0.11	.10	-0.13, 0.34
Expressing full potential (frequency)††	Generation Y	Generation X	- 0.16	.09	-0.38, 0.05
		Baby boomers	- 0.32**	.10	-0.55, 0.08
	Generation X	Generation Y	0.16	.09	-0.05, 0.38
		Baby boomers	- 0.15	.09	-0.37, 0.07
	Baby boomers	Generation Y	0.32**	.10	0.08, 0.55
		Generation X	0.15	.09	-0.07, 0.37
Expressing full potential (importance)†	Generation Y	Generation X	- 0.09	.09	-0.30, 0.12
		Baby boomers	- 0.18	.10	-0.41, 0.05
	Generation X	Generation Y	0.09	.09	-0.12, 0.30

Developing self (frequency)†		Baby boomers	- 0.09	.10	-0.32, 0.15
	Baby boomers	Generation Y	0.18	.10	-0.05, 0.41
		Generation X	0.09	.10	-0.15, 0.32
	Generation Y	Generation X	- 0.17	.10	-0.40, 0.07
		Baby boomers	- 0.07	.11	-0.32, 0.19
	Generation X	Generation Y	0.17	.10	-0.07, 0.40
Baby boomers		0.10	.11	-0.16, 0.36	
Developing self (importance)†	Baby boomers	Generation Y	0.07	.11	-0.19, 0.32
		Generation X	- 0.10	.11	-0.36, 0.16
	Generation Y	Generation X	0.35	.16	-0.03, 0.73
		Baby boomers	0.16	.17	-0.25, 0.57
	Generation X	Generation Y	- 0.35	.16	-0.73, 0.03
		Baby boomers	- 0.19	.18	-0.60, 0.23
Reality (frequency)†	Baby boomers	Generation Y	- 0.16	.17	-0.57, 0.25
		Generation X	0.19	.18	-0.23, 0.60
	Generation Y	Generation X	- 0.21*	.08	-0.41, -0.01
		Baby boomers	- 0.22*	.09	-0.44, 0.00
	Generation X	Generation Y	0.21*	.08	0.01, 0.41
		Baby boomers	- 0.01	.09	-0.23, 0.21
Reality (importance)†	Baby boomers	Generation Y	0.22*	.09	0.00, 0.44
		Generation X	0.01	.09	-0.21, 0.23
	Generation Y	Generation X	- 0.26**	.09	-0.46, -0.05
		Baby boomers	- 0.37****	.09	-0.59, -0.15
	Generation X	Generation Y	0.26**	.09	0.05, 0.46
		Baby boomers	- 0.11	.10	-0.34, 0.11
Inspiration (frequency)†	Baby boomers	Generation Y	0.37****	.09	0.15, 0.59
		Generation X	0.11	.10	-0.11, 0.34
	Generation Y	Generation X	- 0.19	.11	-0.49, 0.07
		Baby boomers	- 0.34*	.12	-0.63, -0.05
	Generation X	Generation Y	0.19	.11	-0.07, 0.46
		Baby boomers	- 0.15	.12	-0.44, 0.15
Inspiration (importance)†	Baby boomers	Generation Y	0.34*	.12	0.05, 0.63
		Generation X	0.15	.12	-0.15, 0.44
	Generation Y	Generation X	- 0.16	.11	-0.43, 0.10
		Baby boomers	- 0.12	.12	-0.41, 0.17
	Generation X	Generation Y	0.16	.11	-0.10, 0.43
		Baby boomers	0.04	.13	-0.25, 0.34
	Baby boomers	Generation Y	0.12	.12	-0.17, 0.41
		Generation X	- 0.04	.13	-0.34, 0.25

Balancing tensions (frequency) [†]	Generation Y	Generation X	- 0.06	.09	-0.28, 0.16
		Baby boomers	0.04	.10	-0.20, 0.28
	Generation X	Generation Y	0.06	.09	-0.16, 0.28
		Baby boomers	0.10	.10	-0.15, 0.34
	Baby boomers	Generation Y	- 0.04	.10	-0.28, 0.20
		Generation X	- 0.10	.10	-0.34, 0.15
Balancing tensions (importance) ^{††}	Generation Y	Generation X	- 0.16	.09	-0.37, 0.04
		Baby boomers	- 0.16	.09	-0.37, 0.06
	Generation X	Generation Y	0.16	.09	-0.04, 0.37
		Baby boomers	0.00	.08	-0.20, 0.20
	Baby boomers	Generation Y	0.16	.09	-0.06, 0.37
		Generation X	0.00	.08	-0.20, 0.20
Overall frequency [†]	Generation Y	Generation X	- 0.17*	.07	-0.34, 0.01
		Baby boomers	- 0.20*	.07	-0.38, 0.03
	Generation X	Generation Y	0.17*	.07	0.01, 0.34
		Baby boomers	- 0.03	.08	-0.21, 0.15
	Baby boomers	Generation Y	0.20*	.07	0.03, 0.38
		Generation X	0.03	.08	-0.15, 0.21
Overall importance [†]	Generation Y	Generation X	- 0.13	.06	-0.28, 0.02
		Baby boomers	- 0.20*	.07	-0.37, -0.03
	Generation X	Generation Y	0.13	.06	-0.02, 0.28
		Baby boomers	- 0.07	.07	-0.24, 0.10
	Baby boomers	Generation Y	0.20*	.07	0.03, 0.37
		Generation X	0.07	.07	-0.10, 0.24

[†] = Tukey HSD post-hoc test ^{††} = Games-Howell post-hoc test

* $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Appendix 9 – Group and overall means for the frequency and importance of meaningful work facets

<i>Group and overall means for the frequency and importance of meaningful work facets</i>		N	M	SD	SE
Unity (frequency)	< 31 (Generation Y)	152	3.57	0.76	.06
	32-47 (Generation X)	139	3.69	0.72	.06
	48-66 (Baby boomers)	104	3.67	0.82	.08
	Total	395	3.64	0.76	.04
Unity (importance)	< 31 (Generation Y)	152	3.75	0.75	.06
	32-47 (Generation X)	139	3.90	0.74	.06
	48-66 (Baby boomers)	104	3.98	0.65	.06
	Total	395	3.86	0.73	.04
Serving (frequency)	< 31 (Generation Y)	152	3.57	0.83	.07
	32-47 (Generation X)	139	3.91	0.77	.07
	48-66 (Baby boomers)	104	4.01	0.74	.07
	Total	395	3.81	0.81	.04
Serving (importance)	< 31 (Generation Y)	152	3.86	0.89	.07
	32-47 (Generation X)	139	4.18	0.74	.06
	48-66 (Baby boomers)	104	4.29	0.66	.06
	Total	395	4.08	0.80	.04
Expressing full potential (frequency)	< 31 (Generation Y)	152	3.16	0.88	.07
	32-47 (Generation X)	139	3.33	0.70	.06
	48-66 (Baby boomers)	104	3.48	0.72	.07
	Total	395	3.30	0.79	.04
Expressing full potential (importance)	< 31 (Generation Y)	152	3.75	0.82	.07
	32-47 (Generation X)	139	3.84	0.77	.07
	48-66 (Baby boomers)	104	3.93	0.68	.07
	Total	395	3.83	0.77	.04
Developing self (frequency)	< 31 (Generation Y)	152	4.16	0.93	.08
	32-47 (Generation X)	139	4.32	0.79	.07
	48-66 (Baby boomers)	104	4.22	0.78	.08
	Total	395	4.23	0.84	.04
Developing self (importance)	< 31 (Generation Y)	152	3.75	1.33	.11
	32-47 (Generation X)	139	3.40	1.37	.12
	48-66 (Baby boomers)	104	3.59	1.41	.14
	Total	395	3.59	1.37	.07
Reality (frequency)	< 31 (Generation Y)	152	3.61	0.73	.06
	32-47 (Generation X)	139	3.81	0.69	.06
	48-66 (Baby boomers)	104	3.82	0.76	.07
	Total	395	3.74	0.73	.04
Reality (importance)	< 31 (Generation Y)	152	3.70	0.78	.06
	32-47 (Generation X)	139	3.95	0.71	.06
	48-66 (Baby boomers)	104	4.07	0.74	.07

	Total	395	3.89	0.76	.04
Inspiration (frequency)	< 31 (Generation Y)	152	2.69	0.99	.08
	32-47 (Generation X)	139	2.88	0.92	.08
	48-66 (Baby boomers)	104	3.03	0.97	.10
	Total	395	2.85	0.97	.05
Inspiration (importance)	< 31 (Generation Y)	152	3.30	0.98	.08
	32-47 (Generation X)	139	3.46	0.88	.07
	48-66 (Baby boomers)	104	3.42	1.05	.10
	Total	395	3.38	0.97	.05
Balancing tensions (frequency)	< 31 (Generation Y)	152	3.39	0.82	.07
	32-47 (Generation X)	139	3.45	0.82	.07
	48-66 (Baby boomers)	104	3.35	0.75	.07
	Total	395	3.40	0.80	.04
Balancing tensions (importance)	< 31 (Generation Y)	152	3.71	0.81	.07
	32-47 (Generation X)	139	3.87	0.66	.06
	48-66 (Baby boomers)	104	3.87	0.64	.06
	Total	395	3.81	0.72	.04
Overall frequency	< 31 (Generation Y)	152	3.43	0.61	.05
	32-47 (Generation X)	139	3.60	0.56	.05
	48-66 (Baby boomers)	104	3.63	0.58	.06
	Total	395	3.54	0.59	.03
Overall importance	< 31 (Generation Y)	152	3.69	0.57	.05
	32-47 (Generation X)	139	3.82	0.52	.04
	48-66 (Baby boomers)	104	3.89	0.57	.06
	Total	395	3.79	0.56	.03
