# RELATING PERSONAL VALUES

# TO WORK ENGAGEMENT IN SINGAPORE

By

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## PUBLICATIONS RELEVANT TO THIS THESIS

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# GLOSSARY

| | |
|---|---|
| AB | Absorption |
| $\chi^2$ | Chi-Square Index |
| CFI | Comparative Fit Index |
| CN | Critical N |
| DE | Dedication |
| Df | Degree of Freedom |
| ECVI | Expected Cross-validation Index |
| MBI | Maslach Burnout Inventory |
| NEP | National Education Program |
| NOB | Negative Organisation behaviour |
| OLBI | Oldenburg Burnout Inventory |
| OSC | Our Singapore Conversation |
| *p* | Level of Statistical Significance |
| POB | Positive Organisation behaviour |
| PV | Personal Values |
| *r* | Parameter Estimate / Correlation |
| RMSEA | Root Mean Square Error of Approximation |
| SEM | Structural Equation Modelling |
| SSVS | Short Schwartz's Value Survey |
| SVS | Schwartz's Value Survey |
| TAFEP | Tripartite Alliance for Fair Employment Practices |
| UWES | Utrecht Work Engagement Scale |
| VI | Vigour |
| WE | Work Engagement |

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# ABSTRACT

Recent literature on work engagement has been dominated by an emphasis on contextual factors such as work design and environmental conditions such as job control, social climate and perceived management quality. But there has been a comparative lack of contribution concerning whether, and if so, how something more core to an individual such as personal values could contribute to work engagement. This present research has found evidence that several personal values are associated with work engagement.

The research adopted a mixed method design involving two sequential investigations. Study One was a quantitative investigation of 294 individuals from the Singapore public with working experience. Participants were asked to rate the importance of 10 personal value types using the Short Schwartz Value Survey (SSVS), and their level of work engagement using the Utrecht Work Engagement Scale (UWES). A structural equation quantitative analysis of these data revealed that achievement, security, self-transcendence and hedonism values relate significantly to work engagement, and the extent of these relationships is influenced by demographic characteristics of age, gender, parenthood status, marital status and education. A second qualitative Study Two was then conducted to further investigate how and why personal values might relate to work engagement. Semi-structured interviews of 22 individuals identified the same personal values relate to work engagement. Study Two also revealed individual demographic characteristics act together with contextual factors such as Singapore's local context and culture, and working conditions to modify the relationship.

Subsequent evaluation of these findings showed that they reinforced recent literature, and reflected the Singaporean context and culture. The findings confirm that work engagement is influenced both by employee characteristics such as personal values, and contextual organisational practices designed to capture employee attention and stimulate their efforts. Though the qualitative data is from only a small sample, it nonetheless offers insights into the possible underlying processes that encourage work engagement arising from the combined influence of demographic characteristics and contextual factors on personal values. Such findings confirm a need to take personal values into account if the antecedents of work engagement are to be comprehensively modelled. They suggest that for organisations to simply provide the 'at work' type of interventions that assist engagement may not of itself be sufficient unless accompanied by supporting strategies that both target employees with the desired personal values at recruitment and provide opportunities for their further reinforcement once they have been hired.

In addition, the findings indicate that some of the value types that are depicted as

conflicting in Schwartz's Circular Structure of Basic Human Values may instead be compatible when work engagement is considered. The research concludes with a revised model of the factors that influence work engagement indicating that personal values are criteria individuals use to choose and justify actions such as whether or not to engage with work. However, the choice of which specific values influence more strongly would appear to vary with the nature of the individual's demographic and contextual circumstances.

# DECLARATION

I declare that:

This thesis presents work carried out by myself and does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; to the best of my knowledge it does not contain any materials previously published or written by another person except where due reference is made in the text; and all substantive contributions by others to the work presented, including jointly authored publications, is clearly acknowledged.

Yeow-Kiang Goh

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Finally, a very important part to this research journey to which I am very thankful of is the love, support and understanding from my wife Meow and my family, without which the completion of this journey would not be possible. Their patience and trust in me to complete this long and arduous journey were comforting, and they reinforced my endeavour to complete this research journey.

I hope this thesis vindicates all the above trust and support given to me.

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# CHAPTER 1: INTRODUCTION

In recent decades, work engagement has been widely touted as a popular and useful management construct to enhance employee and organisation performance (e.g. Coffman & Gonzalez-Molina 2002; Macey & Schneider 2008; May, Gilson & Harter 2004). In addition, organisations in today's digital and knowledge age are increasingly obliged to have engaged employees who have the power to 'control the means of production in the form of their individual effort, creativity and innovation' (Lyons, Higgins & Duxbury 2010, p. 994). A human capital management approach whereby engaged employees exhibit positive organisational behaviour and are energetic, dedicated and absorbed by their work has been cited by Bakker and Schaufeli (2008) as among the less costly ways to achieve competitive advantage. Bakker and Schaufeli suggest that an organisation-centred view (Luthans 2002a) combined with an employee-centred view (Wright 2003) can lead to a win-win situation for both organisations and employees (Zwetsloot & Pot 2004). Moreover, the humanistic aspect of this combined approach and the consequent meaningfulness that engaged employees find in their work mean that it can be personally fulfilling and motivating. Major consultancy and business publications (e.g. Bain & Company 2010a; Boston Consulting Group 2010a; Kroll 2005; Washburn 2009) have also been popularising engagement as a construct, making it reasonable to suppose that there can be considerable benefits for organisations to improve levels of engagement.

Until now, much of the previous research focus on work engagement has been on what employers need to do to increase engagement to achieve competitive advantage. In a review of literature, Freeney and Fellenz (2013) note this focus has almost exclusively been on contextual factors such as work design and environmental conditions. Recommendations for practice to increase work engagement have centred on management interventions through job resources (Gebauer & Lowman 2008; Koyuncu, Burke & Fiksenbaum 2006; Schaufeli & Bakker 2004), or through the development of personal resources (Bakker, Gierveld & Van Rijswijk 2006; Rothman & Storm 2003). It is believed that such management interventions may lessen the effect of job demands, help to realise work goals, or encourage personal learning, development and growth (Bakker & Demerouti 2007).

However, such approaches have tended to ignore other factors fundamental to individuals (Locke 1991; Meyer, Becker & Vandenberghe 2004), such as their values (Rokeach 1973; Schwartz 1992). In a review of the literature on the effectiveness of these management interventions, Stankiewicz and Moczulska (2012) found that they appeared to

work for some organisations but not for others. These discrepancies may be attributable to individual differences, such as personal values, interests and preferences, as suggested by various researchers (e.g. Erickson 2005; Goh & Patrickson 2011; 2012; Kahn 1990; Macey & Schneider 2008; May, Gilson & Harter 2004). These individual-related factors have not yet been investigated in depth, or translated into actionable practice. In other words, some levels of personal responsibility towards work engagement may have been overlooked to some degree. Compared to the attention paid to management interventions, it appears that little attention has been paid to describing the patterns and examining the determinants from the individual perspective of one's work engagement.

This has led the researcher to wonder whether the current approach, based on managerial interventions, is too one-sided. There is an apparent over-emphasis on what employers can do to enhance engagement, and under-recognition of individuals' contributions, which might help to explain their unengaged behaviour. Previous attempts to increase engagement through managerial interventions on job and/or personal resources have been largely based on contextual factors, dependency and stimulations. They have been extrinsically designed to encourage the full participation of employees in their work. However, these factors have not been able to explain the differences between individuals as reported by other researchers (e.g. Langelaan et al. 2006; Warr & Inceoglu 2012).

If it could be shown that intrinsic individual differences such as values are powerful inputs to engagement, it might lead to less costly and even more powerful interventions. Employers could select those displaying the desirable characteristics during recruitment, and subsequently hone those characteristics after hiring through the structuring of jobs, work conditions, compensation packages and promotions to attract and retain those targeted. Further, values can have dominating powers over people's actions (Allport 1961) and induce driving forces behind human behaviour (Lewin 1952). Using personal values as a management tool thus has the potential to encourage commitment and demand 'consistency', compelling employees to act in accordance with those values (Pruzan 1998). Thus, the relationships between personal values and work engagement are worthy of being investigated.

This present research aims to investigate the relationships between the construct of work engagement and personal values, taking into account the extent to which demographic profiles such as gender, age, marital status, parenthood status and education qualifications may affect these relationships. With this aim, the findings from this research may assist academics to shift their focus to individual factors, which until now have been neglected. Moreover, any identification and enhanced understanding of relevant factors may reveal new

approaches to creating the conditions for and/or enhancing work engagement. In view of this, the research sought to answer the following two questions:

> Research Question 1 (RQ1): Do personal values affect work engagement? If so, which personal values have a positive or negative effect on work engagement? Why and how do such relationships exist?
>
> Research Question 2 (RQ2): Do demographic profiles such as gender, age, marital status, parenthood status in terms of number of children, and education qualifications influence the extent to which personal values affect work engagement? If so, why and how do they influence?

To answer these questions, the researcher, who is based in Singapore, looked to workers in Singapore as a potentially interesting and convenient population to be investigated. The United States-based research institute Business Environment Risk Intelligence (BERI) Report 2011 ranks Singapore as the top investment destination in the world, and as having the best workers' productivity and general overall attitude. Singapore also ranked second in the World Economic Forum's Global Competiveness Report 2011–2012 (Economic Development Board 2012), and had the fifth highest gross domestic product (GDP) per capita in 2012 (World Bank 2013).

In this chapter, the various reasons that work engagement was chosen as a management construct to be investigated are first presented. Next, the idea of why personal values are potentially worth investigating in relation to work engagement is introduced. This chapter ends by giving an outline of the thesis.

## 1.1 Why the Interest in Work Engagement?

Shuck (2013) notes that the work engagement construct has been emerging and maturing swiftly, reflecting research scholars' serious undertaking of it, and their view that the engagement construct is worth delving into in depth. In fact, in a review of this construct, Robertson-Smith and Markwick (2009) noted that it was difficult to find articles without any mention of engagement in popular management or human resource (HR) publications.

In the work engagement literature, various reasons have been cited to justify this deep interest in work engagement. These include the wide publicity that work engagement has received (e.g. Bates 2004; Macleod & Clarke 2009), the favourable supportive findings by researchers concerning the veracity of its benefits (e.g. Schaufeli & Salanova 2007;

Xanthopoulou et al. 2009b), the need for organisations to cope with increasingly challenging work environments (e.g. Erickson 2005; Schaufeli 2011), and the academic interest in positive organisational behaviour (e.g. Bakker et al. 2007; Lopez & Snyder 2009).

### 1.1.1 Wide Publicity

Work engagement, as a relatively new construct, has wide publicity for more than a decade. It is believed to have first emerged as a construct in the business field, although its origin is not clear (Schaufeli 2012). The attention of business and academia has been captured by many claims on it. One claim is the lack of having engaged individuals at work could have a significant financial impact on economies and businesses (e.g. Bates 2004; Hooper 2006). Another is the extensive claim by renowned management consultant Gallup on the benefits of engagement (e.g. Coffman & Gonzalez-Molina 2002; Little & Little 2006). Others include further popularisation by other renowned consultants and press, and indications of government interest to know more about work engagement. These factors influencing the focus on work engagement are now discussed in turn.

#### *1.1.1.1 Claims of Significant Financial Impact to Economies and Businesses*

Over the past decade, various claims have been made regarding the significant negative financial impact on national economies and their businesses from lack of engagement of the workforce, or by having a workforce that is largely disengaged. For instance, Bates (2004) estimated that United States (US) businesses were losing $300 billion annually because only about 50 per cent of the country's national workforce was engaged in their work, resulting in reduced productivity. Similarly, Hooper (2006) reported that the Australian economy was losing about $31 billion annually because of the disengaged segment of its national workforce. In 2008, Gallup claimed that the disengaged segment in the United Kingdom's (UK) workforce was costing its economy between £59.4 and £64.7 billion per year (Macleod & Clarke 2009). In this same year, the UK Institute of Employment Studies claimed that if businesses in that country were to improve workplace practices by 10 per cent by improving the engagement of their employees, they could earn an extra annual profit of £1500 per employee (Milton 2011). If the benefits of having engaged employees at work are real or even only possible, significant financial losses could be averted or minimised, and profits could be enhanced for businesses and national economies.

#### *1.1.1.2 Widely Publicised Findings by Gallup*

The benefits of having engaged employees at work received wide publicity when the Gallup Research Group extensively marketed its work on employee engagement in books,

practitioner magazines and academic journals, and on websites (Little & Little 2006, p. 111). Gallup, who is well known for the Gallup Poll, claimed to have developed a propriety engagement instrument that statistically showed that employee engagement was positively related to productivity, profit, employee retention, safety and customer satisfaction (Buckingham & Coffman 1999; Coffman & Gonzalez-Molina 2002). Gallup reportedly developed the engagement instrument after thousands of propriety focus groups with various companies over a period of 25 years in which open-ended questions were used to gather qualitative data. Gallup also administered surveys to over one million employees to gather quantitative data to identify the questions that make up this engagement instrument (Buckingham & Coffman 1999). Gallup then conducted propriety research using the instrument with various organisations, comprising over 100,000 individual employees, and found workplace engagement to be positively related to organisational performance. Gallup concluded that collectively, engaged employees are an 'economic force that fuels an organisation's profit growth' (Coffman & Gonzalez-Molina 2002, p. 26). Further research into how work engagement can be created thus appears to have value.

*1.1.1.3 Popularisation by Renowned Consultants and Press*

Besides Gallup, many other well-known consulting firms (e.g. McKinsey & Company, Boston Consulting Group, and Bain & Company) have promoted the importance and benefits of having a workforce that is engaged. The term engagement is so popular that it is not only widely used as a management construct by major management consultants[1], but it also appears in the popular business press, such as Forbes Magazine, Harvard Business Review and BusinessWeek, and in the best-selling books of Gratton (2000) and Covey (2004). Examples of the claims made about engagement as a useful management construct by these major management consultants and in the popular business press are listed in Table 1-1. All claim that engagement of employees at work can potentially enhance organisational performance and business profitability. It may be inferred from these statements that efforts to promote engagement are varied, ranging from compensation-based incentives to the act of granting attention at no cost. However, as noted from Table 1-1, for these efforts to succeed, there must be a match between the approach taken to promote engagement and what individual employees value.

[1] 'Major' as rated by Careers-in-Business (2008) and Vault Career Intelligence (2013). Both Careers-in-Business and Vault Career Intelligence are career information providers for professionals and students, with the former providing the information for free. For Careers-in-Business, the ranking was based on the number of MBA students recruited from leading schools by these consulting firms. For Vault, the ranking was based on the consulting firms' status as an employer within the consulting industry and the peer-to-peer ratings among these firms.

**Table 1.1. Examples of Claims Made by Major Consultants and Business Press on Engagement as an Attractive Management Construct**

| Source | Claims |
|---|---|
| McKinsey & Company | When companies engage their employees with a clear and compelling sense of direction that is **meaningful** to the employees, there is the potential for strong personal and professional **connections** between employees and their work, such that employees have a better chance to achieve desired outcomes (Leslie, Loch & Schaninger 2006, pp. 70–72; Smet, Loch & Schaninger 2006, pp. 5–6; Smet, Palmer & Schaninger 2007, p. 5). |
| Boston Consulting Group | Strong employee engagement and a high-performance culture are crucial to the achievement of sustainable *competitive advantage* (Boston Consulting Group 2010a; 2010b). |
| Bain & Company | The engagement and focus of its vital frontline employees are tell-tale signs of high-performance organisations; high-performance organisations engage employees' **values** placed on their work (Bain & Company 2010a; 2010b). |
| Forbes Magazine | Instead of looking at job satisfaction scores of employees, good companies are looking at engagement scores where employees are '*willing to go above and beyond* what is expected'. Gallup organisation is reaping profits by conducting engagement surveys (Kroll 2005). |
| Harvard Business Review | Changing and varying job designs can bring about higher and more consistent work engagement (Truss et al. 2010). Imbuing employees with a sense of responsibility and putting the **interests** of stakeholders, such as customers, employees, the community and the environment, ahead of profits generates greater employee engagement (Amar, Hentrich & Hlupic 2009; Washburn 2009). |
| BusinessWeek | Compensation-based incentives have a greater positive impact on the engagement of senior executives (O'Connell 2009b), although Accenture noted in their survey that women are less likely to ask for raises than are men (O'Connell 2009a). For some employees, acts of granting attention (i.e. recognition) at no cost can increase their engagement (Gallo 2008; Irvin 2009). Accenture also found that about half of all employees felt insufficiently challenged in their jobs, and they could be more engaged if their roles were stretched with opportunities to learn or develop new skills (O'Connell 2009a). Both Towers Perrin and Watson Wyatt found employee engagement to boost organisational performance, where an engaged employee is one who willingly and happily works harder, and gives additional discretionary effort to something that matters to the company (Irvin 2009). |

*1.1.1.4 Indications of Government Interest*

Government interest to know more about work engagement also helps to fuel the general interest in this field (e.g. Erickson 2005; MacLeod & Clarke 20009). Two examples of government interest are given here. First, Erickson (2005) prepared a major report for the

one hundred and ninth US Congress that examined the issues relating to the twenty-first century workplace and future employment trends. Using the findings from three major studies sponsored by 24 of the world's leading corporations over a three-year period and involving 7,718 adult employees, Erickson highlighted the need for, and benefits of having, engaged employees in an evolving US workforce. She reported that an engaged workforce could have many positive dispositions towards work, including finding work as a source of personal satisfaction and pride, and as empowering, stimulating, fun and meaningful. Such engaged individuals 'are impassioned and energized by their work', and to them 'time passes quickly on the job' and they are 'willing to put in extra [discretionary] effort' (Erickson 2005, pp. 14-15). Examples of discretionary behaviours include insight, creativity, judgment, leadership and friendliness. Erickson also argued that an engaged workforce is positively related to productivity, innovation, resilience, lower staff turnover, and better business performance and financial success. In addition, she argued engaged employees' positive disposition and excitement over their work can spread to fellow employees.

As the second example, a report by MacLeod and Clarke (2009, p. 3) at the request of the UK Ministry for Business was set up 'to take an in-depth look at employee engagement and to report on its potential benefits to companies, organisations and individual employees'. In this report, the Secretary of State for Business, Lord Mandelson, added his support to the need for organisations to have engaged employees to help them to improve on innovation, productivity and performance. From their eight months of research, MacLeod and Clarke were able to report many examples of organisations in which the existence of engaged employees facilitated improvements in performance and profitability.

If it is confirmed in research that work engagement is as beneficial to organisations as has been widely publicised, there may be considerable benefit to organisations knowing how work engagement can be created and how stronger forms of engagement can be encouraged.

### 1.1.2 Favourable Supportive Findings by Academics

In addition to consultants and business press, academic researchers have also been working to define work engagement and identify the nature of its benefits. Bakker and Schaufeli (Bakker et al. 2007, p. 1; Bakker & Schaufeli 2008, pp. 150–151) note that academic publications on the construct of work engagement are lacking when compared to its growing popularity among management consultants and business publications. Yet, for the concept to be demonstrated to have substance, more academic research on work engagement 'to better understand and capture its contribution to organisational and individual

performance' would seem justified (Little & Little 2006, p. 118). In this section, four supportive findings by academics on the benefits of work engagement are highlighted.

*1.1.2.1 Personal Well-being and Resources*

Various researchers have put forth arguments and findings that individuals that are engaged at work experience personal well-being, which engenders success (Cropanzano & Wright 2001; Xanthopoulou et al. 2009b), and that such individuals have the personal resources to cope with work demands. For instance, Bakker, Demerouti and ten Brummelhuis (2012) argue that engaged individuals often experience positive emotions (Bindl & Parker 2010), such as joy and happiness, at work. Such happy positive individuals tend to thrive on opportunities at work, and are more open, helpful, confident and optimistic than their unhappy counterparts (Cropanzano & Wright 2001). These positive emotions, according to broaden-and-build theory (Fredrickson 2001), tend to broaden one's range of thoughts and actions, which in turn builds one's personal resources. As a result, Bakker, Demerouti and ten Brummelhuis (2012) reason that the positive emotions that characterise engaged individuals at work promote assimilation of new information (e.g. Fredrickson & Losada 2005) and enthusiasm (Bakker 2009), and can lead to the better performance of such individuals at work. Ouweneel, Le Blanc and Schaufeli (2013) also highlight that work engagement is an active rather than passive measure of well-being, such as job satisfaction.

Besides positive emotions, various researchers (e.g. Bakker 2009; Hakanen, Bakker & Schaufeli 2006) have argued and found evidence to positively relate engagement to good health. They reason that with good health and the better state of physical and mental resources associated with it, healthy individuals are in a better position to perform and be engaged at work (Bakker 2009) than are unhealthy workers. Schaufeli and Bakker (2004) found that engaged workers tend to report fewer headaches, cardiovascular and stomach problems. Hakanen, Bakker and Schaufeli (2006) found that work engagement related positively to Finnish teachers' self-rated health. Schaufeli, Taris and Van Rhenen (2008) showed that there were less psychosomatic complaints from engaged individuals compared to those who were not engaged. More recently, Hakanen and Schaufeli (2012) found that work engagement related positively to life satisfaction and negatively to depressive symptoms, and thereby promoted general well-being. They reason that the active and energetic state of psychology in work engagement tends to reduce depressive and anxiety symptoms that may arise in mentally challenging conditions as indicated by other findings relating work engagement to good cardiac autonomic activity (Seppälä et al. 2012).

It has also been argued and demonstrated by some researchers (e.g. Bakker & Bal 2010; Demerouti 2011; Freeney & Fellenz 2013) that engaged employees might create their own resources through processes such as the gain spiral (Llorens et al. 2007; Xanthopoulou 2007) and job crafting (Wrzesniewski & Dutton 2001). In the gain spiral, Bakker and Bal (2010) explain that engaged employees have a greater ability to mobilise resources compared to those who are not or less engaged. This helps to fuel further engagement, leading to an upward spiral of resource mobilisation and engagement. In their own longitudinal study of Dutch teachers over five consecutive weeks, Bakker and Bal (2010) found evidence to relate momentary work engagement positively to job resources in the following week. Studies with similar findings include that of Llorens et al. (2007) on Spanish university students, and Schaufeli, Bakker and Van Rhenen (2009) on Dutch telecom managers. Schaufeli, Bakker and Van Rhenen (2009) also reason that the gain spiral between work engagement and resource mobilisation is consistent with notions of gain cycles in the theory of conservation of resources (Hobfoll & Shirom 2000), broaden-and-build theory (Fredrickson 2001) and the thriving at work model (Spreitzer et al. 2005).

In job crafting, engaged employees actively change the design of their jobs in a case of value congruent work enactment (Freeney & Fellenz 2013) that can lead to better job performance. Employees engaged in job crafting may change their number of job tasks, the ways the job tasks are executed or their attitudes to the job, such as by assigning meaning to the job (Parker & Ohly 2008). For instance, a customer service representative reframed the perception of his job from 'putting in orders, entering order' to 'providing customers with an enjoyable and positive experience, which is a lot more meaningful than entering numbers' (Berg, Wrzesniewski & Dutton 2010, p. 167).

#### *1.1.2.2 Positive Discretionary Behaviour*

Another characteristic of engaged employees validated by various researchers (e.g. Bakker, Demerouti & Verbeke 2004; Gierveld & Bakker 2005; Schaufeli & Salanova 2007; Sonnentag 2003) is the demonstration of positive discretionary behaviours. In these validations, positive discretionary behaviours include taking initiatives, proactive behaviours, eagerness to learn and willing to put in extra effort. For instance, Schaufeli et al. (2001), through structured qualitative interviews of engaged Dutch employees, found that they were active agents who tended to take initiative at work and create their own feedback. Having employees with such characteristics can be beneficial to organisations when organisations expect their employees to take responsibility for their own performance and aim for high

performance standards in their work (Bakker et al. 2008). In the literature, there are at least two groups of proponents of this argument.

One group sees this benefit in the service-related sector. In a study of frontline hotel employees and their managers in Romania, Karatepe (2013a) found that employee work engagement was positively related to extra-role customer service. In this study, extra-role refers to discretionary behaviours 'that extend beyond formal role requirements' (Bettencourt & Brown 1997, p. 41). Karatepe (2013a) reasons that extra-role customer service is important because frontline staff can be expected to face challenging service encounters that require them to go beyond their formal roles and adapt to specific situations with their proactive behaviours (De Jong & De Ruyter 2004). In a study of hotel employees and supervisors in China, Li, Sanders and Frenkel (2012) also found work engagement to be positively related to job performance in terms of meeting role requirements, task adaptability and task proactivity. Li, Sanders and Frenkel (2012) reason that organisations in the service sector need to have engaged employees, who should ideally be proactive, able to take initiative and assume responsibility for delivering quality outcomes.

The second group sees the benefit of positive discretionary behaviours in the innovation-related sector. Agarwal et al. (2012), in a study of managerial employees in different organisations in India, found that work engagement was positively related to innovative work behaviours in terms of idea generation, idea promotion and idea realisation. Agarwal et al. (2012) highlight that work engagement is thus advantageous, as organisations can benefit from the positive proactive behaviour of engaged staff to identify and take action on necessary tasks at work. They explain organisations benefit by not having to push staff to get things done in order to get them to contribute to organisational effectiveness.

#### *1.1.2.3 Positive Contagion Effect*

The positive contagion effect is another research finding supporting the benefit of work engagement to organisations. This effect holds that there is a transfer of positive experiences from engaged workers to others (Bakker 2009), thus encouraging organisations to have engaged workers. This transfer or crossover phenomenon as a cognitive process may occur unconsciously and/or consciously (Bakker, Van Emmerik & Euwema 2006). When it occurs unconsciously, through emotional contagion (Bakker, Westman & Van Emmerik 2009), people tend 'to automatically mimic and synchronise facial expressions, vocalisations, postures, and movements with those of another person and, consequently, to converge emotionally' (Hatfield, Cacioppo & Rapson 1994, p. 5). In other words, engaged colleagues may be the role models to others who imitate them through the process of emotional

contagion; the symptoms of which include optimism, positive attitudes and proactive behaviours (Buunk & Schaufeli 1993). In the case of conscious transfer of positive experience, known as emphatic crossover (Westman 2001; 2002), similar emotions may be sparked in individuals when their realisation of the happiness or sadness of others triggers memories of their similar experiences (Hsee et al. 1990).

In a laboratory study, Barsade (2002) showed that positive mood could be transferred from the enactor of the mood to other team members; and that this resulted in better cooperation and performance in the team. Similarly, albeit in a field setting, Totterdell et al. (1998) found evidence in two studies that the moods of people at work could be linked to the moods of fellow team members. From the data of 2,229 Dutch constabulary officers comprising 85 teams, Bakker, Van Emmerik and Euwema (2006) found evidence of the positive contagion effect from engaged employees to others in the team, which was found to result in a positive team climate. In this study, it was found that, regardless of the demands and resources to which the teams were exposed, the contagion effect helped team members to feel energetic and enthusiastic. This study also showed that the contagion effect could occur even if team members did not interact frequently, and even when the teams differed in size.

Engaged workers have been found to possess qualities of optimism and self-efficacy as they exercise influence over things that affect their lives (Xanthopoulou et al. 2009a). They have also been found to create their own positive feedback on appreciation and recognition of success because of their positive attitude and high level of activity (Bakker 2009). Thus, the contagious tendency of work engagement can potentially increase overall organisation performance because fellow individuals, who became engaged because of the contagion effect, contribute to the organisation's performance through their own engaged performance (Bakker, Albrecht & Leiter 2011a).

#### *1.1.2.4 Individual and Organisational Performance*

Consonant with the encouraging benefits of work engagement argued, various researchers have found evidence to support the positive relationships of work engagement to individual and organisational performance. The following are a few examples. In a study of contact employees from over 100 service units in hotel front desks and restaurants in Spain, Salanova, Agut and Peiro (2005) found that work engagement predicted service climate, which in turn was positively related to employee performance and customer loyalty. From a study of 2,164 Dutch employees from different organisations and occupations, Schaufeli, Taris and Bakker (2006) found that work engagement was positively related to job performance in terms of in-role performance, extra-role performance and level of

innovativeness at work. In a study of 65 firms in different industries, Macey et al. (2009) showed that the top 25 per cent of these industries on an engagement index had greater return on assets and profits, and more than double the shareholder value when compared to the bottom 25 per cent. In a study of Greek employees working in a fast-food company, Xanthopoulou et al. (2009b) found that the company's daily financial returns were predicted by their day-level work engagement, indicating that individual engagement could affect team performance. In a study of 245 firefighters and their supervisors, Rich, Lepine and Crawford (2010) found evidence to support the positive relationship of work engagement to task performance. In a study of 54 Dutch teachers over a five-week period, Bakker and Bal (2010) also found that work engagement was positively related to weekly in-role performance and extra-role performance.

Given the extant literature on the positive link of work engagement to individual and organisation performance, proponents of work engagement (e.g. Macey & Schneider 2008; May, Gilson & Harter 2004; Schaufeli & Bakker 2010) describe engaged employees as those that possess high levels of energy for their work, are enthusiastic about their work and are often immersed in their work. Consequently, some researchers (e.g. Bakker 2009; Demerouti & Cropanzano 2010; Macey et al. 2009) are advocating that, for organisations to stay competitive, they should promote work engagement in the workforce to achieve distinct employee performance.

### 1.1.3 Coping with an Increasingly Challenging Work Environment

The need to cope with an increasingly challenging work environment is another widely espoused reason for organisations to have engaged employees (e.g. Andrew & Sofian 2012; Karakas & Sarigollu 2012). One challenge is the increasingly short-term advantage brought by technology, as digitisation and globalisation have allowed for better connectivity and accessibility among competitors. Thus, advances in technology are obliging organisations to pay attention to HR management (e.g. Carmeli & Schaubroeck 2005). Another challenge is the consequent change in employer–employee relationships, which affects many facets of organisations and jobs, such that it is important for organisations to have employees that are engaged in their work (e.g. Erickson 2005; Schaufeli 2011). As a result, Andrew and Sofian (2012) argue that there is an increasing awareness among organisations that engaged employees are one of the greatest assets to any organisation. Karakas and Sarigollu (2012) argue that this phenomenon is necessary to cope with the increasingly non-linear and unpredictable change that can arise from the increased complexity and interdependence in today's work environment (Brejnrod 2001).

*1.1.3.1 Advances in Technology Oblige Attention on Human Resource Management*

Businesses today are finding it increasingly difficult to rely on tangible resources for competitive advantage, as advances in technology are helping to make tangible resources more accessible than ever before (Carmeli & Schaubroeck 2005). As a result, to achieve competitive advantage, businesses are encouraged to look instead at the capitalisation of intangible resources such as HR. This is because the synergetic relationships created from the management of employees (e.g. work engagement) with organisation strategy and design can be inimitable, and difficult for competitors to imitate (Carmeli & Schaubroeck 2005; Pfeffer 1994, 1998; Rivkin 2000; Siggelkow 2002). According to the human capital theory associated with firm resource model as developed by Barney (1991), having a human resource pool that is inimitable and cannot be substituted by rivals can give the firm a sustainable competitive advantage (Armstrong 2006). For instance, MacLeod and Clarke (2009, p. 4) argue, '[with globalisation,] production line or the goods on a supermarket shelf are much the same the world over', but having employees who are engaged in their work could make all the difference.

Advances in technology in the information and communication arena, also known as information and communication technology (ICT), are also making coordination and collaboration by businesses increasingly inexpensive, and changing the ways businesses operate, such that markets are more efficient than ever before (Erickson 2005). The ubiquitous connectivity that advances in ICT bring allows for free, instant and continuous communication, making the business environment more competitive. To exploit the benefits brought by advances in ICT, having an engaged workforce is important (Erickson 2005) because an engaged workforce is creative and willing to put in discretionary effort for the good of the business (Erickson 2005). As noted by Lyons, Higgins and Duxbury (2010, p. 994):

> In the knowledge age, employees control the 'means of production' in the form of their individual effort, creativity and innovation.

*1.1.3.2 Changing Facets of Organisations*

Schaufeli (2011) notes that recent decades have seen changes in the ways organisations operate. For example, to stay competitive in the more dynamic environment brought about by ubiquitous connectivity, continuous change in the way organisations operate is increasingly the norm. To ensure they are nimble enough to react to a dynamic environment, organisations are increasingly adopting horizontal networks instead of vertical

hierarchies, and some are adopting the management practices of self-control and empowerment of employees instead of external supervision and control. Further, as ubiquitous connectivity allows employees to be connected to their work regardless of time or location, organisations are shifting their ways of operating from according to fixed schedules and patterns towards boundary-less operations. To cope with continuous change in the ways organisations operate, and for horizontal networks, self-control and empowerment of employees to be successful in bringing good results for organisations, a workforce that is engaged (i.e. enthusiastic and willing to put in extra effort to overcome challenges) in their work is necessary (Schaufeli 2011). This argument is consistent with the proposition by Salmela-Aro, Mutanen and Vuori (2012) that employees today need to have the confidence and ability to navigate in a work environment that is rapidly changing and increasingly unpredictable.

*1.1.3.3 Changing Facets of Jobs*

Schaufeli (2011) also notes that various facets of jobs have been changing in recent decades. For instance, the employability of individuals is increasingly their own responsibility, rather than dependent on organisations. Lifetime jobs are no longer the norm; jobs are becoming much less static than before (Singh 2008). How jobs and good performance are defined today can vary, as performance can be multidimensional and dynamic in nature (Fletcher & Perry 2001). To keep pace with such a dynamic environment, individuals must be able to adapt (Pulakos et al. 2000) and perform. To adapt and perform, Schaufeli (2011) opines that innovation, creativity (Tierney & Farmer 2002) and learning, more so than work experience, are the key traits expected of potential employees. Gruman and Saks (2011) note that these traits, together with the trait of proactivity (Bateman & Crant 1993; Grant & Ashford 2008), which is also needed in a dynamic work environment, represent outcomes related to engagement at work (Macey et al. 2009).

In addition, Schaufeli (2011) notes that work demands on the individual have become more mental and emotional (Goleman 1998) rather than solely physical. Work intensification has replaced a less intensive work rhythm; and work–home interference means that there is no clear separation between work and home. Teamwork, rather than individual work, is also increasingly the norm. Given the changing facets of jobs, organisations need an engaged workforce that is prepared to demonstrate positive discretionary effort at work (Erickson 2005; Schaufeli 2011). Moreover, Erickson (2005, p. 18) argues that organisations in the twenty-first century have increasing opportunities to ‘get more out of technology and more out of people’. She explains the opportunities come from the increasingly ubiquitous instant

and continuous connectivity that allows contemporary employees to have greater personal flexibility, autonomy and participation in their work. Thus, there is value in creating engaged employees.

*1.1.3.4 Talent Management*

Another reported reason for the interest in having employees that are engaged in their work is talent management. According to Frank, Finnegan and Taylor (2004), both in good and bad economic times, talent management is important to the organisation, and 'loyalty, engagement and employee retention are intertwined' (p. 17). Further:

> In a downturn, when businesses need to do more with less, engaged employees may be the difference between surviving and thriving. In an upturn, when there is the opportunity to grow and prosper, engaged employees are ready to seize the opportunity and put forth the effort to achieve it. During recovery periods, engagement becomes even more crucial, as organisations ask fewer people to do more, creating increased risk that top-performing employees may leave as conditions improve (Haid & Sims 2009, pp. 3–4).

This sentiment of relating engagement to talent management has also been supported and publicised by a range of management consultants, such as Development Dimensions International (Wellins et al. 2006), Aberdeen Group (Martin & Bourke 2009) and Melcrum (Dyer 2010).

Karakas and Sarigollu (2012) also support this belief, noting that the old psychological contract whereby job security was offered in exchange for loyalty is no longer tenable (Fairholm 1996; O'Bannon 2001) because of severe emotional damages (Cash & Gray 2000) caused by the downsizing and restructuring strategies that have become prevalent among organisations (Kriger & Hanson 1999). Thus, there is value in being able to identify who is engaged and who is not, to avoid unwanted attrition, which can affect business competitiveness.

### 1.1.4 Academic Interest in Positive Organisational Behaviour

Academic interest in work engagement is evidenced by the rising trend of academics to strengthen the literature on positive organisational behaviour (POB; Luthans 2002a; 2002b) as part of the positive psychology movement (Lopez & Snyder 2009; Seligman & Csikszentmihalyi 2000). This is because the literature on POB is less developed than the abundant literature on negative organisational behaviours (NOB), such as poor performance,

low motivation, unwell-being, ill-health, stress and burnout (Bakker et al. 2007, p. 1; Bakker et al. 2008, pp. 187–188; Bakker & Schaufeli 2008, pp. 148–151).

In an assessment of psychological abstracts since 1887, conducted during 2000, the ratio of studies into negative emotions, such as anger, anxiety and depression, to positive ones, such as joy, happiness and life satisfaction, was 14 to 1 (Myers 2000). While the focus on NOB may have led to increased awareness of stressors and the development of techniques to reduce human suffering from them, this preoccupation with NOB also has negative effects. The negative effects include obscuring the power of human strength, and contributing to a culture of victimisation, a pessimistic one-sided view of human nature and possibly depression among young people (Gillham & Seligman 1999). This lack of focus on POB is despite calls for a focus on POB since the mid-twentieth century by psychologists such as Maslow (1962) and Rogers (1954; 1963). This is possibly because of the 'differences in the urgency of negative [emotions associated with NOB] versus positive emotions [associated with POB]', as negative emotions often reflect immediate problems or dangers (Gillham & Seligman 1999, p. 164). As such, according to attribution research (Jones & Davis 1965), causal reasons for negative experiences such as feeling frustrated, angry and afraid are more likely to have been studied, compared to the reasons for positive experiences such as feeling happy, pleased and contented.

Despite the increasing interest in POB research, there is still much to gain from POB by focusing on building human strengths (Rachman 1990), including 'optimism, hope, courage, honesty, realism, putting troubles into perspective, a sense of meaning or purpose, perseverance, future-mindedness, interpersonal skill, empathy, humour and the capacity for pleasure' (Gillman & Seligman 1990, p. 170). Most of these human strengths are what an engaged workforce may have (e.g. Bakker 2009), and are consistent with the positive approach in contemporary organisational research to understand organisational phenomena (Linley et al. 2009).

Further, by building on human strengths, positive spirals may be established (Gillman & Seligman 1990, p. 170). This is because as one learns to put troubles in perspective and persevere, it is possible to achieve success. As success increases, one may sense control and become optimistic as situations are better managed. This in turn boosts one's self-confidence and skills, and makes one more willing to take on greater challenges. The end result is a POB, such as work engagement, which Bakker et al. (2008, p. 187) describe as 'a positive, fulfilling, affective-motivational state of work-related well-being'. Consistent with this argument, Kim, Kolb and Kim (2013) reason that the increasing interest by scholars and practitioners in positive management constructs like work engagement stems from the belief

that the resulting positive change motivates the individual to perform better and ultimately leads to better organisational performance (Bakker & Demerouti 2008; Bakker et al. 2008). DeKay (2013) notes that the traditional basic quest by researchers to investigate what specific factors in the workplace psychology will encourage employees to perform at their best has also contributed to the interest in the work engagement construct. However, Shuck (2011) argues that academic developments in the engagement construct are still lacking. Only 26 of the 159 peer-reviewed articles related to employee engagement retrieved from several scholarly and practitioner databases for the period 1990–2010 were driven by scholarly research (Shuck & Wollard 2010). Thus, for the development of effective interventions at work to increase overall organisational performance, the impetus towards a focus on determining how to promote POB like engagement at work should be continued.

### 1.1.5 Summary

In summary, the interests in the work engagement construct arise from the continuing quests by academics, consultants, practitioners and the media to identify and establish clarity of what specific factors can promote organisational performance. There are also some indications in the literature that the work engagement construct gained its initial popularity mainly from the publicity offered by renowned consultants, the press and even governments. Since then, favourable findings from academics have supported the claims of the usefulness of the work engagement construct, and these research efforts are ongoing. Two additional concomitant developments are fuelling this interest: the need to cope with increasingly challenging work environments, and the growing interest in POB. Both developments require clarity of how positive human strengths such as optimism, enthusiasm, resilience and willingness to put in extra effort at work, all of which are features of engaged employees, can be created or encouraged.

## 1.2 Why the Interest in Relating Personal Values to Work Engagement?

The interest in relating personal values to work engagement arises primarily from three areas. First, there appear to be limitations to what the extant management interventions can do to create or enhance employee engagement at work (Stankiewicz & Moczulska 2012). Second, a key research focus on the influence on work engagement of something more core to individuals, such as personal values, may have been overlooked, as there appears to be little extant literature on the influence of personal interests and preferences in regards to generating work engagement. Finally, management by personal values is worth exploring as a potentially advantageous approach to raising employee engagement.

### 1.2.1 Limitations of Extant Management Interventions

A review of the extant literature seems to reveal that, in terms of increased levels of work engagement, not all individuals respond equally to management interventions such as providing job resources and enhanced personal resources (Stankiewicz & Moczulska 2012). It appears that something more fundamental differentiates the manner in which individuals react to external stimulants to encourage their work engagement. For instance, Hofstede, Hofstede and Minkov (2011) note that work engagement seems to be associated with higher salaries for Americans, honour for the French, mutual obligation for the Chinese, and a sense of community for the Dutch. In other words, differences in employees' interpretations, attitudes and behaviours in response to management interventions appear attributable to the culture and society in which those employees are located. To address this issue, Stankiewicz and Moczulska (2012) recommend a focus on understanding individual needs and expectations at work, to implement suitable solutions that might encourage work engagement.

Erickson's (2005) studies led her to believe that high levels of engagement at work did not depend on more money alone; rather, organisations need to understand and respond to the strengths, preferences, needs and values of employees as individuals. This understanding needs to include the different reasons why individuals work, are happy or satisfied with their work, or appreciate the returns from their work. In a study of two primary data sets of organisations in Israel, from both the private and public sectors, Carmeli and Schaubroeck (2005, p. 406) found that it was important for organisations to understand 'the opportunities and constraints of utilizing [their HR] capital, along with the initiative to put this knowledge into action'. They reason this understanding is important so as to maximise HR capital to advance organisational performance. In essence, there are suggestions that extant management interventions to facilitate work engagement are limited and may need re-evaluation, to move beyond conventional interventions in job and personal resources towards a focus on something more fundamental to individuals.

### 1.2.2 Extant Emphasis to Address Personal Values, Interests and Preferences

Noting that employees in different countries might have different work engagement levels because of their different cultures, Stankiewicz and Moczulska (2012) advocate that detailed research should be conducted to identify relations between work engagement and values. They argue that although different individuals may be equally engaged at work, their respective engagement may be because of different individual values, as 'values are the basis of engagement' (p. 84). Values are important because they tend to influence how employees appraise their work and its conditions (Yang et al. 2012). Individuals also tend to make

decisions that satisfy their self-interests (De Dreu & Nauta 2009; Demerouti 2012; Salancik & Pfeffer 1977).

To Salanova et al. (2013), positive intervention strategies that involve employees' core values and preferences need attention because knowing oneself can help to interpret how one might apply values in a work situation. Erickson (2005) reasons that this understanding of employee values is important to work engagement because employees are increasingly more discerning; they are asking themselves 'whether the paths they have taken [in their work] are indeed consistent with their values' (Erickson 2005, p. 11). Erikson adds that this importance increases as globalisation becomes more deep-rooted. Businesses that offshore their work to take advantage of cheaper labour and market opportunities and/or to meet labour and talent shortages will face having to manage the labour and talents of employees with different nationalities, diverse cultures and values, and hence different perspectives about work. Research shows:

> Different people tend to be engaged by different things. Not everyone wants the same things from work (Erickson 2005, p. 16).

In line with this need to pay attention to different nationalities and diverse cultures, Schaufeli (2012) raises the need to investigate culture-specific aspects of work engagement so that the validity of this construct can be increased. He notes that the work engagement levels of Japanese employees are much lower than those in other countries, which may be because of the pervasive Japanese cultural tendency to suppress expression of positive affect (Shimazu, Miyanaka & Schaufeli 2010). Schaufeli (2012) also notes that there are indications that the local culture in China, such as 'guanxi' exchange, may have an impact on local work engagement levels (Hu, Schaufeli & Taris 2012).

Further, the experience of Synaptics Inc., a touchpad technology developer based in Santa Clara, California, seems to show that organisations may benefit from paying attention to the values of individuals (Hansen 2010). Synaptics Inc. rode through the 2009 recession positively with a net annual income up by 75 per cent. In support of its good performance, Synaptics Inc. credits its engaged workforce, which it has created by striving to know its employees' work and personal values before they are employed. Similarly, in a 2008–2009 study of 28,810 employees from 15 countries in Americas, Europe and Asia-Pacific, Right Management found commitment to the organisation's core values was one driver of employee engagement that was 'constant across all countries' (Haid & Sims 2009, p. 15). Employees tend to be disengaged, and have a lower work performance, when they sense disconnect between management behaviour and organisational values (Haid & Sims 2009; Haid 2010).

In another example, Washburn (2009) notes that engaged employees are more willing to exert extra effort and improve organisation performance if management is seen to put customers, community and environmental concerns ahead of profits. Thus, engaged employees apparently share some personal and professional connections to their work (Robinson 2003). Therefore, to maintain an engaged workforce, it would be useful to be able to identify what these connections are, and to determine whether these connections could be the personal values of employees.

### 1.2.3 Advantages of Management by Personal Values

Regarding the advantages of studying the relationship of personal values to work engagement, the benefits include clarifying whether engagement can be predicted prior to hiring or honed in employees after hiring, and suggesting how this could be achieved. If engagement can be predicted prior to hiring (that is, if the forerunners to engagement could be based on the personal characteristics of individuals), then it may be possible to improve subsequent engagement behaviours by selecting those who deploy the desired characteristics. Though a number of personal characteristics can conceivably satisfy this option, one that merits further investigation is personal values.

Harnessing values as a management tool has the potential to enable employees to become more inspired and motivated whenever the goals set by management are congruent with their personal values (Anderson 1997). By allowing employees to fulfil their personal values at work, Salanova et al. (2013) posit that employers can not only increase employees' level of happiness in the work context but also more generally in life, because values have a wider existential meaning. Salanova et al. (2013) add that such individual interventions can have the benefit of encouraging employees' positive behaviour and increased loyalty, as well as promoting the well-being and proactivity of engaged employees. Conversely, where work requires actions or attitudes contrary to employees' personal values, the resulting strain on the affected employees can be exhausting, de-motivating and discouraging for them. The strain may make such employees lose their sense of efficacy and accomplishment, and the combined impact could lead to the development of burnout (Siegall & McDonald 2004; Verplanken 2004) and reduced engagement (Laschinger & Finegan 2005; Leiter 2008).

Research into organisational commitment has also suggested that work processes can be fulfilling when organisational ends fit individual values (Mowday, Porter & Steers 1982). If it were possible to establish relationships between employees' values and their levels of work engagement, organisations could re-assess their job designs and HR practices based on

the established relationships to create and maintain an engaged workforce. In fact, after finding evidence on the importance of psychological meaningfulness to engagement, May, Gilson and Harter (2004, p. 33) advocate that:

> Selecting the proper employees for particular work roles will enhance meaningfulness. Care must be taken to learn more about the personal aspirations and desires of employees in order to fit them to roles that will allow them to better express themselves.

It is even possible that personal values rather than work-specific values will be more useful in locating suitable employees, given the tendency for individuals to present themselves in a favourable light during any selection process and thus not exhibit their true work values (Crowne & Marlowe 1964; Meglino & Ravlin 1998). Social desirability bias (Crowne & Marlowe 1964; Podsakoff et al. 2003) can occur because of respondent knowledge of desirable work values; however, this is less likely for personal values. Moreover, until individuals face work events that contradict their expectations, at which time they would gradually develop and discover their work values, individuals may only know their own general values (Leiter 2008).

Knowing more about the relationships between values and engagement may thus create the conditions that facilitate employees to perform (Das 2003) as advocated by Gruman and Saks (2011). This notion of 'facilitating' performance instead of 'managing' performance (Gruman & Saks 2011, p. 124) stems from the difficulty in managing and setting objectives for employees when work is becoming more varied and subtle (Pulakos, Mueller-Hanson & O'Leary 2008). However, as values are relatively resistant to change and thus enduring, they are useful indicators for employers to predict an individual's decisions and behaviour (Meglino & Ravlin 1998; Rokeach 1973; Twenge et al. 2010).

## 1.3 Overview of this Thesis

Including this introduction chapter, this thesis comprises five chapters. Chapter 2 provides a literature review to support the investigation in this research, coupled with an outline of the measurement practices. It first gives a review of the different perspectives of work engagement by various researchers and a justification for the perspective adopted in this research. Following this, a review of the multi-faceted characteristics and antecedents of work engagement are given. Two types of antecedents appear to have been dominant; namely, job resources and personal resources. At this juncture, the evidence of individual differences in work engagement and the search for an explanation are introduced. This is followed by an examination of potential relationships between work engagement, individual differences and

perceptions. Questions are raised as to whether and how values may be a possible precursor to work engagement and a potentially important factor in raising the level of work engagement. Techniques for measuring both values and engagement are addressed, leading to an argument for the use of the Schwartz's value model to investigate these relationships. An overview of Schwartz's value model is then given, before the final section that argues and presents the possible interactions (hypotheses H1, H2, H3 and H4) of personal values with work engagement. Finally, a section on the context of Singapore is presented to facilitate subsequent analyses of the data collected.

Chapter 3 gives an account of quantitative Study 1, which was conducted to answer research question RQ1, on which dominant personal values are related positively and negatively to work engagement, and RQ2, on the impact of the demographic profiles of gender, age, marital status, parenthood status and education on these relationships. Study 1 aims to confirm whether the theoretical models and hypotheses developed in Chapter 2 are upheld. Sampling procedures, instruments of measure and the method of analysis using structural equation modelling (SEM) are reported, followed by a presentation of the sample characteristics, basic statistics and psychometric properties of the measures based on the collected data. Quantitative results from the 42 fitted quantitative models using SEM to support this investigation are presented next, and the findings from them in relation to the four hypotheses (H1, H2, H3 & H4) are discussed. Here, the findings will show some evidence to support the impact of individual differences in values on work engagement; that is, the theoretical model relating personal values to work engagement is partially confirmed. However, the findings were insufficient for clear confirmation because the correlations found were small. This inconclusiveness of the findings and the limitations of the quantitative study method are thus highlighted in Chapter 3 to explain the need for the further qualitative Study 2 to seek a deeper understanding of the relationships between personal values and work engagement.

Chapter 4 gives an account of the qualitative Study 2 as a follow up to the inconclusive quantitative findings in Study 1. Having a qualitative study included in this research also helps to redress some researchers' (Kim, Kolb & Kim 2013; Shuck 2013) recent observations that existing investigation into engagement in the literature is quantitative heavy. This research takes up their suggestions that qualitative or mixed-methods research is needed to deliver a complete context for complex constructs such as engagement. Study 2 seeks information on how individuals themselves understand and explain their feelings about the contribution of personal values to work engagement. The qualitative research design, sampling procedure, sample characteristics, interview questions and method of analysis for

Study 2 are first presented, followed by the qualitative results in relation to research questions RQ1 and RQ2. In the final section of this chapter, the results from both Study 1 and Study 2 are compared.

Chapter 5 is the final chapter of this thesis. It discusses the findings from both studies and provides a conclusion on this research. It starts by evaluating the integrated findings produced at the end of Chapter 4 against the extant literature. This is followed by a review of the theoretical model originally developed for this research. The limitations, directions for future research and contributions of this research are then finally presented.

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# CHAPTER 2: LITERATURE REVIEW

Chapter 1 gave an introduction to this research by reviewing: (1) the extant interest in work engagement as a management construct; and (2) the interest in relating personal values to work engagement. In Chapter 2, the review in Chapter 1 is extended to more thoroughly underpin the investigation of the relationship between the construct of work engagement and its interaction with personal values. To underpin this investigation, the nature of work engagement and how it operates are first addressed. This includes the multi-faceted aspects of work engagement, highlighting the various dimensions of effect it can have on an engaged individual. Next, the reported antecedents of work engagement in the literature that have been rationalised or found through empirical research will be addressed. This will illuminate how engagement can be created or enhanced at work to help management increase individual and organisational performance. Following this, recent reports regarding the limitations of these antecedents' effectiveness, and the possible differences between individuals, such as personal preferences and values, are presented. This is followed by the development of a theoretical model that relates personal values to work engagement, and a review of how values may be influential. The identification of a suitable value model to support investigation of this theoretical model is then presented. Finally, the possible interactions of work engagement with personal values using this value model, and the context of Singapore are presented for subsequent investigation and analyses.

## 2.1 What is Work Engagement?

According to Robinson (2003), work engagement is a measurable employee-related construct that evolved from researchers' endeavours to understand what construct was most critical for employee performance, and had the greatest effect on the bottom line. Managing and improving employee performance is important to organisational effectiveness (Cardy 2004; Pulakos 2009): the idea that human capital can be a source of competitive advantage (Lawler 2008) gained momentum by the twenty-first century. Moreover, it is significant for organisations to have a measurable employee-related construct, whose results can be extrapolated into actionable implications whenever employee surveys are conducted, to gauge the potential extent of employees' contributions to organisational performance (Macey & Schneider 2008).

Research to pinpoint the most critical construct for employee performance began with the Hawthorne studies conducted by Western Electric of Chicago between 1927 and 1932

(Carey 1967; Sonnenfeld 1985; Taylor 1911). These studies endeavoured to improve employee performance by investigating the effect of varying working conditions on performance. Some conditions that were varied included supervision styles, length of workdays and weeks, rest break durations and reward systems. Their findings showed that social satisfaction from human association with work affected work behaviour more than the work's physical and economic aspects (Pennock 1930; Putman 1930). However, critics (e.g. Carey 1967) highlighted that the findings from the Hawthorne studies were not representative of the population. These critics reasoned that the conclusions were based primarily on a group of five subjects, and any result was too small to be statistically significant. Some critics also highlighted the unintended confounding in the experiments on human behaviours in the studies (Holden 2001; Parsons 1974). For instance: 'at Hawthorne, the women received many privileges which would normally be quite impracticable in a large factory' (Holden 2001, p. 68). Nonetheless, these studies paved the way forward in that they highlighted the potentially strong influence of non-monetary factors in stimulating higher levels of employee effort. Since that time, many publications (e.g. Messersmith, Patel & Lepak 2011; Salanova et al. 2013) have aimed at specifying what may affect employee effort, and how to maximise this.

Robinson (2003) notes recent increased interest in studying the employee-related construct of engagement as a key determinant of performance, following previous publications in employee satisfaction (e.g. Brayfield & Rothe 1951; Locke 1976) and employee commitment (e.g. Allen & Meyer 1990; Mowday, Porter & Steers, 1982; O'Reilly & Chatman 1986). Employee satisfaction was for years thought to be a key construct from which one's job performance could be inferred. It was thought that job performance was directly influenced by employee satisfaction. It was not until the 1990s that researchers concluded that employee satisfaction, as an internal emotion, was not related directly to organisational performance (Fisher & Locke 1992). In the 1980s and 1990s, attention switched to employee commitment as a more suitable construct. This was because commitment connotes a sense of psychological attachment and effort (e.g. Meyer, Allen & Smith 1993; Mowday, Porter & Steers, 1982; O'Reilly & Chatman 1986).

However, in the twenty-first century, Robinson (2003) notes that work engagement is increasingly discussed as a major construct relating directly to employee performance. She reasons that this may be because engagement is more encompassing in that, not only does it include organisation commitment and motivation, but also organisational citizenship.

### 2.1.1 Different Perspectives

In their review of the literature on engagement, Macey and Schneider (2008) note the

different perspectives of work engagement, whereby some researchers refer to engagement as a specific construct with unique attributes, while others refer to it as a behavioural construct: For instance, Harter, Schmidt and Hayes (2002, p. 269) refer to engagement at work as 'the individual's involvement and satisfaction with as well as enthusiasm for work', equating engagement with both involvement and satisfaction. Fine et al. (2010) define and measure engagement at work using satisfaction, commitment and discretionary effort. Colbert et al. (2004, p. 603) define engagement in terms of a 'high internal motivational state'. Dvir et al. (2002, p. 737) define active engagement in terms of 'high levels of activity, initiative and responsibility'. It would seem that:

> [In essence], engagement has been used to refer to a psychological state (e.g. involvement, commitment, attachment, mood), performance construct (e.g. either effort or observable behaviour, including pro-social and organisational citizenship behaviour), disposition (e.g. positive affect), or some combination of the above (Macey and Schneider 2008, p. 5).

Macey and Schneider (2008, pp. 6–7) further note that the measures of engagement espoused by various perspectives of engagement comprise a mix of items from one or more of the four different categories of 'job satisfaction, organisational commitment, psychological empowerment and job involvement'. They reason that this apparent lack of precision among the various perspectives of engagement may be because the construct of engagement is still in the infancy of development. Maslach (2011) adds that the different perspectives may also be because the concept uses a 'common' word instead of scientific jargon; this may have a multidimensional quality that covers various existing constructs. As a result, people can relate to it immediately. On their own they will generate meanings or definitions of the concept. Simpson (2009) argues that conceptual issues also exist when there is a lack of distinction between the defining characteristics and the antecedents of the construct (Rodgers 2000). Any lack of distinction or presence of conceptual overlap will limit understanding and predictions regarding the construct. For instance, Simpson (2009) and Schaufeli (2012) note the 12 items used to measure engagement by Harter, Schmidt and Hayes (2002) are the antecedents (in terms of perceived job resources, social support and feedback) to their perspective of engagement, rather than stressing the engagement experience.

In a review of the engagement literature, Shuck (2011, pp. 305–306) notes the different perspectives of engagement are also clouded by differing demands in terms of purpose and outcome from practitioners and academics. These differences affect understandings of the engagement construct. Practitioners are more concerned about usability and actionable outcomes, with a focus on practice at the macro level (Wefald & Downey 2009). This approach has confused the engagement construct with other organisational

concepts. In contrast, academics are more concerned about defining and validating the concept's veracity, with a focus on the micro level (Wefald & Downey 2009) to understand how to influence it. Corresponding to this macro versus micro focus, Schaufeli (2012) notes that the organisation has been a key reference of engagement in the business context. In the academic context, the key engagement reference is the work role or work activity of the employee.

Macey and Schneider (2008) note that researchers have not rigorously tested the various perspectives of engagement except for two groups of researchers. One group based their perspectives primarily on work done by Kahn (1990; 1992; May, Gilson & Harter 2004); the other group's perspectives are primarily stimulated by research on 'burnout' (e.g. Maslach & Leiter 1997; Salanova, Agut & Peiro 2005; Schaufeli et al. 2002a; 2002b). Bakker et al. (2008, pp. 188–189) note similar observations. They highlight that apart from these two groups, other approaches contained different conceptualisations that are neither specific nor well-defined for empirical research and practical application. These are discussed further below.

### 2.1.2 Perspectives Based Primarily on Work done by Kahn, Focusing on Work Role

The first group of researchers, who based their perspectives of engagement on the ethnographic work done by Kahn (1990; 1992; May, Gilson & Harter 2004), posits that employees harness themselves to their work role during work engagement. These engaged employees employ and express themselves mentally, physically, emotionally and cognitively during role performances because they identify with their job. Kahn (1990) was interested in how people engage with roles to varying degrees, and how psychologically involved they become in the moments of role performances, during which they get themselves into, or detach themselves from, task behaviours. Working within the same philosophy, May, Gilson and Harter (2004) associate this interest with the human spirit in organisations that managers and researchers have been trying to understand and unleash, where 'human spirit' refers to individuals seeking fulfilment through self-expression at work.

Kahn (1990) notes that other organisational behaviour concepts, such as involvement (Lawler & Hall 1970; Lodahl & Kejner 1965), commitment (Mowday, Porter & Steers 1982; Porter et al. 1974) and alienation (Blauner 1964; Seeman 1972) have also focused on person-role relationships. He suggests that these concepts may offer valuable insights into three areas. The first area is how the psychological importance of work to an individual's identity or self-esteem may be affected by individual differences and situational factors (Jones, James & Bruni 1975; Lodahl 1964). The second area looks at why individuals are willing to make

such effort and stay with organisations (Mowday, Porter & Steers 1982). The third area regards how individuals may be alienated at work (Blauner 1964). While Kahn recognises these concepts can give insights into which variables influence how individuals in organisations perceive themselves, their work and the relationship between the two, he nonetheless believes these understandings are only general. He argues for a more thorough examination of the imperatives for individuals to be psychologically present in those moments of role performances: whereby these imperatives fill the space, from the processes of people experiencing the work situation, to behaving in the situation.

Kahn (1990) based his perspectives of engagement on a few basic ideas. First, he based his concept on the work of Goffman (1961a), and assumed that individuals constantly got themselves into, or detached themselves from, role performances. Kahn (1990) believes that this is possible as organisational life is ongoing, psychologically complex and emotionally charged (Diamond & Allcorn 1985). In addition, literature by psychologists (Freud 1922), sociologists (Goffman 1961b; Merton 1957) and group theorists (Bion 1961; Slater 1966; Smith & Berg 1987) indicates that individuals are inherently ambivalent about being members of any organisation. According to them, individuals seek to shield themselves from both engulfment and isolation by alternately pulling away from, and moving towards, membership in an organisation. As a result, Kahn (1990) suggests that in personal engagement, as individuals respond to the varying work at hand, and as that work unfolds, they may express themselves at some times and defend themselves at other times.

Kahn (1990) explains that such a concept of personal engagement integrates the idea that individuals require both self-expression and self-employment in their work (Alderfer 1972; Maslow 1954). According to Kahn (1990), self-expression entails the display within one's role of the self (real identity, thoughts and feelings), while self-employment entails the driving of one's physical, emotional and cognitive energies into role behaviours. Conversely, to Kahn (1990), during personal disengagement there is the defence of the self, hiding within one's role of the self. This defence is the cause of what researchers refer to as either defensive (Argyris 1982), bureaucratic (Shorris 1981), closed (Gibb 1961), impersonal or emotionally inexpressive (Hochschild 1983; Rafaeli & Sutton 1987), or self-estranged (Seeman 1972) task behaviours. Kahn (1990) also believes that during personal disengagement, there is a simultaneous removal of one's physical, emotional and cognitive energies from role behaviours. This removal is the unemployment of the self, or the uncoupling of the self from role, and the cause of what researchers refer to as apathetic or detached (Goffman 1961a), effortless (Hackman & Oldham 1980), burned out (Maslach 1982), automatic or robotic (Hochschild 1983) task behaviours. In essence, Kahn is suggesting that individuals connect

the depths of their personal selves to role performances through the mechanisms of their expressions, employments, withdrawals and defences (Kahn 1990, p. 719).

To support his concept of personal engagement, Kahn (1990) undertook qualitative research on the relationships between counsellors of a summer camp for adolescents, and members of an architectural firm with the characteristics of the tasks they undertook (Hackman & Oldham 1980). Kahn (1990, p. 695) based this research on three premises concerning the 'psychological experiences of the rational and unconscious elements of work context' that could affect an individual's motivation and outlook on meaning at work. First, there is the premise that individual's attitudes and behaviours at work are driven by their psychological experiences of work (Hackman & Oldham 1980). Critical psychological states of an individual influence the individual's internal work motivations (Fried & Ferris 1987; Renn & Vandenberg 1995). Second, there is the premise that an individual's experiences are influenced simultaneously by individual, interpersonal, group, intergroup, and organisational factors (Alderfer 1985). Third, there is the premise that these psychological experiences are conditions of personal engagement created by the work context, which are mediated by an individual's perceptions.

Kahn's findings indicate that the relationship between engaged employees and the work role is dynamic and dialectical. The engaged employees in the work role drive their personal energies (mental, physical, emotional and cognitive). The work role, in turn, given appropriate conditions, allows engaged employees to express themselves.

> Personal engagement [into one's work] is the simultaneous employment and expression of a person's "preferred self" in task behaviours that promote connections to work and to others, personal presence (physical, cognitive and emotional), and active, full role performances … Personally engaging behaviours simultaneously convey and bring alive self and obligatory role (Kahn 1990, p. 700).

In the 'preferred self', engaged individuals display what they feel and think, their creativity, beliefs and values. In the personal presence, physical refers to being involved in tasks; cognitive refers to vigilance in the tasks; emotional refers to emphatically connecting to others in the tasks. In other words, with the personal presence, the person is attentive and focused in the role performance and feels connected and integrated with it (Kahn 1992). Conversely, during personal disengagement, an individual performs the tasks at some distance from the 'preferred self', treats the role as an external script, and acts as a custodian instead of an innovator (Van Maanen & Schein 1979). Also, disengaged individuals lack personal presence. They are physically uninvolved, cognitively non-vigilant in the tasks, and emotionally disconnected to others in the tasks.

In addition, through inductive analysis, Kahn (1990) proposed three psychological conditions that defined the experiential conditions influencing levels of personal engagement: meaningfulness, safety and availability. Together, they shape how individuals employ and express themselves during role performances. Each is further discussed below.

*2.1.2.1 Psychological Meaningfulness*

To achieve psychological meaningfulness, Kahn(1990) believes that individuals assess work elements for the benefits, incentives or return on investment of any physical, cognitive and emotional energies required during role performances. Work elements comprise the three areas of task characteristics, role characteristics and work interactions. Task characteristics cover the challenges, clarity of responsibilities and independence in the task. Role characteristics cover status, self-image and attractiveness of identities an individual may have within the role. Work interactions cover the dignity, appreciation and sense of value an individual may experience during the interactions.

To Kahn, 'meaningfulness' is associated with the feeling of being worthwhile, useful, valuable, making a difference, and not being taken for granted. It integrates the concepts of how individuals may devote themselves to tasks (Hackman & Oldham 1980) and roles (Maehr & Braskamp 1986) to satisfy personal (Alderfer 1972; Maslow 1954) and existential needs (May, Angel & Ellenberger 1958). May, Gilson and Harter (2004) associate meaningfulness with the value of the work goal or purpose, with respect to the ideals or standards of individuals (Hackman & Oldham 1980; Renn & Vandenberg 1995). They reason that as individuals are primarily motivated to seek meaning in their work (Frankl 1992), there is a tendency for apathy and detachment from one's work when individuals find work meaningless. When this happens, individuals may be estranged from their selves (Seeman 1972).

*2.1.2.2 Psychological Safety*

In psychological safety, according to Kahn (1990), individuals assess elements of social systems for social situations that promote trust, are predictable and non-threatening. To Kahn, the elements of social systems are in the four areas of: interpersonal relationships, group and intergroup dynamics, management style and process, and organisational norms. Interpersonal relationships refer to ongoing relationships individuals have at work. Group and intergroup dynamics refer to informal relationships individuals may have while in the role. Management style and process refer to leader behaviours. Organisation norms refer to shared system expectations of individuals in the organisation.

In the assessment of these elements, individuals strive to understand what is and is not permitted, and what the possible consequences of their behaviours will be (Kahn 1990). This allows them to decide whether they can express and employ their selves without fear of negative consequences detrimental to their status, career or self-image when they engage.

*2.1.2.3 Psychological Availability*

In psychological availability, according to Kahn (1990), individuals sense they have the necessary psychological, emotional or physical resources to cope with the demands of work, to express and employ their selves. This is despite various individual distractions that may preoccupy them to various degrees during their role performances. To Kahn, individual distractions comprise four types: depletion of physical energy, depletion of emotional energy, individual insecurity and outside lives. Respectively, they refer to the available physical energy, emotional energy, confidence in one's own abilities, and resources from non-work lives for investing the self into a role an individual performs.

May, Gilson and Harter (2004) describe psychological availability as an individual's assessment of their own readiness or confidence to express and employ their selves. To them, physical and emotional energies, together with cognitive ability, are resources an individual brings to bear during role performance when they engage themselves at work. They add that individuals may disengage from work to allow resource replenishment.

In essence, Kahn (1990) has framed personal engagement within a core focus on three key aspects. First, there are the emotional reactions of individuals to properties of roles, jobs and work contexts. Second, there are the individuals' experiences during role performances. The third aspect describes how individuals and roles are invigorated or deadened during role performances. In this frame of personal engagement, engagement is a behaviour manifested from a particular psychological presence and mental state, and it is positive in nature (Bakker et al. 2008, p. 189). It is positive in nature at the individual level in terms of personal growth and development, and positive at the organisational level in terms of performance quality. May, Gilson and Harter (2004) built on Kahn's work and operationalised the physical, cognitive and emotional dimensions of his frame in their quantitative study of 213 employees in a US midwestern insurance company. They found evidence supporting a positive relationship of the three psychological conditions of meaningfulness, safety and availability with engagement. In addition, they found that meaningfulness had the strongest relation to engagement, and that job enrichment and work role fit related positively to meaningfulness.

### 2.1.3 Perspectives Stimulated by Research on Burnout, Focusing on Work Activity

In the second group of researchers whose perspectives of engagement are stimulated by research on burnout, engaged employees are considered as those whose sense of work was contrary to those suffering from burnout. Engaged employees sensed 'energetic and effective connection with their work', while those who suffered from burnout sensed their work was stressful, challenging and demanding (Bakker et al. 2008, p. 188). According to Schaufeli et al. (2002b), engagement emerged as a construct from burnout research because of two trends that broaden the traditional concept and scope of burnout (Maslach, Schaufeli & Leiter 2001). Firstly, the concept of burnout has been expanded to all other work beyond those closely linked to human services like health care, social work and education. Secondly, there is the emerging trend towards 'positive psychology' that does not focus on weaknesses and malfunctioning like burnout, but rather on human strengths and optimal functioning (Seligman & Csikszentmihalyi 2000), like engagement.

Within this group, there are two related schools of thought (Bakker et al. 2008, p. 188) that 'consider work engagement as a positive, work-related state of well-being or fulfilment'. In one school, Maslach and Leiter (1997; 2008; Leiter & Maslach 1998) operationalised engagement as the direct opposite of the dimensions that defined burnout. In the other school, Schaufeli and colleagues (Gonzalez-Roma et al. 2006; Schaufeli & Bakker 2004; Schaufeli, Bakker & Salanova 2006; Schaufeli et al. 2002a; 2002b) operationalised work engagement as an independent and distinct construct from burnout.

#### *2.1.3.1 Direct opposites of dimensions that define burnout*

Leiter and Maslach (1998, p. 351) define engagement as 'an energetic experience of involvement with personally fulfilling activities that enhance a staff member's sense of professional efficacy'. To them (Leiter & Maslach 2004; Maslach & Leiter 1997; 2008), engagement is at the positive end of a continuum between negative experiences and positive experiences that is used to conceptualise individuals' psychological relationships with work. Burnout is placed at the negative end of this continuum. At any point in time, an individual may be at certain points along this continuum.

This continuum has three dimensions: energy, involvement and effectiveness. All three dimensions focus on the individual experience within the social context at work and involve the individual's conception of both self and others (Maslach 1993). Interdependent experiences related to these three dimensions affect an individual's belief in his or her own capacity to exert influence on their work (Leiter 2008). The energy dimension deals with the extent of strain or depletion of an individual's emotional and physical resources. It relates to

an individual's coping strategy with work overload, which involves taking appropriate actions to distance oneself cognitively and emotionally from work where necessary. This is because when individuals have limited energy to meet work demands, they will eventually experience fatigue and anxiety. When work demands become excessive, individuals may have insufficient time to recover after they exert extra effort, as their recovery time is disrupted to meet work demands (Leiter 2008). The involvement dimension deals with the interpersonal context and the extent of detached response to work, and relates strongly to the energy dimension in burnout research (Maslach & Leiter 2005; Maslach, Jackson & Leiter 1996). The involvement dimension is self-protective, and the detached or distancing response may result in loss of idealism and dehumanisation of others (Leiter & Maslach 2004). The effectiveness dimension deals with self-evaluation and feelings regarding the extent of one's competence, achievement and productivity at work. It has a more complex relationship to the other two dimensions, in that it can sometimes be related directly to them, and sometimes independent of them (Byrne 1993; Lee & Ashforth 1996; Maslach & Leiter 2008).

In relation to these three dimensions, engagement is characterised by high energy, strong involvement and a sense of efficacy. In contrast, burnout is characterised by low energy or exhaustion (i.e. fatigue or draining of resources), low involvement or cynicism (i.e. indifference or a distant attitude towards work), depersonalisation (i.e. negative, callous and cynical attitude towards work), and low efficacy or lack of personal accomplishment (i.e. tendency to evaluate one's own work negatively). With this school of engagement perspective, the scores in the Maslach Burnout Inventory (MBI; Maslach, Jackson & Leiter 1996) on exhaustion, cynicism and inefficacy for engaged employees are expected to be low. In other words, Maslach and Leiter (1997) assume energy, involvement and efficacy characterise engagement, and engaged individuals see themselves as able to cope with their job demands completely.

*2.1.3.2 Independent and distinct from burnout*

In the other approach (Schaufeli & Bakker 2004; Schaufeli, Bakker & Salanova 2006; Schaufeli et al. 2002a; 2002b), the perspectives of engagement are also stimulated by research on burnout that focuses on work activity. However, in this approach, engagement is defined and operationalised independently and distinctly. It uses a different instrument that is not developed through defining and operationalising engagement as the direct opposite of burnout. With the availability of an independently developed instrument, there can be independent assessment of burnout and engagement as distinct concepts (Schaufeli & Bakker 2001; Schaufeli et al. 2002b). This is unlike the previous approach, where burnout and

engagement are simply at the opposite ends of a continuum measured using the single instrument of MBI. In this approach by Schaufeli and colleagues, an employee who is not burned-out may not necessarily be engaged (Schaufeli & Bakker 2003). Conversely, an employee who is not engaged may not necessarily be burned-out.

In this school of thought, that is independent and distinct from burnout, work engagement is characterised by vigour, dedication and absorption instead of exhaustion, cynicism and inefficacy. Schaufeli and colleagues posit that work-related well-being has two underlying dimensions of activation and identification (Schaufeli & Bakker 2001). The dimension of activation ranges from exhaustion to vigour, while identification ranges from cynicism to dedication. Engagement is characterised by high activation (i.e. vigour) and high identification (i.e. dedication): these characteristics are the direct opposite of burnout, characterised by low activation (i.e. exhaustion) and low identification (i.e. cynicism). However, absorption and inefficacy are not direct opposites but conceptually distinct. Absorption was added after qualitative interviews revealed that absorption was a relevant aspect of engagement that required consideration beyond vigour and dedication (Schaufeli et al. 2001). Given this characterisation, engagement has been defined as:

> A positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption (Schaufeli et al. 2002b, p. 74).

In this definition, vigour refers to the high-energy levels, mental resilience, willingness to invest effort and persistence in the face of difficulties at work of engaged employees. Dedication refers to particularly strong involvement, sense of significance or meaningfulness, pride and enthusiasm of engaged employees in their work, and the feeling that their work is inspiring and challenging. Dedication differs from involvement (Kanungo 1982; Lawler & Hall 1970), in that dedication goes further than the usual level of identification in involvement (Schaufeli et al. 2002b). Dedication includes the affective dimension in addition to the cognitive or belief state. Absorption refers to the full concentration in work by engaged employees, such that they are happily engrossed in the work. Engaged employees who are absorbed find it difficult to detach themselves from the work: to them, time passes quickly.

According to Leiter and Laschinger (2006), there is very little additional explained variance between the two schools of thought. Nevertheless, according to Leiter and Maslach (1998; Maslach & Leiter 2008), the framework of the burnout-engagement continuum, with its three dimensions, can shed light on how to enhance an individual's energy, vigour and resilience at work. The enhancements include promoting an individual's involvement and

absorption with work tasks, and ensuring the dedication, sense of efficacy and success of individuals at work.

In addition, work activity is a common focus to both schools of thought: engagement as a part of work effort. This focus on work activity is unlike the first group of perspectives, based on work done by Kahn in Section 2.1.2, focusing on the work role (Bakker et al. 2008, p. 189). Despite this difference, Schaufeli and Salanova (2007, pp. 142–143) note that the three dimensions of physical, emotional and cognitive engagement used by May, Gilson and Harter (2004) to operationalise Kahn's perspective of engagement, are respectively similar to the dimensions of vigour, dedication and absorption. In other words, there are some similarities between the two groups of perspectives.

### 2.1.4 Definition of Work Engagement in this Study

Moving further and beyond the two groups of perspectives, various researchers have identified areas of commonality among the different perspectives of work engagement in the literature. For instance, Christian, Garza and Slaughter (2011, p. 89) note the emerging convergence to conceptualise 'work engagement as connoting high levels of personal investment in the work tasks performed on a job' (e.g. Kahn 1990; May, Gilson & Harter 2004; Rich, LePine & Crawford 2010; Schaufeli et al. 2002b). Various researchers have also argued that good performance may be traced to the motivational aspect of work engagement (e.g. Demerouti & Cropanzano 2010; Khan 1990; Rich, LePine & Crawford 2010; Schaufeli et al. 2002b). In addition, Macey and Schneider (2008) note there is agreement that having engaged employees is desirable, as not only do they contribute more, but they are also more loyal and less likely to leave an organisation. Macey and Schneider (2008) also note that among the various perspectives of work engagement are the common elements of organisational purpose, and both psychological and behavioural facets that involve energy, passion, enthusiasm and focused effort. In fact, Bakker et al. (2008, p. 189) note that 'most scholars agree that engagement includes an energy dimension and an identification dimension … with one's work'. This general consensus is akin to the second group of perspectives of work engagement that focus on work activity, with the energy dimension related to work effort. For this reason, Schaufeli et al.'s (2002b) perspective of work engagement will be adopted in this study. Their definition of the work engagement construct is as follows:

> A positive, fulfilling, work-related state of mind that is characterised by: (1) vigour (i.e. high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence also in the face of difficulties); (2) dedication (i.e. a sense of significance, enthusiasm, inspiration, pride and challenge); and (3) absorption (i.e. being fully

> concentrated and engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work) (Schaufeli, Taris & Van Rhenen 2008, p. 176).

In this definition, according to Schaufeli, Taris and Van Rhenen (2008), engaged employees are in a well-being state of mind, are characterised by high energy levels and an effective connection with their work activities. Engaged employees feel more confident to deal with the demands of their job, and have a sense of fulfilment with their work activities. This sense of fulfilment is unlike those who suffer from burnout, who on the contrary, feel a sense of emptiness.

Besides energy levels, Bakker et al. (2007, p. 1) add, based on this same definition, that engaged employees demonstrate mental resilience and enthusiasm in their work. Engaged employees sense significance in their job, and often have full concentration on their work, to the extent of being happily engrossed in it. Engaged employees are also active agents who believe in themselves, generate their own positive feedback, possess values that match those of the organisation, and sometimes feel tired but satisfied (Schaufeli, Taris & Schut 2000). Interviews with engaged employees revealed that despite a sense of tiredness at times, the associated positive accomplishments they experienced during work engagement made it a pleasant state (Schaufeli & Bakker 2003). Engaged employees are not 'workaholics' addicted to work (Schaufeli, Taris & Schut 2000):

> [Engaged employees, unlike workaholics,] enjoy doing things outside work, they do not feel guilty when not working, and they do not work hard because of a strong and irresistible inner drive but because for them, work is fun (Schaufeli, Taris & Van Rhenen 2008, p. 176).

According to Salanova and Schaufeli, work engagement is a 'psychological state [that] is not cognitive but affective and motivational in nature' (2008, p. 129), particularly in the intrinsic realm of motivation (2008, p. 118). In addition, they add that with vigour, there is goal-directedness and this may apply to both intrinsic and extrinsic behaviours. Vigour, as defined by Shirom (2003), is an affective state that encompasses the feelings of physical strength, cognitive liveliness and emotional energy. For dedication, Salanova and Schaufeli (2008) add that it is related to the intrinsic nature of motivation, to the extent that the individual wants to work well to achieve personal satisfaction. In absorption, Schaufeli, Taris and Van Rhenen (2008, p. 176) highlight that one is 'close to a state of optimal experience', whereby one's state of mind is 'pervasive and persistent'. In addition, they find that 'engaged managers working in demanding jobs … experienced good mental health' (p. 192).

While there is apparent consensus in the literature that work engagement relates to

work activity with an energy dimension, various researchers (e.g. Kahn 1990; Macey & Schneider 2008; May, Gilson & Harter 2004) have also highlighted that work engagement is multi-faceted or multi-dimensional. This multi-faceted aspect of work engagement is presented in the next section to facilitate the development of the theoretical model in the last section of this chapter for investigating the relationship of personal values to work engagement in this research.

## 2.2 Multi-Faceted Aspect of Work Engagement

According to Macey and Schneider (2008), traditional constructs such as job satisfaction, organisational commitment, job involvement and psychological empowerment may be seen as facets of engagement. This is because in certain aspects, they connote affect and feelings of energy. As a concept, engagement may be 'framed as a model that simultaneously embraces the psychological state and the behaviour it implies' (Macey & Schneider 2008, p. 5). Such a multi-faceted nature is also consistent with Kahn's (1990) description of personal engagement during role performances as one that cuts across different existing conceptual frameworks. To Kahn (1990), self-expression during engagement results in what researchers refer to as a personal voice (Hirschman 1970), authenticity (Baxter 1982), non-defensive communication (Gibb 1961), creativity (Perkins 1981), emotional expression (Rafaeli & Sutton 1987), playfulness (Kahn 1989) and ethical behaviour (Toffler 1986). Self-employment during engagement results in what researchers refer to as effort (Hackman & Oldham 1980), intrinsic motivation (Deci 1975), involvement (Lawler & Hall 1970), mindfulness (Langer 1989) and flow (Csikszentmihalyi 1982). To May, Gilson and Harter (2004), who built on Kahn's (1990) work on engagement, engagement is most closely related to the existing social science constructs of job involvement (Brown 1996) and flow (Csikszentmihalyi 1990). To Maslach and Leiter (2008), engagement is a multi-dimensional concept that is more complex and comprehensive in its perspective on individuals' relationships with their work. They argue it is unlike single concepts such as job satisfaction, organisational commitment or job involvement. In other words, these various researchers believe that engagement is multi-faceted, multi-dimensional and different from existing constructs in the literature; some of which are briefly reviewed below in relation to engagement.

### 2.2.1 Job Satisfaction and Engagement

Macey and Schneider (2008) note that the measures used for job satisfaction (e.g. Brayfield & Rothe 1951; Brief & Weiss 2002), such as those to assess feelings of energy,

enthusiasm, and positive affective states, are also used in measures for engagement. There exist some similarities in the characteristics they measure; this is understandable as people may be willing to invest more time in the things they do if they find them enjoyable (Rothbard & Edwards 2003). Nonetheless, Macey and Schneider (2008) claim that job satisfaction and engagement constructs are not the same as 'engagement connotes activation, whereas satisfaction connotes satiation' (p. 8). Job satisfaction only helps one understand the work conditions that may be relevant to assessing engagement conditions, and does not measure engagement directly. This is consistent with the views of Leiter and Maslach (2004), in that job satisfaction deals with the extent of need fulfilment and contentment from work, or the freeing of employees from hassles or dissatisfiers at work, but does not deal with the employees' relationships with the work itself. Thus, job satisfaction is not the same as engagement, but is a facet of the latter.

### 2.2.2 Organisational Commitment and Engagement

Like job satisfaction, Macey and Schneider (2008) note that some parts of the measures used for organisational commitment (O'Reilly & Chatman 1986) also reflect certain aspects of engagement. Macey and Schneider (2008) made this observation after examining the two commitment scales created by Meyer and his colleagues (Allen & Meyer 1990; Meyer, Allen & Smith 1993), and Mowday, Porter and their colleagues (Mowday, Porter & Steers 1982; Porter et al. 1974). Both of these are widely used and published, as noted by Ng and Feldman (2011). For instance, the commitment scale created by Meyer and his colleagues (Allen & Meyer 1990; Meyer, Allen & Smith 1993) has items asking whether respondents will be 'happy to spend' their time in the organisation, 'feel like part of the family' in the organisation, are 'emotionally attached' to their organisation, feel their work in the organisation has 'personal meaning' or 'sense of belonging' to the organisation: all of these are akin to the psychological meaningfulness (Kahn 1990) of engagement. O'Reilly and Chatman (1986) regard these aspects of commitment as a state of psychological attachment of the individual to an organisation. In this attachment, a force binds the individual to the organisation (Meyer, Becker & Vandenberghe 2004).

Further, in the commitment scale created by Mowday, Porter and their colleagues (Mowday, Porter & Steers, 1982; Porter et al. 1974), there are the additional concepts of effort and pride, akin to the high energy levels and sense of fulfilment (Schaufeli et al. 2002b) in engagement. However, organisation commitment and work engagement have different foci. The focus of organisation commitment is on the organisation, whereas the focus of work engagement is on the work itself (Maslach, Schaufeli & Leiter 2001, p. 416). In addition,

Macey and Schneider (2008) note that engagement has other facets, which organisation commitment does not have, such as safety (Kahn 1990). Thus, they suggest that organisation commitment may be regarded as another facet of engagement when the former connotes positive attachment, willingness to exert energy, and feeling pride at work.

### 2.2.3 Psychological Empowerment and Engagement

Psychological empowerment may be considered as another facet of engagement when the two-dimensional framework (Mathieu, Gilson & Ruddy 2006) and four-dimensional framework (Spreitzer 1995) of empowerment are both considered. In the two-dimensional framework, there is the 'experience of authority and responsibility' during empowerment (Mathieu, Gilson & Ruddy 2006, p. 98). In the four-dimensional framework, there is the experience of meaning (sense of purpose), competence (self-efficacy), self-determination (feelings of control), and effect (belief that one's efforts can make a difference). In addition, Spreitzer (1995) suggests that effort, persistence and initiative are possible outcomes of empowerment. The experiences of willingness to invest effort in one's work in both frameworks, and the persistence as possible outcomes are akin to the concept of engagement in the aspect of vigour (Schaufeli et al. 2002b). The experiences of meaning and effect are respectively akin to the concept of engagement in the aspects of psychological meaningfulness (Kahn 1990) and dedication (i.e. a sense of significance; Schaufeli et al. 2002b). Thus, Macey and Schneider (2008) suggest psychological empowerment as another facet of engagement.

### 2.2.4 Job Involvement and Engagement

According to Cooper-Hakim and Viswesvaran (2005, p. 244), who built on the earlier work of Lodahl and Kejner (1965), job involvement may be defined 'as the degree to which an employee psychologically relates to his or her job and the work performed therein'. From a review and meta-analysis of job involvement, Brown (1996, p. 235) suggests that involvement 'implies a positive and relatively complete state of engagement of core aspects of the self in the job'. In a review of two decades of research and development in transformational leadership, Bass (1999) suggests that when self-worth of the individual is involved, the levels of task engagement may increase. Bass (1999) reasons this is because any unwillingness to invest effort would be incongruous with the feelings of self-worth from goal attainment. Noting these understandings of job involvement, Macey and Schneider (2008) suggest job involvement is a further facet of engagement related to the psychological aspect of engagement. However, they add that engagement is a broader concept that comprises

energy and efficacy, as suggested by Maslach, Schaufeli and Leiter (2001; Leiter & Maslach 2004). May, Gilson and Harter (2004) also note that although both job involvement (Kanungo 1982) and engagement (Kahn 1990) entail cognition, engagement also entails emotions and behaviours, which differentiate engagement from job involvement. To them, engagement is more concerned with how individuals express self in role performances, instead of concern with a role's need-satisfying abilities, which is tied to one's self-image or identity (Lawler & Hall 1970). According to Kahn (1990), individuals would still engage and disengage, regardless of their levels of involvement and commitment.

### 2.2.5 Flow and Engagement

Flow is the 'holistic sensation that people feel when they act with total involvement' (Csikszentmihalyi 1975, p. 36). In such a state, self and environment are little distinct from each other, mind and body are in unison, concentration is effortless, and actions require little conscious control as individuals meld with the activity itself. In addition, in such a state, attention is narrowed to specific stimuli in the activity, which itself challenges and spurs individuals. There is no need for external rewards or goals as motivation. In this state, time is also distorted and there is intrinsic enjoyment. Examples of such activities are games, and creative art and science. Studies also showed management staff experience more flow than non-management staff, such as clerical or blue-collar workers (Csikszentmihalyi 1990), possibly because they face more challenging tasks.

May, Gilson and Harter (2004) note that while flow and engagement have self-employment underpinnings (Kahn 1990), the two constructs differ. Flow relates to cognitive involvement and the state of 'peak' experience, whereas according to Kahn, individuals can have different levels of immersion in their roles during engagement. This is consistent with the view (Schaufeli & Salanova 2007; Schaufeli et al. 2002b) highlighting that flow is a more complex concept involving many aspects and momentary peak experiences that can occur beyond work. In contrast, engagement is more of a persistent and pervasive work state, albeit one that can exist at different levels of immersion in roles during engagement (Kahn 1990). May, Gilson and Harter (2004) also highlight that engagement (Kahn 1990) encompasses emotional and physical aspects of the self besides cognition. Thus, engagement and flow, though similar, remain different constructs.

### 2.2.6 Positive Affectivity and Engagement

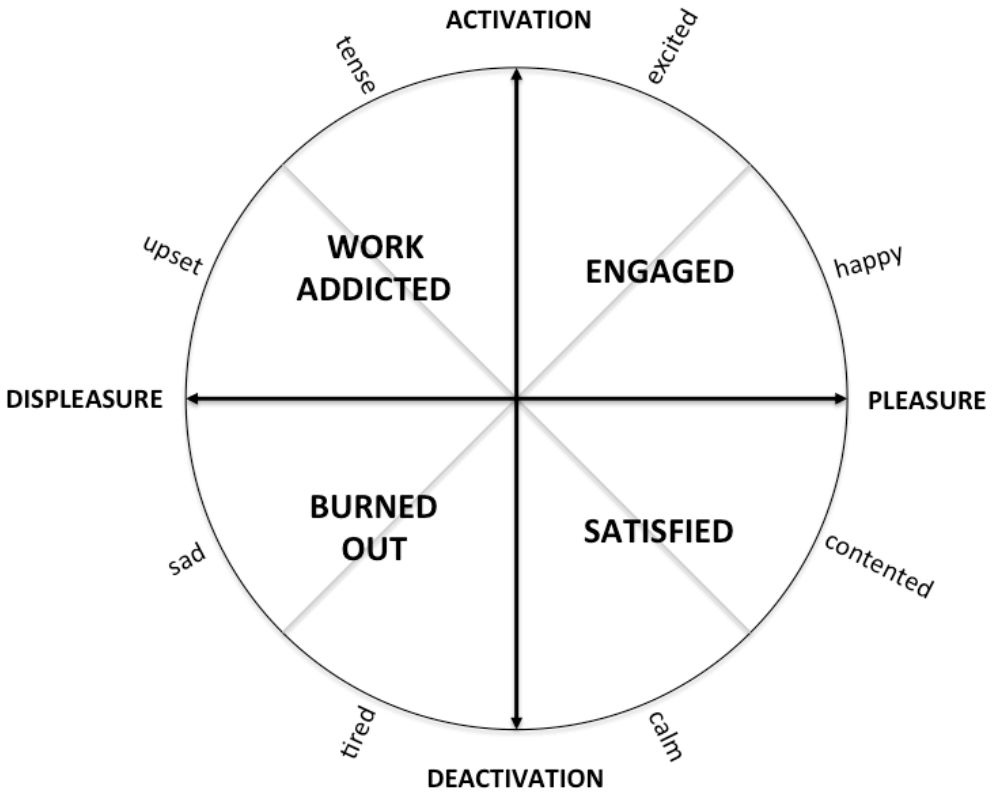
According to Larsen and Diener (1992), affectivity is halfway between pleasantness and activation. Among the measures for positive and negative affect in the Positive and

Negative Affect Schedule (PANAS) scale, there are markers such as attentive, alert, enthusiastic, inspired, proud, determined, strong and active (Watson, Clark & Tellegen 1988, p. 1064). Macey and Schneider (2008) note these markers are consistent with the descriptors used in contemporary definitions of engagement. The three markers—determined, strong and active—connote the dimension of vigour in engagement. The other three markers enthusiastic, inspired and proud connote the dimension of dedication in engagement; and the two markers attentive and alert connote the dimension of absorption in engagement.

### 2.2.7 Engagement in the Taxonomy of Well-being

Given the above brief comparison of various existing constructs in the engagement literature, it seems that engagement is 'a [relatively] more complex and thorough perspective on an individual's relationship with work' (Maslach, Schaufeli & Leiter 2001, p. 416) than various alternative existing constructs. To understand how engagement relates to an individual's well-being at work, an adaption of Russell's (2003, p. 148) map on 'core affect', as shown in Figure 2.1, was introduced to differentiate engagement from burnout, work addiction and satisfaction (Bakker, Albrecht & Leiter 2011b; Schaufeli 2011).

**Figure 2.1. Taxonomy of Well-being**




(Bakker, Albrecht & Leiter 2011b, p. 76)

According to Russell (2003), 'affect' (Watson & Tellegen 1985) is evident in moods and emotions as raw feelings, similar to activation (Thayer 1989). These feelings, at any given moment, blend two dimensions: pleasure-displeasure and activation-deactivation. In the pleasure-displeasure continuum, feelings can range from happy or contented to sad or upset. In the activation-deactivation continuum, feelings can range from excited or tense to calm or tired. Russell's (2003) model highlights that feelings are not discrete or isolated; they are interrelated, based on the two dimensions of activation-deactivation and pleasure-unpleasant.

Adapting Russell's (2003) model, engaged workers, burnout, work addiction and satisfaction can be differentiated (Bakker, Albrecht & Leiter 2011b; Schaufeli 2011). Engaged workers may be positioned in the quadrant where workers exhibit high levels of activation and pleasure, in contrast to workers in the opposite quadrant, who experience burnout and exhibit low levels of activation and pleasure. Engaged workers feel excited and happy, while burned-out workers feel sad and tired. Workers who are addicted to work and workers who feel satisfied are in the other two opposing quadrants. They are different from engaged workers and burned-out workers. Workers addicted to work are in the quadrant that exhibits high levels of activation and low levels of pleasure, as opposed to the opposite quadrant, where workers feel satisfied. Workers who feel satisfied exhibit high levels of pleasure and low levels of activation. Workers who are addicted to work feel tense and upset, while satisfied workers feel contented and calm. This analysis implies that to have engaged workers, there is a need to identify what aspects of the work make workers feel excited and happy.

Up to this point, a review of what work engagement is understood to be by the literature—including how it has been conceptualised and its multi-faceted characteristics—has been given. The extant literature on its antecedents is presented in the following section to clarify current understandings of how work engagement can be created or enhanced.

## 2.3 Antecedents of Work Engagement

Earlier, Section 2.1.2 highlighted that May, Gilson and Harter (2004) had validated the positive relationships of three psychological conditions proposed by Kahn (1990) regarding personal engagement. Besides these three antecedent conditions, various studies (e.g. Christian, Garza & Slaughter 2011; Halbesleben 2010; Mauno et al. 2010) have also consistently shown that job resources and personal resources relate positively to work

engagement (Schaufeli 2012). A brief account of these two antecedents of work engagement is presented below, followed by recently reported associated limitations.

### 2.3.1 Job Resources

Job resources refer to those aspects of the job that: (1) may lessen the effect of job demands and associated psychological and physiological costs; (2) may help in accomplishing work goals; or (3) encourage personal learning, development and growth (Bakker & Demerouti 2007; Schaufeli & Bakker 2004). These job aspects may be physical, social or organisational. Examples of job resources shown to relate positively to work engagement are social support from colleagues and supervisors, performance feedback, autonomy, skill variety and opportunities to learn (Bakker & Demerouti 2008; Halbesleben 2010; Schaufeli & Salanova 2007). Social support and performance feedback can intrinsically motivate engaged employees to increase job performance, by encouraging personal learning, development and growth, fulfilling the basic human needs of autonomy, relatedness and competence (Deci & Ryan 1985; Ryan & Frederick 1997; Van DenBroeck et al. 2008). For instance, there is evidence that with sufficient freedom to try new things and adjust activities to spend more time on problems with the support of colleagues, the most innovative solutions can be developed and implemented (Daniels et al. 2009). Job resources can also extrinsically motivate engaged employees to increase job performance. When many resources instrumental in work goal achievement are available, there can be an increase in the will of engaged employees to put in efforts and devote their abilities to work (Meijman & Mulder 1998).

In a study of four samples of Dutch employees, Schaufeli and Bakker (2004) found that the three job resources of performance feedback, supervisory coaching and social support were positively related to work engagement. Similarly, Hakanen, Bakker and Schaufeli (2006) found, in a sample of 2,000 Finnish teachers, that job resources of job control, information, innovative climate, supervisory support and social climate were positively related to work engagement. In a sample of women managers and professionals in a large Turkish bank, Koyuncu, Burke and Fiksenbaum (2006) found that job resources of job control, rewards and recognition were related positively to work engagement. In a two-year longitudinal study among Finnish health care personnel, Mauno, Kinnunen and Ruokolainen (2007) found that job control predicted work engagement. In a one-year long study among managers and executives in a Dutch telecom company, Schaufeli, Bakker and Van Rhenen (2009) found that performance feedback, autonomy, social support, and opportunities to learn and develop predicted work engagement.

Conceptually, the notion of job resources as an antecedent of work engagement is also

consistent with the framework proposed by Macey and Schneider (2008) to understand the engagement construct. In this framework, conditions in the workplace can have both direct and indirect effects on engagement. These workplace conditions include the nature of work, such as challenges and work variety, and the nature of leadership. This is also akin to studies on job design (Johns, Xie & Fang 1992; May, Gilson & Harter 2004; Renn & Vandenberg 1995) showing that job enrichment (Fried & Ferris 1987) in the Job Characteristics Model's five dimensions (Hackman & Oldham 1976; 1980) can affect the meaningfulness employees experience at work (Kahn 1990). The five job dimensions are skill variety, task identity, task significance, autonomy, and job feedback. In his study on the vigour, which Schaufeli et al. (2002b) identifies as a dimension of engagement, Shirom (2003) also rationalises that job characteristics can predict vigour.

### 2.3.2 Personal Resources

Personal resources are self-evaluations that are positive and linked to resilience, and the sense of individual ability to control and affect one's environment successfully (Hobfoll et al. 2003). Positive self-evaluations can predict job performance and desirable outcomes (Judge, Van Vianen & De Pater 2004). This is because positive self-evaluations lead to the experience of goal self-concordance (Judge et al. 2005), which intrinsically motivates individuals to pursue their goals, triggering higher performance and satisfaction (Luthans & Youssef 2007). With personal resources, engaged employees can have better control and influence on their work environment (Luthans et al. 2008). This allows them to be more successful in adapting to their environment (Demerouti 2011). Demerouti et al. (2011) found that personal resources can be developed over time through specific personal development training.

Examples of personal resources shown to relate positively to work engagement include: an active coping style (Rothman & Storm 2003), self-efficacy, self-esteem and optimism (Bakker, Gierveld & Van Rijswijk 2006; Xanthopoulou et al. 2007). One plausible reason for this positive relation to work engagement is that these personal resources enhance the state of psychological availability for engagement (Kahn 1990; May, Gilson & Harter 2004). For example, in a study among 1,910 South African police officers, Rothman and Storm (2003) found that those police officers who were engaged with their work had active coping styles. They were also problem-focused and proactive in their work to remove or rearrange stressors. Similarly, in another study among highly skilled Dutch technicians, Xanthopoulou et al. (2007) found that the personal resources of self-efficacy, organisational-based self-esteem and optimism were positively related to work engagement. In this study, the

engaged employees believed in their ability to meet job demands, believed they would experience good outcomes, and believed they would satisfy their needs in doing their work. In other research by Bakker, Gierveld and Van Rijswijk (2006) looking at school principals, they found that besides self-efficacy and optimism, resilience was also positively related to work engagement.

Home resources, which are personal and may be included in personal resources, have also been found to have an effect on work performance. As an example, Demerouti, Bakker and Voydanoff (2010) found that home resources like social support, autonomy and developmental possibilities can lead to better performance, and even make couples happier during their free time. This positive relationship with performance may be due to home resources enhancing psychological availability by reducing distracting outside activities (Kahn 1990); this indicates that home resources relate positively to work engagement.

Studies have also been conducted to determine the effect of job resources and personal resources together on work engagement. A diary study on the role of job and personal resources on the work engagement of 42 employees working in three branches of a fast-food company by Xanthopoulou et al. (2009b) is one such study. In this study, Xanthopoulou et al. (2009b) found that the day-level job resources of autonomy, coaching and team climate had a positive effect on work engagement through day-level personal resources of self-efficacy, self-esteem and optimism. Similarly, in an earlier diary study of 44 flight attendants, Xanthopoulou et al. (2008) found that the work engagement of flight attendants increased as a consequence of higher self-efficacy (personal resource), when colleagues were more supportive (job resource).

### 2.3.3 Limitations of Job and Personal Resources

However, Bakker et al. (2008, p. 194) note that engaged employees can at times perform well, poorly or below average, and posit that this may depend on their perceptions and feelings. Bakker et al. (2008, p. 195) reason that self-regulation (Higgins 2000) may help explain how individuals manage work engagement, and highlight that individual differences and the environment both affect the focus of this regulation. In other words, there are limitations of extant management interventions that focus on contextual factors, such as job and personal resources on work engagement, as highlighted in Chapter 1, Section 1.2.1. The limitations could be due to the dependence on individual differences and individual perception of the work environment, both of which are further presented below.

*2.3.3.1 Dependence on Individual Differences*

There are differences in the levels of work engagement and performance among individuals because the pathway to performance does not depend on a simple reaction to various intervening mechanisms (e.g. social and / or job resources, or approach taken in human resource management) but is highly dependent on the individual (Demerouti 2011). Individual differences can affect the potential level of an employee's engagement (Robinson 2006):

> Individual differences shape people's disposition toward personally engaging or disengaging in all or some types of role performances, just as they shape people's abilities and willingness to be involved or committed at work (Kahn 1990, p. 718).

As a result of individual differences, for the same context factors, there can be a different sense of psychological meaningfulness, safety and availability, and different engagement levels among individuals (Kahn 1990).

Consistent with Kahn (1990), Demerouti et al. (2001) reason that individual differences alter the extent of their reactions to management interventions via their perceptions and cognition operations. May, Gilson and Harter (2004) also argue that the indications of influence in the identity-prescription link of the Triangle Model of Responsibility (Schlenker et al. 1994) on work engagement (Britt 1999) show that individual self-concepts affect work engagement. They reason that how engaged or responsible individuals feel in their role is dependent on how they see prescribed rules (i.e. contextual factors) as applying to their individual identity. They also showed that the individual notion of meaningfulness has the strongest relationship with work engagement. This is consistent with the observation by Bakker et al. (2007) that engaged individuals have a sense of personal significance in their job.

Thus, Kular et al. (2008) note extant research suggesting that the level of work engagement is also dependent on individual differences, despite the existence of common antecedents (i.e. job and personal resources). In turn, this belief suggests that the psychological process of individual work environment perception has a role to play in one's work engagement.

*2.3.3.2 Individual Perceptions according to Personal Frame*

Perception as a process has been highlighted as a key influence on individual behaviour (e.g. Kular et al. 2008). In perception, individuals classify and make sense of their surroundings, interpret and then respond according to a unique personal frame of reference

(Kular et al. 2008; Robinson 2006). This unique personal frame of reference comprises the individual personality, knowledge, past experiences and current needs, interests and priorities, most of which are related to the features of values (Schwartz & Bilsky 1987; 1990). The frame serves as a perceptual filter that influences one's view of the environment. In turn, this affects one's engagement level (Kular et al. 2008). The individual usually analyses the task, determines the appropriate procedure, and identifies the resources needed to complete the task (Marr 1982). In this decision making process, the individual either systematically scrutinises the information available or intuitively makes a decision based on past experiences (Trumbo 1999). This is consistent with the cognitive model that involves the three components of events or situations, beliefs, and the emotions and behaviours that follow (Gillham & Seligman 1999, p. 170).

In Kahn's (1990, p. 695) grounded theory of personal engagement, he also assumed that individuals' perceptions mediated work contexts with the psychological conditions for personal engagement. According to Kahn (1990):

> People vary their personal engagements according to their perceptions of the benefits, or the meaningfulness, and the guarantees, or the safety, they perceive in situations. Engagement also varies according to the resources they perceive themselves to have–their availability (p. 703).

When these perceptions are conducive, engaged individuals can then display their preferred selves (preferred identity, thoughts or beliefs, and feelings or values). This promotes connections to work, for instance the idea of self-expression, which is a mechanism within Kahn's (1990) concept of personal engagement. Kahn also describes this as the dialectic connection between work and self during personal engagement with work, whereby the work role (given appropriate conditions) allows the engaged employee to express their self. This self-expression is the emotional reaction of individuals to the properties of roles, jobs and work context (Kahn 1990); it manifests from the positive mental state (Bakker et al. 2008) of perceived alignment of preferred selves, such as personal values regarding work. The perceived alignment is also consistent with the definition of work engagement by Schaufeli, Taris and Van Rhenen (2008) that highlights the characteristics of effective connection of engaged individuals with work activities, and having a sense of fulfilment, during which the engaged individual may be close to a state of optimal experience.

The multi-faceted aspect of work engagement (Macey & Schneider 2008) presented in Section 2.2 lends support to the role of individual perception in work engagement. The satisfaction or satiation facet of work engagement, whereby the engaged individual assesses the work conditions suitable for employing the self is akin to the sense of fulfilment during

perceived alignment. The emotional attachment to the organisation, which Macey and Schneider (2008) note to be the commitment facet of work engagement, is akin to the emotional reactions arising from the perceived alignment. The experience of meaning and the self-determination dimensions of the empowerment facet (Spreitzer 1995) of work engagement are akin to the feelings of control from satisfying one's preferences, such as personal values as one chooses to employ one's self upon the perceived alignment. The involvement and flow aspects of work engagement are akin to the psychological aspect of perceiving alignment during work engagement. This is because during work engagement, the individual psychologically relates to the work to a certain degree (Cooper-Hakim & Viswesvaran 2005), and cognition is involved (May, Gilson & Harter 2004), albeit that flow relates more to a state of peak experience.

Recent findings by Andrew and Sofian (2012) indicating that perceived co-employee support, as an individual factor, is related to work engagement also supports the role of individual perception. Building on Saks's (2006) work that uses social exchange theory to explain engagement, they reason that one's engagement level at work stems from the perceived cost and benefits (Cropanzano & Mitchell 2005) from the resources given for the work. In her review of the engagement literature, Simpson (2009) also notes that the affective aspect of one's perception of selves with work is a focus in work engagement. Further, in a recent development of purposeful work behaviour theory, Barrick, Mount and Li (2013) reason that individuals need perceived control of the behaviour, as situational demands may exceed availability of resources such as time or even adequate ability to perform. They reason that individual perception is a crucial factor to the individual's behaviour, as the extent of motivation to behave in a certain way (such as to engage or disengage with work) is ultimately decided by the individual (Endler & Magnusson 1976).

The above review highlights the critical role of individual perception of the contextual factors in work engagement. It highlights that perception is an individual psychological process and is frequently juxtaposed against one's unique personal frame, such as personal values, before one makes a decision and / or acts. In his rationalisation of the motivation sequence, Locke (1991) explains that perception involves having a set of values to guide decision-making and actions; in turn, one's actions reflect what one values, and thus, values motivate action. This is also a view which Park and Gursoy (2012) share. They argue that one's interpretation and perceptions of contextual factors such as resources and the environment are guided by one's values. As a result, they view that individual psychological factors such as values may be the cause for the differential effects contextual factors, such as job and personal resources, have on work engagement. Noting that there is little literature

examining these potential interactions, they advocate that these potential interactions be investigated. The review thus far indicates that personal values are also 'precursors' to work engagement (Park & Gursoy 2012, p. 1200), and there exists plausible connections between personal values and work engagement. This plausibility is reviewed in the next section.

## 2.4 Personal Values and Work Engagement

In this section, further supporting literature is presented that indicates work engagement does not just depend on contextual factors, such as job and personal resources, but on factors that are more core to an individual, such as personal values. A brief review of how values are understood is first provided, before the additional supporting literature and the theoretical underpinning of the relationship of personal values to work engagement.

### 2.4.1 What are Values?

Values, according to psychologist Rokeach (1973), are a unifying construct in the study of human and social behaviour, a view that is similarly taken by sociologists (e.g. Williams 1968) and anthropologists (e.g. Kluckhohn 1951). They view values as criteria which individuals use to choose and justify actions, and assess self, others and events (Schwartz 1992). Values are in the conscious realm of the mind, and are not innate but acquired (Locke 1991). Values help researchers understand the meanings people place on their actions (Nord et al. 1990), as they function as standards that generally guide thoughts, behaviour and decision-making (Feather 2002; Rohan 2000; Schwartz & Bilsky 1987). Rokeach (1973, p. 79) describes values as:

> Multifaceted standards that guide conduct in a variety of ways. They lead us to take particular positions on social issues and they predispose us to favour one ideology over another. They are standards employed to evaluate and judge others and ourselves.

Values are also generally ordered in terms of the relative importance individuals place on them. The resulting hierarchical nature of individuals' values allows individuals to reconcile competing values that may emerge in their daily lives (Kluckhohn 1951; Lyons, Higgins & Duxbury 2010; Rokeach 1973; Schwartz & Bilsky 1987; Schwartz 1992). In a review of the literature on values, Schwartz and Bilsky (1987; 1990) note that values have five conceptual features, which reflect the multi-faceted nature of values (Rokeach 1973). These features are:

> (a) concepts or beliefs, (b) about desirable end states or behaviours, (c) that transcend specific situations, (d) guide selection or evaluation of behaviour and events, and (e) are

ordered by relative importance (Schwartz & Bilsky 1987, p. 551).

With this concept in mind, Schwartz (1992) highlights values as differing from attitudes because of the generality and abstractness of values, and the hierarchical importance of values to individuals (Levy & Guttman 1974). Instead, values have a direct influence on attitudes and behaviour (Schullery 2013), as values shape individual perceptions of preferences in the environment (Twenge et al. 2010).

### 2.4.2 Indications that Personal Values affect Work Engagement

In the work engagement literature (besides those highlighted in Section 1.2 in Chapter 1 and Section 2.3.3 earlier in this chapter), there are various other indications that personal values affect engagement. For instance, in Kahn's (1990) conceptualisation of personal engagement:

> People become physically involved in tasks, whether alone or with others, cognitively vigilant, and emphatically connected to others in the service of the work they are doing in ways that display what they think and feel, their creativity, their beliefs and values, and their personal connections to others (p. 700).

Robinson, Perryman and Hayday (2004) define engagement as 'a positive attitude held by the employee towards the organisation and its values' (p. 2). To Leiter (2008, p. 53), employee judgements of value congruence are 'a defining factor to their psychological relationship with work'. When employees perceive that their personal values are congruent with the organisation's, they can then sense confirmation of their relevance or meaningful contribution to the organisation. In doing so, they assure themselves they are correctly positioned to strive for what is important to them. However, if the values-in-action (Leiter 2008) are perceived to differ considerably from the documented values, employees may judge they are wasting their time and talents, or even behaving unethically. Documented values refer to values expressed in the mission, vision and value statements of an organisation. Values-in-action refer to values that are deduced through observing organisational events that define priorities such as capital investments and promotions. Findings from qualitative interviews of Dutch employees by Schaufeli et al. (2001) lend support to this argument; the findings revealed that the values of engaged employees matched well with their organisation.

Building on Kahn's (1990) conceptualisation of personal engagement, May, Gilson and Harter (2004) note a common sentiment among a number of authors is that the perceived 'fit' between the self-concept and role of an individual can lead to a sense of meaning from the opportunity to express one's values and beliefs (Brief & Nord 1990; Shamir 1991). People strive for work roles that permit them to behave so that their authentic self-concepts can be

expressed (Shamir 1991). This argument further indicates personal values affect work engagement, as self-concept is a feature identified by Schwartz and Bilsky (1987; 1990) in the multi-faceted nature of values. Argyle's (2001) view that individuals who are not authentic to themselves are not aligned to their values lends further support to this argument.

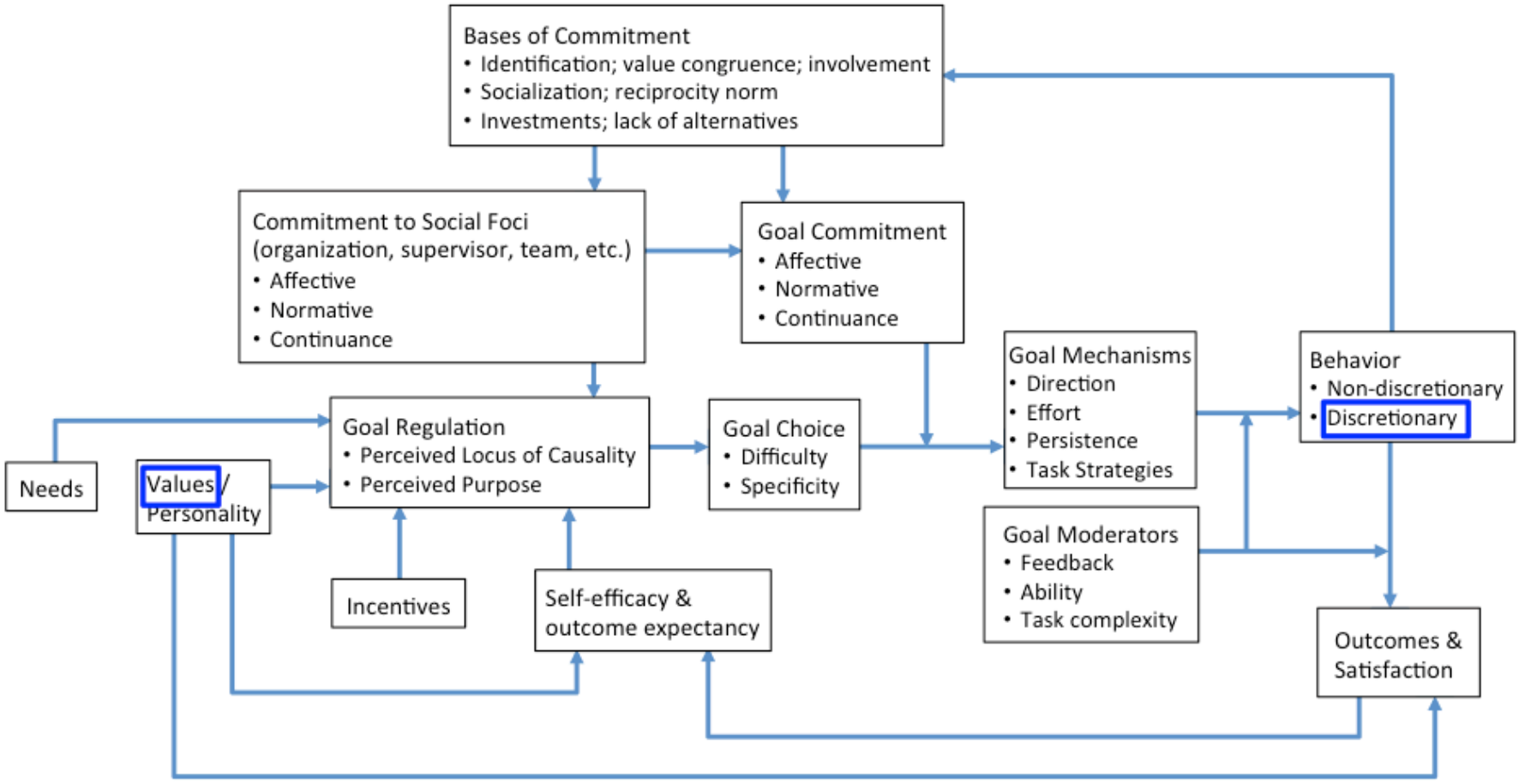
Recent findings by Park and Gursoy (2012) showing that Millennials[1] have distinct work engagement levels from Gen Xers and Baby Boomers also indicate that values affect work engagement. They reason these findings may result from the ways different generations perceive resources at work. These different 'perceptions of the meaningfulness of the work' may be because of the different values of different generations (Park & Gursoy 2012, p. 1,197). From another perspective, Salanova et al. (2013) note, from their review of positive psychology literature, individual-based interventions that involve individual core values can help to develop a positive organisation.

### 2.4.3 Theoretical Support for Relating Personal Values to Work Engagement

Having noted the various indications that personal values affect work engagement, there is also apparent theoretical support for this relationship. According to Salanova and Schaufeli (2008), work engagement is a psychological state that is 'affective and motivational in nature' (p. 129). It is in the intrinsic realm of motivation, whereby the individual strives to achieve personal satisfaction, and is goal-directed in both intrinsic and extrinsic work behaviours (Salanova & Schaufeli 2008, p. 118). In other words, work engagement is a conscious behaviour that is discretionary in nature. According to Meyer, Becker and Vandenberghe (2004, p. 997), discretionary behaviour can be an exertion of extraordinary effort to achieve a goal. Motivated behaviour in general is goal-oriented (Locke & Latham 1990; Meyer, Becker & Vandenberghe 2004; Miner 2003). Using the concept of goal regulation based on self-determination theory (Deci & Ryan 1985; Ryan & Deci 2000) and regulatory focus theory (Higgins 1997; 1998), Meyer, Becker and Vandenberghe (2004, p. 998) postulate that goals can occur naturally from the activation of a few factors, ultimately leading to discretionary behaviour, as shown in Figure 2.2. Among these factors are personal values that are shaped through experience and socialisation. With work engagement as discretionary behaviour that is goal-oriented and personal values as activating factors, a plausible basic relationship between work engagement and personal values in Figure 2.3 (known as Model 0) can be developed.

[1] Millennials are born in the period of 1981 to 1999, while Gen Xers are born in the period of 1965 to 1980, and Baby Boomers in the period of 1946 to 1964 (Park & Gursoy 2012).

**Figure 2.2. Integrated Model showing Discretionary Behaviour arising from Personal Values according to the Concept of Goal Regulation**




(Meyer, Becker & Vandenberghe 2004, p. 998)

Besides postulating this plausible relationship between work engagement and values (Model 0), based on the motivational model by Meyer, Becker and Vandenberghe (2004), extant literature by other researchers seems to support Model 0. For instance, in Locke's (1991) theorising of the motivation sequence, personal values are considered the core of motivation. He reasons the concept of personal values as the core explains the difference in actions (e.g. levels of work engagement) by different individuals in response to the same needs (e.g. job demands), because values make one unique and guide one's actions. This reasoning is in line with Kahn's (1990) statement that 'it is difficult for people to engage personally in fulfilling work processes when organisational ends do not fit their own values' (p. 716). Similarly, Leiter (2008) argues that value congruence needs to be considered for a comprehensive examination of the organisational context of the burnout-to-engagement continuum.

**Figure 2.3. Model 0 showing Plausible Relationship between Work Engagement and Personal Values**




Like Locke, Leiter and Maslach (2004) believe that values are at the heart of the relationship of individuals with their work. This comprises the ideals and motivations that originally drew them to the work. Leiter and Maslach (2004) add that this associated motivation connection goes beyond the incentives of money or advancement. They reason that being able to fulfil values or ideals can be a personal goal so powerful that it 'produces [a] self-perpetuating dynamic that support[s] engagement' (p. 100).

In their review of the diverse literature on engaged workers, Macey and Schneider (2008, p. 15) note that the behaviour of engaged employees may be described using self-concordance theory (Sheldon & Elliot 1999), whereby individuals are willing to put in sustained effort to achieve those goals consistent with their developing interests and values. As a consequence, they are more likely to achieve those goals. Pulakos (2009) also advocates that in performance management to drive business results, it is important to consider individual development needs when goals are being established. To Armstrong (2000), individuals should be allowed to formulate their own goals. This is because 'achieving goals that are not integrated with the self does not promote well-being (Sheldon & Kasser 1998)

and is not likely to promote engagement' (Gruman & Saks 2011, p. 128). Consistent with this approach to promote engagement, Schaufeli and Salanova (2007, pp. 157–158) have suggested the first step when drafting a psychological contract (Rousseau 1995) with employees is to 'assess the employee's values, preferences, and personal and professional goals'. This approach to promote engagement can also be further supported if we are to relate the incorporation of personal goals as satisfying Kahn's (1990) three psychological states of meaningfulness, availability and safety in psychological contracts that involve reciprocal obligations between employees and organisations (Rousseau 1990). In a study of 102 employees working in different jobs and organisations, Saks (2006) found evidence to show that the theoretical foundation provided by social exchange theory (Cropanzano & Mitchell 2005) could explain the different levels of engagement. In this explanation, parties abiding by certain 'rules' of exchange may be led, or feel obliged, to respond or act in tandem to the action of another party.

Another way to consider the link of personal values to work engagement is to examine the basis for attitude change. According to Kelman (1958), individuals may change their attitude when they accept influence in three distinct ways. First, individuals may accept an influence out of compliance, or exchange for specific rewards, which they value. Second, acceptance may occur because of identification or affiliation to establish or maintain a relationship that the individual values. Third, it may be because the induced attitudes and behaviours are consistent with an individual's values. Thus, it is plausible that for individuals to change their attitude towards engagement, values may be a deciding factor.

However, different values may be able to meet the same needs (e.g. livelihood and job demands), and the hierarchy individuals apply to their values affects how they meet the same needs (Locke 1991). Thus, in this investigation into the relationship of personal values and work engagement, determining the personal values, and in what way they are more dominant than others, that affect work engagement are also required for an in-depth understanding. To deduce these personal values from the literature, a suitable value model is required.

## 2.5 Value Model

In the literature on values, various value models (e.g. Elizur & Sagie 1999; Schwartz 1992; Zytowski 2006) have been developed to help researchers study human and social behaviour. They cover both work and non-work areas. Values concerning work areas are developed through various processes that include professional training, cultural background and personal experiences (Leiter 2008). Values in non-work areas include life areas such as home and family life, religion, culture, sports and politics (Guttman 1994; Jordan 1992; Levy

1990; Near, Rice & Hunt 1980; Sagie & Elizur 1996; Ying 1992). Both work and non-work values are sub-domains of personal values, and the same personal values may be relevant to various life areas (Elizur & Sagie 1999), covering both work and non-work areas. Since the same personal values may be relevant to both work and non-work areas, personal values in a framework that covers both work and non-work areas are used in this research. This reason to consider personal values rather than work values complements the usefulness of investigating personal values highlighted in section 1.2.3 of Chapter 1: individuals tend not to exhibit their true work values (Crowne & Marlowe 1964; Meglino & Ravlin 1998), or know them until they develop or discover them through experience at work (Leiter 2008). For this research, Schwartz's (1992) value model is used. The reasons for using it are elaborated next.

### 2.5.1 Suitability of Schwartz's Value Model for use in this Research

There are various reasons why Schwartz's value model is used in this research to investigate the relationship of personal values to levels of work engagement. A major reason is that it has been widely tested and validated using samples from very different cultures, languages, geographical areas, religions and races, making the model relatively universal for study of personal values. This model has been used on more than 200 samples from over 50 countries in various studies, covering more than 70 cultural groups (Ros, Schwartz & Surkiss 1999; Schwartz 1992; 2005; Schwartz & Sagiv 1995). Based on an initial tentative theory of universal types of values, Schwartz's value model was tested with over 3,700 respondents from seven countries (Schwartz & Bilsky 1987; 1990). Subsequently, an extended and revised version of it was developed and studied for its universality, using 40 samples from 20 countries (Schwartz 1992). Later, Schwartz and Sagiv (1995) re-evaluated the model further and confirmed the widespread presence of the basic values in the model, using data from 88 samples from 40 countries, increasing the heterogeneity of its basis. Using confirmatory factor analysis, Schwartz and Boehnke (2004) further verified the model with nearly 11,000 respondents in 27 countries. The consistent results suggest that Schwartz's value model is relatively robust and universal, and has a framework applicable across cultures and languages.

In addition, Schwartz's value model offers a few other advantages. Firstly, this model not only covers work and non-work areas, it also expresses basic motivations as values, making the model suitable to relate values to the motivational nature of work engagement. Secondly, the comprehensive but distinct way this model organises personal values into 10 different value types, makes it suitable to discern possible relationships between work engagement and personal values. Thirdly, adopting a value model that is organised along value types can also provide more reliable indices of value priorities (Schmitt et al. 1993).

Reliable because organising a value model along value types 'improves the likelihood of interpretable findings' (Schwartz 1994b, p. 42), as one's behaviour tends to be influenced by more than one value of the same motivational type. Finally, it has been noted that this model has gained wide support in recent values research (Lindeman & Verkasalo 2005, p. 170; Lyons, Duxbury & Higgins 2006, p. 607). To Jin and Rounds (2012, p. 327), 'Schwartz (1992; 1994a) provides the most comprehensive and up-to-date summary of the structure of values'.

Having presented the suitability of Schwartz's value model for this research, a review of it is presented next to facilitate subsequent deduction of possible dominant personal values that relate to work engagement in the final section of this chapter.

### 2.5.2 Schwartz's Value Model (Theory of Basic Human Values)

Schwartz's value model is based on the theory of basic human values (Schwartz 1992; 2006). In it, the values domain is considered as a whole (Lyons, Higgins & Duxbury 2010). Its definition of values follows the works of Kluckhohn (1951) and Rokeach (1973). Values are defined as:

> desirable, trans-situational goals, varying in importance, that serve as guiding principles in people's lives (Davidov, Schmidt & Schwartz 2008, p. 423).

Like most theorists (e.g. Ball-Rokeach, Rokeach & Grube 1984; Feather 1975; Levy & Guttman 1985; Rokeach 1973), this model assumes that value priorities have to be relatively enduring to serve as guiding principles in people's lives.

Schwartz's value model comprises the ten motivationally distinct value types in Table 2.1 and together, they aim to represent the universal aspects of basic human value content (i.e. common meanings) and structure. The difference in the primary content aspect of these value types is the goal or motivational concern that they express (Schwartz & Bilsky 1987; 1990). The ten are presumed to make up the major value orientations implicitly recognised across cultures. The content typology of these ten motivationally distinct value types was derived by reasoning that values exemplify three universal requirements of human existence, which are biologically based needs, coordination needs for social interaction, and group functioning demands for welfare and survival (Schwartz & Bilsky 1987; Schwartz 1992; Schwartz & Sagiv 1995). To be effective in social groups, individuals must recognise, think and communicate about them as they cope with reality and plan responses.

**Table 2.1. Ten Distinct Value Types in Schwartz's Value Model**

| |
|---|
| SELF-DIRECTION: Independent thought and action – choosing, creating, exploring. |
| STIMULATION: Excitement, novelty, and challenge in life. |
| HEDONISM: Pleasure and sensuous gratification for oneself. |
| ACHIEVEMENT: Personal success through demonstrating competence according to social standards. |
| POWER: Social status and prestige, control or dominance over people and resources. |
| SECURITY: Safety, harmony and stability of society, of relationships, and of self. |
| CONFORMITY: Restraint of actions, inclinations, and impulses likely to upset or harm others, and violate social expectations or norms. |
| TRADITION: Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self. |
| BENEVOLENCE: Preservation and enhancement of the welfare of people with whom one is in frequent personal contact. |
| UNIVERSALISM: Understanding, appreciation, tolerance and protection for the welfare of all people and for nature. |

(Davidov, Schmidt & Schwartz 2008, p. 424)

*2.5.2.1 Value Types and its Content*

Based on the defining motivational goal of each value type, Schwartz (1992) selected from various sources, specific values judged to have a clear motivational goal representing the associated value types. The various sources include: Rokeach's (1973) value survey, instruments developed in other cultures (e.g. Braithwaite & Law 1985; Chinese Culture Connection 1987; Hofstede 1980; Levy & Guttman 1974; Munro 1985), the examination of literature on comparative religion, and consultations with Muslim and Druze scholars. The defining goal and the associated specific values for each value type are briefly presented below:

1. Self-Direction. The defining goal of the self-direction value type is 'independent thought and action covering choosing, creating and exploring' (Schwartz 1992, p. 5). It is derived from the interactional requirements of autonomy and independence (e.g. Kluckhohn 1951; Kohn & Schooler 1983; Morris 1956) and organismic needs for control and mastery (e.g. Bandura 1977; Deci 1975; White 1959). The set of specific values Schwartz (1992) associates with the self-direction value type comprises freedom, creativity,

independence, choosing one's own goals, curiosity and self-respect.

2. Stimulation. The defining goal of the stimulation value type is 'excitement, novelty, and challenge in life' (Schwartz 1992, p. 8). It is derived from the need to maintain an optimal level of activation (Berlyne 1960; Houston & Mednick 1963; Maddi 1961), which requires the presumed organismic need for variety and stimulation. The importance of stimulation values may vary among individuals, depending on a biologically based variation in the need for stimulation and arousal, as conditioned by social experience. For instance, the biological base for thrill-seeking (Farley 1986) is personality dependent. The set of specific values Schwartz (1992) associates with the stimulation value type comprises an exciting life, a varied life and daring.

3. Hedonism. The defining goal of the hedonism value type is 'pleasure and sensuous gratification for oneself' (Schwartz 1992, p. 8). It is derived from the needs of organisms and the pleasure involved with satisfying them (Morris 1956; Williams 1968). The set of values Schwartz (1992) associates with the hedonism value type comprises pleasure and enjoying life. Schwartz (1992) does not include happiness in the set of specific values associated with this value type, as past research indicates happiness can be realised via successful pursuit of any of the other value types.

4. Achievement. The defining goal of the achievement value type is 'personal success through demonstrating competence according to social standards' (Schwartz 1992, p. 8). Schwartz (1992) reasons that achievement is a value type if it enables social interaction and institutional functioning, and if resources are needed for survival (e.g. Maslow 1959; Rokeach 1973; Scott 1965). This definition of the achievement value type is different from that of McClelland (McClelland et al. 1953), in that McClelland associates achievement motivation with the meeting of internal standards of excellence. Schwartz's definition of the achievement value type is associated with obtaining social approval by meeting prevailing cultural standards, to the extent of doing it in everyday interaction. The set of specific values Schwartz (1992) associates with the achievement value type comprises ambition, influence, capability, successfulness, intelligence and self-respect.

5. Power. The defining goal of the power value type is 'attainment of social status and prestige, control or dominance over people and resources'

(Schwartz 1992, p. 9). Schwartz (1992) reasons that power is a value type as social institutions seem to need some level of status differentiation (Durkheim 1964; Parsons 1957) to function. Most empirical studies of interpersonal relations within and across cultures (Lonner 1980) show a dominance-submission dimension. In addition, Schwartz (1992) notes that value analysts (Allport 1961; Gordon 1960) have considered power type values too. Power values may be the transformation of individual needs that analysts of social motives (e.g. Korman 1974; Schutz 1958) have identified for dominance and control. Schwartz (1992) also reasons that while both power and achievement value types focus on social esteem, the former (e.g. authority and wealth) stresses the acquisition or preservation of a position of dominance or abstract outcomes as social status. Thus, they refer to the hierarchical organisation of relations in a general social system. In contrast, the achievement value type (e.g. success and ambition) stresses the active validation of competence in concrete interactions, or the striving of an individual alone. The set of specific values Schwartz (1992) associates with the power value type comprises social power, wealth, authority, preserving public image and social recognition.

6. Security. The defining goal of the security value type is 'safety, harmony and stability of society, of relationships, and of self' (Schwartz 1992, p. 9). It is derived from the basic requirements of individuals and groups, covering both individual and collective interests. The set of specific values Schwartz (1992) associates with the security value type comprises national security, reciprocation of favours, family security, sense of belonging, social order, healthy and clean.

7. Conformity. The defining goal of the conformity value type is 'restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms' (Schwartz 1992, p. 9). It is derived from the need for individuals to prevent inclinations that may be socially disruptive to allow smooth interaction and group survival, whereby there is an emphasis in everyday interaction on the need for self-restraint when close to others. Schwartz (1992) notes that value analyses (e.g. Freud 1930; Kohn & Schooler 1983; Morris 1956; Parsons 1957) have considered conformity type values too. The set of specific values Schwartz (1992) associates with the conformity value type comprises obedience, self-discipline, politeness and honouring parents and elders.

8. Tradition. The defining goal of the tradition value type is 'respect, commitment and acceptance of the customs and ideas that one's culture or religion impose on the individual' (Schwartz 1992, p. 10). It is derived from the symbols and practices groups everywhere develop and accept as traditions and customs (Sumner 1906) to represent their shared experience and fate, solidarity, unique worth and supposed guarantors of its survival (Durkheim 1954; Parsons 1957). Common forms of traditions are religious rites, behaviour norms and beliefs (Radcliffe-Brown 1952). The set of specific values Schwartz (1992) associates with the tradition value type comprises respect for tradition, devoutness, accepting one's portion in life, humbleness and moderation.

9. Benevolence. The defining goal of the benevolence value type is 'preservation and enhancement of the welfare of people with whom one is in frequent personal contact' (Schwartz 1992, p. 11). It is derived from the requirement for positive interaction to foster successful and rapid development of groups (compare Kluckhohn 1951; Williams 1968), and from the requirement by organisms for affiliation (compare Korman 1974; Maslow 1959). The set of specific values Schwartz (1992) associates with the benevolence value type comprises helpfulness, responsibility, forgiveness, honesty, loyalty, mature love and true friendship.

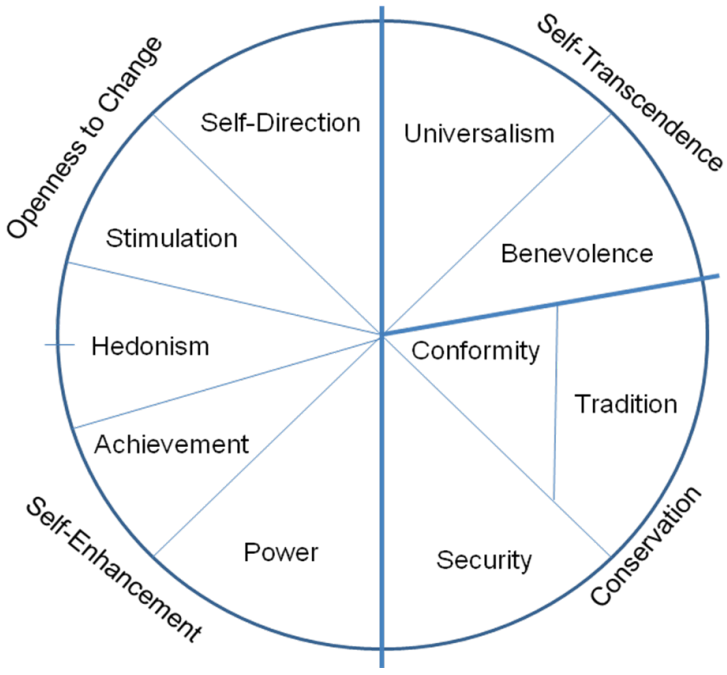
10. Universalism. The defining goal of the universalism value type is 'understanding, appreciation, tolerance and protection for the welfare of all people and for nature' (Schwartz 1992, p. 12). It is derived from the requirements of individuals and groups for their survival when they become aware of the inadequacy of natural resources as they come in contact with those outside their primary group. Under such circumstances, individuals will realise there can be life-threatening strife if they do not accept others and treat them justly, and resources on which life depends can be destroyed if the natural environment is not protected. The set of specific values Schwartz (1992) associates with the universalism value type comprises equality, unity with nature, wisdom, a world of beauty, social justice, broad-mindedness, protecting the environment and a world at peace. However, Schwartz (1992) notes that for small, isolated and homogenous cultures, the universalism value type may not be recognised.

*2.5.2.2 Dynamic Circular Structure of Value Relations*

Schwartz (1992, p. 13) also theorised a dynamic circular structure of value relations between the ten value types, as shown in Figure 2.4. He argues that actions in pursuit of each value type can have psychological, practical and social consequences that may conflict with some values and yet be congruent or compatible with others. As a result, he posits that the conflict and congruity or compatibilities among the ten value types can be portrayed in a schematic circular structure.

In this circular structure, value types serving individual interests (power, achievement, hedonism, stimulation and self-direction) form a contiguous region opposite to another contiguous region formed by those serving collective interests (benevolence, tradition and conformity). However, as universalism and security can serve both individual and collective interests, they are located between both regions. The closer the values are to each other in either direction around the circle, the more they are understood as congruent or compatible. The further they are from each other around the circle, the more potentially antagonistic or in conflict they are. For example, achievement type values are directly opposite benevolence type values, because pursuit of personal success for oneself can hinder actions meant to enhance the welfare of others.

**Figure 2.4. Structural Relations among the 10 Values and the Two Dimensions of Schwartz's Theory of Basic Human Values**




(Davidov, Schmidt & Schwartz 2008, p. 425)

*2.5.2.3 Compatibilities*

In this circular structure, Schwartz (1992, p. 14–15) also argues for the existence of nine sets of compatible value types as follows: (1) Power and achievement form a set that 'emphasizes superiority and esteem' in the society, and thus, has a focus on social esteem; (2) Achievement and hedonism form a set that is 'concerned with self-indulgence', and thus, relates to egotism; (3) Hedonism and stimulation form a set that 'entails a desire for affectively pleasant arousal'; (4) Stimulation and self-direction form a set that 'involves intrinsic motivation for mastery and openness to change' or novelty; (5) Self-direction and universalism form a set that 'expresses reliance on one's own judgment and comfort with the diversity of existence'; (6) Universalism and benevolence form a set that is 'concerned with enhancement of others and transcendence of selfish interests'; (7) Tradition and conformity form a set that 'stresses self-restraint and submission'; (8) Conformity and security form a set that 'emphasizes protection of order and harmony in relations'; (9) Security and power form a set that 'stresses avoiding or overcoming the threat of uncertainties by controlling relationships and resources', or uncertainty.

For the seventh set formed by tradition and conformity value types, Schwartz (1992) found through analysing the data samples drawn from 20 countries, using Guttman-Lingoes Smallest Space Analysis (SSA), that both value types are located in the same wedge of the circular structure that portrays the value types. This finding led Schwartz to suggest that they share the same broad motivational goal of 'subordination of self in favour of socially imposed expectations' (Schwartz 1992, p. 40). In this wedge, tradition type values formed the periphery of conformity type values, probably because of the difference in objects to which one subordinates the self. The objects tradition values relate to, for subordinating the self, are more abstract: religion and cultural customs. In contrast, the objects conformity values relate to, for subordinating the self, are persons with whom one has frequent interaction.

*2.5.2.4 Conflicts*

Besides sets of compatible value types, Schwartz (1992, p. 15) also argues for the existence of at least three sets of value types in this same circular structure that are in conflict with one another as follows: (1) There is the set that involves self-direction and stimulation versus conformity, tradition and security: where the former emphasises 'own independent thought and action, and favouring change', the latter emphasises 'self-restriction, preservation of traditional practices, and protection of stability'. (2) There is the set that involves universalism and benevolence versus achievement and power: where the former is concerned with 'acceptance of others as equals and concern for their welfare interests', the latter

emphasises the 'pursuit of one's own relative success and dominance over others'. (3) There is the set that involves hedonism versus conformity and tradition: where the former involves 'indulgence of one's own desires', the latter emphasises 'restraint of one's own impulses and acceptance of externally imposed limits'.

*2.5.2.5 Value Dimensions (Higher order value types)*

From 97 samples in 44 countries, Schwartz (1994a) found evidence that the ten value types could be organised into four higher order value types in the two dimensions of self-enhancement versus self-transcendence, and openness to change versus conservation, which are also portrayed in Figure 2.4. Self-enhancement covers power and achievement type values, and it emphasises self-interest, pursuit of one's own success and dominance over others, whereby individuals are motivated to enhance their own personal interests and outcomes, even at others' expense. Self-transcendence covers universalism and benevolence type values, and it emphasises concern for the welfare and interests of others (acceptance of others as equals) and of nature, while transcending selfish concerns. Openness to change covers self-direction and stimulation type values, and it emphasises independent action, thought and feeling, and readiness for new experience, whereby individuals are motivated to follow their own intellectual and emotional interests. Their directions may, to some extent, be unpredictable and uncertain. Conservation covers security, conformity and traditional values, and it emphasises self-restriction, order and resistance to change, whereby there is the protection of stability or preservation of the status quo and the certainty provided in relationships with others. These two dimensions reflect the different motivational goals of the ten value types and the two major conflicts that organise the whole value system (Lindeman & Verkasalo 2005, p. 177).

In Figure 2.4, hedonism (shown by the dashed line) encompasses openness to change and self-enhancement. This is because hedonism shares some elements with each dimension. With openness to change value types of self-direction and stimulation, hedonism shares some degree of motivation interest for arousal and challenge. With self-enhancement value types of achievement and power, hedonism shares the focus on self.

*2.5.2.6 Motivational Continuum*

The circular structure presenting the ten value types schematically also serves to show that each value type is underscored by a continuum of related motivations; so the partitions between the value types are arbitrary, and conceptually convenient. Fuzzy boundaries ensure the motivational meanings of the values near or at these boundaries overlap somewhat. As a result, the mixture of values from adjacent value types can emerge during empirical studies.

The pattern of intercorrelations with all other values reflects the meaning of a value (Schwartz & Sagiv 1995). In other words, specific values lying near a partition line express some motivational goals of the value types on either side of that partition line. Schwartz (1992) found evidence of various specific values that support this phenomenon during his SSA study, validating this circular structure of ten value types.

For instance, within the security value type: The specific security values of social order, national security and family security, which relate to collective interests, were found to lie in the region adjacent to conformity and tradition values; on the other hand, the specific security values of health and a sense of belonging, which relate to individual interests, lie in the region adjacent to power values. Within the universalism value type: The specific universalism values social justice and world at peace, which express concern for the welfare of others, lie in the region adjacent to benevolence values; on the other hand, the specific universalism values wisdom and broad-mindedness, which relate to one's own judgment and understanding of diversity, lie in the region adjacent to self-direction values. Within the benevolence value type: The specific benevolence values loyalty and responsibility, which relate to the maintenance of solidarity with others, and wishing to enhance others' welfare and avoid violating the expectations of others, lie in the region adjacent to conformity values. Within the power value type: The specific power values of preserving public image and social recognition, which may relate to the control of uncertainty in relationships, lie in the region adjacent to security values. Thus, the locations of these specific values in the circular structure of the ten value types show that each value type is underscored by a continuum of related motivations, rather than being discrete. As the differences between value types are meaningful, the value types are generally treated as discrete for the benefit of research.

In summary, this section has: (1) provided justification for using Schwartz's value model for the development of possible interactions of work engagement with personal values; and (2) provided a review of what and how values are organised in this model. The next section will use this review to postulate which personal values are more dominant than others in their relationships with work engagement, and whether the relationships are positive or negative.

## 2.6 Possible Interactions of Work Engagement with Personal Values

As highlighted in Chapter 1 and earlier in this chapter, there are many benefits (namely individual and organisation performance, as well as individual well-being) to understanding how work engagement can be created or enhanced at the workplace. However, extant literature on the antecedents for positive interventions at the workplace are mainly

contextual (job and personal resources), and their influence is seemingly limited because they ultimately depend on individual differences and individual perceptions. A review of the literature indicates: (1) personal values could be the core reason affecting work engagement; and (2) the existence of theoretical support to the plausible basic relationship in Model 0, portrayed in Figure 2.3.

### 2.6.1 RQ1: How do Personal Values affect Work Engagement?

To capitalise on the plausible relationship in Model 0 to exploit the various benefits of management by personal values (e.g. prediction before hiring, increase loyalty after hiring, and organisation performance), as highlighted in Section 1.2.3 in Chapter 1, it is important to postulate what the dominant personal values are and how they relate to work engagement for subsequent investigation. Thus, the following pair of research questions is asked:

> Research Question 1.1 (RQ1.1): Which personal values are associated positively with work engagement?
>
> Research Question 1.2 (RQ1.2): Which personal values are associated negatively with work engagement?

The findings, regarding these research questions, may usefully contribute to further understandings of work engagement as a management construct in organisational behaviour. In addition, the findings may provide unique, complementary or contradictory information on the key constructs of values and work engagement. The findings from this research may contribute to extant understandings of the aetiology of work engagement. In contrast, they may also add to the extant knowledge of the operationalisation of values, by investigating the relationship of values to work engagement as the behavioural outcome (Hattrup, Karsten & Jones 2007, p. 495).

According to Bakker et al., engaged employees are more likely to find work fun (2008, p. 190), i.e. working for pleasure and sensuous gratification for oneself. They are thus likely to focus on one's self-interest rather than for others, and are likely to be self-directed and excited during work. These descriptions connote engaged individuals value hedonism, self-direction and stimulation. Hakanen, Schaufeli and Ahola (2008, p. 88) describe engaged employees as those who enjoy 'absorption in work' and whose experience of 'vigour and dedication facilitates extra-role behaviour such as taking initiative at work'. This description implies engaged individuals value achievement. Taken together, these interpretations of work engagement lead the researcher to postulate the following hypothesis (H1), that relates the

higher order value types in Schwartz's (1992) value model serving individual interests to engaged employees, possibly answering RQ1.1:

> Hypothesis 1 (H1): Self-enhancement and openness to change values (self-direction, stimulation, hedonism, achievement and power value types) are positively related to work engagement.

As guided by Schwartz (1992, p. 54), when hypotheses are generated about value priorities with other variables, there can be implications for the relations of other value priorities, as individuals' value systems may be conceived as an integrated circular structure of ten motivational value types, as portrayed in Figure 2.4. Thus, given the generation of hypothesis H1, as self-transcendence and conservation values motivationally conflict with the self-enhancement and openness to change values respectively, the researcher further postulates the following hypothesis (H2):

> Hypothesis 2 (H2): Self-transcendence and conservation values (universalism, benevolence, conformity, tradition and security value types) are negatively related to work engagement.

### 2.6.2 RQ2: How do Demographic Profiles affect Work Engagement?

Besides personal values, demographic profiles (e.g. age, gender, marital status, parenthood status and education) are also basic factors that differentiate individuals. They can affect individuals' value orientations, as posited by Schwartz (1992) when he reasons that values exemplify universal requirements of human existence which are biologically and socially based, and necessary for welfare and survival. In line with this perspective that demographic profiles affect values, Meglino and Ravlin (1998, p. 354) argue that values are the products of a culture or social system. This is because individuals are influenced by personal experiences and exposure (both of which relate to their demographic profiles) to formal socialisation forces. They may consequently learn to behave in ways that are appropriate in their social environment. In the interest of investigating the relationships of personal values and work engagement, the researcher is concomitantly led to ask the following research question:

> Research Question 2 (RQ2): Do demographic profiles such as gender, age, marital status, parenthood status in terms of number of children, and education qualification influence the extent personal values affect work engagement? If so, why and how do they influence?

From the literature, there are apparent empirical evidences that show personal values can be affected by demographic profiles. For instance, Schwartz (2006) found indications from different samples in 20 countries (total sample size about 35,000) that correlations exist between demographic profiles of age, gender and education, and personal values. He reasons that historical events related to age cohorts, physical aging and life stage affect value change. Regarding gender, psychoanalysis, evolutionary and social role theories suggest different value priorities between men and women. For education, he reasons that a broadening of perspectives from educational experiences affects one's values. In a later survey of 316 participants from Chinese enterprises, Li, Liu and Wan (2008) also found that values were likely to be the product of employee's age, education and gender. If demographic profiles are antecedents to personal values and one may consequently learn to behave in ways that are appropriate in the social environment (e.g. work context), Model 0 in Figure 2.3 may be refined to Model 1 in Figure 2.5. Here, personal values mediate the relationships of demographic profile and work engagement, where work engagement is the consequent behaviour.

**Figure 2.5. Model 1 showing Personal Values mediate the Relationships of Demographic Profile and Work Engagement**

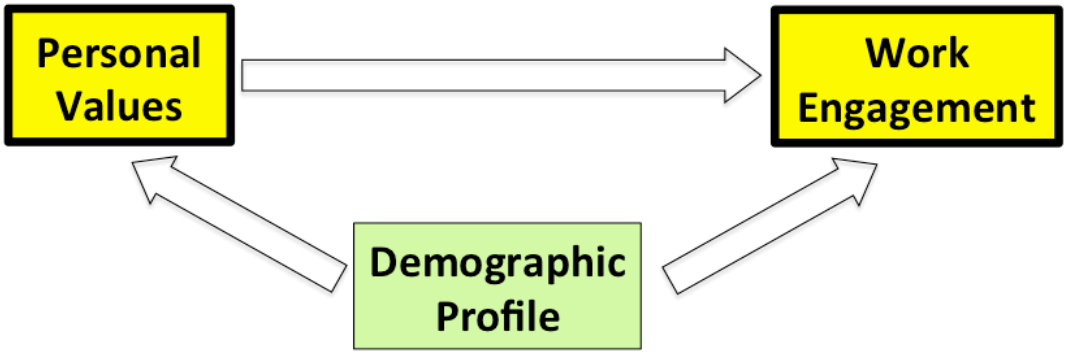



This leads to the third hypothesis:

> Hypothesis 3 (H3): Personal values play a mediating role between demographic profiles and work engagement.

On a separate note, there is also apparent empirical evidence to show that demographic profiles affect work engagement. For instance, findings from the UK's Institute of Employment Studies (Robinson, Hooker & Hayday 2007; Robinson, Perryman & Hayday 2004) show that work engagement may vary with some demographic profiles such as age and parenthood status. If demographic profiles do affect work engagement, one may refine Model 0 to Model 2 in Figure 2.6, instead of Model 1. Here, the demographic profile moderates the relationships of personal values and work engagement.

**Figure 2.6. Model 2 showing Demographic Profile moderates the Plausible Relationships of Personal Values and Work Engagement**




This leads to the fourth hypothesis:

> Hypothesis 4 (H4): Demographic profiles play a moderating role between personal values and work engagement.

As it is unclear whether demographic profiles are primarily the moderator, or personal values are primarily the mediator, in the relationships between demographic profiles, personal values and work engagement, both Models 1 and 2 need to be investigated subsequently in this research to test Hypotheses H3 and H4. Both models are worth investigating because they imply that demographic profiles may or may not influence which personal values are positively, negatively or not correlated to work engagement. Conversely, in practical terms, the outcome of this investigation can mean that employees with particular personal values may or may not be engaged employees, depending on their demographic profiles. Findings from the investigation of these two models can potentially help employers better engage employees from different demographic backgrounds.

In summary, this chapter has so far presented a literature review of the work engagement construct, how it may be related to personal values, and what interactions are theoretically possible between them. Given this state of knowledge, the researcher believes that the conceptual Models 0, 1 and 2, and their associated hypotheses, are best investigated quantitatively in the next phase of research. The justifications and details of this quantitative approach will be further elaborated in the next chapter. Finally, to facilitate subsequent analysis of the results collected in this research, which is conducted in Singapore, the context of Singapore at the time of this research is next presented in the final section of this chapter.

## 2.7 Context of Singapore

Singapore is a city-state that is strategically located on an island at the southern tip of the Malay peninsula in South East Asia (Koh & Barraclough 2012; Wong 1982). In 2013, according to the published statistics of Singapore by its Ministry of Trade and Industry (2014a), Singapore has a land area of 716 square kilometers and has a multi-racial population of 5.4 millions. In this population, 3.8 millions are residents who are either citizens or permanent residents; of these 3.8 millions, 74.2% are Chinese, 13.3% are Malays, 9.1% are Indians and 3.3% are from other ethnic groups (Ministry of Trade and Industry 2014b). According to U.S. Bureau of Labor Statistics (2013), the GDP per capita of Singapore was USD 60,742 in 2011, and second highest in the world, just behind Norway (USD 61,900). In 2013, the major industries that contributed to Singapore's GDP were manufacturing, wholesale and retail trade, finance and insurance, and business services (Ministry of Trade and Industry 2014a).

Singapore became independent as a city-state in 1965 when it was forced to separate from Malaysia (Tan 2012; Yeo, Tan & Niehart 2012). As a result of its historical background, the momentous events leading to its independence and the demographic challenges it faces, its government and the people have been adopting a pragmatic approach in their nation building (Shatkin 2014; Yeo, Tan & Niehart 2012). With its pragmatic approach, it managed to achieve First World country status from Third World within 30 years after independence (Chang 2003; Yeo, Tan & Niehart 2012). Its society is known to be 'globally-savvy', 'well plugged-in' and 'highly adept' (Lee 2002, p. 111). It is noted to be a 'high-income and technologically advanced nation marked by political stability and economic resilience' (Koh & Barraclough 2012, p. 3). Given aforesaid achievements as well as the various economic successes highlighted at the start of Chapter 1, Singapore is a potentially interesting country to explore how personal values may be related to work engagement. This section gives a brief account of these contexts, the key themes that make up the pragmatic approach Singapore adopts in its nation building, and how they affect the culture of its people, and pose various challenges to them.

### 2.7.1 Historical Background

Historically, Singapore has been a trading port for centuries because it is geographically located at the crossroads of sea trading routes in South East Asia linking countries in Indian Ocean to countries in Pacific Ocean (Wong 1982). In 1819, it became a British colony (Hill & Lian 2003; Yeo, Tan & Niehart 2012), and under the British administration, Singapore continued to develop as a centre for free trade with a growing

population of migrants (Hill & Lian 2003). According to the study by Ang and Stratton (1995) on multiculturalism in Singapore, Singapore had about 1000 inhabitants in 1819, made up primarily of indigenous Malays; by 1860, the population grew to 80,000 with Chinese immigrants making up the dominant group.

Briefly in World War Two, Singapore was occupied by the Japanese, and sovereignty was reverted to the British after the Japanese surrendered (Noor & Leong 2013). In 1959 as the British Empire consolidated after World War Two, Singapore was given self-governance by the British (Hill & Lian 2003; Yeo, Tan & Niehart 2012). In 1963, Singapore merged with the Malay peninsula to form Malaysia so as to capitalize on the latter for support of Singapore's survival (Hill & Lian 2003; Yeo, Tan & Niehart 2012).

Since its self-governance from 1959, Singapore has continuously been ruled by one political party – the People's Action Party (PAP), as it has been able to win over the voters in every election (Shatkin 2014; Tan 2012). Under its leadership and directions, Singapore grew originally as a port city under the British to an industrial city via foreign investment (Clark & Kim 1995; Ho & Ge 2011; Perry et al. 1997). The purpose of this industrialized approach was to acquire manufacturing capabilities so as to provide employment, and thereby, reduce poverty dramatically (Sidhu, Ho & Yeoh 2011) in a developing country.

### 2.7.2 Momentous Events Leading to Independence

The momentous events leading to the independence of Singapore in 1965 were unsettling and traumatic (Hill & Lian 2003). These were because (1) the separation of Singapore from Malaysia was abrupt, and arose from communal political conflict (Koh & Barraclough 2012), and (2) Singapore, as a small country with no natural resource, was left to fend for itself to establish a socially, economically and defensively viable state, at a time when British military was withdrawing and ethnic tensions were high in the region (Hill & Lian 2003). According to a fact sheet issued by Singapore's Ministry of Information and the Arts,

> [After the separation in 1965, Singapore] commenced the struggle to survive and prosper on its own and to build a national identity and consciousness among a disparate population of immigrants (Ministry of Information and the Arts 1993).

Shatkin (2014) explains Singapore was understandability in a period of crisis as it has previously sought entry in 1963 into Malaysia because Singapore political leaders feared that its small state of 800,000 inhabitants could not survive without the support of Malaysia. Koh and Barraclough (2012) explain in their study of Singapore's security, the withdrawal of

British military reinforced Singapore's sense of innate vulnerability as a small island wedged between two large and populated neighbors (Malaysia and Indonesia).

In Malaysia's considerations for the separation, they were worried that (1) the predominant Chinese population could upset the ethnic balance in Malaysia as the latter was predominated by the Malays, and (2) the geopolitical possibility of Singapore as a potential base for communists related to China (Hill & Lian 2003; Shatkin 2014; Yeo & Lau 1991). Noor and Leong (2013) also noted that in the two years as part of Malaysia from 1963 to 1965, Malaysia also perceived Singapore as an economic and political rival whereby Singapore advocated equal treatment of all races while Malaysia advocated pro-Malay policies. These concerns were also exacerbated by racial riots in Singapore in 1964 between Chinese and Malay (Gwynne 2013; Noor & Leong 2013). As a result of Malaysia's concerns, Singapore was expelled from Malaysia in 1965 (Hill & Lian 2003; Noor & Leong 2013).

### 2.7.3 Pragmatic Approach in Nation Building

Sensitive to the fragile nature of the social fabric in Singapore and constantly reminding itself of the traumatic times that led to its independence, Singapore adopts a pragmatic approach in its nation building, whereby maintaining social stability is a key emphasis (Chong 1987; Shatkin 2014; Yeo, Tan & Niehart 2012). Chong (1987) explains that Singapore adopts open and pragmatic practices because it has always opened itself to foreign influences when the population that forms the young nation consists largely of migrants. Seeking to protect itself in a region known for its historical instability (Lee 2012b), Oswin and Yeoh (2010) note that since independence: (1) Singapore pragmatically strives to draw sustenance from the international economic system as a 'global city' rather than a 'regional city' (Rajaratnam 1972, p. 19); and (2) Singapore manages its different races through the 'logic of 4Ms + M', that comprises the philosophies of multiracialism, multiculturalism, multilingualism, multireligosity plus meritocracy. In terms of national defence, Singapore pragmatically joined a five-nation defense treaty with United Kingdom, Australia, New Zealand and Malaysia, and developed for itself a sophisticated Army that involved conscription to deter threat against Singapore (Koh & Barraclough 2012).

#### *2.7.3.1 Logic of 4Ms + M*

The practice of the 'logic of 4Ms + M' in Singapore serves to pacify and contain ethnic and religious demands so as to facilitate nation building (Hill & Lian 2003). For instance, various researchers (e.g. Hill & Lian 2003; Shatkin 2014; Yeo, Tan & Niehart 2012) note that ethnic quota is made mandatory in housing and electoral seats, and English has been established as a national language. They note that these policies were enacted to ensure (1) no

formation of any major ethnic enclave that may disrupt social cohesion, and (2) different ethnic groups have English as a common language for communication, i.e. lingua franca, while allowing Chinese, Malay and Tamil to remain as official second languages. Gwynne (2013) notes that English is also promoted as a language that facilitates progress and development in science and technology (Tong & Pakir 1996). For meritocracy, Hill and Lian (2003) argue that meritocracy complements the 4Ms as it facilitates social mobility and non-discrimination against any ethnic group, and together, the 'logic of 4Ms + M' contribute to the development of Singapore's sense of sovereignty and nationality.

*2.7.3.2 Human Capital and Traditional Asian Work Ethics*

Noor and Leong (2013) note that pragmatic realism and market considerations have led Singapore to treasure (1) human capital and (2) those traditional Asian work ethics that are related to self-reliance and hard work because of the lack of natural resources and domestic hinterland in Singapore. Oswin (2012) notes this pragmatic approach to treasure human capital in the National Day speech by Singapore's Prime Minister Goh in 1999. The latter emphasised in his speech that for Singapore to vie to be a 'key global node', Singapore 'must' be 'an oasis of talent' because 'who wins depends on who attracts the most talent' (Oswin 2012, p. 1629). As for the emphasis on traditional Asian work ethics, Gopinathan (1980) notes in his case study of Singapore as a plural society, that Singapore seeks to mobilise ethnic pride and Asian cultural tradition to promote economic growth, and yet, be able to manage its diversity at the same time. Other researchers (e.g. Noor & Leong 2013; Rahman & Tong 2013) reinforce this view when they note the adoption of a dual language policy in Singapore (whereby English is the first language, and native language as the second) facilitates intercultural contact, equality (Taylor 1994) and mutual respect to enhance social cohesion, and yet help maintain the preservation of identity of each ethnic group (Clammer 1985; Lee 2008). Supporting this view, Gopinathan (1980) notes the following perspective of Singapore's first Prime Minister Lee Kuan Yew:

> [Having a dual language policy] is not just learning the language. With the language goes the fables and proverbs. It is the learning of a whole value system, a whole philosophy of life, that can maintain the fabric of our society intact. (Lee 1972, p. 9)

*2.7.3.3 Collective and Risk-adverse*

As a result of a pragmatic approach to its nation building and survival, the population in Singapore is encouraged to maintain collectives values as opposed to that of individualism, and citizenship is associated more with 'duties and obligations than with rights' (Hill & Lian 2003, p. vii). Tan (2012) notes that Singaporeans are constantly reminded to practise self-

restraint in the interest of peace, efficiency and growth as a country, and not take its achievements for granted, and this pragmatic approach seems to make Singaporeans risk-adverse. In turn, Koh and Barraclough (2012, p. 5) argue that the continual support since independence by Singaporeans to re-elect its government, who has been reminding them to take a pragmatic and conservative approach in nation building, is evident that Singaporeans support this risk-aversion mentality for the sake of 'national security and economic advancement'.

### 2.7.4 Demographic and Infrastructural Challenges

The pragmatic approach adopted in Singapore for nation building also poses various demographic and infrastructural challenges (e.g. Jones 2012; Noor & Leong 2013; Saw 2007). Singapore government has the belief that foreign labour (i.e. human capital) can add value to local economy, ensure its competitiveness, and lead to creation of more jobs for people in Singapore (Ho & Ge 2011; Noor & Leong 2013). As a result, Singapore has been quite open to the introduction of foreign labour to augment its domestic workforce as a mix of non-resident (who requires employment or work permits) and resident (who migrates to Singapore) workers (Ho & Ge 2011). However, this openness in immigration policy has also generated concerns over the consequent strain on social services (e.g. education) and infrastructure (e.g. housing and transport), and a sense of job insecurity among its people (Noor & Leong 2013; Welsh 2011). As an illustration, the proportion of non-resident workers in Singapore grew from 10% of the Singapore labour force in 1980 to 34.4% in 2008 (Ho & Ge 2011). This predicament is compounded by an anaemic birth trend and rapid ageing demography in Singapore that need to be stemmed so as to alleviate any decline in old-age support ratio (Noor & Leong 2013). Saw (2007) noted that without immigration, there would be fewer than three working-age adults to support one Singaporean aged 65 and above, lest taxes are raised to fund social expenditure associated with low old-age support ratio.

On another note, as Singapore prospers, its income disparities have also become one of the highest in the world (Gini coefficient of 0.465 in 2010), and this implies that its social cohesion runs the danger of erosion if its successful and rich people cannot empathise with the less fortunate locals in Singapore (Noor & Leong 2013). In addition, Jones (2012) notes the very pressures to focus on economic growth and having an open immigration policy to attract foreign labour or talents may ironically contribute to the inability of its locals to reproduce itself.

# CHAPTER 3: QUANTITATIVE STUDY 1

The purpose of this chapter is to report on the quantitative study briefly referred to at the end of the previous chapter. The reason for beginning this research with a quantitative study is first explained in this introduction. Such an explanation of the choice of research method is a step in the research process between gaining clarity on the research focus and starting on fieldwork, as noted by Buchanan and Bryman (2007).

As the preceding chapters in this thesis have highlighted, work engagement is related to both individual and organisational performance. These chapters also highlighted that the extent to which contextual interventions (such as job and personal resources) create and / or enhance work engagement may be limited. Further, evidence exists within the literature (e.g. Kahn 1990; Leiter 2008; Park & Gursoy 2012; Schaufeli et al. 2001) that variables, which are core to an individual, such as personal values, may be a crucial factor in the different engagement levels of individuals at work. These insights contributed to the development of the conceptual frameworks in Figures 2.3, 2.5 and 2.6 in Chapter 2, which illustrate the possible interactions of personal values, demographic profiles and work engagement for further investigation in this research.

To determine the choice of research method in a scholarly investigation, Fassinger and Morrow (2013), and Ponterotto, Mathew and Raughley (2013) advocate methodological situationalism. They argue that when selecting a research method, the researcher has to look at the research questions (i.e. on the interactions of personal values, demographic profiles and work engagement) and the state of knowledge regarding them. Singh (2007) also argues that the decision on which research method to use involves identifying and determining available information in the research, and accounting time and cost factors to collect information using the particular method. Veal (1997) claims there is no right or wrong choice of research method, but only whether the particular method is appropriate or inappropriate for the research. In terms of appropriateness, Lancaster (2005) highlights the need to check the purpose of the data and the data quality (validity, reliability and generalisability).

In this research, well-validated conceptual frameworks have been developed to measure both key variables: personal values and work engagement. Schwartz's (1992) value model has a long established operational usage, and Schaufeli et al.'s (2002b) perspective of work engagement has been identified and justified. Later in the chapter (Section 3.3), Schwartz's Value Survey and the Utrecht Work Engagement Scale will be further elaborated

as the selected measurement instruments. In the previous chapter, the researcher developed hypotheses to relate the independent variables of personal values and demographic profiles to each other, and to the dependent variable work engagement. An appropriate research method that can capitalise on this state of knowledge, to reliably affirm the relationships between these variables (personal values, demographic profiles and work engagement), and accept or reject the hypotheses, is required.

The researcher determined that commencing research with a quantitative study is appropriate for the following reasons. First, the rigour of validity and reliability checks, and statistical analysis of collected numerical data in a quantitative study (Castro et al. 2010; Creswell 2008; Veal 1997) will be appropriate to confirm or disconfirm the developed hypotheses. This is because a hypothesis is an educated guess of the relationship between variables, and they are to be tested (Cohen, Manion & Morrison 2011; Kerlinger 1970). A quantitative study is appropriate, as its focus is on testing theories such as models and hypotheses using measurement and observation (Tacq 2011) to determine the relationships between variables (Singh 2007). It uses a structured procedure to collect information and emphasises objectivity through statistical analysis (Polit & Hungler 1995; Santy & Kneale 1998). Asking the same questions in the same precise way in quantitative research makes it more reliable than other research methods, such as qualitative research (Goldman & McDonald 1987).

Second, and more importantly, a quantitative research method is used when clear concepts and hypotheses have been developed; this is the case in this phase of the research. Clear concepts and hypotheses are needed so that numerical data can be collected and analysed to derive objective knowledge, using deductive reasoning (Bowling 2009) to explain changes in social facts (Firestone 1987). Thirdly, quantitative research can yield a general understanding of the phenomenon being investigated as it can refer to data collected from larger samples (Creswell & Plano-Clark 2007). The general understanding can support further in-depth exploration of the phenomenon, or assist with the design of the next research phase (Newman & Benz 1998; Rossman & Wilson 1985). This is the post-positivist approach, as noted by Muijs (2004) and Tacq (2011). Muijs (2004) notes that post-positivists, like positivists, perceive that researchers can uncover existing truths or reality through objective research methods. However, while hypotheses are tentative explanations for particular set of facts, post-positivists accept that researchers cannot totally uncover the reality because of one's subjective shaping of reality (Muijs 2004). Social facts, including thoughts and observations, are social constructions instead of objective and universal truths (Cohen, Manion & Morrison 2011; Nisbett 2005). The facts, information and awareness of the world

are conjectural and falsifiable (Popper 1968). Post-positivists believe researchers can only do their best to try and approximate that reality (Muijs 2004). Thus, post-positivists believe objective research focuses on drawing confidence from collected quantitative findings, whereby the confidence can result in a general understanding of a phenomenon for further investigation.

Fourth, quantitative research has the ability to systematically handle large amounts of collected data quickly and consistently, and very efficiently locate outliers and find correlations (Fabozzi, Focardi & Ma 2005). A quantitative research method with a correlational design is thus an efficient research approach to reliably produce generalisable findings on relationships between variables that are useful in exploratory research (Roberts & Taylor 1998), such as this research. Finally, quantitative research makes use of the operationalised instruments of the specific constructs (personal values and work engagement) to study their relationships, and also allows for group comparisons (Castro et al. 2010; Seale 2004). Group comparisons are required in this research to investigate the influence of demographic profiles on the interactions between personal values and work engagement.

In this chapter, the quantitative methodology and results to investigate the relationships between work engagement and personal values in conjunction with demographic profiles are reported. This quantitative investigation, also known as Study 1, aims to elicit quantitative findings to answer the following research questions and the associated hypotheses raised and postulated respectively when the literature was reviewed in Chapter 2:

Research Question 1 (RQ1): What personal values are predominantly associated with engaged employees?

> Hypothesis 1 (H1): Self-enhancement and openness to change values (self-direction, stimulation, hedonism, achievement and power value types) are positively related to work engagement.
>
> Hypothesis 2 (H2): Self-transcendence and conservation values (universalism, benevolence, conformity, tradition and security value types) are negatively related to work engagement.

Research Question 2 (RQ2): Do demographic profiles such as gender, age, marital status, parenthood status in terms of number of children, and education qualification influence the extent personal values affect work engagement? If so, why and how do they influence?

> Hypothesis 3 (H3): Personal values play a mediating role between demographic profiles and work engagement.

Hypothesis 4 (H4): Demographic profiles play a moderating role between personal values (PVs) and work engagement (WE).

## 3.1 Quantitative Research Design

Within quantitative research, there are various design approaches. They include experimental, quasi-experimental, survey and observations: experiments and surveys are the main categories (Clark-Carter 2004; Haslam & McGarty 1998; Santy & Kneale 1998). For this research, a survey approach covering questions on respondents' demographic profiles, WE and PVs has been adopted because of the various benefits a survey approach offers. First, surveys are easy to administer, as respondents can answer questionnaires on their own (i.e. self-report), allowing for a relatively large amount of data to be collected in a shorter amount of time (Clark-Carter 2004; Haslam & McGarty 1998) than with interviews and experiments. With the large amount of data collected, confidence in the conclusions drawn from the findings can increase (Haslam & McGarty 1998). Second, the use of a standard format in surveys can also increase reliability of collected data, as there can be consistency in the way questions are asked, and in the way people respond (Clark-Carter 2004). Third, the consistent way data are collected makes the data quantifiable, facilitating statistical analysis (Clark-Carter 2004). Fourth, unlike experiments, surveys also allow researchers to collect various aspects of the phenomenon in question at the same time (Haslam & McGarty 1998). Finally, surveys are simply observations, non-intrusive and with no intervention in respondents, unlike experiments (Roberts & Taylor 1998).

## 3.2 Sampling Procedure

The selection criterion for participants in this study is anyone who had past or present work experience in Singapore. In this research, participants were sampled from public places, such as downtown shopping districts in public areas (not inside shopping centres), recreation parks and taxi stands in Singapore, from May 2009 to October 2009. This approach of sampling from public places was adopted to ensure a high response rate and to ensure the participants were sampled from a diverse range, with different demographic profiles of gender, age, marital status, parenthood status, and education qualification.

Eleven research assistants (RAs), trained by the researcher, were used to approach potential participants from the general public. The RAs were trained by the researcher to randomly select potential participants to cover the various demographic profiles identified for this study; they were also trained to invite the latter to take part in this study. In their

invitation, the RAs used the recruitment material in Appendix 1 to explain to potential participants the purpose of this study and the anonymous nature of their participation.

Together with the recruitment material, the participants were given an information sheet about the survey being conducted by the RAs, as shown in Appendix 2. The information sheet further explained the purpose and confidentiality of the survey, and also highlighted that (1) participation in the survey was strictly voluntary, (2) participants were not obliged to complete all the questions, and (3) participants were also allowed to exit the survey at any point. A sample of the survey questionnaires is shown in Appendix 3. The survey questionnaires comprised three sections. The first section asked the participants for their demographic data. The second section asked for the participant's level of WE. The third section asked for the participant's PVs. As the questionnaires were anonymous, return of hard copies of anonymous questionnaires implied consent.

## 3.3 Instruments

Two instruments were used for data collection. They were the WE instrument and the PV instrument. Both instruments were used to collect empirical data to study the relationships between WE and PVs. Each is further described below.

### 3.3.1 Work Engagement Instrument

Several instruments have previously been developed to measure WE (Schaufeli & Bakker 2010). In the academic literature, those that have been validated more extensively (Bakker et al. 2008) are the Maslach Burnout Inventory (MBI; Maslach, Jackson & Leiter 1996), the Oldenburg Burnout Inventory (OLBI; Demerouti & Bakker 2008) and the Utrecht Work Engagement Scale (UWES; Schaufeli et al. 2002b). Both MBI and OLBI adopt the approach that engagement is perfectly negatively correlated to burnout (Bakker & Demerouti 2008). This approach was reported in the previous chapter as operationalising engagement as the direct opposite of the dimensions defining burnout (Leiter & Maslach 1998; Maslach & Leiter 1997; 2008). However, not all researchers agree with this approach (e.g. Gonzalez-Roma et al. 2006; Schaufeli et al. 2002a; 2002b). This is exemplified by the opposite belief that an employee who is not burned-out is not necessarily engaged with work; 'for this reason, burnout and WE are two distinct concepts that should be assessed independently' (Schaufeli & Bakker 2003, p. 4). Thus, the second approach arose as reported in the previous chapter that operationalised engagement independently, distinctly and negatively related to burnout

(Gonzalez-Roma et al. 2006; Schaufeli & Bakker 2004; Schaufeli, Bakker & Salanova 2006; Schaufeli et al. 2002a; 2002b).

The instrument developed by this latter school of thought is known as the UWES. The UWES has been validated in many countries (Bakker et al. 2008), including the Netherlands (Schaufeli et al. 2002b), Spain (Schaufeli et al. 2002b), Finland (Hakanen 2002), South Africa (Storm & Rothmann 2003), China (Yi-Wen & Yi-Qun 2005), Japan (Shimazu et al. 2008) and Greece (Xanthopoulou et al. 2012). These investigations showed that UWES is a better fit to the data than alternative measures of WE (Bakker et al. 2008). In their literature reviews, Kim, Kolb and Kim (2013) and Shuck (2011) found that UWES is widely used to measure WE. Thus, given the direct, independent, distinct and established nature of UWES, UWES was selected for this research.

The UWES instrument used in this study is the UWES-9 (Schaufeli, Bakker & Salanova 2006; Schaufeli et al. 2002b), which has nine items organised into the three subscales of vigour (VI), dedication (DE) and absorption (AB), with three items each to reflect the underlying dimensions of engagement, as listed in Table 3.1. The UWES-9 was developed for pragmatic reasons (Schaufeli, Bakker & Salanova 2006): to measure WE with as few items as possible, to not bother respondents with a long questionnaire, and to lower the likelihood of attrition during usage of the questionnaire. The UWES-9 has been shown (Schaufeli, Bakker & Salanova 2006) to have acceptable psychometric properties using confirmatory analyses, and also good internal consistency and test-retest reliability.

**Table 3.1. Items in UWES**

| |
|---|
| VI1. At my work, I feel bursting with energy |
| VI2. At my job, I feel strong and vigorous |
| VI3. When I get up in the morning, I feel like going to work |
| DE1. I am enthusiastic about my job |
| DE2. My job inspires me |
| DE3. I am proud of the work that I do |
| AB1. I feel happy when I am working intensely |
| AB2. I am immersed in my work |
| AB3. I get carried away when I am working |

In the UWES, respondents are asked to indicate 'how do you feel about each' item using a Likert Scale ranging from 1 to 7, with 1 for 'never', 4 for 'sometimes or a few times a month', and 7 for 'always or every day'. The mean scale score of the three subscales (VI-Vigour, DE-Dedication and AB-Absorption) is computed by adding the scores on the particular scale and dividing the sum by the number of items of the subscale involved. A similar procedure is followed for the total score. Hence, this engagement instrument yields three subscale scores and a total score that ranges between 1 and 7, to indicate the levels of WE.

### 3.3.2 Personal Values Instrument

As elaborated in the previous chapter, Schwartz's model of PVs was adopted because: (1) it has been widely tested, validated and gained wide support in values research (Lindeman & Verkasalo 2005; Lyons, Duxbury & Higgins 2006); (2) its framework has been found to be applicable across cultures and languages, and this suits Singapore, as it is a multicultural country; (3) its organisation of PVs of the same motivational types along ten distinct value types makes it suitable to discern possible relationships between PVs and WE; and (4) the organisation of PVs along value types provides more reliable indices of value priorities (Schwartz 1994a). This is because one's behaviour tends to be influenced by more than one value of the same motivational type.

The instrument used in this study to examine participants' PVs, based on Schwartz's value model, is the Short Schwartz's Value Survey (SSVS; Lindeman & Verkasalo 2005). The SSVS has ten items, one for each of the ten value types in Schwartz's value model, with the related values that make up the value type in parentheses as descriptors, as shown in Table 3.2. Like UWES, the SSVS was also developed for pragmatic reasons (Lindeman & Verkasalo 2005); the Schwartz's Value Survey (SVS; Schwartz 1992; 1996), with its 57 items is too time-consuming for participants to complete. Thus, a more compact SSVS was developed for empirical value research that needs basic information about people's values, since the ten value types identified by Schwartz are the major value orientations recognised across cultures: 'SSVS is a convenient measure for conducting value comparisons' (Lindeman & Verkasalo 2005, p. 177). Lindeman and Verkasalo (2005) examined the ten-item SSVS in 4 studies involving 3907 participants and showed it to be a practical alternative to the original 57-item SVS; the studies revealed that SSVS has good reliability and validity, and high correlation to SVS.

**Table 3.2. Items in SSVS**

| |
|---|
| S1. Power (social power, authority, wealth) |
| S2. Achievement (success, capability, ambition, influential) |
| S3. Hedonism (pleasure, satisfaction, self-indulgence) |
| S4. Stimulation (daring, exciting, varied and challenging) |
| S5. Self-Direction (creativity, freedom, curiosity) |
| S6. Universalism (equality, world at peace, love nature) |
| S7. Benevolence (helpful, honest, forgiving, loyal, responsible) |
| S8. Tradition (respect, humble, devoted, modest) |
| S9. Conformity (obedient, respect, discipline, polite) |
| S10. Security (national / family security, social order, orderliness, reciprocation of favours) |

In the SSVS, respondents were asked to 'rate each value type on how important it is to you' on a 7-point scale ranging from -1 (opposed to it), 0 (not important), 3 (important), to 5 (of supreme importance). Like the SVS, employment of rating on the importance of values is used in SSVS, rather than ranking. Rating facilitates easier analysis of data collected and the measurement of 'negative' values, which are values that people prefer not to express or promote through their choices and actions (Schwartz 1992).

However, to avoid respondents' tendency to end-pile their ratings (Meglino & Ravlin 1998, pp. 354–356; McCarty & Shrum 2000, p. 271), and yet provide reasonable ease of collecting data and outcomes, to facilitate statistical analysis, a most-least procedure to measure values, as recommended by McCarty and Shrum (2000), was also used for this study. This method, which is a mix of normative and ipsative techniques, is similar to the best-worst scaling method advocated by Lee, Soutar and Louviere (2008), for use with SVS. Respondents were asked to select their most and least important values before rating the rest of the values in the survey. By so doing, McCarty and Shrum (2000) showed that 'the psychological distance respondents perceive among the values [when they rate] is increased' (p. 294). This allows respondents' true values to be measured. In addition, this can also reduce the tendency of shifts in respondents' subjective scales of importance, as they evaluate values of different importance to those evaluated previously (Schwartz 1992). This is because, if a most-least procedure is not implemented, there is the possibility that the correlations

among values, located a distance away round the circular structure of Schwartz's model of values, may not be accurate as the values rated on different subjective scales.

## 3.4 Method of Analysis

### 3.4.1 Use of Structural Equation Modelling (SEM)

To analyse quantitatively what PVs are associated with engaged employees (RQ1, H1 and H2) and how demographic profiles influence their relationships (RQ2, H3 and H4), a structural equation modelling (SEM) technique was used. This is because SEM facilitates the analysis of a network of hypothesised relationships (Millsap & Hartog 1988). All relevant paths in the network are directly tested and none are omitted (Baron & Kenny 1986). The confirmatory and exploratory analysis nature of SEM (Garson 2009) allows both hypothesised and non-hypothesised relationships among variables to be investigated. SEM is also a useful and popular technique to quantitatively estimate and test hypothesised models involving linear relationships among variables (Hoyle 1995; Kline 2005). In the study of relationships between WE, job resources (comprising job control, feedback and variety) and proactive behaviour, Salanova and Schaufeli (2008) also adopted the SEM technique.

To apply the SEM technique, AMOS 17.0 statistical software (Arbuckle 2008) was used in this study. With AMOS 17.0, the best fits were found for plausible relationships of WE with PVs and demographic profiles, using the conceptual Model 1 (mediator-oriented) and Model 2 (moderator-oriented) postulated in the previous chapter. Common to both models, the dependent variables exist in WE because it is the primary construct of interest that is being investigated in this research. Model 1 is used to investigate the relationship between PVs and WE, on the assumption that PVs perfectly mediate (Baron & Kenny 1986, p. 1,177), so that demographic profiles, as the independent variables, have no effect on WE. Model 2 is used to investigate to what extent demographic profiles, as the moderating variables, affect the strength of the relationships (Baron & Kenny 1986, p. 1,174) between the independent variables in PVs and the dependent variables in WE.

For demographic profiles gender and marital status, which do not have an intrinsic order (i.e. nominal in nature), Model 0, which only postulates the relationships between PVs and WE, was used for investigation in this study. This was instead of Models 1 and 2, both of which postulate the relationships between PVs, WE and the demographic profiles.

### 3.4.2 Variables

In these models, there are a total of eighteen variables. Five of them are demographic profiles. These are gender, age, marital status, parenthood status, and education qualification. For PVs, there are ten variables and they are the extent of importance one places on value types power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and security. The remaining three of the eighteen variables are vigour, dedication and absorption, which are the underlying dimensions of WE. As the models are complex with so many variables, each dimension (i.e. vigour, dedication and absorption) of the latent construct WE was examined separately.

### 3.4.3 Handling of Incomplete Inputs

Responses in which there were incomplete inputs to the WE and the PV scales were rejected. This was because complete inputs for these two scales were necessary to facilitate study into the relationships between them, and the relationships between them and the demographic profiles of the respondents. When investigating the influence of each demographic profile with PVs and WE, the inputs from respondents who did not give input to particular demographic profiles could not be used. These were thus also rejected for analysis. Omitting incomplete inputs from respondents for the observed variables being investigated is in line with the requirement of the AMOS statistical software for the use of modification indices (whose purpose will be elaborated in the next sub-section), which requires a dataset with no missing values (Garson 2009).

### 3.4.4 Finding Acceptable Fit

Before performing SEM, the normality of each variable was checked for the purpose of applying the Maximum Likelihood Estimation (MLE; Kline 1998). According to Schumacker and Lomax (2004, p. 69), who stated that if skew and kurtosis were within the range of +/- 1.0, normality may be assumed. In addition, the internal consistencies for the PV and WE scales were then computed for verification.

During SEM, checks for convergence and admissibility were made. Whenever convergence failed, the model was re-rationalised and adjusted to yield convergence and admissibility. When admissibility was achieved, the values of fit indices were checked for acceptable model fit. As noted by various academics (e.g. Garson 2009; Hooper, Coughlan & Mullen 2008), while there is no apparent consensus on which fit indices to report, a variety of indices is still required to reflect different aspects of model fit (Crowley & Fan 1997). For this study, the values of the fit indices $\chi^2$, Comparative Fit Index (CFI; Bentler 1990), Root Mean

Square Error of Approximation (RMSEA; Steiger 1990; Steiger & Lind 1980), Expected Cross-validation Index (ECVI; Browne & Cudeck 1989) and Hoelter's critical N (CN; Hoelter 1983) were checked and reported for acceptable model fit. $\chi^2$ was used as a general fit index, whereby large $\chi^2$ values indicate lesser fit (Garson 2009). However, $\chi^2$ is sensitive to sample size (Bentler & Bonnet 1980; Hooper, Coughlan & Mullen 2008; Jöreskog & Sörbom 1993; Kenny & McCoach 2003). So CFI and RMSEA, which are both less sensitive to sample size (Fan, Thomson & Wang 1999; Hooper, Coughlan & Mullen 2008), were also used. As a rule of thumb, values of CFI above or equal to 0.95 (Hu & Bentler 1999) and RMSEA below 0.05 (Browne & Cudeck 1993; Schumacker & Lomax 2004) indicate good fit. ECVI was used to compare fit of models where smaller ECVI is better (Barbara 2000; Garson 2009). Hoelter's CN was used to check on adequacy of sample size where values in excess of 200 indicate sufficient statistical power for analysis (Garver & Mentzer 1999; Hoe 2008; Hoelter 1983). However, considering that the recommended sample size for SEM is lacking consensus (Sivo et al. 2006), and there exists literature (e.g. Hoyle 1995; Leohlin 1992) to support the use of sample size of at least 100 for SEM modelling, the SEM results from sub-samples with sizes greater than 100 are used to stimulate further investigation, even if the CN < 200. Table 3.3 shows a summary of these fit indices used in this study, accompanied with brief explanatory notes for choosing them.

**Table 3.3. Fit Indices used in this Study**

| Fit Index | Main Highlights for Choosing the particular Fit Index | Criteria |
|---|---|---|
| $\chi^2$ (Chi-Square Index) | Basic measure of 'badness of fit' (Kline 2005) or 'lack of fit' (Mulaik et al. 1989); the bigger it is, the lesser fit is the model. | The smaller the better. |
| CFI (Comparative Fit Index) | One of the measures least affected by sample size (Fan, Thomson & Wang 1999; Hooper, Coughlan & Mullen 2008). Performs well even when sample size is small (Tabachnick & Fidell 2007). | Greater than or equal to .95 (Hu & Bentler 1999). |
| RMSEA (Root Mean Square Error of Approximation) | Fan, Thompson and Wang (1999) reported that this model fit measure is less sensitive to sample size. It also penalises model for lack of parsimony (Garson 2009; Hooper, Coughlan & Mullen 2008, p. 54). | Values below .05 as good fit (Browne & Cudeck 1993; Schumacker & Lomax 2004). |
| ECVI (Expected Cross-validation | Feedback extent of replicability of the model. Useful for comparing the fit of | The smaller the better (Barbara 2000, p. 86; |

| | | |
|---|---|---|
| Index) | models (Barbara 2000; Garson 2009). | Garson 2009). |
| Hoelter's CN (critical N) | Feedback the adequacy of sample size. | Value in excess of 200 (Hoelter 1983). |

When an acceptable fit was not initially found, additional relationships suggested by SEM modification indices were added until an acceptable fit was found. However, the adding of relationships is subject to theoretical and practical considerations, as fit indices give only a sense of the model's lack of fit (Barbara 2000, p. 88; MacCallum 1986; MacCallum, Roznowski & Necowitz 1992). When a fit is found for Model 1 (mediator-oriented) and also for Model 2 (moderator-oriented) for each demographic profile except gender and marital status, which do not have an intrinsic order (i.e. nominal in nature), the model with a lower value of ECVI was used to identify whether the mediator-oriented (Model 1) or moderator-oriented (Model 2) was a better fit. This is to facilitate the decision to accept either hypothesis H3 or hypothesis H4 respectively, and reject the other.

### 3.4.5 Identifying Significant Relationships

After finding a model that was a better fit, the model was then checked for parsimony to identify significant relationships between PVs, WE and demographic profiles. For a path parameter to be accepted based on a significant level of .05, the critical ratio had to be >$\pm$1.96 (Arbuckle 2008; Barbara 2000; Garson 2009). Having found models that fit and checked for parsimony, observations were then made of which PVs had significant positive or negative or no relationship to WE for each demographic profile. For demographic profiles gender and marital status, both of which are nominal in nature, the differences between men and women, and between married and singles for WE and its dimensions of vigour, dedication and absorption, and the value types, were elicited using t-test.

## 3.5 Sample Characteristics

A total of 313 responses were obtained. Two hundred and ninety four were accepted and 19 rejected; these 19 respondents did not respond completely to the UWES and SSVS instruments, which were critical to analysis. Table 3.4 shows the number of accepted responses for each demographic profile being studied here, and the distribution and mean for them. Among the accepted responses, 44.9% were men and 53.8% were singles. Most (72.1%) of the respondents were aged between 18 to 40 years old. The majority (57.7%) of

the respondents were yet to be parents. Most (78.5%) of the respondents had higher secondary to master degree for education qualification.

**Table 3.4. Number of Accepted Responses, the Distribution and Mean of each Demographic Profile of the Respondents**

| Characteristics | *N* | % | Mean |
|---|---|---|---|
| Gender | 287 | | N.A. |
| Men | | 44.9 | |
| Women | | 55.1 | |
| Age | 294 | | 31–40 years |
| 18–20 years old | | 26.9 | |
| 21–30 years old | | 21.4 | |
| 31–40 years old | | 23.8 | |
| 41–50 years old | | 16.7 | |
| 51–60 years old | | 9.5 | |
| > 60 years old | | 1.7 | |
| Marital Status | 288 | | N.A. |
| Single | | 53.8 | |
| Married | | 45.6 | |
| Widowed | | 0.3 | |
| Divorced | | 0.3 | |
| Parenthood Status | 291 | | 1 child |
| 0 child | | 57.7 | |
| 1 child | | 11.3 | |
| 2 children | | 24.4 | |
| 3 children | | 5.8 | |
| 4 or more children | | 0.8 | |
| Education Qualification | 294 | | Higher Sec, Polytechnic or College |
| Junior or Primary and below | | 1.4 | |
| High School or Secondary | | 19.4 | |
| Higher Sec, Polytechnic or College | | 39.1 | |
| Degree, Post Grad Diploma or Master | | 39.4 | |
| PhD or Doctorate | | 0.7 | |

## 3.6 Basic Statistics and Psychometric Properties of the Measures

The basic statistics and psychometric properties for the UWES and SSVS measures are shown in Table 3.5. The average WE score from the sample is 4.71. From the sample, the PV type with the highest rating of importance is benevolence, with a score of 3.79, followed by achievement (3.49) and security (3.63). The PV type with the lowest rating of importance is power, with a score of 2.30, followed by stimulation (2.81) and hedonism (2.89). In terms of the PV dimension, self-transcendence has the highest rating of importance, with an average score of 3.42 per value type, followed closely by conservation (3.41), openness to change (2.99). The lowest rating of importance is from self-enhancement, with an average score of 2.89 per value type, mainly because of the low rating of importance given to power value type.

**Table 3.5. Basic Statistics and Psychometric Properties for the Measures used in this Study (N = 294)**

**(a) UWES using Likert Scale from 1 to 7**

| Item | Mean | Standard Deviation | Variance | Skewness | Kurtosis |
|---|---|---|---|---|---|
| VI1. At my work, I feel bursting with energy | 4.69 | 1.196 | 1.429 | -.445 | .449 |
| VI2. At my job, I feel strong and vigorous | 4.63 | 1.221 | 1.490 | -.348 | .028 |
| VI3. When I get up in the morning, I feel like going to work | 4.28 | 1.558 | 2.427 | -.385 | -.386 |
| DE1. I am enthusiastic about my job | 4.87 | 1.283 | 1.646 | -.583 | .358 |
| DE2. My job inspires me | 4.58 | 1.498 | 2.244 | -.413 | -.355 |
| DE3. I am proud of the work that I do | 5.09 | 1.386 | 1.920 | -.693 | .225 |
| AB1. I feel happy when I am working intensely | 4.86 | 1.381 | 1.906 | -.498 | .138 |
| AB2. I am immersed in my work | 4.83 | 1.300 | 1.689 | -.589 | .371 |
| AB3. I get carried away when I am working | 4.52 | 1.518 | 2.305 | -.436 | -.235 |

Note: Average mean is 4.71.

**(b) SSVS using Likert Scale from -1 to 5**

| Item | Mean | Standard Deviation | Variance | Skewness | Kurtosis |
|---|---|---|---|---|---|
| S1. Power (social power, authority, wealth) | 2.30 | 1.556 | 2.421 | -.289 | -.005 |
| S2. Achievement (success, capability, ambition, influential) | 3.49 | 1.321 | 1.746 | -.463 | .674 |
| S3. Hedonism (pleasure, satisfaction, self-indulgence) | 2.89 | 1.491 | 2.224 | -.433 | -.046 |
| S4. Stimulation (daring, exciting, varied and challenging) | 2.81 | 1.304 | 1.699 | -.250 | -.128 |
| S5. Self-Direction (creativity, freedom, curiosity) | 3.26 | 1.196 | 1.429 | -.228 | -.085 |
| S6. Universalism (equality, world at peace, love nature) | 3.04 | 1.403 | 1.967 | -.146 | -.414 |
| S7. Benevolence (helpful, honest, forgiving, loyal, responsible) | 3.79 | 1.170 | 1.368 | -.291 | .251 |
| S8. Tradition (respect, humble, devoted, modest) | 3.41 | 1.323 | 1.752 | -.523 | .392 |

| | | | | | |
|---|---|---|---|---|---|
| S9. Conformity (obedient, respect, discipline, polite) | 3.20 | 1.403 | 1.968 | -.632 | .576 |
| S10. Security (national / family security, social order, orderliness, reciprocation of favours) | 3.63 | 1.359 | 1.846 | -.605 | .626 |

Note: The value type with the highest mean is benevolence (3.79); the lowest is power (2.30).

The skew and kurtosis statistics for both measures are within the range of ± 1.0. Thus, normality may be assumed (Schumacker & Lomax 2004, p. 69), and the method of Maximum Likelihood Estimate can be applied to them during Structural Equation Modelling (Kline 1998).

## 3.7 Reliability Assessment

The Cronbach's Alpha for UWES, subscales of UWES and SSVS are summarised in Table 3.6. The reliabilities of UWES and its subscales are all above 0.70. Thus, they are suited for statistical modelling, as the reliability of scales in general for statistical modelling (particularly structural equation modelling) should be .70 or above to guarantee proper measurement (Maruyama 1998; Nunnally 1978). However, the reliability of SSVS is 0.68, close but not above or equal to 0.70. As a lenient cut-off of .60 is common in exploratory research (Garson 2009, p. 4), and since this study explores the possible relationships between PVs and WE, the results measured using SSVS were accepted for further analysis.

**Table 3.6. Reliability Assessment of the Measures used in this Study**

| UWES | Vigour Subscale | Dedication Subscale | Absorption Subscale | SSVS |
|---|---|---|---|---|
| 0.94 | 0.87 | 0.90 | 0.82 | 0.68 |

## 3.8 Results

To confirm the construct validity of each WE dimension, in relation to the ten value types in SSVS, while addressing particular demographic profiles, a total of 42 confirmatory factor analysis (CFA) models were fitted to the collected quantitative data and checked for parsimony to elicit significant relationships between the variables: each model addresses a particular WE dimension, demographic profile, and hypothesis. The 42 models comprise: three fitted Model 0, to derive findings regardless of gender; 12 fitted Model 0, to take into account the demographic profile influences of men, women, married and singles; nine each of Model 1 and Model 2, to explore whether the influence of demographic profiles of age, parenthood status, and education qualification is mediator-oriented or moderator-oriented respectively; and another nine after selecting the better fit between Model 1 and Model 2 for further checks on parsimony, to elicit significant relationships between the variables. In the following report of the SEM results of these various fitted models, the corresponding covariance matrices and path diagrams following the widely accepted conventions for graphical display of structural equation models (e.g. Bentler 1989; Jöreskog & Sörbom 1988) are shown in Appendix 4.

### 3.8.1 Gender

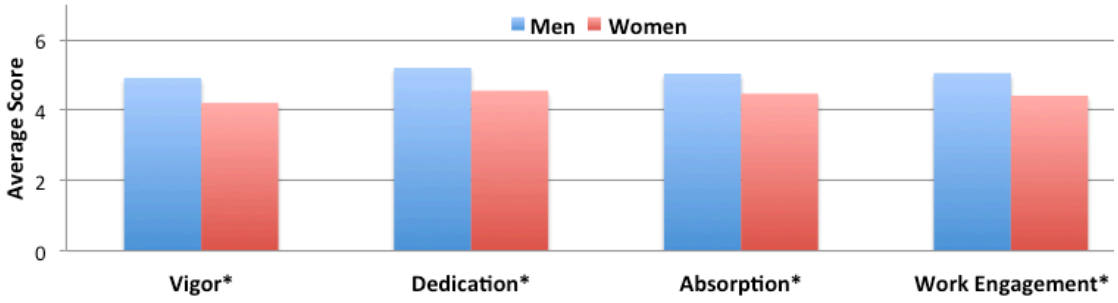
The quantitative results of the study to investigate the relationships of PVs and WE, under the influence of the demographic profile of gender, are presented below in five sub-sections. The basic differences of PV types and WE between men and women are first reported. The next three sub-sections report the SEM results for the whole sample data comprising both genders, and for the sub-sample data of the participants for men and women. The final sub-section gives a summary of the SEM results.

#### *3.8.1.1 Basic Differences of PV Types and WE between Men and Women*

Differences in the mean values of the variables using the sub-sample data for men and women are shown in Figure 3.1. The t-test results based on a significant level of .01 indicate that men are about 15 per cent more engaged in their work, and about 15 per cent higher in achievement value type than women. At a significant level of .1, men rate about seven per cent less in self-transcendence values than women.

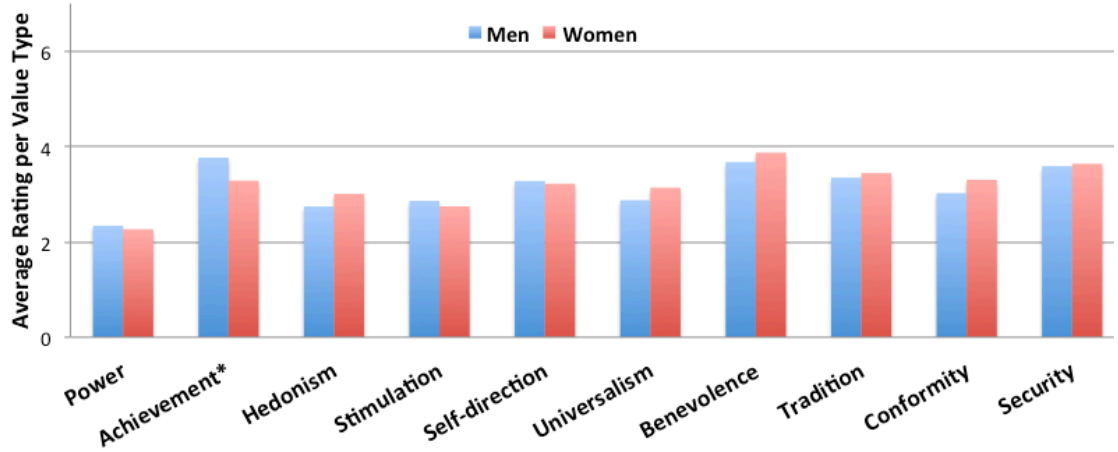
**Figure 3.1. Mean Values of the various Variables using the sub-sample data for Men and Women**

(a) Work Engagement and its Dimensions



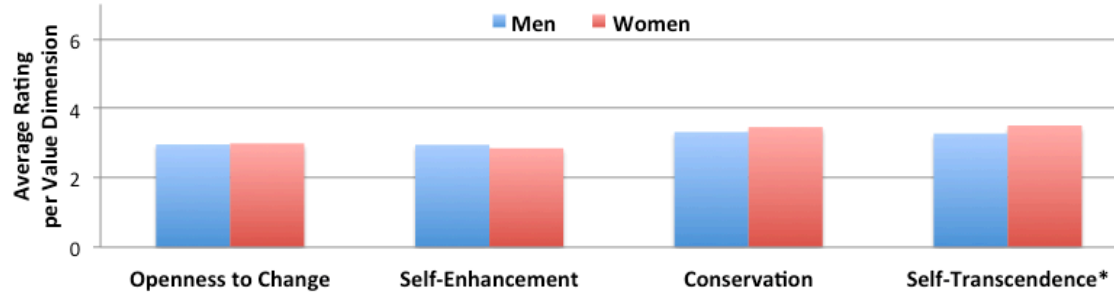

* Significant at the $p < 0.01$ level

(b) Personal Value Types




* Significant at the $p < 0.01$ level

(c) Personal Value Dimensions




* Significant at the $p < 0.1$ level

*3.8.1.2 SEM Results on Both Genders*

The corresponding covariance matrices and path diagrams for the fits of Model 0, relating PV types to the various WE dimensions for both genders, are shown in Figure 1 to Figure 6 in Appendix 4. The fit indices for them are summarised in Table 3.7.

**Table 3.7. Fit of Model 0 relating PV Types to the various WE Dimensions for Both Genders (*N* = 294)**

| WED | $\chi^2$ | Df | *P* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 89.34 | 54 | 0.002 | 0.97 | 0.047 | 0.557 | 237 |
| Dedication | 87.71 | 54 | 0.003 | 0.97 | 0.046 | 0.552 | 242 |
| Absorption | 99.92 | 58 | 0.001 | 0.96 | 0.050 | 0.566 | 226 |

*Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05.

*WE dimension vigour*

For WE dimension vigour, the PV types that seem to have significant relationships with it are achievement (r = .13) and stimulation (r = .13). However, for stimulation value type, the fitted model indicates that its relationship with vigour could be indirectly caused by self-direction, hedonism, achievement and security value types.

*WE dimension dedication*

For WE dimension dedication, the PV types that seem to have significant relationships with it are stimulation (r = .16), achievement (r = .22) and tradition (r = .13). However, for stimulation value type, the fitted model indicates that its relationship with dedication could be indirectly caused by self-direction and security value types. Similarly, for tradition value type, it could be indirectly caused by security, self-direction and achievement value types.

*WE dimension absorption*

For WE dimension absorption, the PV types that seem to have significant relationships with it are hedonism (r = -.15), achievement (r = .22) and benevolence (r = .09). However, for benevolence value type, the fitted model indicates that its relationship with absorption could be indirectly caused by universalism value type.

*Summary of results using whole sample comprising both genders*

Table 3.8 shows a summary of the results relating PV types to WE for both genders. For both genders, the PV type that has a significant direct relationship to WE is achievement, and the relationship is positive in nature. The result also shows that if one is high in hedonism

value type, one is likely to be less absorbed at work. In addition, the results show that PV types that could influence WE indirectly are self-direction, hedonism, security and universalism.

**Table 3.8. Summary of the Results relating PV Types to the various WE Dimensions for Both Genders (*N* = 294)**

| WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|
| Vigour | Achievement (r = .13) | Self-direction<br>Hedonism<br>Security |
| Dedication | Achievement (r = .22) | Self-direction<br>Security |
| Absorption | Achievement (r = .22)<br>Hedonism (r = -.15) | Universalism |

*3.8.1.3 SEM Results on Men*

The corresponding covariance matrices and path diagrams for the fits of Model 0, relating PV types to the various WE dimensions for the demographic characteristic 'Men', are shown in Figure 7 to Figure 12 in Appendix 4. The fit indices for them are summarised in Table 3.9. The values of Hoelter's CN are below 200, indicating an inadequacy of these sub-sample sizes for ideal use of SEM analysis (Hoelter 1983). The values of RMSEA are also above .05, indicating a lack of good fit (Browne & Cudeck 1993; Schumacker & Lomax 2004). Thus, any significant relationships found using SEM on the sub-sample data for men will require further validation.

**Table 3.9. Fit of Model 0 relating PV Types to the various WE Dimensions for Men (N = 129)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 80.99 | 57 | 0.02 | 0.96 | 0.057 | 1.164 | 120 |
| Dedication | 96.63 | 56 | 0.001 | 0.93 | 0.075 | 1.302 | 99 |
| Absorption | 80.64 | 58 | 0.026 | 0.96 | 0.055 | 1.146 | 122 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

*WE dimension vigour*

For WE dimension vigour, the PV types that seem to have significant relationships with it are self-direction (r = .21), stimulation (r = .15), achievement (r = .24), security (r = .24) and universalism (r = .28). However, for self-direction and stimulation value types, the fitted model indicates that the relationships of them with vigour could be indirectly caused by

security value type. Similarly, for benevolence value type, it could be indirectly caused by achievement, security and universalism value types.

*WE dimension dedication*

For WE dimension dedication, the PV types that seem to have significant relationships with it are self-direction (r = .24), stimulation (r = .17), achievement (r = .37), tradition (r = .18), security (r = .17) and benevolence (r = .31). However, for self-direction value type, the fitted model indicates that its relationship with dedication could be indirectly caused by stimulation value type. Similarly for tradition value type, it could be indirectly caused by stimulation and achievement value types; for security value type, it could be indirectly caused by stimulation value type; for benevolence value type, it could be indirectly caused by universalism, stimulation and achievement value types.

*WE dimension absorption*

For WE dimension absorption, the PV types that seem to have significant relationships with it are self-determination (r = .20), stimulation (r = .18), achievement (r = .38), tradition (r = .19), security (r = .22) and benevolence (r = .21). However, for self-direction value type, the fitted model indicates that its relationship with absorption could be indirectly caused by stimulation value type; similarly for tradition value type, it could be indirectly caused by stimulation and universalism value types; for security value type, it could be indirectly caused by stimulation value type; for benevolence value type, it could be indirectly caused by universalism value type.

*Summary of results using sub-sample data for Men*

Table 3.10 shows a summary of the results relating PV types to WE for the demographic characteristic 'Men'. The PV types that have significant direct relationships to WE are achievement, stimulation and security, in decreasing order of significance. All these relationships are positive. The results also show that universalism PV type could influence WE indirectly.

**Table 3.10. Summary of the Results relating PV Types to the various WE Dimensions for Men (*N* = 129)**

| WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|
| Vigour | Achievement (r = .24)<br>Security (r = .24) | Universalism |
| Dedication | Achievement (r = .37)<br>Stimulation (r = .17) | Universalism |
| Absorption | Achievement (r = .38)<br>Stimulation (r = .18) | Universalism |

*3.8.1.4 SEM Results on Women*

The corresponding covariance matrices and path diagrams for the fits of Model 0, relating PV types to the various WE dimensions for the demographic characteristic 'Women', are shown in Figure 13 to Figure 18 in Appendix 4. The fit indices for them are summarised in Table 3.11. The values of Hoelter's CN are below 200, indicating an inadequacy of these sub-sample sizes for ideal use of SEM analysis (Hoelter 1983). Thus, any significant relationships found using SEM on the sub-sample data for women will require further validation.

**Table 3.11. Fit of Model 0 relating PV Types to the various WE Dimensions for Women (*N* = 158)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 80.53 | 65 | 0.093 | 0.98 | 0.039 | 0.844 | 166 |
| Dedication | 79.14 | 62 | 0.07 | 0.98 | 0.042 | 0.873 | 162 |
| Absorption | 74.69 | 61 | 0.112 | 0.97 | 0.038 | 0.858 | 169 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

*WE dimensions vigour and dedication*

For both WE dimensions of vigour and dedication, no PV type seems to have a significant relationship.

*WE dimension absorption*

For WE dimension absorption, the PV type that seems to have a significant relationship with it is universalism (r = -.20). However, the fitted model indicates that the relationship of it with absorption could be indirectly and negatively caused by security value type.

*Summary of results using sub-sample data for Women*

Table 3.12 shows a summary of the results relating PV types to WE for the demographic characteristic 'Women'. There is no apparent PV type that has a significant direct relationship to work. The extent to which women feel absorbed at work could be influenced indirectly and negatively by security value type.

**Table 3.12. Summary of the Results relating PV Types to the various WE Dimensions for Women (*N* = 158)**

| WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|
| Vigour | - | - |
| Dedication | - | - |
| Absorption | - | Security (-) |

*3.8.1.5 Summary of SEM Results on Gender*

Table 3.13 shows a summary of the results relating PV types to WE for both genders, men and women. Like the results for both genders, the results for the men's sub-sample show achievement to be the primary PV type that has a significant direct relationship to WE. In contrast, the results for the women's sub-sample do not show any PV type to have a significant direct relationship to WE. In terms of PV type that could influence WE indirectly, the results using the whole sample comprising both genders show self-direction and security are the main ones. From the sub-sample data for men, it is universalism. From the sub-sample data for women, it is security: this applies to the WE dimension of absorption only. However, as the values of Hoelter's CN are below 200 for the fitted models of the sub-sample data for men and women, the significant relationships found using SEM for them will require further validation.

**Table 3.13. Summary of the Results relating PV Types to the various WE Dimensions for Both Genders, Men and Women**

| | WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|---|
| **Both Genders (*N* = 294)** | Vigour | Achievement (r = .13) | Self-direction<br>Hedonism<br>Security |
| | Dedication | Achievement (r = .22) | Self-direction<br>Security |
| | Absorption | Achievement (r = .22)<br>Hedonism (r = -.15) | Universalism |
| **Men* (*N* = 129)** | Vigour | Achievement (r = .24)<br>Security (r = .24) | Universalism |
| | Dedication | Achievement (r = .37)<br>Stimulation (r = .17) | Universalism |
| | Absorption | Achievement (r = .38)<br>Stimulation (r = .18) | Universalism |
| **Women* (*N* = 158)** | Vigour | - | - |
| | Dedication | - | - |
| | Absorption | - | Security (-) |

* The values of Hoelter's CN are below 200.

### 3.8.2 Marital Status

The quantitative results of the study to investigate the relationships of PVs and WE, under the influence of the demographic profile of marital status, are presented below in four sub-sections. The basic differences of PV types and WE between married personnel and singles are first reported. The next two sub-sections report the SEM results for the sub-sample data for married and singles status. The final sub-section gives a summary of the SEM results.

#### *3.8.2.1 Basic Differences of PV Types and WE between Married and Singles Status*

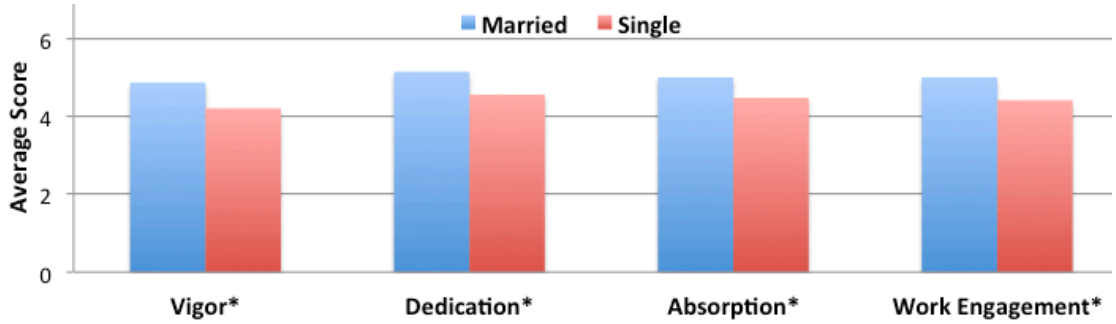
The differences in the mean values of the various variables for married and singles sub-samples are shown in Figure 3.2. The t-test results indicate that married personnel are about 13 per cent more engaged with their work, at a significant level of .01. For PV types at a significant level of .05, married personnel score less in hedonism (about 15% less) and stimulation (about 13% less) value types, but steeper in tradition (about 10% more) and security (about 15% more) value types than singles. For PV dimensions at significant level of .05, married personnel are less steep in openness to change (about 11% less steep) and self-enhancement values (about 11% less steep), but steeper in conservative values (about 11% steeper) than singles.

#### *3.8.2.2 SEM Results on Married Status*

The corresponding covariance matrices and path diagrams for the fits of Model 0, relating PV types to the various WE dimensions for married participants, are shown in Figure 19 to Figure 24 in Appendix 4. The fit indices for them are summarised in Table 3.14. The values of Hoelter's CN are below 200, indicating an inadequacy of these sub-sample sizes for ideal use of SEM analysis (Hoelter 1983). The value of RMSEA, when WE dimension vigour is investigated, is also above .05, indicating a lack of good fit (Browne & Cudeck 1993; Schumacker & Lomax 2004). Thus, any significant relationships found using SEM on the sub-sample data for married participants will require further validation.

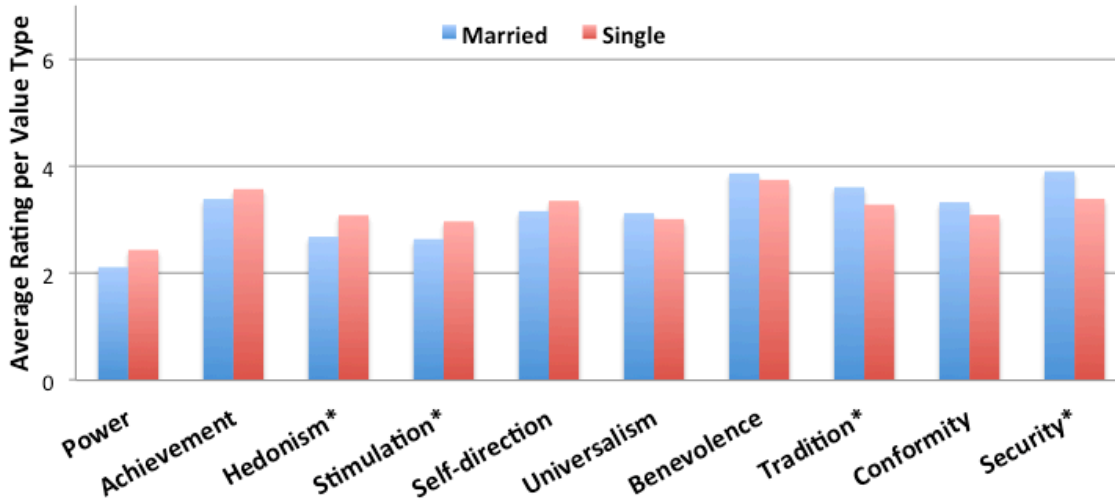
**Figure 3.2. Mean Values of the various Variables using the sub-sample data for Married and Singles Status**

(a) Work Engagement and its Dimensions



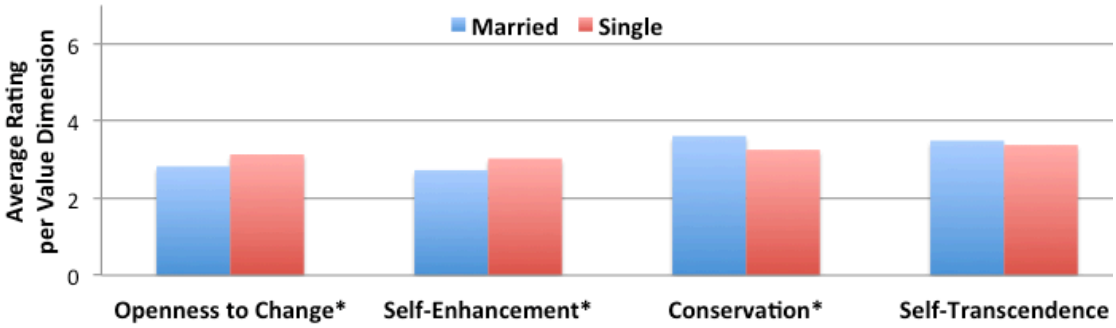

* Significant at the $p < 0.01$ level

(b) Personal Value Types




* Significant at the $p < 0.05$ level

(c) Personal Value Dimensions




* Significant at the $p < 0.05$ level

**Table 3.14. Fit of Model 0 relating PV Types to the various WE Dimensions for Married Status (*N* = 132)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 84.72 | 60 | 0.02 | 0.96 | 0.056 | 1.120 | 123 |
| Dedication | 70.54 | 59 | 0.145 | 0.98 | 0.039 | 1.027 | 145 |
| Absorption | 75.30 | 59 | 0.075 | 0.97 | 0.046 | 1.063 | 136 |

*Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05.

*WE dimension vigour*

For WE dimension vigour, the PV types that seem to have significant relationships with it are self-direction (r = .23) and stimulation (r = .20). However, for stimulation value type, the fitted model indicates that its relationship with vigour could be indirectly caused by self-direction and achievement value types.

*WE dimension dedication*

For WE dimension dedication, the PV types that seem to have significant relationships with it are self-direction (r = .25), stimulation (r = .24) and achievement (r = .24). However, for stimulation value type, the fitted model indicates that its relationship with dedication could be indirectly caused by self-direction and achievement value types.

*WE dimension absorption*

For WE dimension absorption, the PV types that seem to have significant relationships are self-direction (r = .33), stimulation (r = .23), achievement (r = .24) and benevolence (r = .18). However, for stimulation value type, the fitted model indicates that its relationship with absorption could be indirectly causes by self-direction and achievement value types; similarly for benevolence value type, it could be indirectly caused by universalism value type.

*Summary of results using sub-sample data for married status*

Table 3.15 shows a summary of the results relating PV types to WE for the demographic characteristic 'Married Status'. For married personnel, the PV types that have significant direct relationship to WE are self-direction and achievement, in decreasing order of significance, and all these relationships are positive. The results also show that the extent to which married personnel feel absorbed at work could be influenced indirectly by universalism value type.

**Table 3.15. Summary of the Results relating PV Types to the various WE Dimensions for Married Status (*N* = 132)**

| WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|
| Vigour | Self-direction (r = .23) | Achievement |
| Dedication | Self-direction (r = .25)<br>Achievement (r = .24) | - |
| Absorption | Self-direction (r = .33)<br>Achievement (r = .24) | Universalism |

*3.8.2.3 SEM Results on Singles Status*

The corresponding covariance matrices and path diagrams for the fits of Model 0, relating PV types to the various WE dimensions for singles, are shown in Figure 25 to Figure 30 in Appendix 4. The fit indices for them are summarised in Table 3.16. The values of Hoelter's CN are below 200, indicating an inadequacy of these sub-sample sizes for ideal use of SEM analysis (Hoelter 1983). The values of RMSEA, when work engagement dimensions of vigour and dedication are investigated, are also above .05, indicating a lack of good fit (Browne & Cudeck 1993; Schumacker & Lomax 2004). Thus, any significant relationships found using SEM on the sub-sample data for singles will require further validation.

**Table 3.16. Fit of Model 0 relating PV Types to the various WE Dimensions for Singles Status (*N* = 156)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 92.33 | 61 | 0.006 | 0.95 | 0.058 | 0.983 | 135 |
| Dedication | 98.80 | 62 | 0.002 | 0.94 | 0.062 | 1.012 | 128 |
| Absorption | 81.46 | 62 | 0.049 | 0.96 | 0.045 | 0.900 | 155 |

*Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05.

*WE dimensions vigour, dedication and absorption*

For all the WE dimensions of vigour, dedication and absorption, the PV type that seems to have significant relationship is achievement (r = .19, .19, .22 respectively).

*Summary of results using sub-sample data for singles status*

Table 3.17 shows a summary of the results relating PV types to WE for demographic characteristic 'Singles Status'. The PV type that has significant direct relationship to WE is achievement, and the relationship is positive.

**Table 3.17. Summary of the Results relating PV Types to the various WE Dimensions for Singles Status (*N* = 156)**

| WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|
| Vigour | Achievement (r = .19) | - |
| Dedication | Achievement (r = .19) | - |
| Absorption | Achievement (r = .22) | - |

*3.8.2.4 Summary of SEM Results on Marital Status*

Table 3.18 shows a summary of the results relating PV types to WE for participants who are married and single. The results from both married and single sub-samples show achievement to be a PV that has a significant direct relationship to WE. However, the results from the married sub-sample also show that self-direction is another PV type with a significant direct relationship to WE, and the extent to which married personnel feel absorbed at work could be influenced indirectly by universalism value type.

**Table 3.18. Summary of the Results relating PV Types to the various WE Dimensions for Married and Singles Status**

| | WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|---|
| **Married Status* (*N* = 132)** | Vigour | Self-direction (r = .23) | Achievement |
| | Dedication | Self-direction (r = .25)<br>Achievement (r = .24) | - |
| | Absorption | Self-direction (r = .33)<br>Achievement (r = .24) | Universalism |
| **Singles Status* (*N* = 156)** | Vigour | Achievement (r = .19) | - |
| | Dedication | Achievement (r = .19) | - |
| | Absorption | Achievement (r = .22) | - |

* The values of Hoelter's CN are below 200.

### 3.8.3 Age

The fits of Model 1 and Model 2, relating PV types to the various WE dimensions under the influence of age, are summarised in Table 3.19.

*WE dimension vigour*

For WE dimension vigour, the lower value of ECVI for Model 2 (ECVI = 0.727) than Model 1 (ECVI = 0.765) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 31 and Figure 32 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.20.

**Table 3.19. Fits of Model 1 and Model 2 relating PV Types to the various WE Dimensions under the influence of Age (*N* = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | | | | | | | |
| Model 1 | 110.24 | 48 | 0 | 0.95 | 0.067 | 0.765 | 174 |
| Model 2 | 99.14 | 48 | 0 | 0.96 | 0.060 | 0.727 | 193 |
| Dedication | | | | | | | |
| Model 1 | 93.90 | 48 | 0 | 0.97 | 0.057 | 0.710 | 204 |
| Model 2 | 83.79 | 49 | 0.001 | 0.97 | 0.049 | 0.668 | 232 |
| Absorption | | | | | | | |
| Model 1 | 102.67 | 52 | 0 | 0.96 | 0.058 | 0.712 | 200 |
| Model 2 | 89.60 | 53 | 0.001 | 0.97 | 0.049 | 0.661 | 233 |

*Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05.

**Table 3.20. Fit of Model 2 relating PV Types to WE Dimension Vigour under the influence of Age (*N* = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 123.27 | 64 | 0 | 0.96 | 0.056 | 0.701 | 199 |

*Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05.

The PV types that seem to have significant relationships with vigour are stimulation (r = .12) and achievement (r = .12). However, for stimulation value type, the fitted model indicates that its relationship with vigour could be indirectly caused by self-direction, hedonism, achievement and security value types. In this moderation-oriented fitted model, age has significant relationships with PV types hedonism (r = -.20) and security (r = .16), and also with vigour (r = 0.21).

*WE dimension dedication*

For WE dimension dedication, the lower value of ECVI for Model 2 (ECVI = 0.668) than Model 1 (ECVI = 0.710) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 33 and Figure 34 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.21.

**Table 3.21. Fit of Model 2 relating PV Types to WE Dimension Dedication under the influence of Age (*N* = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Dedication | 116.55 | 65 | 0 | 0.96 | 0.052 | 0.671 | 214 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

The PV types that seem to have significant relationships with dedication are stimulation (r = .16), achievement (r = .21) and tradition (r = .13). However, for stimulation value type, the fitted model indicates that its relationship with dedication could be indirectly caused by self-direction and security value types; similarly for tradition value type, it could be indirectly caused by self-direction, achievement and security value types. In this moderation-oriented fitted model, age has a significant relationship with PV type security (r = .17), and also with dedication (r = .25).

*WE dimension absorption*

For WE dimension absorption, the lower value of ECVI for Model 2 (ECVI = 0.661) than Model 1 (ECVI = 0.712) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 35 and Figure 36 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.22.

**Table 3.22. Fit of Model 2 relating PV Types to WE Dimension Absorption under the influence of Age (*N* = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Absorption | 126.93 | 69 | 0 | 0.95 | 0.054 | 0.679 | 207 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

The PV types that seem to have significant relationships with absorption are hedonism (r = -.15), achievement (r = .22) and benevolence (r = .09). However, for benevolence value type, the fitted model indicates that its relationship with absorption could be indirectly caused by universalism value type. In this moderation-oriented fitted model, age has a significant relationship with the PV type security (r = .17), and also with absorption (r = 0.28).

*Summary of results using sub-sample data for Age*

Table 3.23 shows a summary of the results relating PV types to WE for demographic characteristic 'Age'. From the perspective of looking at the relationship of PV types to WE, the results are similar to that for both genders (see Table 3.8): PV type achievement has a significant direct and positive relationship to WE; if one shows a high value for hedonism value type, one is likely to be less absorbed at work; and PV types that could influence WE indirectly are self-direction, hedonism, security and universalism.

**Table 3.23. Summary of the Results relating PV Types to the various WE Dimensions and with Age (*N* = 294)**

| WE Dimension | WE Dimension | | Age | Age |
|---|---|---|---|---|
| | Direct Relationship | Indirect Relationship | Direct Relationship | |
| Vigour | Achievement (r = .12) | Self-direction<br>Hedonism<br>Security | Hedonism (r = -.20)<br>Security (r = .16) | r = .21 |
| Dedication | Achievement (r = .21) | Self-direction<br>Security | Security (r = .17) | r = .25 |
| Absorption | Achievement (r = .22)<br>Hedonism (r = -.15) | Universalism | Security (r = .17) | r = .28 |

For all the various WE dimensions in this study of the influence of age on the relationship of PV types to them, the moderation-oriented fitted Model 2 was found to be the better fit. These fitted models indicate that as one grows older, WE may increase, and one may place higher emphasis on security value type and less on hedonism value type.

### 3.8.4 Parenthood Status

The fits of Model 1 and Model 2 relating PV types to the various WE dimensions under the influence of Parenthood Status are summarised in Table 3.24.

*WE dimension vigour*

For WE dimension vigour, the lower value of ECVI for Model 2 (ECVI = 0.695) than Model 1 (ECVI = 0.710) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 37 and Figure 38 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.25.

**Table 3.24. Fits of Model 1 and Model 2 relating PV Types to the various WE Dimensions under the influence of Parenthood Status (*N* = 291)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | | | | | | | |
| Model 1 | 91.87 | 48 | 0 | 0.97 | 0.056 | 0.710 | 206 |
| Model 2 | 87.56 | 48 | 0 | 0.97 | 0.053 | 0.695 | 216 |
| Dedication | | | | | | | |
| Model 1 | 86.58 | 48 | 0.001 | 0.97 | 0.053 | 0.692 | 219 |
| Model 2 | 83.06 | 49 | 0.002 | 0.97 | 0.049 | 0.673 | 232 |
| Absorption | | | | | | | |
| Model 1 | 88.23 | 52 | 0.001 | 0.97 | 0.049 | 0.670 | 230 |
| Model 2 | 88.78 | 53 | 0.002 | 0.97 | 0.048 | 0.665 | 232 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

**Table 3.25. Fit of Model 2 relating PV Types to WE Dimension Vigour under the influence of Parenthood Status (*N* = 291)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 108.76 | 65 | 0.001 | 0.97 | 0.048 | 0.651 | 227 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

The PV types that seem to have significant relationships with vigour are stimulation (r = .13) and achievement (r = .12). However, for stimulation value type, the fitted model indicates that its relationship with vigour could be indirectly caused by self-direction, hedonism, achievement and security value types. In this moderation-oriented fitted model, parenthood status has a significant relationship with the PV type security (r = .18), and also with vigour (r = 0.16).

*WE dimension dedication*

For the WE dimension dedication, the lower value of ECVI for Model 2 (ECVI = 0.673) than Model 1 (ECVI = 0.692) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 39 and Figure 40 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.26.

The PV types that seem to have significant relationships with dedication are stimulation (r = .16), achievement (r = .19) and tradition (r = .12). However, for stimulation value type, the fitted model indicates that its relationship with dedication could be indirectly caused by self-direction and achievement value types; similarly for tradition value type, there

could be an indirect cause by self-direction, achievement and security value types. In the moderation-oriented fitted model, parenthood status has a significant relationship with the PV type security (r = .18), and also with dedication (r = 0.19).

**Table 3.26. Fit of Model 2 relating PV Types to WE Dimension Dedication under the influence of Parenthood Status (*N* = 291)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Dedication | 100.11 | 65 | 0.003 | 0.97 | 0.043 | 0.621 | 246 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

*WE dimension absorption*

For the WE dimension absorption, the lower value of ECVI for Model 2 (ECVI = 0.665) than Model 1 (ECVI = 0.670) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit, after checking for parsimony is shown in Figure 41 and Figure 42 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.27.

**Table 3.27. Fit of Model 2 relating PV Types to WE Dimension Absorption under the influence of Parenthood Status (*N* = 291)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Absorption | 122.29 | 70 | 0 | 0.95 | 0.051 | 0.663 | 215 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

The PV types that seem to have significant relationships with absorption are stimulation (r = .08), hedonism (r = -.15) and achievement (r = .21). However, for stimulation value type, the fitted model indicates that its relationship with absorption could be indirectly caused by self-direction, hedonism and achievement value types. In this moderation-oriented fitted model, parenthood status has no significant relationship with any PV type, but its relationship with absorption is found to be significant (r = 0.18).

*Summary of results using sub-sample data for Parenthood Status*

Table 3.28 shows a summary of the results relating PV types to WE for demographic characteristic 'Parenthood Status'. From the perspective of looking at the relationship of PV types to WE, the results are similar to that for both genders (see Table 3.8): PV type

achievement has significant direct and positive relationship to WE; if one is steep in hedonism value type, one is likely to be less absorbed at work; and the PV types that could influence WE indirectly are self-direction, hedonism, and security (unlike Table 3.8, there is no universalism value type).

**Table 3.28. Summary of the Results relating PV Types to the various WE Dimensions and with Parenthood Status (*N* = 291)**

| WE Dimension | WE Dimension | | Parenthood Status | Parenthood Status |
|---|---|---|---|---|
| | Direct Relationship | Indirect Relationship | Direct Relationship | |
| Vigour | Achievement (r = .12) | Self-direction<br>Hedonism<br>Security | Security (r = .18) | r = .16 |
| Dedication | Achievement (r = .19) | Self-direction<br>Security | Security (r = .18) | r = .19 |
| Absorption | Achievement (r = .21)<br>Hedonism (r = -.15) | Self-direction | - | r = .18 |

Like the results on the influence of age in the previous sub-section, for all the various WE dimensions in this study of the influence of parenthood status on the relationship of PV types to them, the moderation-oriented fitted Model 2 was found to be the better fit. These fitted models indicate that as one has more children, WE may increase, and one may place higher emphasis on security value type.

### 3.8.5 Education Qualification

The fits of Model 1 and Model 2, relating PV types to the various WE dimensions under the influence of Education Qualification, are summarised in Table 3.29.

*WE dimension vigour*

For the WE dimension vigour, the lower value of ECVI for Model 2 (ECVI = 0.673) than Model 1 (ECVI = 0.695) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 43 and Figure 44 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.30.

**Table 3.29. Fits of Model 1 and Model 2 relating PV Types to the various WE Dimensions under the influence of Education Qualification (N = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | | | | | | | |
| Model 1 | 89.67 | 48 | 0 | 0.97 | 0.054 | 0.695 | 213 |
| Model 2 | 85.17 | 49 | 0.001 | 0.97 | 0.050 | 0.673 | 229 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Dedication | | | | | | | |
| Model 1 | 93.70 | 48 | 0 | 0.97 | 0.057 | 0.709 | 204 |
| Model 2 | 82.94 | 48 | 0.001 | 0.97 | 0.050 | 0.672 | 231 |
| Absorption | | | | | | | |
| Model 1 | 98.16 | 52 | 0 | 0.96 | 0.055 | 0.697 | 209 |
| Model 2 | 90.22 | 53 | 0.001 | 0.97 | 0.049 | 0.663 | 231 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

**Table 3.30. Fit of Model 2 relating PV Types to WE Dimension Vigour under the influence of Education Qualification (*N* = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Vigour | 102.91 | 65 | 0.002 | 0.97 | 0.045 | 0.624 | 242 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

The PV types that seem to have significant relationships with vigour are stimulation (r = .13) and achievement (r = .13). However, for stimulation value type, the fitted model indicates that its relationship with vigour could be indirectly caused by self-direction, hedonism, achievement and security value types. In this moderation-oriented fitted model, education qualification has significant relationships with PV types achievement (r = .10) and conformity (r = -.23), and also with vigour (r = 0.23).

*WE dimension dedication*

For the WE dimension dedication, the lower value of ECVI for Model 2 (ECVI = 0.672) than Model 1 (ECVI = 0.709) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 45 and Figure 46 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.31.

The PV types that seem to have significant relationships with dedication are stimulation (r = .16), achievement (r = .20) and tradition (r = .12). However, for stimulation and tradition value types, the fitted model indicates that these relationships with dedication could be indirectly caused by self-direction, achievement and security value types. In this moderation-oriented fitted model, education qualification has significant relationships with PV types achievement (r = .08) and conformity (r = -.23), and also with dedication (r = 0.25).

**Table 3.31. Fit of Model 2 relating PV Types to WE Dimension Dedication under the influence of Education Qualification (*N* = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Dedication | 95.67 | 63 | 0.005 | 0.98 | 0.042 | 0.613 | 253 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

*WE dimension absorption*

For WE dimension absorption, the lower value of ECVI for Model 2 (ECVI = 0.663) than Model 1 (ECVI = 0.697) indicates that Model 2 is a better fit. Using Model 2 to identify significant parameter estimates, the resulting fit after checking for parsimony is shown in Figure 47 and Figure 48 in Appendix 4 for its covariance matrix and diagram respectively. Its fit indices are summarised in Table 3.32.

**Table 3.32. Fit of Model 2 relating PV Types to WE Dimension Absorption under the influence of Education Qualification (*N* = 294)**

| WED | $\chi^2$ | Df | *p* | CFI | RMSEA | ECVI | H.05 |
|---|---|---|---|---|---|---|---|
| Absorption | 108.94 | 69 | 0.002 | 0.96 | 0.044 | 0.618 | 241 |
| *Notes*: WED = Work Engagement Dimension; Df = Degree of freedom; *p* = probability level; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; ECVI = Expected Cross-validation Index; H .05 = Hoelter's CN at significance level of 0.05. | | | | | | | |

The PV types that seem to have significant relationships with absorption are hedonism (r = -.15), achievement (r = .23) and benevolence (r = .10). However, for benevolence value type, the fitted model indicates that its relationship with absorption could be indirectly caused by universalism value type. In this moderation-oriented fitted model, education qualification has significant relationship with PV type conformity (r = -.21), and also with absorption (r = 0.29).

*Summary of results using sub-sample data for Education Qualification*

Table 3.33 shows a summary of the results relating PV types to WE for demographic characteristic 'Education Qualification'. From the perspective of looking at the relationship of PV types to WE, the results are similar to that for both genders (see Table 3.8): PV type achievement has a significant direct and positive relationship to WE; if one is steep in hedonism value type, one is likely to be less absorbed at work; and the PV types that could influence WE indirectly are self-direction, hedonism, security and universalism.

**Table 3.33. Summary of the Results relating PV Types to the various WE Dimensions and with Education Qualification (*N* = 294)**

| WE Dimension | WE Dimension | | Education Qualification | Education Qualification |
|---|---|---|---|---|
| | Direct Relationship | Indirect Relationship | Direct Relationship | |
| Vigour | Achievement (r = .13) | Self-direction<br>Hedonism<br>Security | Achievement (r = .10)<br>Conformity (r = -.23) | r = .23 |
| Dedication | Achievement (r = .20) | Self-direction<br>Security | Achievement (r = .08)<br>Conformity (r = -.23) | r = .25 |
| Absorption | Achievement (r = .23)<br>Hedonism (r = -.15) | Universalism | Conformity (r = -.21) | r = .29 |

Like the results on the influence of age and that for parenthood status in the previous sub-sections, for all the various WE dimensions in this study of the influence of education qualification on the relationship of PV types to them, the moderation-oriented fitted Model 2 was found to be the better fit. These fitted models indicate that as one achieves higher education qualifications, WE may increase, and one may place higher emphasis on achievement value type, but lesser emphasis on conformity value type.

## 3.9 Findings from Study 1 Quantitative Results

In this section, a summary of the results from Study 1 is first presented. The findings in relation to the four hypotheses postulated in the previous chapter are then reported. This section ends with a summary of these findings in relation to the two research questions posed.

### 3.9.1 Summary of Results from Study 1

The average WE score from the sample is 4.71. The PV type with the highest rating of importance is benevolence, with a score of 3.79, and the lowest is power, with a score of 2.30. In terms of PV dimension, self-transcendence has the highest rating of importance, with an average score of 3.42 per value type, and self-enhancement has the lowest, with an average score of 2.89 per value type. Table 3.34 gives a summary of the results on the direct and indirect relationships of PV types to each WE dimension for each demographic characteristic studied.

The summary of results in Table 3.34 suggests that achievement value type is the primary PV type related positively and directly to WE. In addition, the results also show that if one is steep in hedonism value type, one tends to be less absorbed at work. The overall trend of the results also indicates that self-direction, hedonism, security and universalism value types could have indirect influence on WE. All have a positive influence, except for

security, which can have either a positive or negative influence, depending on which WE dimension and demographic characteristic are considered.

**Table 3.34. Summary Results of the Relationships of PV Types to WE for Each Demographic Characteristic Studied**

**('-' and '±' signs in parentheses indicate negative and mixed relationships)**

| Demographic Profile | WE Dimension | Direct Relationship | Indirect Relationship |
|---|---|---|---|
| Both Genders ($N$ = 287) | Vigour | Achievement (r = .13) | Self-direction<br>Hedonism<br>Security (-) |
| | Dedication | Achievement (r = .22) | Self-direction<br>Security (±) |
| | Absorption | Achievement (r = .22)<br>Hedonism (r = -.15) | Universalism |
| Men* ($N$ = 129) | Vigour | Achievement (r = .24)<br>Security (r = .24) | Universalism |
| | Dedication | Achievement (r = .37)<br>Stimulation (r = .17) | Universalism |
| | Absorption | Achievement (r = .38)<br>Stimulation (r = .18) | Universalism |
| Women* ($N$ = 158) | Vigour | - | - |
| | Dedication | - | - |
| | Absorption | - | Security (-) |
| Married Status* ($N$ = 132) | Vigour | Self-direction (r = .23) | Achievement |
| | Dedication | Self-direction (r = .25)<br>Achievement (r = .24) | - |
| | Absorption | Self-direction (r = .33)<br>Achievement (r = .24) | Universalism |
| Singles Status* ($N$ = 156) | Vigour | Achievement (r = .19) | - |
| | Dedication | Achievement (r = .19) | - |
| | Absorption | Achievement (r = .22) | - |
| Age ($N$ = 294) | Vigour | Achievement (r = .12) | Self-direction<br>Hedonism<br>Security (-) |
| | Dedication | Achievement (r = .21) | Self-direction<br>Security (±) |
| | Absorption | Achievement (r = .22)<br>Hedonism (r = -.15) | Universalism |
| Parenthood Status ($N$ = 291) | Vigour | Achievement (r = .12) | Self-direction<br>Hedonism<br>Security (-) |
| | Dedication | Achievement (r = .19) | Self-direction<br>Security |
| | Absorption | Achievement (r = .21)<br>Hedonism (r = -.15) | Self-direction |
| Education Qualification ($N$ = 294) | Vigour | Achievement (r = .13) | Self-direction<br>Hedonism<br>Security (-) |
| | Dedication | Achievement (r = .20) | Self-direction<br>Security (±) |
| | Absorption | Achievement (r = .23)<br>Hedonism (r = -.15) | Universalism |

* The values of Hoelter's CN are below 200.

However, minor exceptions to these general findings existed when the sub-sample data for gender and marital status were investigated. For instance, for women, no PV type appeared to have a significant direct relationship to WE, and the extent to which women feel absorbed at work could be influenced indirectly and negatively by security value type. For married personnel, besides achievement value type, self-direction value type is a further PV with a direct positive relationship to WE. The extent to which married personnel feel absorbed at work could be influenced indirectly by universalism. However, common to these exceptions, the size of each sub-sample data for gender and marital status is small: their sample sizes are below 200 and the values of their Hoelter's CN at significance level of 0.05, are below 200. Thus, their SEM results will require further validation. In addition, using t-tests on the sample, men were found to be more engaged with their work, steeper in achievement value type, and less steep in self-transcendence values than women. For marital status, married personnel were found to be more engaged with their work, less steep in hedonism, stimulation, openness to change and self-enhancement values, and steeper in tradition, security and conservative values than singles.

### 3.9.2 Findings in relation to Hypothesis H1

Hypothesis H1 states:

> H1: Self-enhancement and openness to change values (self-direction, stimulation, hedonism, achievement and power value types) are positively related to WE.

Study 1 results show that, on the contrary, not all self-enhancement and openness to change values are positively related to WE. From the summary of results in Table 3.34, there are indications of support of the positive relationships of achievement, self-direction, stimulation and hedonism value types to WE. Despite this, hedonism value type is also found to relate negatively to WE dimension absorption, and power value types are not found to have significant relationship with WE. Thus, H1 cannot be fully accepted.

In addition, Study 1 results also indicate that security and universalism value types can be positively related to WE. This is contrary to Schwartz's circular structure of PVs, which posits that security value type conflicts with self-direction and stimulation, because security favours protection of stability, while the latter two value types favour change. However, the results indicate that these three value types can be compatible when being engaged at work allows individuals to experience change at work while simultaneously maintaining a sense of stability. Schwartz's circular structure of PVs also posits that universalism is in conflict with

achievement, because universalism favours concern for others, while achievement favours pursuit of one's own relative success. However, the results indicate that these two value types can be compatible when being engaged at work allows individuals to pursue their own relative success and fulfil their concern for others at the same time.

### 3.9.3 Findings in Relation to Hypothesis H2

Hypothesis H2 states:

> H2: Self-transcendence and conservation values (universalism, benevolence, conformity, tradition and security value types) are negatively related to WE.

As reported in the previous sub-section, Study 1 results show that on the contrary, some self-transcendence and conservation values, namely universalism and security, can be positively related to WE, although Study 1 also shows that security value type can relate negatively to WE. The other self-transcendence and conservative values (i.e. benevolence, conformity and tradition) are not found to relate negatively or positively to WE. Thus, given these contrary results, H2 cannot be accepted.

### 3.9.4 Findings in Relation to Hypotheses H3 and H4

The following hypotheses state:

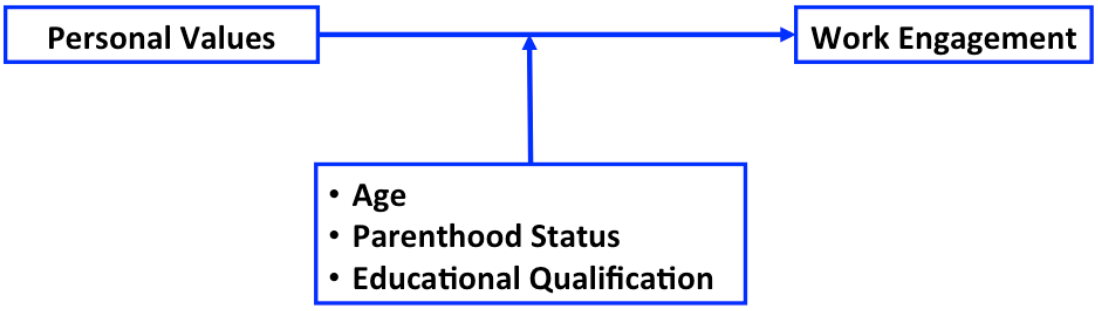
> H3: PVs play a mediating role between demographic profiles and WE.
>
> H4: Demographic profiles play a moderating role between PVs and WE.

Study 1 results, as summarised in Table 3.34 and Table 3.35 on the relationships between the demographic profiles (age, parenthood status and education qualification), PVs and WE dimensions, and their corresponding diagrams in Appendix 4, show that H3 should be rejected and H4 may be accepted. In the study of each influence of age, parenthood status and education qualification, the moderation-oriented fitted Model 2 was found to be the better fit. Thus, Study 1 results show that age, parenthood status and education qualification moderate the relationships of PVs to WE, as shown in Figure 3.3.

**Table 3.35 Summary Results on the Influence of Each Demographic Characteristic Studied on the Relationships of PV Types to WE**

| Demographic Characteristic | WE Dimension | Relationship of Demographic Profiles to PVs | Relationship of Demographic Profiles to WE Dimension | Corresponding Figure in Appendix 4 |
|---|---|---|---|---|
| Age ($N$ = 294) | Vigour | Hedonism (r = -.20)<br>Security (r = .16) | r = .21 | See Figure 32 |
| | Dedication | Security (r = .17) | r = .25 | See Figure 34 |
| | Absorption | Security (r = .17) | r = .28 | See Figure 36 |
| Parenthood Status ($N$ = 291) | Vigour | Security (r = .18) | r = .16 | See Figure 38 |
| | Dedication | Security (r = .18) | r = .19 | See Figure 40 |
| | Absorption | - | r = .18 | See Figure 42 |
| Education Qualification ($N$ = 294) | Vigour | Achievement (r = .10)<br>Conformity (r = -.23) | r = .23 | See Figure 44 |
| | Dedication | Achievement (r = .08)<br>Conformity (r = -.23) | r = .25 | See Figure 46 |
| | Absorption | Conformity (r = -.21) | r = .29 | See Figure 48 |

**Figure 3.3. Age, Parenthood Status and Education Qualification moderate how PVs relate to WE**




The results in Table 3.35 also show that as one grows older, has more children and has higher education qualifications, one tends to be more engaged at work. In addition, as one grows older, one tends to be steeper in security value type and less steep on hedonism value type. As one has more children, one also tends to be steeper in security value type. As one has higher education qualifications, one also tends to be steeper in achievement value type and less steep on conformity value type.

### 3.9.5 Summary of Quantitative Findings

Research question 1 (RQ1) asks:

> 'What PVs are predominantly associated with engaged employees?'

The findings indicate that the predominant PVs associated positively with engaged employees are achievement, self-direction, stimulation, hedonism, security and universalism value types. Among them, achievement value type is the most dominant. In terms of negative associations, the predominant PVs are hedonism and security. However, all these dominant relationships of PVs to WE found as significant are not large (i.e. $r < 0.4$; Cohen & Holliday 1982).

Research question 2 (RQ2) asks:

> 'How do demographic profiles such as gender, age, marital status, parenthood status, and education qualification influence the relationships between PVs and WE?'

The findings indicate that the demographic profiles studied tend to moderate the relationships between PVs and WE, and these influences are not necessarily identical. Quantitative evidence shows that individuals may be engaged differently with their work for different reasons (i.e. different personal values), because of their individual differences (i.e. different demographic profiles). Like the relationships between PVs and WE, the relationships found between these demographic profiles, and PVs and WE, though significant, are also not large ($r < 0.4$).

## 3.10 Motivation for a Study 2 that is Qualitative in Nature

The quantitative findings from Study 1 are unfortunately neither clear enough for unqualified acceptance, nor conclusive. This is due to a number of issues. First, although the relationships associated with PVs are found to be statistically significant, they are not large. It is plausible that there are other factors complementing the causal factors of PVs on WE. Further, the conceptual framework proposed in Figure 3.3, does not consider other factors such as attitudes, norms, goals and self-efficacy. This may mediate the influence of values on activities or performance (Locke 1997, p. 390; Roe & Ester 1999, p. 11).

Second, it is also possible that the findings from this study may be convoluted by a high level of engagement from respondents who are more autonomous and associated with high work centrality (Mannheim & Cohen 1978).

Third, the research approach in this quantitative study is etic instead of emic, in that the instruments used are structured measures that are not a result of qualitative research with the respondents. As a result, respondents are limited to the structured set of values for their choice.

Fourth, statistical insignificance in any value types should be taken with caution. Failure to detect any significant effects could be caused by inadequate operationalisation of the construct and limitations of data. This can be partially confirmed by the low reliability of the SSVS (Cronbach's alpha .68). Therefore, at this point, any significance or lack of it in any of the value types in relation to WE should be taken with caution.

Finally, as fix indices give only a sense of the model's lack of fit in SEM methodology (Barbara 2000; MacCallum 1986; MacCallum, Roznowski & Necowitz 1992), and can lead to incorrect rejection of an acceptable model (Hooper, Coughlan & Mullen 2008; Marsh, Hau & Wen 2004), the findings derived from the 42 models fitted to the data are not definitive. As highlighted by MacCallum and Austin (2000, p. 218), 'one must recognize that there may well be other models that fit the data to approximately the same degree'.

Given these issues, further research (i.e. a Study 2), preferably of an exploratory qualitative nature, to seek deeper understanding of the relationships of PVs and WE could assist with further understanding:

> Qualitative research can provide the 'why' behind statistically significant differences (Robbins 2001, p. 27).

Kim, Kolb and Kim (2013) also note that studies in the engagement literature are quantitative heavy, and lack qualitative or mixed-method studies to provide a holistic understanding of the engagement construct, which is still relatively new. A further qualitative Study 2, to specifically explore the process whereby PVs facilitate higher levels of engagement were thus proposed and undertaken by the researcher, and its methodology and results are reported in the next chapter.

# CHAPTER 4: QUALITATIVE STUDY 2

The purpose of this chapter is to report on the qualitative methodology and results of Study 2 to investigate the relationships between work engagement and personal values. As reported in the previous chapter, a quantitative Study 1 investigation on the relationships of personal values to work engagement for 294 Singaporeans led to findings that were neither clear nor conclusive. In addition, while the quantitative approach adopted in Study 1 helped to generalise and predict correlations between different variables (Castro et al. 2010), the quantitative approach was not as helpful when explaining perceptions and behaviours (Brannen 1992). According to Moghaddam, Walker and Harre (2003), quantitative approaches risk producing findings that are detached from real-world contexts. In contrast to quantitative approaches, Castro et al. (2010) argue that a qualitative approach is more holistic and contextualised (Gelo, Braakman & Benetka 2008), and can generate rich details of personal experiences and observations in the original context they occur within (Guba & Lincoln 1994). In addition, having a qualitative Study 2 research following from the quantitative Study 1 research, using a different methodology may alleviate common method bias (Jick 1979). It may also possibly neutralise or cancel the biases among different methods, while achieving convergence in analysis (Creswell 2003; Jick 1979). A qualitative study on work engagement also helps to address researchers' (Kim, Kolb & Kim 2013; Shuck 2013) concerns regarding the apparent lack of qualitative studies complementing the many quantitative studies on engagement to derive a complete understanding of the engagement construct.

Consequently, the researcher decided that a qualitative approach involving in-depth interviews, focus group discussions or participant observations could be 'very good for generating detailed data on the experiences, perceptions, emotions, beliefs and behaviours of respondents' (Teye 2012, p. 380). A qualitative approach can be more flexible and reflective than a quantitative approach (Minichiello et al. 1995), and has the advantage of allowing important dimensions to be sieved out during analysis of the collected data, without assuming what those dimensions will be (Quinn 1980). Patton (2002) claims qualitative research is a helpful method to understand complex phenomenon, such as organisational processes and social interactions: it is difficult for quantitative research to give an understanding of these phenomena. Shuck (2013, p. 280) reinforced this view when he asserted the need to complement existing engagement literature that is 'quantitatively heavy', with qualitative or

mixed-methods research to illuminate the 'curiosities and complexities of the engagement construct'. Qualitative research has 'the ability to generate rich descriptions of complex phenomena' (Jeanty & Hibel 2011, p. 636), as it 'seeks answers to questions that stress how social experience is created and given meaning' (Denzin & Lincoln 1994, p. 4). Qualitative research facilitates the understanding of complex social processes through capturing critical aspects of a phenomenon from the study participants (Malterud 2001), and uncovering the beliefs, values and motivations behind individual behaviours (Crabtree & Miller 1999). Thus, the value of a qualitative Study 2 is that its findings will augment and further clarify the quantitative findings in Study 1. These augmenting and clarifying are valuable as the researcher focuses on why and how certain dominant personal values are related to work engagement under the influence of demographic profiles, and how these relationships operate (Creswell & Plano-Clark 2007; Greene, Caracelli & Graham 1989). At the same time, Study 2 may further clarify the postulated theoretical model that was developed in Study 1 and shown in Figure 3.3, in Section 3.9.4.

Besides generating detailed data, having a mix of quantitative and qualitative studies in this research can also give a more complete understanding of human behaviour and experience (Morse 1991). By adopting a mixed method approach, the researcher benefits from corroborating findings and minimising plausible alternative explanations for the data collected in Study 1 (Johnson & Onwuegbuzie 2004). Using mixed methods can give the researcher multiple views for analysing the study and triangulating the data (Creswell 1994; Creswell et al. 2003; Johnson & Onwuegbuzie 2004; Tashakkori & Teddlie 2003). The results from the different methods can provide mutual confirmation and give the researcher confidence that the results are valid (Niglas 2004).

According to Greene, Caracelli and Graham (1989), besides triangulation, mixed methods research helps in four other areas. One area is the purpose of 'complementarity', whereby one method is used to seek clarification, enhancement, elaboration and illustration of its results with results from the other method. A second area is the purpose of 'development', where the results of one method help develop use of the other method. A third area is the purpose of 'initiation', whereby the discovery of any anomalies or contradictions from results of the different methods allows the researcher to reframe the research questions. Finally, mixed methods research contributes to 'expansion', whereby the use of different methods extends the breadth and range of inquiry in the study of the phenomenon. Similarly, Teddlie and Tashakkori (2003; 2009) argue that mixed methods can be superior to singular methods in three areas. First, mixed methods can seek answers to research questions that singular methods cannot. Second, the former can provide better inferences. Finally, the former gives

chance for a greater range of divergent views. In other words, mixed methods research allows the researcher access to knowledge or insights that would otherwise be unavailable if the researcher undertook qualitative and quantitative studies separately (O'Cathain, Murphy & Nicholl 2007). According to Molina-Azorin (2011, p. 9), the insights gained from the integration of mixed methods 'may produce more than the sum of these two parts'. To Sharan (2002), a mixed methods approach gives the researcher a tool to understand complex problems, since there can be multiple interpretations of reality. Reinforcing the benefits of expansion when mixed methods are used, Devine and Heath (1999, p. 49) wrote that the triangulation in mixed methods:

> Can be used effectively to explore the dynamics of complex social phenomena, highlighting the multi-layered and often contradictory nature of social life.

In this chapter, the qualitative methodology and results of Study 2 are presented. These findings are then integrated with those from Study 1 to answer the two questions in the researcher's investigation:

> Research Question 1 (RQ1): Do personal values affect work engagement? If so, which personal values have positive or negative effect on work engagement? Why and how do such relationships exist?
>
> Research Question 2 (RQ2): Do demographic profiles such as gender, age, marital status, parenthood status in terms of number of children, and education qualification influence the extent personal values (PVs) affect work engagement (WE)? If so, why and how do they influence?

## 4.1 Qualitative Research Design

A phenomenological approach that encompasses the investigation of the shared meaning or essence of a phenomenon's experience for several individuals (Creswell 2007, pp. 57-58; McCaslin & Scott 2003, p. 449) is adopted in this qualitative Study 2 investigation of the relationships between PVs and WE. Here, the researcher strives to 'grasp the very nature' (Creswell 2007, p. 58; Van Manen 1990, p. 177) of the WE phenomenon, with a view to finding out to what extent, and how, PVs act as possible antecedents of WE. According to Moustakas (1994, p. 14), the aim of phenomenological study is to seek 'the understanding of meaningful concrete relations implicit in the original description of experience in the context

of a particular situation'. In this study, the 'meaningful concrete relations' referred to are the relationships between PVs and WE, the 'experience' referred to is engagement, and the 'context of a particular situation' referred to is the working individual in Singapore.

## 4.2 Sample

A total number of 22 participants were interviewed until theoretical saturation (Glaser & Strauss 1967; Morse 1995; Strauss & Corbin 1998) was achieved in the qualitative data collection, complementing the quantitative findings from the 294 participants in Study 1. These 22 participants were purposefully solicited from different demographic backgrounds covering gender, age, marital status, parenthood and education qualification, to ensure the sample was heterogeneous. The sampling procedures and the sample characteristics are presented in the next few sub-sections.

### 4.2.1 Sampling Procedure

The sampling criterion for participants in Study 2 is anyone who had past or present work experience in Singapore. This criterion is the same as that in Study 1, to maintain consistency of population being sampled. A purposeful sample (Collins, Onwuegbuzie & Jiao 2007; Creswell 2007; Kuzel 1999; Tashakkori & Teddlie 2003) of participants who met this criterion was thus solicited in Study 2. This purposeful sampling (Pope & Mays 1995) was conducted through friends and their recommendations, to identify participants that were open and willing to participate in this study, to share their meanings and experience of the WE phenomenon. To build rapport and ensure candour, each participant was allowed to choose the location for a face-to-face interview. Eighteen of the 22 participants chose their homes for the interview place, while four participants chose public cafes.

Where the participants knew each other, they were also given the option to have the interviews conducted together or individually, to facilitate rapport and candour (Curry, Nembhard & Bradley 2009). According to Bedford and Burgess (2001), small group interaction in the sharing of views or experiences in a group allows conversations to take place in a common social manner, facilitating rapport and candour. Bedford and Burgess (2001) argue that group interviews provide a platform for participants to question each other, and this allows any views to be amplified or contested, without participants feeling the researcher is challenging them. Gathering data in this way has the potential to widen the range of responses, activate forgotten details, and release inhibitions that participants may otherwise be discouraged to disclose (Merton, Fiske & Kendall 1956; Morgan & Krueger 1998). Hess

(1968) describes the advantages of group interviews as synergism, snowballing, stimulation, security and spontaneity, while Asbury (1995) argues that the data collected from focus groups are rich in detail that other research methods have difficulty achieving. Krueger and Casey (2000) argue that group interaction can expose factors that affect opinions or behaviours. Valentine (2001) claims that, to explain the complexities, contradictions and ambiguities of human behaviour, it is important to use a combination of different qualitative methods. Thus, besides facilitating rapport and candour, permitting group interviews, in addition to the one-to-one interviews in this study, allowed data generated from group interaction to be used as another source for analysis (Goldman & McDonald 1987; Morgan 1988; Steward & Shamdasani 1990).

Prior to the commencement of the interviews, participants were briefed on the purpose and background of this study, as well as the confidentiality of their interviews using the information sheet shown in Appendix 5. Written consents were then sought from participants, using the consent form in Appendix 6 for their participation in this study, and for the interview session to be audiotaped. In addition, their demographic profiles, as indicated in Appendix 7, were also collected. The participants were also given the options of (1) to not answer any questions they did not wish to answer, and / or (2) stop the interview or cease participating in this qualitative study at any point in the interviews.

### 4.2.2 Sample Characteristics

The 22 participants comprised 12 men and ten women. Their ages ranged from 18 to 50 years. Fifteen were parents. Their education qualifications ranged from secondary to university degree. Table 4.1 shows the demographic distribution of these participants. With these 22 participants, a total of 14 interviews were conducted; they comprised seven one-on-one interviews, six group interviews of two participants each, and one group interview of three participants. The researcher in this study conducted all the interviews. Each interview lasted between 30 to 60 minutes.

**Table 4.1. Demographic Distribution of the Participants in the Qualitative Study 2**

| Characteristics | n |
|---|---|
| Gender | |
| Men | 12 |
| Women | 10 |

| | |
|---|---|
| Age | |
| 18–20 years old | 2 |
| 21–30 years old | 2 |
| 31–40 years old | 3 |
| 41–50 years old | 10 |
| 51–60 years old | 5 |
| Marital Status | |
| Single | 6 |
| Married | 16 |
| Parenthood Status | |
| 0 child | 7 |
| 1 child | 6 |
| 2 children | 7 |
| 3 children | 2 |
| Education Qualification | |
| Secondary, or High School | 2 |
| Higher Secondary, Polytechnic or College | 7 |
| Degree, Post Graduate Diploma or Master | 13 |

## 4.3 Interview Questions

Essentially, the views of participants based on their personal experience of WE and observations of other engaged individuals at work were sought. The interviews were semi-structured and the open-ended questions as shown in Appendix 8 were used as a guide. The interviews were semi-structured to allow flexibility in how and in what sequence questions were asked (Mason n.d). Semi-structured interviews helped to ensure rapport, as they were more of a conversation where questions were asked only when the interviewer felt it was appropriate to ask them. A more standardised or structured approach was not used so as to avoid overly imposing the researcher's meaning and understanding onto the subsequent data.

The open-ended questions in Appendix 8 were developed to answer the two key questions RQ1 and RQ2. They were developed with the aim of validating the quantitative findings from Study 1. The researcher aimed to see if the participants in Study 2 highlighted similar PVs as those in Study 1, which are significantly related to WE in general, and also when the influence of various demographic profiles was considered. By doing this, the researcher aimed to seek possible reasons for the existence and the strength of these relationships.

## 4.4 Method of Analysis

The method of analysis used is similar to those discussed by Moustakas (1994) and Polkinghorne (1989) for phenomenological research. This method of analysis is used because

the steps are ‘systematic’, and its purpose is ‘to develop a deeper understanding about the features of the phenomenon’, as noted by Creswell (2007, p. 60) for phenomenological data analysis: the phenomenon being studied here is WE. In this methodology, after transcribing all the interviews, each interview was read closely, and the significant statements and contexts provided by the participants on the relationships of PVs, WE and under the influence of demographic profiles were identified and coded.

This collection of statements and contexts was then sorted and combined into two main categories to facilitate investigation. The first category was the relationships of PVs and WE in general. The second was the influence of the demographic profiles considered in this study (gender, age, marital status, parenthood and education qualification) on the relationship of PVs and WE.

Finally, a deductive approach was adopted to identify key insights from these findings to illustrate what the participants experienced during WE when associating this phenomenon with PVs and demographic profile, and also ‘how they experienced it in terms of the conditions, situations, or context’ (Creswell 2007, p. 60). This final analysis process consisted of reanalysing the data collated in the categories, and the raw data to check on the rigour of the key insights postulated, to convey the overall essence of the experience.

The TAMS Analyser 4.32 qualitative research software (Weinstein 2012) was used to facilitate data analysis. It has various features that help organise the high volume of data generated in the qualitative investigation for easy analysis. It allows easy coding, organisation, searching and data retrieval. These features facilitate and enhance efficient qualitative analysis of data. As a result, the software allows more consistent and reproducible analysis than by hand (Curry, Nembhard & Bradley 2009, p. 1446). Taylor (2012, p. 8) notes, in his review of the many computer software for qualitative analysis, that the TAMS Analyser is often used in the social sciences. Examples of TAMS Analyser use in the literature include: exploratory studies on the perceptions of asthma among physicians (Sickle 2005); on computer-supported collaborative inquiry in remote networked schools (Turcotte 2008); on how story writing by pre-service elementary teachers demonstrates physical science concepts (Frisch 2010); and on the operational and operations management characteristics of a professional service firm (Lewis & Brown 2012).

## 4.5 Results to Research Question RQ1 on Influence of Personal Values

Participants were unanimous in sharing their experiences and observations regarding their belief that PVs were related to WE. Various reasons were given; they are presented in

this section. Common among them was that individuals 'come to work with certain values' and their 'own perspectives'. Participants believed there would be an associated tendency for individuals to be engaged at work whenever their work 'gave them the ability' to fulfil their PVs.

Two sample statements from participants illustrated this belief. According to a participant in his mid-40s with tertiary education:

> If individuals do not see a direct connection to the work, how do they see value in what they are doing at work? Management needs to understand a worker's personal motivations or values.

In other words, this participant was highlighting the advantage of understanding and then taking advantage of, or exploiting, personal motivation for WE. To another participant in his mid-40s (also with tertiary education), 'intrinsic values that one embraces would tend to determine the degree of engagement or lack of it'.

Other samples of quotations supporting this belief are in Table 1 in Appendix 9. Using the Schwartz's model of human value types as a guide, all participants shared a strong belief that the primary PVs related to WE were achievement, security, self-transcendence and hedonism. In addition, they highlighted that it was also possible for engaged individuals to be driven by the other value types, in addition to these primary ones. The details of these findings are presented in the next few sub-sections.

### 4.5.1 Achievement Value Type

For achievement value type, participants reasoned that individuals who were achievement-oriented or result-oriented were more likely to put in the necessary effort to do well and be engaged at work. All participants concurred that achievement value type was a dominant reason for WE. The following insights were gleaned about why and how this belief was held. Samples of the quotations supporting these insights are in Table 2 in Appendix 9.

#### *4.5.1.1 Return for desired gains*

All participants stated that individuals who value achievement would strive to do well at work in return for desired gains. These desired gains might be material and / or non-material, to meet 'certain level of satisfaction': material gains such as 'pay' and work 'benefits' were most common. To a participant who was an ex-full time teacher in his mid-40s:

> Some will respond better if they get paid more as these people aspire towards that. This may be the most common.

He added that the number of teachers recruited and willing to take teaching as career in Singapore had increased in recent years, since the Education Ministry increased the pay package for both trainee teachers and trained teachers.

*4.5.1.2 Non-material gains*

Common examples of non-material gains shared by participants were related to pride, self-esteem, self-respect or recognition. They suggested individuals might take pride as a form of non-material gain when (1) their work allowed them to 'do more than others', help others or 'a cause', or do something 'meaningful', and (2) they found the accomplishment 'very self-fulfilling'. In deriving these examples of non-material gains through work achievements, individuals also gained a sense of fulfilling stimulation (excitement in meeting challenges), self-transcendence (helping others) and hedonism values (pleasure from self-fulfilment). To a participant in her early 40s:

> I will be proud because nobody else has done this before. I am the first person to have re-engineered the entire system after people have been using the old application for so many years. So it is the good feeling that I am delivering something that is a lot of good for my users. At the end of the day, everybody will be very happy with the product. I would feel very proud that I engineer this. So it is pride.

Regarding self-esteem, one participant in her late 40s stated that some individuals become engaged at work because they want to be seen as professional, whereby 'professional means being competent'. She explained such individuals would strive to 'do the job to the expectation' or 'to a certain completion', and be seen to demonstrate 'competence according to generally accepted standards'. For other participants, standards include being able to 'provide for one's family', which is associated with security (safety of family), benevolence (welfare of family) and tradition (fulfilling family responsibilities) values.

On the notion of self-respect, a participant in her early 50s shared her observation of her boss. Her boss 'rose through the ranks despite lacking professional training' and was able to cope and do well as a manager. This participant added that in the local context of Singapore—as it was uncommon for non-degree holder to be a manager—being a manager was 'a big thing' for her accounting manager. 'It is a proof to others' that although the accounting manager did not have a degree, the accounting manager 'was a manager now'. This participant explained this achievement made her manager feel 'very proud and satisfied' of herself. Regarding recognition, non-material gains were described by another participant in his mid-40s as 'benefits that are of the intrinsic kind' to recognise one's work. As an example,

the awarding of 'certificates to acknowledge' the contributions of individuals was given to illustrate this form of non-material gain.

*4.5.1.3 Local context and Singapore culture: Meritocracy*

When participants were asked why they believed achievement was the most common PV type related positively to WE, participants unanimously replied it had to do with the local context and culture in Singapore. They added that since independence, there had always been a 'push' by 'government policies' in Singapore for meritocracy, as part of the national effort to sustain development and growth in the country. A participant in his mid-40s gave the following explanation of why meritocracy was adopted in Singapore:

> Meritocracy pushes people and because of it, people can get a sense of achievement and the natural sense of people wanting to do better. The idea of meritocracy is when I give you a test and you do well, you get rewarded.

A major government policy highlighted was the stance to not support welfare benefits for locals unless at least one person in the household was working. This approach is unlike some 'welfare'-oriented states. A participant in his mid-50s gave the following elaboration:

> For some other countries, if they don't have a job, they can still get paid. But there is not much of a welfare system here. If there is too much welfare, the people may tend not to work as hard. Singapore adopts a policy whereby one needs to work in order to get a certain level of welfare.

Participants also shared that Singaporeans had developed a strong commitment to the local spirit of 'KIASU'. KIASU (meaning 'scared-to-lose' in local dialect, when translated directly) is a colloquial expression for meritocracy in Singapore. With this spirit so ingrained, it was natural for Singaporeans to attain high achievement values. Epitomising this culture of meritocracy and the value of achievement, two siblings (who were about 20 years old) stated that such cultural beliefs were ubiquitously advocated among their friends and acquaintances. To them, this culture permeated 'from house, to outside, to school, at the workplace and even when as conscript soldiers in the army'.

*4.5.1.4 Extent of Influence on WE tempered by personal resources*

However, participants shared that the personal resources inherent in the individual or built up through education, work and / or life experiences could temper the extent by which achievement values drove WE. If individuals had the personal resources of ability to cope with stress, and had resilience and self-efficacy, such individuals might be able to stay

engaged at work. For instance, a participant in his mid-50s explained:

> If the person has enough energy and intelligence while struggling for his family, the person can still contribute. But not many people can do that. So it is very subjective [i.e. not everyone has these personal resources]

'Confidence' to fulfil achievement value built up through career 'progression' or 'higher education' was also stated as a personal resource that could affect WE. Career progression and education could enhance self-efficacy, self-esteem and optimism, which in turn could affect extent of WE.

*4.5.1.5 Extent of Influence on WE tempered by personal goals*

Participants also stated that personal goals could affect the extent of how achievement values affect WE. The examples of personal goals given by the participants were mainly related to life stage. They include striving to earn 'high pay in the first job to support the family', using an existing job as 'stepping-stone' to 'better jobs' or 'starting own business', and the desire to have a 'balance[d] work and family life'. An example given that is not related to life stage was to 'compete for clients'.

From the examples, it can be seen that personal goals may or may not be aligned to positive WE. Those that are aligned (e.g. striving to support the family financially or competing for clients) can lead to positive WE driven by achievement values and / or to fulfil security and self-transcendence values. For instance, a married participant in her late 40s reasoned if an individual 'wish to learn something like knowledge', this individual could be 'inspired to take up the challenge and achieve something'. But those that are not aligned (e.g. treating existing work as 'stepping-stone' or striving for work-family balance) may temper WE, as such individuals may 'just put in sufficient effort to be seen to be working'. When one treats existing work as 'stepping-stone', one may be focusing effort on 'learning' as much as possible, or gaining 'experience' from the existing work to prepare for a venture into other new work or own business. In turn, this may not mean that one will necessarily be very engaged at work. Explaining this belief, a participant in her early 50s gave the following illustration of some junior staff she observed in her company:

> There are these people in the twenties up to thirty years old. Most of them do not have the qualification and are still studying for their exams at different levels to be accountants. Motivation to them comes more from the pay packet at the end of the day, and the time-off the company gives to them to study and take exam. And once they have the qualification or the experience, they can take up higher positions or go elsewhere for better jobs. For those

> who plan to get better jobs elsewhere, the current job is a temporary job to them and they come into the current job with that mentality.

*4.5.1.6 Extent of Influence on WE tempered by work conditions*

Besides personal goals and resources, participants also stated that work conditions could affect the extent of how achievement values affected WE. Work conditions include how conducive the work environment is, the quality of work experience and the quality of relationships at work. Examples of conducive work environment that enhance an individual's WE include having a workplace that has 'good training programs and resources', having a good 'boss', and doing work that is in line with 'one's self-interest'. Should the work environment not be conducive, not only can individuals be disengaged, they 'may decide to resign and look for another job'. This disengagement arises from a perceived lack of support, or alignment to individual ability to achieve, in return for desired gains at work.

For quality of work experience, examples that can lead individuals to 'not putting full effort' or 'just putting sufficient effort' at work include bad work experience related to inability to fulfil the work 'ideals' of individuals, and feeling 'disillusioned' after a 'reality check' at work. Such experience can result in individuals being wary about tasks given, 'assessing whether any effort [put in] is worth it'. In certain cases, individuals may be engaged at work to avoid past bad experiences of 'scolding' or 'poor appraisal' or 'no pay increment' at work. Such individuals may just 'conform to the set of rules set by the manager'. Conversely, there are individuals who are engaged at work because of past good experiences of being promoted and / or having increased 'salaries' for their work done. Non-material good experiences such as 'compliments' or customer satisfaction were also cited as examples that encourage achievement and being engaged at work.

For quality of relationships at work, participants cited 'office politics and conflicts'. Individuals can become disengaged at work because they may 'not get along' with the individuals they are working with. Summarising this view, a married participant in her early 40s stated, 'people join because of organisation but people also leave because of people'. In other words, the quality of people relationships at work can be a veto factor on WE.

*4.5.1.7 Summary of findings on achievement value type*

In summary, there was a unanimous view that individuals who were high in achievement value type would put in effort, strive to do well and be engaged at work in return for the material and / or non-material gains they desired. These desired gains could be related to fulfilling pride or other PVs, such as security, stimulation, self-transcendence, hedonism,

tradition and conformity. Participants also explained that achievement value type was a common value type that drove workers in Singapore to be engaged at work, because of the 'push' for meritocracy in the local context and Singaporean culture. Participants also cited that personal resources, personal goals and work conditions might temper the influence of achievement value to WE. Figure 4.1 provides a summary of the key findings related to achievement value type.

**Figure 4.1. Summary of Key Findings on Achievement Value Type**

- Involves putting necessary effort at work in return for desired gains
- Desired gains may be material or non-material, and may involve the achievement of pride, or the fulfilment of other PVs such as security, stimulation, self-transcendence, hedonism, tradition, etc.
- Related to local context and Singapore culture of meritocracy
- Extent of influence on WE is tempered by personal resources, personal goals and work conditions

### 4.5.2 Security Value Type

Participants stated that concomitant with achievement as the primary value type related to WE, was the individual's security PV. From participants' responses, the following insights were gleaned about why and how this belief was held. Samples of the quotations supporting these insights are in Table 3 in Appendix 9.

#### *4.5.2.1 Achieve material gains to meet basic needs*

Participants stated that when individuals were high in security values, they would be positively engaged at work to achieve material gain to maintain safety, harmony and stability for themselves or within relationships, such as their family. Participants explained that people 'need money to survive' and they would thus value security and put in effort at work, especially when their immediate needs for survival could not be satisfied by means other than their work. Supporting this belief, a participant in her early 50s explained:

> Most people work to get a steady stream of income, and then, can maintain their family and therefore, maintain the relationships in the family. So security I think would be a more common reason, a more common motivation for most people.

Another common example of individuals who were engaged at work because of security values were those individuals who had just entered the workforce and 'wanted to establish' themselves, or those individuals in the 'lower hierarchy' of the workforce, all of

whom needed to work to meet basic needs.

*4.5.2.2 Local context and Singapore culture: Conservative*

Like achievement value type, when participants were asked why they believed security was a common PV type, they unanimously replied it concerned the local context and culture in Singapore. Singapore is a relatively young country, without 'natural resources' and it 'cannot survive independently'. A participant in her mid-40s explained some countries could be self-sustaining with their natural resources:

> For water, they can get it from the well. For food, they can grow or rear livestock. They got land and natural resources. In fact, they can do without electricity. They can use the traditional way to light up the house. But if you look at Singapore, you cannot survive without paying for something. There is a need to pay for basic living.

There are also continuous needs to strive for growth and sustainability through meritocracy, and to maintain social cohesion through racial and religious harmony. The 'education system and the government policies' encourage Singaporeans to be conservative. As a result, participants shared that, like KIASU (or meritocracy), Singaporeans have at times been characterised as KIASI. KIASI (meaning 'scared-to-die' in local dialect when translated directly) is a colloquial expression for being conservative in Singapore. Participants unanimously highlighted that KIASI's characteristics, of being risk-averse and fearful of losing, demonstrate the importance placed by Singaporeans on security values.

Examples of KIASI spirit or conservative culture shared by participants include: (1) cultural willingness to take a 'pay cut' during bad economic times to keep jobs as part of a national effort to maintain strong labour-management relations; (2) propensity to be risk adverse when doing business; and (3) supplementing children's education beyond the basic education provided by the national education system, to ensure 'kids would not lose out when they grow up'.

*4.5.2.3 Security is a basic value that needs to be fulfilled first*

Common among participants, security value was highlighted as the basic and first value that needed to be fulfilled before becoming engaged at work for reasons other than security. Participants explained this was because 'individuals need to survive', and 'Singapore's lack of natural resources' obliged individuals to treat 'security as an underlying value to secure one's future'. Put simply by some participants, 'security is a base'.

Supporting this notion, participants shared that more of the older generation in

Singapore are engaged at work because of security values, than current and younger generations. This is because the older generation had been brought up during times when Singapore was relatively poor and still developing. For the current generation, because Singapore had recorded steady growth, and was less poor and more developed, security was still important, but a lesser concern to most of the current generation. For the younger generation, Singapore had reached developed-country status. Most parents, and the country, could meet their 'basic security' needs. Most of the children's generation could be engaged at work, 'for something that is of meaning to them whatever that meaning is'. For example, two siblings who were about 20 years old shared that their parents were able to provide their basic financial needs. This allowed them to engage with work that supported their self-enhancement and openness to change values, and personal interests. However, they added that they had peers who were unable to engage with work for the same reasons, as their peers needed to work for sufficient money to fulfil the security need of supporting their families.

*4.5.2.4 No guarantee that WE will be high*

However, participants also shared that being high in security value type might not necessarily guarantee high levels of WE, as individuals could just work sufficiently to ensure their income was sufficient. For instance, a participant in his early 40s shared:

> There are people that just work for the sake of security. They just need their salary. It is not in their interest to work if they had a choice. As they need a job and got nowhere to go, they just grab a job.

Another participant in his mid-50s shared:

> In the workplace, there are some individuals who try not to be smart and just do a fair bit for a fair day's job. These individuals may come across as less engaged at work. This is because such an individual is only prepared to do the basic to get by each day, keeping within a comfort zone of work and trying not to do new things. This is in order not to be too smart and end up doing a lot more things.

Conversely, individuals' thresholds for meeting their security value could be different. The difference in threshold could be such that the extent to which individuals might strive to achieve and be engaged at work, to gain that threshold of security, would be correspondingly different. For instance, the threshold for some individuals may concern being able to provide a basic home and living for their family. Others' thresholds may concern being able to provide or maintain a 'luxurious' home and living for the family. As a result, depending on the 'perception' of security, an individual can be concomitantly high in self-enhancement and

openness-to-change values to ‘enhance their security’.

*4.5.2.5 Extent of Influence on WE tempered by work conditions*

Like achievement value type, participants also cited examples of work conditions that could temper the extent of how security values might drive WE. These include clarity of ‘purpose’, having ‘like-minded people’ and desire for fair a return for effort at work. Should clarity of purpose at work be lacking, workers may be neither ‘inspired’ nor engaged at work. When like-minded people are absent at work, one may find ‘difficulty to put across any proposition’ that helps to secure the success of one’s work. As a result, one may not be confident at work. Less engagement, or disengagement, may be the consequence. When one has ‘worked very hard’ and this has not been reciprocated with proportionate fair material or non-material returns, one may no longer trust that effort at work is ‘worth it’; a sense of security at work may be lost, resulting in lack of engagement.

*4.5.2.6 Summary of findings on security value type*

In summary, participants shared that, concomitant to the emphasis on achievement value type, another common PV type driving individuals at work was security. This was because if an individual’s basic needs were not met, that individual would need to work to derive material gain to meet those basic needs. Participants also explained that security was a common value type that drove Singaporeans to be engaged at work, because of Singapore’s conservative culture. Security was a basic value that would have to be fulfilled before one would be engaged because of other reasons. In addition, participants shared that valuing security might not necessarily guarantee high WE, as individuals’ thresholds for meeting the security value at work was subjective. Participants also highlighted that work conditions might temper the influence of security value to WE. Figure 4.2 provides a summary of the key findings related to security value type.

**Figure 4.2. Summary of Key Findings on Security Value Type**

- Individuals need to meet basic needs first if it was not yet met
- Related to local context and Singapore culture of being conservative
- No guarantee that WE would be high because of security value type, as individuals’ threshold for fulfilling security was subjective
- Extent of influence on WE is tempered by work conditions

### 4.5.3 Self-Transcendence Values (Universalism and Benevolence Value Types)

Besides achievement and security value types, participants also shared that self-transcendence values were simultaneous common values related to WE. The insights from the participants as to why and how this belief was held are presented as follows. Samples of the quotations supporting these insights are in Table 4 in Appendix 9.

*4.5.3.1 Common resentment at unfair practices and lack of welfare at work*

A primary insight shared by participants was the common resentment at 'unfair' practices and lack of 'welfare' at work (i.e. contrary to self-transcendence values) that could lead to low WE or disengagement. A participant in his mid-40s even described it as 'universal', because 'unfair' practices and lack of 'welfare' were common 'grouses' workers made. Using an analogy to explain this view, he highlighted there was always the tendency for individuals to feel they were unfairly treated when someone 'cut into their queue'. He explained that it might concern 'one's ego', and added that 'the sense of unfair treatment could be subjective'.

In another instance, a married participant in his mid-50s used an anecdote of recent unrest in a local company at the time of interview to illustrate this insight. In that company, a group of workers was unhappy with the remuneration package they were receiving, compared to another group of workers. They felt they were 'treated unfairly'. They were also unhappy with the 'conditions of the accommodation' provided by the company. They felt their 'welfare' was not taken care of. As a result, they became disengaged with their work and decided to go on strike.

In contrast, a married participant in his mid-40s shared his positive experience of ensuring fair treatment and taking care of his workers' welfare. He felt that his regular 'review sessions' with his workers, disbursement of 'salary on time' and proactive approach to recognise and 'promote' deserving workers had helped to 'ensure his workers were engaged'.

*4.5.3.2 Being able to care for others in need*

Another insight related to the self-transcendence values that participants shared as a driver of WE concerns work that allowed individuals to care for others in need. Examples of such insights included 'lawyers' feeling engaged because 'they could help' their clients, healthcare staff feeling engaged because of 'the ability to help needy people', and teachers feeling engaged because of 'beliefs' they were 'doing something good' as they 'helped and

developed' students. Common to all these examples, individuals with self-transcendence values are engaged with their work because they sense the potential significant influence they can have on those they are helping. They treat their work as good deeds they are 'passionate' about. Demonstrating the high value he placed on helping others in need, a participant in his mid-40s, who had been a teacher and social worker gave the following illustration:

> If you do not perform in a bank, what is affected is the bank profits or your performance bonus or increment. But for teachers if they do not perform, the kids in their classes for each period will be affected. Imagine each class has about 40 kids and if each teacher has 5 classes, the performance of any particular teacher may affect about 200 kids.

*4.5.3.3 Obligation, duty and responsibility*

Participants also stated obligation, duty and responsibility as reasons related to self-transcendence values that could drive individuals' WE. Participants explained that these reasons could be from the 'higher education' or skill qualifications they had, the 'higher pay' they earned, the relative 'higher job positions' they held in organisations, or having 'subordinates'. As a result, such individuals tend to 'sense the significance' of their work contribution and 'feel they are part of the organisation', as they feel their work contribution is 'recognized'. Participants explained that such individuals would then feel 'obliged' to 'put in all their might' to be responsible, 'even when nobody was watching'. These individuals will tend 'not to go against organisational directives or the instructions of their superiors', and will thus be engaged at work.

*4.5.3.4 Extent of Influence on WE tempered by work conditions*

However, participants qualified that the extent of self-transcendence values' influence on WE was tempered by work conditions. For example, if the 'boss treats the workers well', the workers reciprocate through WE. If everybody is 'chipping' in at work to ensure organisational performance, individuals may feel obliged to contribute and be engaged at work too. Conversely, if others at work are not cooperative or helpful, one may not be fully engaged at work. Participants felt that perceived support at work could affect the extent to which individuals fulfilled their self-transcendence values. In turn, this affected their WE.

*4.5.3.5 Summary of findings on self-transcendence values*

In summary, participants shared that, concomitant to achievement and security value types, self-transcendence values were also commonly related to WE. Among the reasons for this was that individuals tend to be engaged at work if work practices were fair and if welfare

existed at work. Participants added that other reasons could include the perceived significant positive effect of helping others in need, and the perceived recognition of one's work contribution. In the case of perceived recognition, one may consequently feel obliged to reciprocate and be engaged at work out of duty and responsibility. However, perceived support at work was highlighted as a factor that could temper the extent of self-transcendence values' influence on WE. Figure 4.3 provides a summary of the key findings related to self-transcendence values.

**Figure 4.3. Summary of Key Findings on Self-transcendence Values**

- When work practices are fair and there is welfare at work, individuals tend to be engaged at work
- Perceived significant positive impact of helping others in need while at work may drive WE
- Perceived recognition of one's contribution at work can drive WE through obligation, duty and responsibility
- Extent of influence on WE is tempered by work conditions, particularly perceived support at work

### 4.5.4 Hedonism Value Type

Besides achievement value type, security value type and self-transcendence values, participants also shared that hedonism was a common value type related to WE. The insights from the participants as to why and how this belief was held are presented as follows. Samples of the quotations supporting these insights are in Table 5 in Appendix 9.

#### *4.5.4.1 Happy at doing the work*

A common insight from participants is that individuals who are 'happy at doing the work' tend to be engaged. A participant in his mid-40s related his experience to support this insight. In his previous job as a full time teacher, he was 'not happy doing' the increased administrative tasks he had after being promoted for good performance at teaching. He was unhappy with the increased administrative workload because he preferred spending his time at work teaching. He was happy doing teaching, as he 'liked' it and was 'good at' it. Feeling disillusioned because he was doing less teaching, he became disengaged at work.

Another participant in his mid-50s emphasised the importance of happiness as a prerequisite for WE, when he stressed that 'happiness should come first' before 'one would think about achievement' and then thought about expending the 'energy' to do the work. He reasoned that when one was happy, one could derive 'a very high state of pleasure, and

achieve self-actualization'.

*4.5.4.2 Sensuous gratification*

Participants also shared that the ability to satisfy one's 'individualism' in terms of 'interest or passion' through doing the work could keep one engaged. During such a phenomenon, the act of doing work may give an individual the sensuous gratification of fulfilling interests, passions, values or simply a sense of 'recognition'. In such a situation, individuals may experience a sense of 'freedom', 'independence' and 'enjoyment' from the sensuous gratification.

To satisfy that 'interest', one may continue to expend effort 'to get it', even if 'it could take some time', as long one 'achieves success' at it. The endeavour 'to see the result gets one to be absorbed at work', 'refusing to stop', till the result meets one's interest. A participant in her early 40s gave the following illustration of how her drive for sensuous gratification kept her engaged at work:

> It is almost there. It is almost there. I am about to see the result soon. Everybody is looking forward to this result. There is this feeling of I just need to do one more thing to make it happen. And this feeling continues, and I get so absorbed into my work. I just need to do this one more step. Everything will fall into place nicely. It is that one more thing and one more thing, one after another.

Also expressing this insight, a participant in his late 40s stated, 'WE boiled down to interest because if the work was not interesting to the person, one would not be dedicated to or absorbed in the work'.

*4.5.4.3 Does not necessary lead to WE because of subjectivity*

However, participants stressed that hedonism might not necessarily lead to WE, as individuals' interests, passions and values might not be in line with the work being done. A participant in his mid-50s explained that when individuals were doing work that 'went against their self-interest', or deprived them of a 'sense of freedom' or 'self-gratification', such individuals could become disengaged at work. Examples of such instances shared by participants include 'preference to hang out with friends', doing 'dream jobs' or 'certain kind of work they like', or gaining desirable returns for effort expended. In contrast, participants also shared there were other individuals who could be engaged at work because of the pleasure derived from the material and non-material gains received. Examples of material gains given by participants include WE allowing such individuals 'to buy branded goods',

and the support of their hobbies, such as 'spending on their pets'. An example of non-material gains was the ability to 'put to use their values' during WE. A participant in his early 40s also highlighted this subjectivity was 'regardless of education level, age or gender', as interest 'depended a lot on the person'.

*4.5.4.4 Summary of findings on hedonism value type*

In summary, participants stated that it was common for hedonism value type to be related to WE. Participants believed that individuals who value hedonism would treat happiness at doing the work as a prerequisite for WE. Participants explained happiness would be derived when these individuals experienced sensuous gratification while doing work. However, participants highlighted that such individuals might not be engaged at work when the work and their self-interest were not aligned. Figure 4.4 provides a summary of the key findings related to hedonism value type.

**Figure 4.4. Summary of Key Findings on Hedonism Value Type**

- When one is happy doing the work, one tend to be engaged at work
- Sensuous gratification can lead to WE
- Valuing hedonism may not lead to WE when doing the work is against self-interest

### 4.5.5 Other Value Types

Participants shared that it was possible for engaged individuals to be driven by the other value types in the Schwartz's Value Model when they were driven by: (1) achievement, security, self-transcendence and hedonism values, and (2) contextual factors. They felt that all the PVs were relevant to WE. They also felt that 'at different times' or 'life stages', 'some might be more important than others because of the 'circumstances' and 'experiences' one had gone through or was in. There was also a general view that individuals might be fulfilling a 'combination of values' when they were engaged at work. The insights from the participants as to why and how these beliefs were held are presented as follows. Samples of the quotations supporting these insights are in Table 6 in Appendix 9.

*4.5.5.1 Self-direction value type*

Some participants reasoned that self-direction value type could drive WE because (1) WE required engaged individuals to be 'willing' to put in effort to perform at work, and (2)

autonomy at work could make individuals 'feel the achievement once the job was accomplished'. A participant in his late 40s explained that individuals who were 'willing' to perform at work would need to 'handle challenges, take initiative and be creative' to be successful and fulfil achievement values. With autonomy at work, a married participant in his mid-40s reasoned that the pride derived from achieving successful job completion through independent effort could keep one engaged at work. Another participant, also in his mid-40s but single, supports this belief when he highlighted:

> I think self-direction can probably be the biggest thing management can give to employees. This is because this approach allows the individuals to find their own.

*4.5.5.2 Stimulation value type*

For stimulation value type, some participants reasoned it could drive WE because of (1) the 'confidence' in 'abilities' gained through one's 'education', or experience of success at work, and (2) one's basic needs had been met. Participants reasoned higher educated individuals tend to 'challenge' themselves and 'do a bit more' to capitalise on their abilities. Such individuals would thus tend to value stimulation and be engaged at work. Regarding basic needs, a participant in her early 40s explained that her WE was driven by her passion and liking of her work, because she 'had [already] met her basic needs'. She 'felt very self-fulfilling' and 'motivated' in her work when she could 'do more than what was previously completed'. Another participant in her late 40s reasoned that a person who valued stimulation in the form of challenge 'would not be working with little energy'. This is because such a person would tend 'to show the ability to take on the work'.

*4.5.5.3 Power value type*

For power value type, some participants reasoned that it could drive WE because some individuals might view the ability to influence others and social status as (1) desirable achievements, or as (2) necessary means for them to be successful at work. To some individuals, 'authority and autonomy' are forms of achievement and 'inspiration'. They will strive and be engaged at work to attain certain levels of power to be 'compatible with what they have put in'. To some other individuals, power is deemed necessary at work to achieve desirable gains of (1) 'respect' from others, (2) ability 'to influence' others, and / or (3) career progression.

*4.5.5.4 Conformity value type*

For conformity value type, some participants reasoned that it could drive WE because

(1) of the desire for material gain like 'pay', (2) of universalism values, and / or (3) of security values. To seek material gain such as 'pay', some individuals may 'conform to the set of rules' even if they do not like the rules or their superiors' treatment of them. In the interest of universalism values, some individuals may 'not want to go against, upset or violate' established practices at work or instructions, and just abide by them. Security values may arise from contextual factors, such as financial obligations to fulfil for family, and / or the desire to seek job security. They may consequently drive conformity values, which in turn lead to WE.

*4.5.5.5 Tradition value type*

The general views of participants on why and how tradition value type could influence WE were similar to those on conformity value type. They reasoned that tradition value type could drive WE because of achievement, universalism and / or security values. For companies to succeed, some managers promote harmony at work by placing 'emphasis on tradition and security [values] so that the staff turnover will not be high'. Like conformity value type, some individuals who are driven at work by contextual factors, such as financial responsibilities to family (i.e. security and self-transcendence values), may be driven by tradition values too at work.

*4.5.5.6 Extent of influence depends on job requirements*

Common among the insights provided by participants in the above sub-sections is that the extent of these other value types' influence on WE may depend on job requirements. For instance, they shared that engaged managers tend to be driven by self-direction values, because their roles required them 'to lead', be 'independent', 'appear different', plan and allocate job tasks. In contrast, for engaged lower managers and working staff, they may be driven by conformity values, because they are generally required to follow instructions and complete the tasks given to them to ensure the organisation's success, and 'not do things that will rock the boat'.

Should one be high in certain PV, with that PV not matching what the job requires, the sense that one is unable to derive the pleasure of fulfilling PV at work can lead to lower WE or disengagement. For instance, a participant in his mid-40s highlighted that a 'very self-directed' person might not like to be 'told what to do' most of the time. If the person is persistently 'told what to do' at work without having much autonomy, this negative experience is likely to lower their WE. Conversely, another participant in his mid-50s gave examples of individuals who valued tradition and hedonism and were able to get carried

away, or be engaged at work, because their work allowed them to fulfil the PVs they were high in.

*4.5.5.7 Summary of findings on other value types*

Overall, the findings on other value types (i.e. self-direction, stimulation, power, conformity and tradition) indicate that they can drive WE because of (1) the emphasis of achievement, security, self-transcendence and / or hedonism values at work, and (2) contextual factors. In the examples, participants elaborated how achievement values could lead to self-direction, stimulation, power, conformity and tradition values. There were also elaborations of how security and self-transcendence values could lead to conformity and tradition values. As for hedonism values, how well other PVs match those of the job requirements can influence the extent of (1) pleasure derived from fulfilling it, and (2) being engaged. Figure 4.5 provides a summary of the key findings related to other value types.

**Figure 4.5. Summary of Key Findings on Other Value Types**

- Other value types (i.e. self-direction, stimulation, power, conformity and tradition) can drive WE too because of (1) the emphasis of achievement, security, self-transcendence and / or hedonism values at work, and (2) contextual factors
- Extent of influence of these other value types on WE depends on how well they match the job requirements

### 4.5.6 Summary of Results to RQ1

First and foremost, participants shared a strong common view that PVs were related to WE. The primary value types highlighted as relating to WE were achievement value type, security value type, self-transcendence values and hedonism value type. Participants shared that individuals who were high in achievement value type were likely to be engaged with their work in return for material or non-material gains, and personal resources, personal goals and work conditions tempered the extent of this WE. For individuals who are high in security value type, they are likely to be engaged at work if their effort at work is necessary to meet their basic needs. However, being high in security value type may not necessarily guarantee high levels of WE, as individuals can just work enough to ensure basic needs are met. Participants also shared that achievement and security value types were primary value types related to WE in Singapore, because of the meritocratic and conservative Singapore culture.

For individuals who are high in transcendence values, they are likely to be disengaged

or not fully engaged with their work if they sense unfairness and lack of welfare at work; it is common for humans to resent such work conditions. However, if the work allows such individuals to care for others in need, and / or fulfil their sense of duty and responsibility, they are likely to be engaged with their work. For individuals high in hedonism value type, if the work meets the sensuous gratification of the individuals, they can become increasingly engaged. Sensuous gratification can occur when doing the work is in line with individuals' interests, passions and values.

Besides these primary value types, participants shared that other value types in the Schwartz's Value Model could also concomitantly drive WE because of achievement, security, self-transcendence and hedonism values, and contextual factors. These other value types are self-direction, stimulation, power, conformity and tradition. The extent of their influence on WE may depend on how well they match the job requirements.

## 4.6 Results to Research Question RQ2 on Influence of Demographic Profiles

Besides PVs, participants were asked to share their experience and observations as to whether, and if so why and how, they considered the demographic profiles of individuals might affect the relationships of PVs to WE. The demographic profiles considered were gender, age, marital status, parenthood status and education qualification. They are the same as those that were investigated in Study 1, to allow for results juxtaposition. The qualitative results collected are presented in the next few sections.

### 4.6.1 Gender

The experience and observations of the participants on whether gender could affect the relationships of PVs to WE were mixed. This mixed perspective was exemplified by one participant in his mid-50s when he said, 'it is very hard to say' what the differences between the genders were. The insights gleaned about why and how this belief was held are presented below. Samples of the quotations supporting them are in Table 7 in Appendix 9.

*4.6.1.1 Gender does affect with men more engaged at work*

Some participants perceived that men were more engaged at work than women. These participants reasoned that socially and traditionally, men had always been 'breadwinners' in the family and were high in achievement values, striving to perform and be engaged at work more than women. Men's focus is on bringing monetary gains for the family, while women's

focus is on providing care to the family, rather than work. A married participant in his mid-40s with one child shared:

> Some of the reasons are family needs and responsibilities. For men, it would be fulfilling all the monetary needs of the family most of the time. For women, they might not so much come into work, [but instead] they might focus more on the family.

Some participants also reasoned that this difference might be to do with 'biological or psychological make-up', which makes the two genders 'see things differently'.

*4.6.1.2 Women tend to value security more and achievement less*

Some participants also highlighted that women tend to value security more and achievement less than men. As a consequence, women tend to have lower WE than men. They reasoned that this phenomenon had to do with traditional and societal expectations, and governmental policies in Singapore. For example, Singaporean men are mandated to be conscripted into the Army or Civil Defence, and be consequently paid more at work than women, because of the sacrifices made during conscription. As a result of this mandate, there is a tendency for Singaporean women to value achievement less than Singaporean men as exemplified by a participant in her mid 40s with two children when she shared:

> If you look at it traditionally, when I first started and got a job, people tell you the male counterparts earn more than you because of National Service [in the Army or Civil Defence]. So for females, we got used to this concept. The government has been telling the men they will earn more after NS. The society moulded us this way. That is why in the society, if the woman does not get promoted, like in my company, they will say it is ok to wait for the next time. Whereas for the males, they will throw tantrums if female counterparts get promoted.

According to a participant in his mid 50s with one child, Singaporean men tend to be more confident and achievement-oriented after their experience as conscripts than women. Another participant in his mid 40s with one child added in a separate interview that Singaporean women seemed to be less independent and able to take care of themselves in society than men.

In another example, a participant in her late 30s with one child reasoned the tendency to value security over achievement at work might stamp from traditional and societal expectations of women. She explained:

> Women, especially those with children, will not work as hard as men with children. Women will spend more effort and time with their children. That is why government has mandated the giving

> of more childcare benefits to the mother than to the father. As women tend to behave this way, the government is giving the childcare benefits this way. For women, it is a case of security in the family-sense rather than money-sense as long money is sufficient.

In other words, Singaporean women tend to take up the primary role as caregiver in the family, be more security conscious and less achievement-oriented.

*4.6.1.3 Gender may not affect WE*

However, many of the participants also shared that gender might not affect WE. Many reasons were given. They include growing gender equality and independence among Singaporean women, increasing standards of living and changing societal expectations of women in Singapore, and job requirements. Proponents of gender equality reasoned that increasing equal educational and job opportunities might have raised the self-confidence among women, and this in turn leads them to develop PVs that were increasingly similar to men. Proponents of increasing standards of living reasoned that women were increasingly expected by society and their families to be engaged at work for financial returns to meet the cost of living. For job requirements, proponents of this reasoned that the lack of difference in the PVs between men and women become more apparent when they were holding higher management or particular professional positions. In general, participants viewed that the cause of any differences in the PVs and WE between men and women were increasingly more to do with individual interests or goals, rather than gender.

*4.6.1.4 Summary of findings on gender*

Overall, the findings on the influence of gender were mixed. Some participants believed men had higher WE because men had been socially and traditionally the 'breadwinners' in the family, and / or because of differences in 'biological or psychological make-up' between genders. Some participants also believed women valued security more and achievement less than men because of the local context and culture in Singapore. However, many participants shared that gender might not affect WE, because of increasing gender equality related to increasing educational and job opportunities for women, and the cost of living in Singapore, changing societal expectations and job requirements. Figure 4.6 provides a summary of the key findings on the influence of gender.

**Figure 4.6. Summary of Key Findings on Influence of Gender**

- Men tend to be more engaged at work than women
- Women tend to value security more and achievement less than men
- Increasingly, gender may not affect WE in Singapore

### 4.6.2 Age

For age, all participants shared that values could change over time because of the cumulative and possibly varied experiences built up in life. As a result, age can influence one's values, and the consequent changes to PVs can affect one's WE. A married participant in her late 30s with one child exemplified this when she shared:

> Age does make a difference [to PVs]. Because as one ages, one's values can change as the environment changes and the conditions change. So therefore, one would have to adjust oneself accordingly.

The following insights were gleaned about why and how this belief was held. Samples of the quotations supporting these insights are in Table 8 in Appendix 9.

#### *4.6.2.1 Life stage*

Some participants shared that age could influence which PVs affect WE because of the life stage one was in. They reasoned that the 'circumstances' individuals were in 'at that point in time' might require individuals to put more emphasis on certain PVs, which in turn could affect their WE. Two common life stages highlighted by some participants that could effect changes to PVs were when individuals took up management positions at work, and when individuals had family responsibilities. A married participant in his mid-50s shared:

> Individuals holding senior positions will generally put higher priorities on certain values like self-enhancement and openness to change. Similarly for younger people in management, they would also emphasize on these same set of values.

Another single participant in his mid-40s shared:

> Values can change over time and depend on the situation. When you have a family and thus, have more responsibilities, it is no longer about oneself.

#### *4.6.2.2 Young achieves for security if basic needs are not yet met*

Some participants also shared that when one was young and had basic needs that were

not yet met, one would tend to achieve at work for security. In addition to meeting basic needs, some of these participants explained that such individuals would be 'eager to learn', 'to show results', and in doing so, want to ensure their job security. A participant in her early 40s shared the following:

> When I [was young and] just graduated, I felt that I was very enthusiastic, as I was a working professional for my first time. To me, I would say that it was more of security. I want to establish myself and I also want to prove my capability.

In other words, young individuals tend to strive to achieve and be engaged at work to fulfil security values of meeting their basic threshold of needs, such as money, resources and childcare, if they are not met yet.

*4.6.2.3 Young achieves for other values or interests if basic needs were already met*

In tandem with the above insight in 4.6.2.2, various participants shared that young individuals tend to strive for other values or interests that were not security related if their basic needs were already met. This drive for other values or interests may not lead to high WE, depending on its alignment with the work. Examples of these other values or interests given by participants include self-direction, stimulation, hedonism and things that individuals could be passionate about, or found pleasure in. Some participants added that over time, the threshold of basic needs might increase because of changes in one's circumstances, such as raising a family, or the cessation of financial support from parents. Under such circumstances, these participants reasoned that individuals might place more emphasis on security values at work, rather than other values or personal interests. Supporting this belief, a married participant in her mid-40s with two children explained:

> Their parents may have met their basic needs by providing them food and housing. As a result, these younger workers can be more independent and fulfil their aspirations. However, once they start to have a family, own houses and responsibilities without the support of their parents, they may realize that they need to go back to ensure their security is taken care of.

*4.6.2.4 Dependence on generations*

Many participants also shared that age could influence which particular PVs might affect WE because of the different generations in which they had been raised. In general, these participants shared that most of the younger generations valued self-enhancement (achievement, power and hedonism) and openness to change (self-direction, stimulation and hedonism), because they had been brought up in a time when Singapore had already reached

developed status, whereby basic needs were mostly met by their parents, and much emphasis on 'meritocracy' had been put in place. As a consequence, younger generations were more 'individualistic' and 'idealistic', and valued security less than older generations. For the older generations, these participants felt that most of them valued self-transcendence (benevolence and universalism) and conservation (tradition, conformity and security) because they were brought up in a time when Singapore was still developing and fighting for survival, trying to make ends meet. The older generations tended to place higher value on security and to not take things for granted.

*4.6.2.5 Older workers tend to be steeper in self-transcendence and conservation values*

Finally, many participants also shared that older workers valued self-transcendence (benevolence and universalism) and conservation (tradition, conformity and security) more than younger workers, because of their life experiences and not just from generational differences. These participants reasoned that with more experience, older workers were more 'careful', 'detail', 'understanding', and 'appreciative' of the situation they were in, and more able to 'analyse', 'deliberate', and 'plan' at work. On the other hand, younger workers, being less experienced in life, were more 'naive' and seemingly 'daring to try' things at work that they have 'interest and pleasure' in. In addition, these participants also reasoned that older workers were more risk adverse, as most of them were holding senior positions at work or greater responsibilities in life, and / or were earning higher pay. Therefore, they would value and secure what they had gotten thus far.

*4.6.2.6 Summary of findings on age*

Overall, the findings show that age does influence how and why certain PVs affect WE. From the participants' sharing, this influence is generally because of life and work experiences, and changes in individuals' circumstances over time. With experiences and circumstances as key factors, participants highlighted the influence of age could be better understood by looking at the life stage and the generation of the individual. In addition, participants also shared that younger individuals tend to achieve at work to fulfil security values if their basic needs were not yet met. Should basic needs be met, however, then younger individuals may achieve at work to fulfil other PVs or interest, although this does not necessary lead to high WE. Participants also explained that older individuals tend to value self-transcendence (benevolence and universalism) and conservation (tradition, conformity and security) more than younger individuals. Figure 4.7 provides a summary of the key findings on the influence of age.

**Figure 4.7. Summary of Key Findings on Influence of Age**

- Age can influence which PVs affect WE because of life and work experiences, and changes in circumstances of individuals over time, particularly their life stage and generation they are brought up in
- If basic needs are not yet met, young individuals tend to achieve to fulfil security values
- If basic needs are already met, young individuals tend to achieve to fulfil non-security related values or other personal interests
- Older individuals tend to value self-transcendence and conservation more than the younger individuals

### 4.6.3 Marital Status

For marital status, participants had mixed experiences and observations of whether marital status would affect the relationships of PVs to WE. Some thought that marriage might lower WE, some thought that marriage might increase WE, and some thought that marriage might not influence the relationships of PVs to WE. The following insights were gleaned about why and how these mixed beliefs were held. Samples of the quotations supporting these insights are in Table 9 in Appendix 9.

#### *4.6.3.1 Marriage can affect*

Some participants shared that marriage could generally affect the relationships of PVs to WE because 'married workers would need to think for the spouse in whatever they were to do'. They reasoned that married workers were obliged to be responsible partners to their spouse. In contrast, singles would not have this responsibility and could be 'self-directed and strive for non-material achievement'. For instance, an unmarried participant in his mid-40s shared:

> Personally, people want to get married because they want to start a family. Even without kids, they are still responsible for their partners. Security will thus play a part. The reason why I can go around and do social work and work part-time or contract basis is because I am still a single. I am not responsible to anybody. After marriage, I will not be able to have much time compared to when I am single now. It is because I do not want to, as there are things directly in life that are more important after marriage.

However, there was also the view that some singles might still 'work hard to save up for their future', depending on what they had in mind, and what was important to them.

*4.6.3.2 Marriage may lower WE*

Some participants shared that marriage might lower one's WE because some married individuals could be 'concerned about the quality of work-life balance' and had other priorities in life than work. Such married individuals may not get carried away at work, but may just put in adequate effort at 'work for sufficient material gains'. A married participant in his mid-50s elaborated the following for married individuals who valued quality work-life balance:

> Married individuals may not be too concern about fast track to promotion and may feel comfortable, as long one has delivered enough. So it is a case of staying just sufficiently engaged and may be not absorption. It is a case of giving basic amount of energy, and really not additional energy. So the person is prepared to be mediocre, doing enough so as not to be sacked.

Conversely, without the need to be concerned with family life, singles 'can work harder' and be more engaged at work.

*4.6.3.3 Marriage may increase WE*

Some participants shared that marriage might increase one's WE because some married individuals might see it as a traditional obligation to 'want their family to be better' than it was before the couple became a family. Such married individuals can consequently be more serious at work, 'work harder' and be 'more engaged at work' than when they were single, to acquire material gains for the betterment of their family. A married participant in his mid-50s gave the following illustration to support this belief:

> Now that I want a family, I want things to be better for my family. I will then become more engaged. I may harbour traditional values because I am married with a housewife who takes care of the home, and I will have to put in energy and be very engaged. The stimulation in excitement and challenge come not from the workplace but from the family. The family gives the challenge and vigour for me to put in more energy into the organisation and thereby, in turn, enjoy and reap the benefit of work which in turn benefits the family.

*4.6.3.4 Marriage may not affect*

There were some participants who shared that marriage might not affect the relationships of PVs to WE, especially when a couple had no children. These participants explained that without childcare responsibilities, how the PVs of such married individuals would relate to WE could be the same as when they were singles. The relationships would

depend largely on their individual interests. For instance, a participant in his mid-50s with two children shared:

> Singles have no children or major responsibilities to others. So what drive them at work could be their interests. If there is need to sustain the interest, they will want to work and earn more. Want to be happy and tend to earn more. For married, if they have no children, there may not be much difference from those who are singles, i.e. depends on their interests.

*4.6.3.5 Depends on circumstance of individuals after marriage*

Two participants highlighted that the influence of marriage on the relationships of PVs to WE ultimately depended on the circumstance of the individuals after marriage. For instance, it was highlighted that a married individual might not be as engaged in work if the spouse's working income was already able to meet the family's financial needs. With the spouse earning sufficient income, the married individual can be attentive to caregiving responsibilities in the family instead of being engaged at work. In another instance, a participant in her mid-40s with two children shared that she ventured into entrepreneurship because her husband's working income met the family's financial needs and he supported her taking the risk to achieve higher material gains for the family.

*4.6.3.6 Summary of findings on marital status*

Overall, the findings show that marital status can influence the relationships of PVs to WE, and this influence depends on the circumstances of individuals after marriage. WE level of married individuals may decrease if they place higher emphasis on quality work-life balance, or on being the primary caregiver. WE levels of married individuals may increase if they strive to achieve desired material gains, which they are yet to have for the family. WE level of married individuals may also not change. Instead, they may depend on the individuals' interests if they have no childcare responsibility. Figure 4.8 provides a summary of the key findings on the influence of marital status.

**Figure 4.8. Summary of Key Findings on Influence of Marital Status**

- Influence of marital status tends to depend on circumstance of individuals after marriage
- Marriage may decrease WE because of emphasis on quality work-life balance or on caregiving in the family
- Marriage may increase WE because of desired materials gains which one may have yet to have for the good of the family as part of traditional marital obligations
- Marriage may not affect WE when there is no childcare responsibility

### 4.6.4 Parenthood Status

For parenthood status, participants also had mixed experiences and observations of whether parenthood would affect the relationships of PVs to WE. The following insights were gleaned about why and how these mixed beliefs were held. Samples of the quotations supporting these insights are in Table 10 in Appendix 9.

#### *4.6.4.1 Having children may increase WE*

Some participants shared that having more children might lead to higher WE because of the greater financial needs to support children, covering the costs for their daily needs and education. As a result, individuals with more children may be more conservative and risk adverse, value achievement, and be more engaged at work to ensure job security in return for the financial gains. Among these individuals, some may be more engaged than others to seek and enjoy more material gains with their children beyond their basic needs.

#### *4.6.4.2 Having children may lower WE*

In contrast, some participants also shared that having more children might lead to lower WE instead, especially when the children required considerable personal attention and time, and were still young. While the WE might be lower, participants added that such affected individuals might still remain sufficiently engaged to meet their family's basic needs. However, a single in her late 20s highlighted that if these affected individuals were able to make alternative arrangements for others to take care of their young children, their WE level might not necessary be low.

#### *4.6.4.3 Individuals without children tend to value self-direction and own interests*

Like Section 4.6.3.4 on 'marriage may not affect', some participants shared that individuals without children tend to value self-direction and own interests because such individuals were generally responsible only for themselves. 'They do not have the burden' of childcare responsibilities. They can venture into areas in life or work that are 'self-fulfilling' and are 'for oneself and pleasure'. Supporting this belief, a married participant in his late 40s with one child shared:

> Those without children will be a bit like those who are singles, who are very self-directed. They might still want to achieve. It depends on their interests.

*4.6.4.4 Summary of findings on parenthood status*

Overall, the findings on the influence of parenthood status on the relationships of PVs to WE are also mixed. Having children may increase WE if individuals need to increase WE to ensure certain levels of financial gains for their children. Conversely, having children can also lower or not increase WE, if the level of WE to meet financial needs of bringing up children is not high. This latter situation can also occur when individuals want to focus their attention on providing adequate personal resources to their children, especially when they are young. Figure 4.9 provides a summary of the key findings on the influence of parental status.

**Figure 4.9. Summary of Key Findings on Influence of Parental Status**

- Having children may increase WE if individuals need to increase it in return of desired financial gains for children
- Having children may lower or not increase WE if required level of WE to meet basic children needs is not high, and / or demand on personal resources for childcare is high

### 4.6.5 Education Qualification

For education qualification, most participants had similar experiences and observations that education qualification could affect the relationships of PVs to WE. There were some participants who highlighted that a lack of education qualification might not mean such individuals would not have the PVs for work engagement. The following insights were gleaned about why and how these beliefs were held. Samples of the quotations supporting these insights are in Table 11 in Appendix 9.

*4.6.5.1 Higher educated individuals have high personal resources*

The first common insight shared unanimously by participants on why education could influence the relationships of PVs to WE, was the tendency for higher educated individuals to have higher personal resources than those with lower education. The personal resources they referred to include coping ability, self-efficacy, self-esteem and optimism at work. Higher educated individuals tend to have coping ability, as education 'prepares' them through 'presentations and assignments' and 'builds up their independence'. Higher educated individuals also tend to have self-efficacy, as they are 'more systematic', 'better at planning', 'more thorough at research', and 'resourceful'. They also tend to have higher self-esteem and optimism at work, as they have experienced successes, 'progressing and progressing' academically. As a result, they are 'confident' in the things they do.

*4.6.5.2 Higher educated tend to value self-enhancement and openness to change*

Following from the reasoning that higher educated individuals tend to have high personal resources, various participants shared that such individuals also tend to value self-enhancement (achievement, power and hedonism) and openness to change (self-direction, stimulation and hedonism) values. They reasoned that as such individuals were more 'capable' they were 'more independent in thoughts and actions', 'more creative and exploring at work', self-driven and showing 'initiatives'. They added that such individuals also 'expected a certain level of pay and status' to be 'compatible with what they [were capable] of putting in' and looked forward to 'challenges' to 'match with their qualifications'. From another angle, these participants also explained that higher educated individuals were obliged to demonstrate their competence at work, as 'they were paid more, holding certain position, and had subordinates'.

*4.6.5.3 Lower educated tend to value conservation*

For lower educated individuals, various participants shared that because of the lack of personal resources developed through education, this group of individuals valued conservation (tradition, conformity and security). These participants explained that lower educated individuals tend to have low self-esteem and perceived a limit to 'what they could achieve'. For instance, a participant in her early 40s, with tertiary education shared:

> Those less educated may probably feel no matter how hard they have worked, this is only what they can achieve at the maximum.

Such individuals will tend not to value challenge at work, but 'just do what they have to', follow tradition, 'conform to earn sufficient money', work 'to meet the immediate needs', and 'keep their job'. Thus, they value security. A participant in her late 40s with tertiary education shared:

> For those lower educated, they are not studying anymore and they need to earn. The idea is to get a salary for stability of self to meet the immediate needs.

*4.6.5.4 Lower educated may value achievement too*

Another insight shared by some participants was that lower educated individuals might also value achievement.. These participants explained that 'achievement could make up for the lack of self-security'. Lower educated individuals may 'want to rise up the career ladder too' for 'self-worth or pride'. Some participants shared that there were lower educated individuals who looked forward to 'opportunity to upgrade themselves', and this could be

related to their 'phases or stages in life', when one 'realized the need' to achieve more than before. A participant in his mid-40s with tertiary education and his own company gave the following illustration about his staff who were lower educated:

> I help to upgrade those lower educated staff that I employ as upgrading can help to take care of their morale. This is because they may feel not so confident in their job when they compare with others who are better educated.

*4.6.5.5 Lack of education may not matter*

Finally, another insight shared by various participants was that the lack of education qualification might not mean such individuals would not have the PVs to be engaged at work. The reasoning given by these participants can be grouped into two areas. First, if the individual is 'interested in the work' and has the 'capabilities' or 'competencies' to meet the 'work requirements', the individual can have the PVs and be engaged at work. Some participants highlighted that 'certain jobs might not require level of education', although they added that certain professions did require this, such as 'doctors, lawyers and accountants'. Second, individuals can develop the PVs to be engaged at work through life experiences instead of education. To some of these participants, education just 'meant accelerated learning' or 'a structured formal manner or way of organising knowledge and ideas'. This 'accelerated' or 'structured' exposure helps to 'inculcate the values' and develop the resources for educated individuals to be engaged and perform well at work. Reinforcing these two areas of reasoning, some participants highlighted there had always been examples of individuals who were not highly educated, but had the PVs, engagement and performance in their work. For instance, a participant in her mid-40s with tertiary education shared:

> It does not mean that for people who do not go through all these education, their values will be lesser. It is just that if this person has more life experiences, he may even have the same values as the one who is educated as well. So it does not mean that this guy who is more educated and is smarter in the academic sense mean that another guy who is lesser educated is not smart. The latter could be smart in other ways and does not mean he is not so achievement-oriented, and self-directed. He can still be very stimulated. He can be good at certain skill sets and do very well in them. You look at Bill Gates. Bill Gates did not complete his education. While that is in Western context, in Singapore context, I have seen people like my ex boss. He was put in a management position simply because of his street-smartness. He knows how to get things done. He is self-directed and got universalism and everything. And it is not through education but his life experiences.

*4.6.5.6 Summary of findings on education qualification*

Overall, the findings indicate that education qualification could influence the relationships of PVs to WE because of the personal resources developed through education. However, some participants clarified that education might not be a major influence if (1) individuals had the life experiences and personal resources to have the PVs and be engaged at work, or (2) the work did not require certain education qualifications. For individuals who are higher educated, they tend to value self-enhancement and openness to change. For those lower educated, they tend to value conservation 'to meet immediate needs', albeit they may value achievement to 'make up for the lack of self-security' or prove their 'self-worth'. Figure 4.10 provides a summary of the key findings on the influence of education.

**Figure 4.10. Summary of Key Findings on Influence of Education**

- Higher educated individuals tend to have high personal resources, and value self-enhancement and openness to change
- Lower educated individuals tend to value conservation albeit some of them may value achievement too
- Education may not matter if (1) individuals have the life experiences and personal resources, or (2) the work does not require it

### 4.6.6 Summary of Results to RQ2

Various insights were gleaned from the participants' sharing of why and how the five demographic profiles studied, might or might not affect the relationships of PVs to WE. Common to all the profiles, there was the view that individuals would value achievement and security to meet basic needs and the threshold of these basic needs might vary with one's life stage or demographic profile.

For gender, the results show that men tend to be more engaged at work than women, because of Singapore's social and local context, and possibly 'biological or psychological make-up'. For the same reasons, women tend to value security more, and achievement less than men. With increasing gender equality and standards of living in Singapore, gender may not influence the relationships of PVs to WE.

For age, the results show that life and work experiences, and the circumstances of individuals are perhaps the main reasons for the influence of age on the relationships of PVs to WE. These reasons can be understood via the life stage and generation the individuals are

in. For young individuals, if their basic needs are not met yet, they tend to value security together with achievement. If their basic needs are already met, they tend to achieve for other PVs or interests, albeit the WE may not be high. Young individuals also tend to value self-transcendence and conservation less than older individuals.

For marital status, the results show that the circumstances of individuals after marriage tend to determine whether marital status influences the relationships of PVs to WE. When one is married, emphasis on quality work-life balance or to be a primary caregiver in the family tends to decrease WE. When one is married, desire to meet beyond basic material needs of the family tends to increase WE. When one is yet to have a child after marriage, WE level may remain the same.

For parenthood status, the results show that the influence of parenthood status seems to depend on two factors. The first factor is whether the individual needs to increase WE level in return for desired or basic financial gains for children. The second factor is whether the demand for personal resources of the individual for childcare is high. If the demand is high, the individual will tend to be more conservative and engage less with work, especially when alternative arrangement to take care of the children is not forthcoming.

For education qualification, the results show that education can influence the relationships of PVs to WE if individuals lack the life experiences and personal resources for the work. Under such circumstances, higher educated individuals tend to be engaged at work because of self-enhancement and openness to change values, while lower educated individuals tend to be engaged at work because of conservative values.

## 4.7 Integration of Findings from Study 1 and Study 2

In this section, the findings from Study 2 presented thus far are juxtaposed with those from Study 1 to integrate the findings from both studies. This will illuminate how and why PVs can be related to WE. This integration will be organised around the two research questions, RQ1 and RQ2.

### 4.7.1 RQ1: Do PVs affect WE?

Both Study 1 and Study 2 showed that participants confirm a belief that PVs affect WE. Table 4.2 gives a summary of the key corresponding findings to support this. However, Study 2 participants added they believe other factors also influence the relationship. These other factors are contextual, such as personal resources, personal goals, work conditions, and

how well the PVs match the job requirements. They might help explain why the correlations found in Study 1 are small.

**Table 4.2. Summary of Key Findings from both Studies showing PVs affect WE**

| Study 1 | Study 2 |
|---|---|
| - Achievement is the primary PV that directly affects WE<br>- Self-direction, hedonism, security and universalism can have indirect influence on WE | - Primary PVs that affect WE are achievement, security, self-transcendence and hedonism<br>- Achievement is most common among them but its effect on WE is tempered by personal resources, personal goals and work conditions<br>- Other PVs can concomitantly affect WE because of above primary PVs and contextual factors, and the extent of influence depends on how well they match the job requirements |

*4.7.1.1 RQ1.1—Which PVs are associated positively with WE*

Table 4.3 shows the summarised findings in both studies in which PVs are associated positively with WE. Study 2 not only supports that achievement, security, self-transcendence and hedonism values are the primary PVs, but also clarifies how and why they may be associated positively with WE. For instance, the Singaporean context and culture may be one key reason for the apparent significant influence of achievement and security values. Study 2 also shows that the other PVs (e.g. self-direction and stimulation) may drive WE if they are aligned with job requirements.

**Table 4.3. Summarised Findings from both Studies showing Positive associations of PVs with WE**

| Study 1 | Study 2 |
|---|---|
| - There are indications that achievement, self-direction, stimulation, hedonism, security and universalism value types can have positive influence on WE<br>- Self-transcendence is rated as most important value dimension, followed closely by conservation | - Achievement value type may drive WE in return for desired gains and because of Singapore context and culture<br>- Security value type may drive WE so as to meet basic needs and also because of Singapore context and culture<br>- Self-transcendence values may drive WE so as to help others, and / or out of obligation, duty and responsibilities<br>- Hedonism value type may drive WE because one is happy doing the work and achieves sensuous gratification<br>- Other PVs may drive WE if they are aligned with job requirements |

Given the coherence of both studies' findings, Figure 4.11 shows a list of the salient integrated findings to RQ1.1 on how and why each significant PV found to associate positively with WE might have such an association.

*4.7.1.2 RQ1.2 - Which PVs are associated negatively with WE*

Table 4.4 shows the summarised findings in both studies in which PVs are associated negatively with WE. Together, the findings show that contextual factors such as work conditions may lead to negative associations of security and self-transcendence values with WE. The findings also seem to show that hedonism value type tends to limit how absorbed one can be at work, and affects WE negatively when the work is not in line with one's interest.

Similarly to the integrated findings in RQ1.1, given the coherence of both studies' findings to RQ1.2, Figure 4.12 shows a list of the salient integrated findings to RQ1.2, on how and why each significant PV found to associate negatively with WE, could have such an association.

### 4.7.2 RQ2: How do Demographic Profiles affect these Relationships?

This section contains six sub-sections. The first five integrate the findings for each of the demographic profiles studied (gender, age, marital status, parenthood status and education). The sixth and final sub-section gives a summary of the integrated findings for them.

**Figure 4.11. Integrated Findings to RQ1.1 on which, how and why PVs are associated Positively with WE**

ACHIEVEMENT VALUE TYPE

Finding #1. Achievement-oriented individuals tend to put in the necessary effort to do well and be engaged at work in return for desired gains that may be material or non-material in nature.

Finding #2. The local context of Singapore and its culture of meritocracy encourage Singapore workers to value achievement and be engaged at work.

Finding #3. The extent that achievement value type relates positively to WE is tempered by personal goals, personal resources and work conditions such as conduciveness of work environment, qualities of relationships and experience at work.

SECURITY VALUE TYPE

Finding #1. Individuals value security and can be engaged at work because of the basic need to acquire material gains for family and / or self.

Finding #2. The local context of Singapore and its conservative culture oblige workers in Singapore to value security and be engaged at work.

SELF-TRANSCENDENCE VALUES

Finding #1. Participants rate self-transcendence as the most important* value dimension to them.

Finding #2. Individuals tend to be engaged at work when there is opportunity to help and care for others in need.

Finding #3. Individuals can be engaged at work because of their sense of obligation, duty and responsibility to their work.

HEDONISM VALUE TYPE

Finding #1. When individuals can be happy at doing the work, they are likely to be engaged at work.

Finding #2. Ability to experience sensuous self-gratification at work encourages one to be engaged with the work.

*Whereas achievement value type was found to be the dominant PV type related to WE, and conservation was rated as next most important value dimension after self-transcendence in Study 1.

**Table 4.4. Summarised Findings from both Studies showing Negative associations of PVs with WE**

| Study 1 | Study 2 |
|---|---|
| - There are indications that security and hedonism value types can have negative influence on WE, and absorption respectively | - Security value type may decrease WE because of work conditions that lead to perceived threat to sense of security, and / or one chooses to spend more resources on family than work<br>- Self-transcendence values may decrease WE because of work conditions like unfair practices and lack of welfare at work<br>- Hedonism value type may decrease WE when doing the work is against self-interest |

**Figure 4.12. Integrated Findings to RQ1.2 on which, how and why PVs are associated Negatively with WE**

SECURITY VALUE TYPE

Finding #1. If work conditions are not conducive and threaten the sense of security, one can become disengaged or less engaged at work.

Finding #2. If security value emphasises spending more resources on family rather than focusing or balancing one's resources on maximising material gain from work, one can become disengaged or less engaged at work.

SELF-TRANSCENDENCE VALUES

Finding #1. Perceived lack of welfare or care for one's being at work can lead to disengagement or lower WE.

Finding #2. Perceived unfairness at work can lead to disengagement or lower WE.

HEDONISM VALUE TYPE

Finding #1. Hedonism value type relates negatively to WE component absorption.

Finding #2. If the work is not of personal interest to the individual, the individual may be less engaged or not be engaged with the work.

*4.7.2.1 RQ2.1–How does Gender influence which PVs affect WE?*

Table 4.5 shows the summarised findings in both studies on the influence of gender on the relationships of PVs to WE. The qualitative findings in Study 2 that men tend to be more engaged at work and value achievement more than women are supported by the quantitative findings in Study 1. The Study 2 finding that women tend to value security more than men seems to be in line with Study 1's finding that women are slightly higher in self-transcendence values than men. This may be because self-transcendence, comprising universalism and benevolence, is 'concerned with enhancement of others and transcendence of selfish interest' (Schwartz 1992, p. 15). This is akin to the notion given by the participants in Study 2 that women in Singapore tend to take up the primary caregiver role, instead of striving for achievement for themselves like men. In addition, the Study 2 finding that gender may not affect WE because of various contextual factors properly explains why the correlations found in Study 1 on the influence of gender are small.

Given the coherence of the findings from both studies, the salient integrated findings to RQ2.1 on how and why gender can influence the relationships of PVs to WE are shown in Figure 4.13.

**Table 4.5. Summarised Findings from both Studies showing the Influence of Gender on the Relationships of PVs to WE**

| Study 1 | Study 2 |
|---|---|
| - Men are more engaged (15%), steeper in achievement value type (15%), and slightly less steep in self-transcendence values (7%) than women | - Men tend to be more engaged at work than women because of social context and possibly different biological / psychological make-up compared to women<br>- Women tend to value security more and achievement less than men because of social and local context<br>- Gender may not affect WE because of increasing gender equality related to educational and job opportunities, increasing cost of living in Singapore, changing societal expectations and job requirements |

**Figure 4.13. Integrated Findings to RQ2.1 on how and why Gender can influence the relationships of PVs to WE**

Finding #1. Men are more positively driven by achievement value type and more engaged at work.

Finding #2. Women are more negatively driven by security value type at work.

Finding #3. Values driving both genders at work may not differ with increasing gender equality and standards of living.

*4.7.2.2 RQ2.2–How does Age influence which PVs affect WE*

Table 4.6 shows the summarised findings in both studies on the influence of age on the relationships of PVs to WE. Study 1's finding that older individuals value security more than younger individuals is consistent with Study 2's finding that the former are more conservative than the latter. For Study 2's finding that older individuals tend to value self-transcendence more than younger individuals, the quantitative data in Study 1 was revisited to verify this.

**Table 4.6. Summarised Findings from both Studies showing the Influence of Age on the Relationships of PVs to WE**

| Study 1 | Study 2 |
|---|---|
| - When one grows older, WE may increase ($r < .28$), one may place higher emphasis on security value type ($r < .17$) and less on hedonism value type ($r > -.2$) | - Older individuals tend to value self-transcendence and conservation values more than younger individuals<br>- Younger individuals tend to fulfil personal interest if basic needs are met, but will value security if the basic needs are not yet met<br>- Influence of age can be understood through one's life stage and the generation one is brought up in because of one's life and work experiences, and changes in circumstances over time |

T-tests were performed to seek out the differences in the mean values of self-transcendence and self-enhancement value dimensions for sub-samples of those younger respondents aged below 30 years ($n = 142$), and those older respondents aged above 40 years ($n = 82$). At a significant level of .01, albeit there was no difference found for self-transcendence value dimension between the two sub-samples, the self-enhancement value dimension of the older respondents was found to be about 17 per cent less than younger respondents. In other words, these older individuals have a lesser emphasis on self-interest, pursuit of their own success and dominance over others than the younger individuals. This indicates that the former value self-transcendence more than the latter.

Like the rest of the previous sub-sections, Study 2's finding on the need to consider contextual factors when examining the influence of age on the relationships of PVs to WE probably explains why the corresponding correlations found in Study 1 are small. The contextual factors highlighted by participants in Study 2 include whether one's basic needs were met, and in which life stage and / or generation one was located.

Given the coherence of the findings from both studies, the salient integrated findings to RQ2.2 on how and why age can influence the relationships of PVs to WE are as shown in

Figure 4.14.

**Figure 4.14. Integrated Findings to RQ2.2 on how and why Age can influence the relationships of PVs to WE**

| |
|---|
| Finding #1. Generational differences and life stages can explain how age influences which PVs affect WE. |
| Finding #2. Current younger workers have higher hedonism values and lower WE. |
| Finding #3. Current younger workers value job security as part of adult development. |
| Finding #4. Current older workers have higher self-transcendence values. |
| Finding #5. Current older workers have higher conservation values. |

*4.7.2.3 RQ2.3–How does Marital Status influence which PVs affect WE?*

Table 4.7 shows the summarised findings in both studies on the influence of marital status on the relationships of PVs to WE. The Study 2 finding that influence of marital status depends on the contextual circumstances of individuals after marriage is probably the reason for the small corresponding correlations found in Study 1. Study 1 showed that married individuals were slightly more engaged than singles, while Study 2 indicated that marriage might not affect WE when there was no childcare responsibility. A revisiting of the quantitative data in Study 1 revealed that only 18 of the 132 married respondents had no children, a small minority (about 14%). Thus, this Study 1 finding is in line with the Study 2 finding that marriage may affect WE when there are childcare responsibilities.

**Table 4.7. Summarised Findings from both Studies showing the Influence of Marital Status on the Relationships of PVs to WE**

| Study 1 | Study 2 |
|---|---|
| - Married participants were about 13% more engaged, less steep in hedonism (15%), stimulation (13%), openness to change (11%) and self-enhancement (11%) values, and steeper in tradition (10%), security (15%) and conservation (11%) values than singles | - Influence of marital status tends to depend on circumstance of individuals after marriage such as whether the spouse is able to fulfil family's basic needs<br>- Marriage may decrease WE because of emphasis on quality work-life balance or caregiving in the family<br>- Marriage may increase WE because of desired materials gains which one may have yet to have for the good of the family as part of traditional marital obligations, causing one to be more serious at work than before<br>- Marriage may not affect WE when there is no childcare responsibility |

In addition, the Study 1 findings on the difference in PVs of married participants, when compared to singles, seem to be in line with the insights given by participants in Study 2, when explaining why and how marriage might increase WE. The Study 1 findings that married participants who were more engaged at work were lower in stimulation, openness to change and self-enhancement values, and higher in tradition, security and conservation values than singles, are in line with the Study 2 finding that traditional marital obligations tend to increase married individuals' WE for the good of their family. The Study 1 finding that married participants were lower in hedonism is in line with the Study 2 finding that individuals tend to be more serious at work after marriage.

Given the coherence of the findings from both studies, the salient integrated findings to RQ2.3 on how and why marital status can influence the relationships of PVs to WE are as shown in Figure 4.15.

*4.7.2.4 RQ2.4—How does Parenthood Status influence which PVs affect WE*

Table 4.8 shows the summarised findings in both studies on the influence of parenthood status on the relationships of PVs to WE. The Study 1 findings that individuals with more children have higher WE and higher security value type, are consistent with the corresponding finding in Study 2 on why having children may increase WE. In Study 2, participants reasoned that WE might increase if individuals with more children desired to seek gains through work for their children, and these desired gains include meeting basic needs. This desire to meet basic needs is congruent with valuing security, which relates to safety of relationships and self. The additional finding in Study 2 that having children may lower or not increase WE, depending on contextual circumstances, probably explains why the corresponding correlations found in Study 1 are small.

**Figure 4.15. Integrated Findings to RQ2.3 on how and why Marital Status can influence the relationships of PVs to WE**

Finding #1. Marriage may lower WE because the other spouse is able to fulfil the basic financial needs of the family, and / or one values spending more time with the family than at work.

Finding #2. Marriage may increase WE because the other spouse is unable to fulfil the basic financial needs of the family, and / or one sees the need to seek maximum material gains for one's family to be fulfilling.

Finding #3. Marriage may not affect WE when there is no child.

**Table 4.8. Summarised Findings from both Studies showing the Influence of Parenthood Status on the Relationships of PVs to WE**

| Study 1 | Study 2 |
|---|---|
| - Individuals with more children have higher WE ($r < .19$) and steeper in security ($r = .18$) value type | - Having children may increase WE if individuals need to increase it in return of desired financial gains for children<br>- Having children may lower or not increase WE if required level of WE to meet basic children needs is not high, and / or demand on personal resources for childcare is high |

Given the coherence of the findings from both studies, the salient integrated findings to RQ2.4 on how and why parenthood status can influence the relationships of PVs to WE are as shown in Figure 4.16.

**Figure 4.16. Integrated Findings to RQ2.4 on how and why Parenthood Status can influence the relationships of PVs to WE**

Finding #1. Having more dependent children can lead to change in PVs affecting WE, particularly a higher emphasis on security value type.

Finding #2. Having more dependent children may lead to higher WE because of one's focus on work to ensure financial security, or may lead to lower WE because of one's focus on the family to ensure quality time is spent on caregiving.

*4.7.2.5 RQ2.5—How does Education influence which PVs affect WE*

Table 4.9 shows the summarised findings in both studies on the influence of education on the relationships of PVs to WE. The Study 2 finding that higher educated individuals tend to have higher personal resources seems to be in line with Study 1's finding that these individuals are more engaged at work. This is because, as discussed in literature review in Chapter 2, various studies (e.g. Bakker, Gierveld & Van Rijswijk 2006; Luthans et al. 2008; Xanthopoulou et al. 2007) have shown personal resources to be antecedents of WE. The Study 1 findings that higher educated individuals tend to value achievement more and conformity less than lower educated, are consistent with the Study 2 findings that the former tend to value self-enhancement more, and value conservation less. This is because achievement and conformity value types are respectively part of the self-enhancement and conservation value dimensions in Schwartz's value model (Schwartz 1992). The finding in Study 2 that lower educated individuals may value achievement, depending on individual's contextual circumstances, probably explains why the corresponding correlations found in

Study 1 are small.

**Table 4.9. Summarised Findings from both Studies showing the Influence of Education on the Relationships of PVs to WE**

| Study 1 | Study 2 |
|---|---|
| - Higher educated individuals tend to be more engaged at work ($r < .29$), and place higher emphasis on achievement ($r < .1$) value type but lower on conformity ($r > -.23$) value type | - Higher educated individuals tend to have higher personal resources<br>- Higher educated individuals tend to value more on self-enhancement and openness to change<br>- Lower educated individuals tend to value more on conservation<br>- Lower educated individuals may value achievement too because of life experiences, and personal resources they have on their own without going through education |

For Study 2's finding that higher educated individuals tend to value openness to change than those who were lesser educated, the quantitative data in Study 1 was revisited to verify it. The graphical normalised trends of the various variables across different education qualifications, using the data in Study 1, were plotted as shown in Figure 4.17.

The plot not only confirms the integrated findings on WE, achievement and conservation values, it also shows the value of self-direction increases with education qualification. This latter aspect is in line with Study 2's finding that higher educated individuals tend to value openness to change, albeit the plot in Figure 4.17 does not show a clear trend for the value of stimulation. This lack of clear trend may be related to the reasoning by Study 2's participants, that education may not be a factor when individuals can develop their PVs from life experiences.

Given the general coherence of the findings from both studies, the salient integrated findings to RQ2.5 on how and why education can influence the relationships of PVs to WE are as shown in Figure 4.18.

**Figure 4.17. Normalised Trends of the various Variables across different Education Qualifications**

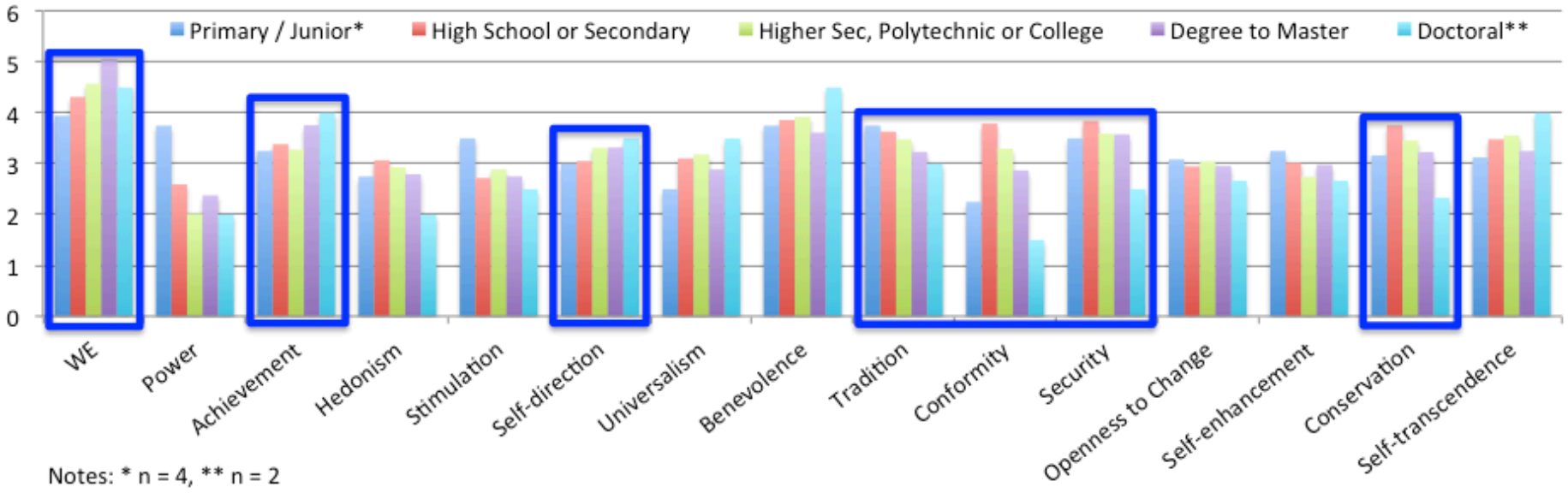


**Figure 4.18. Integrated Findings to RQ2.5 on how and why Education can influence the relationships of PVs to WE**

| |
|---|
| Finding #1. Individuals with higher education qualification tend to place higher value on achievement and self-direction, and lower value on conservatism. |
| Finding #2. Having higher education qualifications increase one's confidence in personal abilities, and this in turn, can lead to positive WE. |

*4.7.2.6 Summary of integrated findings to RQ2*

Like the integrated findings to RQ1, the integration of the findings to RQ2 also reveal the Study 1 and Study 2 findings to be congruent and complementary, and they help to clarify each other. Like the summary of results to RQ2 in sub-Section 4.6.6, the integrated findings also revealed that the primary PVs in relation to the different demographic profiles revolved mainly around achievement and security value types. This was probably due to Singapore's local context and culture, although to some extent, self-transcendence and hedonism values were also highlighted.

Having (1) described how the qualitative Study 2 was conducted, (2) reported its results to gain better insights into the possible relationships of PVs to WE and how they operate, and (3) integrated its findings with those from quantitative Study 1, the integrated findings shall now be reviewed, evaluated against extant literature and discussed in Chapter 5. This subsequent discussion shall be presented with the aim of studying the relationships of PVs to WE. The theoretical and practical implications of these findings will also be presented.

# CHAPTER 5: DISCUSSION AND CONCLUSIONS

The purpose of this chapter is to review, evaluate and discuss the Study 1 and 2 findings presented in Chapters 3 and 4, with the aim of investigating the extent to which personal values relate to work engagement. The quantitative Study 1 found evidence to support the arguments that (1) some personal values (achievement, security, self-transcendence and hedonism) may be associated with work engagement, and (2) age, gender, marital status, parenthood status and education qualification do affect which personal values relate to work engagement. For instance, older workers may be more engaged at work than younger workers because of higher emphasis on security values, men may be more engaged at work than women because of achievement values, marriage may make one more engaged at work than singles because of conservation values, parents with children may be more engaged at work than those without children because parents value security more. However, the findings were not conclusive for a number of reasons, as stated at the end of Chapter 3. The reasons included (1) the relationships found in Study 1 though significant were not large (e.g. $r < 0.4$; Cohen & Holliday 1982), (2) Study 1 was etic in that respondents were limited to a structured set of values for their choice, and (3) fitted models derived in SEM methodology may not necessarily be definitive (MacCallum & Austin 2000).

These findings led to Study 2, which was qualitative to gain deeper insights into what and how personal values could affect work engagement. Study 2 findings supported that achievement, security, self-transcendence and hedonism values were associated with work engagement. In addition, Study 2 provided insights to why and how (1) these values are the dominant ones associated with work engagement, and (2) how age, gender, marital status, parenthood status and education qualification may affect which personal values (PVs) relate to work engagement (WE), even though marriage may or may not have an effect depending on the circumstances of the individuals after marriage. Participants in Study 2 also highlighted contextual factors, such as Singapore's local context and culture, personal goals, personal resources, and work conditions as potential modifiers of these relationships.

In the following sections, the two research questions in this investigation are examined and their findings evaluated. The theoretical model originally developed for this research is then reviewed. Following this, the chapter addresses the limitations of this research, provides some personal reflections, and proposes directions for future. Finally, the contributions of this research to literature and practice are discussed.

## 5.1 Research Question 1 (RQ1): Do Personal Values affect Work Engagement?

### 5.1.1 RQ1.1—Which PVs are Associated Positively with WE?

Both Study 1 and 2 showed that achievement was found to be the most dominant PV type associated positively with WE for all participants. Other primary PV types found to have significant positive associations with WE were security, self-transcendence and hedonism. The reasons for these positive associations are discussed below. For each sub-section, the specific values that make up the value type as descriptors based on Short Schwartz's Value Survey (SSVS; Lindeman & Verkasalo 2005), as described in Chapter 3 and shown to the participants in both Study 1 and Study 2 are first briefly recapped, together with the studies' findings.

*5.1.1.1 Achievement value type*

The related value items used to describe achievement value type are success, capability, ambition and influential (Lindeman & Verkasalo 2005). The primary findings from the participants in this research to why and how achievement is the dominant PV type that associates positively to WE are summarised in Figure 5.1.

**Figure 5.1. Research Findings from the Participants for Achievement as dominant PV Type that associates positively to WE**

Finding #1. Achievement-oriented individuals tend to put in the necessary effort to do well and be engaged at work in return for desired gains that may be material or non-material in nature.

Finding #2. The local context of Singapore and its culture of meritocracy encourage Singapore workers to value achievement and be engaged at work.

Finding #3. The extent that achievement value type relates positively to WE is tempered by personal goals, personal resources and work conditions such as conduciveness of work environment, qualities of relationships and experience at work.

Finding #1 is consistent with recent studies by various academics (e.g. Bakker, Demerouti & ten Brummelhuis 2012; Bal, Kooij & De Jong 2013; Salanova, Llorens & Schaufeli 2012) and renowned Asian recruitment agency, jobsDB (ChannelNewsAsia 2013). In a survey finding of about 2,000 participants, jobsDB found that workers in Singapore value career progression and high salary, while acknowledging the need to deal with challenging situations (ChannelNewsAsia 2013); that is, workers in Singapore are achievement-oriented. Bakker, Demerouti and ten Brummelhuis (2012) showed from a study of 144 participants in

various occupations that the extent individuals were inclined to be achievement-oriented moderated the relationships between their WE and job performance. Bal, Kooij and De Jong (2013) showed from a multilevel study among 1,058 employees in 17 healthcare units that organisational support of employee development needs (i.e. non-material needs) could be reciprocated by employees through increased WE. Salanova, Llorens and Schaufeli (2012) showed, using two longitudinal studies, that any strong belief that one's own actions could produce desired gains (i.e. beliefs in personal competencies and attendant success) could lead to reciprocal influence on engagement through positive affect (enthusiasm, satisfaction and comfort) over time. They explain the strong belief that desired gains can be achieved through one's own actions makes one feel efficacious, and motivates one to engage in the activity related to the desired gains. In such a situation, one puts in the necessary effort (e.g. work), and is resilient in the face of obstacles, failures and adversity; that is, achievement-oriented engagement.

Finding #2 reinforces the recent arguments by various academics and the steadfast policies by the Singapore government on meritocracy. Lim (2013, p. 1) reasons that, 'since inception as a nation-state in 1965, the notion of meritocracy has remained a key principle of governance and education distribution in Singapore'. In line with pragmatism, meritocracy has helped bring prosperity and stability to Singapore (Backman 2006; Gan, Morgan & Sheldon 2012). Meritocracy rewards individual merit with higher rewards ranging from incomes and recognition to prestige (Tan 2008). With meritocracy, there is the sense that if one works hard, one can get a better life (Wong 2012). Lim (2013) argues that Singapore adopts a utilitarian perspective, whereby meritocracy maximises the average level of well-being in a society: meritocracy often involves motivating individuals to do the best they can. Leading by example, the top positions in the Singapore civil service and politics tend to be staffed by individuals with demonstrated track records of merit (Barr & Skrbis 2008). Explaining the importance of upholding meritocracy, the Singapore Ministry of Education (2013) reasons, 'Singapore is a small nation with only human resources to rely on for its progress and prosperity'. In one of the many initiatives that reinforced this philosophy, Singapore Prime Minister Lee (2013a) iterated the government's commitment to meritocracy by legislating monetary awards 'to help every student achieve their best'. Tan (2013) reasons that by adopting education policies that support individuals to develop their talents and put in effort, meritocracy promotes equity of opportunities. Thus, Tan (2013) and Lim (2013) in their separate studies argue that the meritocratic society of Singapore has resulted in a society of individuals who are achievement-oriented.

Finally, finding #3 is in line with the study findings of Salmela-Aro, Mutanen and

Vuori (2012) on promoting career preparedness and intrinsic work-goal motivation, and of Freeney and Fellenz (2013) on the role of social context to WE. Salmela-Aro, Mutanen and Vuori (2012) explain that the pursuit of goals is an expression of personal choice, and values are among the various factors that affect personal choices. They also explain that the intrinsic motivational nature of goals can be a personal resource for work (Hyvönen et al. 2009). This is because the intrinsic reasons for goal pursuits promote sustained effort that leads to goal progress (Ryan & Connell 1989; Sheldon et al. 2004). Using Hobfoll's (2002) notion of threats to the development of social and psychological resources, Salmela-Aro, Mutanen and Vuori (2012) also argue that if work conditions are favourable, engaged employees can create resources by seeking help at work to achieve personal goals. In a separate study, Freeney and Fellenz (2013) also found evidence that WE could be facilitated by the role of immediate superiors, as they could affect how favourable the work conditions were for individuals at work.

In addition, finding #3 also supports the theory of purposeful work behaviour developed by Barrick, Mount and Li (2013). In this theory, they posit that work outcomes are jointly and interactively influenced by higher-order implicit goals or personal agendas, and job characteristics. Applying this theory, when the purposeful motivational strivings (DeShon & Gillespie 2005) from personal goals act in concert with the motivational forces related to job characteristics (Hackman & Oldham 1976), as reflected in work conditions, the psychological state of meaningfulness experienced by individuals can trigger task-specific motivational processes that affect work outcomes, such as WE. Among the task-specific motivational processes Barrick, Mount and Li (2013) posit is achievement-striving motivation that refers to the strong desire for a sense of accomplishment, demonstration of personal competence and enhancement of self-worth (Barrick, Stewart & Piotrowski 2002; Deci & Ryan 1985; White 1959). Using a personality perspective, Barrick, Mount and Li (2013) also reason that achievement-striving motivations tend to be associated with individuals who have the two traits of conscientiousness and emotional stability (Barrick, Stewart & Piotrowski 2002; Mount et al. 2005). These two traits allow individuals to have personal resources of being organised and self-disciplined (Costa & McCrae 1992; Goldberg 1992), the ability to cope with stress (Hobfoll 1989; Penney, Hunter & Perry 2011), and be focused and confident about completing tasks (Barrick & Mount 1991; Barrick, Mount & Judge 2001). Thus, personal goals, personal resources and work conditions can influence the extent to which achievement value type affects WE.

Overall, it would appear that the findings for achievement value type are consistent with recent literature: (1) relating WE to returns for desired gains, (2) on intrinsic work-goal

motivation, (3) on the role of social context, and (4) on the theory of purposeful work behaviour. The findings also appear to be consistent with the local context and culture of Singapore, even though there is an apparent lack of literature clearly stating that achievement value type relates to WE.

*5.1.1.2 Security value type*

The related value items used to describe security value type are national / family security, social order, orderliness, and reciprocation of favours (Lindeman & Verkasalo 2005). The primary findings from the participants in this research as to why and how security value type associates positively to WE are summarised in Figure 5.2.

**Figure 5.2 Research Findings from the Participants for Security value type to associate positively to WE**

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|---|
| Finding #1. Individuals value security and can be engaged at work because of the basic need to acquire material gains for family and / or self. |
| Finding #2. The local context of Singapore and its conservative culture oblige workers in Singapore to value security and be engaged at work. |

Finding #1 is consistent with recent findings (Hu & Schaufeli 2011; Wayne et al. 2013) that the emphasis placed by individuals on security value type can positively affect WE. Hu and Schaufeli (2011) showed that WE mediated positive relationships between remuneration and organisational outcomes. They explain that remuneration can be thought of as a job resource in the Job Demands-Resources model (Bakker & Demerouti 2007; Demerouti et al. 2001), to fulfil basic human needs such as food, clothing and shelter. Hu and Schaufeli (2011) also reason that depending on the salience of individual needs (Chiang & Birtch 2005), different people can respond differently to workplace incentives. For instance, the focus of some individuals' basic human needs may be job security rather than mere remuneration. For Wayne et al. (2013), they showed a work environment that was perceived to be family-supportive and thus satisfied basic needs for family, led employees to reciprocate with positive work outcomes.

Finding #2 is congruent with the recent arguments of 'crisis' mentality among Singaporeans by academics and senior politicians, and the apparent conservative culture promoted by the Singapore government. Lee (2012b) and Overland (2007) argue that Singaporeans are conservative and security conscious, as they are obliged to safeguard national interests and security with a 'crisis mentality' (Lee 2012b, p. 56). This is because

Singapore is a predominantly ethnic Chinese small city-state located in the middle of the Malay / Muslim world of Southeast Asia, notorious for religious and ethnic strife. This gives the government and Singaporeans a natural sense of 'siege mentality' (Da 1999, p. 460). As a result, Lee (2012b) argues that a top priority in education and other government initiatives and policies of Singapore, since its independence in 1965, is to maintain racial and social harmony as a conservative and risk adverse culture. Lee (2012c, p. 503) argues that 'social cohesion in diversity' is naturally seen as a priority, given that a very diverse population of different ethnicities, religions and languages is crammed into a densely populated city-state.

Social and national values that emphasise 'communitarian principles, consensus and cohesion' (Sim & Ho 2010, p. 897) are transmitted to citizens through Singapore's education system, which makes social and history subjects compulsory, and through various national policies (Lee 2012b; Leow & Tan 2010). For instance, the government promotes, through the National Education program (NEP), a Total Defence concept that places equal importance on military, social, economic, civil and economic defence for national security (Lim & Ong 2012). Through the NEP, an understanding of Singapore's history and vulnerabilities is promoted to highlight the importance of ethnic harmony for public order, social and racial stability, as well as national security; an example of promoting this importance is through reminders of the racial riots that occurred in Singapore and neighbouring Malaysia in the 1950s and 1960s (Goh & Gopinathan 2005; Lee 2008; Lee 2012b). To highlight the importance of (1) a self-reliant Singapore on defence and security that has no hinterland support, and (2) the conscription of male adults to undertake National Service in military and civil defence, the NEP also covers Singapore's history on the spread of communism in the 1960s and 1970s, the inability of British and Allied Forces to protect Singapore against Japanese invasion in World War II, and the subsequent withdrawal of British troops once Singapore was not a British colony (Lee 2012b). In addition, as a policy to ingrain Singaporeans with the importance of social and racial harmony, economic growth and prosperity as being closely related (Tan & Chew 2004), students recite the national pledge:

> To be one-united people, regardless of race and religion, to build a democratic society based on justice and equality so as to achieve happiness, prosperity and progress (Mohamed 2013).

This is done during the daily singing of the national anthem in flag-raising ceremonies in all schools. Singaporeans also recite the national pledge annually during National Day celebrations every year. In the latest Population White Paper for Singapore (National Population and Talent Division 2013), the importance of a robust sense of social harmony and cohesion that involves respect for others, family ties and multi-racialism is also emphasised, as Singapore's immigrant heritage is credited with enabling the nation to become a first world

country in a few decades. To promote security of family and nation, the Singapore Ministry of Information and Arts (1990) formulated national shared values that stress 'nation before community and society above self, family as the basic unit of society, regard and community support for the individual, consensus instead of contention, and racial and religious harmony'.

Former Prime Minister of Singapore Goh, who remains an active senior politician, describes Singapore as a society that is apparently 'trapped in a mid-life crisis' in its development as a nation (Goh 2013, p. 1). Goh stated this when he was providing his view to the public on the fervent appeal for job opportunities, and affordable housing and healthcare from the recent year-long 660 dialogues organised by the government under the theme 'Our Singapore Conversation' (OSC), involving 47,000 Singaporeans and government officials, to garner what future Singaporeans want and how Singaporeans can get there (Our Singapore Committee 2013). From a global perspective, he reasons the crisis is because Singapore is facing increasing competition for jobs, markets and investments as more countries become economically developed. From a regional perspective, he reasons the crisis is maintained because Singapore is experiencing a more complex and uncertain external environment than in the past, such as the effect of US-China relations, tensions in North-east Asia, and the integrity and relevance of regional cooperation in the Association of South-east Asian Nations (ASEAN). From a domestic perspective, he reasons the crisis is because Singaporeans are facing slower economic growth, but rising costs of living, especially in housing and healthcare, a shrinking population, high reliance on foreigners working locally, and higher expectations of life. A recent survey of 501 Singapore residents, aged 16 to 62 years old, commissioned by Singapore's primary national media *The Straits Times*, found that Singaporeans indicated stress and concern on the need to stay ahead (1) in one's organisation amid global competition, and (2) in the labour market amid competition from foreign workers (Goh & Ong 2013). In the annual National Day Rally 2013 by the Prime Minister (PM) of Singapore, the incumbent PM highlighted to Singaporeans that besides global competition from emerging economies, advancement in technology also added to the competition for jobs and to the woes of job security in Singapore. Technology is increasingly replacing humans at basic work (Lee 2013b). He also shared that the experience of an ageing population, widening income gaps arising from technology and globalisation, and increasing costs of living are realities and growing concerns among Singaporeans (Lee 2013b). It has been projected that two working adults will support each senior citizen in Singapore in 2030, compared to the current ratio of 6:1 (Kok 2013).

To Munson (2011), the conservative and risk-adverse culture also stems from Singaporeans' resulting confidence and growing reliance on the Singapore government's

ability, through its various pragmatic social and economic initiatives and policies (Ng 2004), to successfully sustain impressive economic growth and weather economic crises since independence, despite lacking significant natural resources. As a result, there is an apparent apprehension of failure among Singaporeans (Low 2006; Munson 2011; Vandenborre 2003). Thus, finding #2 is congruent with recent arguments of Singapore as a conservative and risk adverse society.

Overall, the findings for security value type appear to be consistent with recent literature relating WE to fulfilment of basic needs, and the local context and culture of Singapore. However, like the findings for achievement value type, there is an apparent lack of literature that clearly states security value type relates to WE.

*5.1.1.3 Self-transcendence values (Benevolence and Universalism)*

The related value items used to describe self-transcendence values are helpful, honest, forgiving, loyal and responsible for benevolence, and equality, world at peace and love nature for universalism (Lindeman & Verkasalo 2005). Universalism and benevolence values are alike in that both involve the transcending of selfish interests for others' sakes, and universalism values can be seen as the extension of benevolence values beyond those who are close to us (Schwartz & Rubel 2009). The primary findings from the participants in this research as to why and how self-transcendence values associate positively to WE are summarised in Figure 5.3.

**Figure 5.3 Research Findings from the Participants for Self-transcendence values to associate positively to WE**

| |
|---|
| Finding #1. Participants rate self-transcendence as the most important* value dimension to them. |
| Finding #2. Individuals tend to be engaged at work when there is opportunity to help and care for others in need. |
| Finding #3. Individuals can be engaged at work because of their sense of obligation, duty and responsibility to their work. |

*Whereas achievement value type was found to be the dominant PV type related to WE.

Finding #1 is congruent with the egalitarian values that are increasingly being demanded by modern societies (Crespi & Fontaine 2012) such as Singapore. In the national pledge highlighted in the previous sub-Section 5.1.1.2, there is an egalitarian emphasis when Singaporeans pledge 'to be one-united people, regardless of race and religion, to build a democratic society based on justice and equality so as to achieve happiness, prosperity and progress' (Mohamed 2013). Singaporeans are reminded and have ingrained into them the

importance of self-transcendence values in a country that is multiracial, multiethnic, multireligious and multicultural, which might make it prone to social unrest if any group of people feels a lack of justice and / or equality. Even in the recently concluded year-long OSC, conducted nationwide to 'define what sort of country we want and how we can achieve it' (Lee 2012a, p. 1), and the latest Population White Paper for Singapore, there is a continuous emphasis on the need for a Singapore society that has a robust sense of 'social justice, harmony and cohesion' (National Population and Talent Division 2013, p. 64).

Finding #1 also supports the recent finding and argument by Karakas and Sarigollu (2013) on the contagious nature of self-transcendence values like benevolence. They explain benevolence involves creating virtuous cycles of uplifting change for the better, through actions that are ethical, meaningful, inspiring and positive for the larger community. When these virtuous cycles are actions at work, they have been found to be contagious, as they encourage replication of such actions, and lead to the development of mutually positive reinforcing cycles in human systems (Cameron, Bright & Caza 2004; Fredrickson 2001; Seligman 2002b). These positive cycles can then lead to collective thriving and productivity, and better performance (Cameron, Bright & Caza 2004), encouraging individuals to put in extra effort to contribute to common good (Karakas & Sarigollu 2012; Lilius et al. 2008). Thus, to Karakas and Sarigollu (2013, p. 675), benevolence serves as 'catalysts for individual growth', helping to create a supportive environment that is responsive in nature, that acknowledges and allows individuals to develop their potential and thus 'engages their hearts, spirits and minds'. With benevolence, compassionate organisations are created (Karakas & Sarigollu 2013). In turn, they can create collective capacities for attention, detection and response to members' suffering, and improvement of members' well-being (Lilius et al. 2008). Thus, it is not surprising for self-transcendence values to be popular among participants.

Finding #2 is in line with recent literature on the emotional benefits (positive affect and positive self-evaluations) arising from doing good and perceived pro-social effects at work (e.g. Freeney & Fellenz 2013; Sonnentag & Grant 2012; Weinstein & Ryan 2010). For positive affect, Sonnentag and Grant (2012) found that through positive work reflection, helpers experience an increase in positive affect states (Dunn, Aknin & Norton 2008; Glomb et al. 2011), when the helpers find their acts of helping relevant (e.g. inherently part of the job) and have pro-social affect (Weinstein & Ryan 2010). Positive affect states that manifest from helping others include empathic joy (Batson 1990; Smith, Keating & Stotland 1989), happiness (Dunn, Aknin & Norton 2008; Williamson & Clark 1989) and positive mood (Glomb et al. 2011), all of which are associated with the well-being state of mind of engaged

employees (Schaufeli, Taris & Van Rhenen 2008). In addition, positive affect states are also associated to vigour (Shirom 2011), energy (Leiter & Maslach 2004; Maslach & Leiter 2008) and emotional (Kahn 1990; May, Gilson & Harter 2004) dimensions of WE. Separately, Freeney and Fellenz (2013) also found evidence that WE could be facilitated by how much importance one gave to the perceived pro-social effect of one's work. They reason that a perceived pro-social effect of one's work increases one's positive emotions, and intrinsic motivation. They rationalise these influences contribute to WE because individuals find the perceived pro-social effect meaningful. In their review of positive behaviour strategies to create a positive organisation, Salanova et al. (2013) note that kindness acts have a positive affect on individuals. They reason that kindness acts stimulate positive social interactions and self-perception of altruism, and promote self-esteem and confidence.

For positive self-evaluations, Sonnentag and Grant (2012) explain that there is increase in positive self-evaluations because of the perceived competence (Grant 2007; Penner et al. 2005) resulting from perceived pro-social affect. Helping others allows people to perceive they have contributed effectively to other people's lives (Caprara & Steca 2005). The perceived pro-social effect because of successfully helping others is akin to a mastery experience, during which one experiences increased confidence in one's abilities, and are thus positive self-evaluations (Sonnentag & Grant 2012). The positive self-evaluations then serve as personal resources (Hobfoll et al. 2003), which have been reported as antecedents of WE (e.g. Rothman & Storm 2003; Xanthopoulou et al. 2007).

Finding #3 is congruent with recent studies on positive discretionary and extra-role work behaviour that arise from social exchanges at work (e.g. Agarwal et al. 2012; Karatepe 2013a; Li, Sanders & Frenkel 2012; Mannarini & Fedi 2012; Strom, Sears & Kelly 2013). Karatepe (2013a) found that material or non-material gains, such as training programs, seem to signal to employees they were appreciated and recognised. In turn, the employees 'feel obliged to respond to the organisation through work engagement' (Karatepe 2013a, p. 137). Karatepe (2013a) reasons that social exchange relationships are created when organisations take care of the employees, and these relationships can lead to 'close personal attachment and open-ended obligations' (Cropanzano, Rupp & Byrne 2003, p. 161). Agarwal et al. (2012) had similar findings when they found that the quality of exchanges, through a series of interactions between employees, superiors and the organisations, create a state of reciprocal interdependence that influences engagement levels and innovative work behaviour. Agarwal et al. (2012) explain that when employees feel a sense of fulfilment of psychological contract by the organisations, such as taking care of employees' personal and professional needs, a sense of employee obligation to be engaged at work and accomplish their tasks is created.

For Li, Sanders and Frenkel (2012), they found that obligation-based motivation (Deci & Ryan 1985), arising from leader-member exchange, and internally consistent HR practices, such as rewards-based incentives (extrinsic motivation) for performance, and competency-enhancing support (resources), could lead to reciprocation of WE by the employees. They explain that organisational goals, management purposes and related incentives become salient (Bowen & Ostroff 2004) to the employees when HR practices are perceived as internally consistent. As a result, employees reciprocate with appropriate attitudes and behaviour, such as WE and good performance. Doing so can lead to the benefits associated with the ongoing interpersonal relationships with their superiors and HR practices. Strom, Sears and Kelly (2013) had similar findings, and they explain that conceptually, when the processes of decisions and the distribution of rewards are seen as fair (Cohen-Charash & Spector 2001), the contextual influences of justice and leadership style can be considered 'job resources' in the job demands-resources model, as contributing forces to WE (Strom, Sears & Kelly 2013, p. 9). Mannarini and Fedi (2012) found that factors affecting sustained engagement at work include interpersonal relationships and psychological interface. They (p. 302) reason that the obligation to maintain involvement with an organisation comes from the belief that it was the 'right and moral thing to do', or one 'ought to' after some socialisation and internalisation of organisational norms.

Finding #3 is also congruent with various studies that showed conscientiousness is an important personal resource to WE (e.g. Christian, Garza & Slaughter 2011; Halbesleben, Harvey & Bolino 2009; Sulea et al. 2012). Christian, Garza and Slaughter (2011, p. 100) reason the 'strong sense of responsibility' in conscientiousness increases the likelihood that individuals with such dispositional characteristics will be involved in their work. Halbesleben, Harvey and Bolino (2009, pp. 1453–1454) reason that the 'strong level of achievement motivation' and drive 'to succeed in what they do' in conscientious individuals enable them to 'cope with multiple demands' from work and family. Sulea et al. (2012, pp. 191–193) reason the proactive features of a strong sense of responsibility and achievement-orientation that characterise conscientious individuals, encourage them 'to invest energy and feel dedicated about their work' and inhibit them from being absorbed in counterproductive work behaviours.

Overall, the findings for self-transcendence values are congruent with recent literature (1) on egalitarian values demanded by modern society, (2) on the contagious nature of benevolence values, (3) on emotional benefits arising from perceived pro-social effects at work, (4) on obligation-based motivation arising from social exchanges at work, and (5) on conscientiousness. Similar to the findings for achievement and security value types, there is

an apparent lack of literature clarifying that self-transcendence values relate to WE.

*5.1.1.4 Hedonism value type*

The related value items used to describe hedonism value type are pleasure, satisfaction, and self-indulgence (Lindeman & Verkasalo 2005). The primary findings from the participants in this research as to why and how hedonism value type associates positively to WE are summarised in Figure 5.4.

**Figure 5.4. Research Findings from the Participants for Hedonism value type to associate positively to WE**

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|---|
| Finding #1. When individuals can be happy at doing the work, they are likely to be engaged at work. |
| Finding #2. Ability to experience sensuous self-gratification at work encourages one to be engaged with the work. |

Findings #1 and #2 are consistent with recent literature by proponents of positive psychology that hedonic acts are a route to happiness that can bring about positive states at work, such as WE (Haines 2013; Harzer & Ruch 2012). Haines (2013) explains that hedonism is a route that involves maximising pleasure or happiness and minimising pain or negative emotions (Peterson, Park & Seligman 2005; Ryan & Deci 2001) to achieve happiness and a subsequent good life. A good life occurs when individuals can engage themselves fully in activities (Vella-Brodrick, Park & Peterson 2009). In this engagement, Haines (2013) found a sense of authenticity (Wright 2008), whereby an individual's identified strengths could be used in activities to obtain 'abundant gratification and authentic happiness' (Seligman 2002a, p. 161). For Harzer and Ruch (2012), they reason that positive experiences at work such as pleasure, engagement, meaning and job satisfaction are inherent aspects of having uncovered 'something that we are good at and something we enjoyed' (Novak 1996; p. 18), because people mostly prefer to work on jobs congruent with their signature strengths (Park & Peterson 2007). When individuals are able to develop their dominant talents (i.e. signature strengths) at work, there can be significant increases in their WE (Clifton & Harter 2003).

*5.1.1.5 Summary of discussion for RQ1.1*

Overall for RQ1.1, the findings appear to be consistent with a range of recent literature. However, there is still an apparent lack of literature clearly stating that particular PVs relate positively to WE. In addition, the findings for achievement and security values

appear to be consistent with the local context and culture of Singapore.

### 5.1.2 RQ1.2—Which PVs are Associated Negatively with WE?

Both Study 1 and 2 confirmed that security, self-transcendence and hedonism values are positively associated with WE, as discussed in Section 5.1.1. However, both studies also found they could associate negatively with WE, albeit for different reasons. The reasons for these negative associations are discussed below.

#### *5.1.2.1 Security value type*

The primary findings from the participants in this research as to why and how security value type associates negatively to WE are summarised in Figure 5.5.

**Figure 5.5. Research Findings from the Participants for Security value type to associate negatively to WE**

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| Finding #1. If work conditions are not conducive and threaten the sense of security, one can become disengaged or less engaged at work. |
| Finding #2. If security value emphasises spending more resources on family rather than focusing or balancing one's resources on maximising material gain from work, one can become disengaged or less engaged at work. |

Finding #1 is congruent with various recent findings (Coetzee & De Villiers 2010; Crawford, LePine & Rich 2010; Karatepe 2013b) and arguments (Lazarova, Westman & Shaffer 2010) that unfavourable work conditions related to job requirements, and quality of relationships and experiences at work can negatively affect WE. Coetzee and De Villiers (2010) found that stress from insecurity at work, resulting from job ambiguity and instability, led to low WE in a financial institution in South Africa. They reason insecurity is related to the notion of psychological danger, whereby (1) one is reluctant to fully show and employ oneself out of fear of negative consequences, and (2) this can lead to lower WE or disengagement. Crawford, LePine and Rich (2010) also found similar conclusions in their meta-analysis that the hindrance demands of role conflict, emotional conflict, organisational politics, administrative hassles, resource inadequacies and role overload are negatively related to WE. They reason that these demands thwart personal development and goal attainment. Employees perceive them as constraints or barriers and become less engaged or disengaged at work. In a recent investigation of hotel employee outcomes in Iran, Karatepe (2013b) also found that distrust at work, as a result of negative perceptions of organisational politics, lowered levels of WE. Karatepe (2013b) explains a work environment with organisational

politics can be perceived as uncertain and threatening, and the consequent uncomfortable feeling can result in negative experience and display of negative organisation behaviour through disengagement or lower WE. Similarly, Lazarova, Westman and Shaffer (2010, p. 104–105) argue that individuals' adjustment to engagement at work will be lowered if they perceive 'negative consequences' regarding their actions at work, or if they distrust work situations. When negative consequences or distrust is perceived, individuals will feel insecure and not be confident of acquiring desired gains to meet their basic needs of family and / or self via WE.

Finding #2 is in line with the literature on work-family conflict and the associated spillover effects (e.g. Allen et al. 2012; Odle-Dusseau, Britt & Greene-Shortridge 2012; Wayne et al. 2013). Wayne et al. (2013) showed there could be positive work outcomes from employees when they perceived their work environment to be family-supportive. Conversely, if employees do not perceive their work environment to be family-supportive, resources such as 'positive mood and sense of fulfilment' (Wayne et al. 2013, p. 12) arising from the perceived support, will not be present. When this occurs, employees will not be able to handle the role strain arising from the multiple role demands of work and family, and this spillover (Edwards & Rothbard 2000; Lambert 1990) can lead to lower positive work outcomes, like lower WE (Allen 2001; Odle-Dusseau, Britt & Greene-Shortridge 2012).

Allen et al. (2012) had similar findings when they meta-analysed the relationships between dispositional variables and both directions of work-family conflict. They argue that as individuals have limited amount of resources, unless they have additional resources, performance in at least one role will suffer if one other role requires more resources. These resources can be social, physical or psychological to help in goal completion and / or demand reduction (Demerouti et al. 2001). In the context of being unable to cope with the competing demands of work and family roles, Rothbard (2001) describes the process of engagement in the two roles as depleting. In this depleting process, there can be high self-focus (Greenberg & Pyszczynski 1986; Wood, Saltzberg & Goldsamt 1990) to cope with the competing demands, such that consumption of energy in one role (e.g. family) will lead to fatigue (either mental or physical) and subsequent reduction in engagement in the other role (e.g. work). Individuals that self-regulated tend to dwell on problems and be self-absorbed (Nolen-Hoeksema 1987; Wood, Saltzberg & Goldsamt 1990) in the role (e.g. family), such that they became less available to engage in another role (e.g. work).

Overall, the findings for security value type appear to be consistent with recent literature (1) relating WE to unfavourable work conditions that lead to a sense of job insecurity, and (2) on work-family conflict. Together, the findings and this recent literature

illuminate that security value type has two subtypes of job security and family security, where job security emphasises the acquisition of material gains from work (i.e. work focus), and family security emphasises the caregiving of love ones (i.e. family focus). Job security appears to relate negatively to WE if work conditions are unfavourable, while family security appears to relate negatively to WE if perceived family support at work is lacking.

*5.1.2.2 Self-transcendence values (Benevolence and Universalism)*

The primary findings from the participants in this research as to why and how self-transcendence values associate negatively to WE are summarised in Figure 5.6.

**Figure 5.6. Research Findings from the Participants for Self-transcendence values to associate negatively to WE**

| |
|---|
| Finding #1. Perceived lack of welfare or care for one's being at work can lead to negative WE. |
| Finding #2. Perceived unfairness at work can lead to negative WE. |

Finding #1 is congruent with the literature on perceived organisation support (e.g. Sakurai & Jex 2012; Sulea et al. 2012). Sulea et al. (2012) demonstrated that lack of perceived organisational support was related negatively to WE. They reason that when there is occurrence of contentious exchange (Ilies et al. 2011), such as lack of 'help and consideration for the goals and values', and 'care about the well-being' of the employees (Sulea et al. 2012, p. 190), both of which are a perceived lack of organisational support, employees can encounter emotionally stressful situations (Peeters et al. 2005). These situations can wear out the energy of these employees (Van Emmerik, Bakker & Euwema 2009), and consequently result in experiences of lower levels of well-being (Guerra et al. 2005). They may then reciprocate with negative organisational behaviour, such as lower WE (Chen, Zhang & Vogel 2011). Sakurai and Jex (2012) showed that perceived co-worker incivility, which is another sign that perceived support at work is lacking, including rude comments and condescending actions, were related to higher levels of negative emotions. They showed these negative emotions lead to reduced work effort and higher levels of counterproductive work behaviours. In other words, facing frequent noxious aspects (e.g. co-worker incivility) at work makes employees less happy and less able to concentrate on their work (Heuven et al. 2006; Schaufeli & Bakker 2004).

Finding #2 is congruent with the literature related to ethical leadership (e.g. Den Hartog & Belschak 2012). Den Hartog and Belschak (2012) demonstrated that WE mediated the relationships of ethical leadership to employee initiative and counterproductive work

behaviour. They explain that ethical leaders are morally upright managers and people (Brown & Treviño 2006) who foster desirable behaviours among followers, through inspiration such as trust (Den Hartog & De Hoogh 2009; Kalshoven, Den Hartog & De Hoogh 2011; Piccolo et al. 2010). Ethical leaders are expected to act fairly, allow followers a voice, possess integrity, and be caring, consistent and responsible (Brown, Treviño & Harrison 2005; De Hoogh & Den Hartog 2008; Kalshoven, Den Hartog & De Hoogh 2011). By treating followers fairly and earning trust, positive social exchange can occur, such that the followers feel obliged to reciprocate with positive organisational behaviours (Mayer et al. 2009). In other words, justice perceptions of fairness and quality of treatment can determine discretionary behaviour (Blader & Tyler 2009). Fair treatment or organisational justice in uncertain contexts can result in positive consequences in the form of positive affect, increased trust and support for work objectives via WE (Lind & Van Den Bos 2002; Moliner et al. 2008). In other words, perception of supervisory fairness can influence extra-role behaviours such as WE (Macey et al. 2009; Skarlicki & Latham 1996). With ethical leadership, followers can see links between their efforts and the attainment of 'important moral goals and values' they identify with, and meaningfulness in their jobs (Den Hartog & Belschak 2012, p. 43). Meaningfulness leads to vigour and positive behaviour (Piccolo et al. 2010). Conversely, if the perceived leadership at work is unethical, negative consequences in the form of disengagement or lower WE can occur. Den Hartog and Belschak (2012) also demonstrated that a leader's Machiavellianism[1] moderated the relationship of ethical leadership to WE. In this demonstration, work behaviours such as WE of followers, were reduced when there was a higher degree of Machiavellianism in leaders. This is because highly Machiavellian leaders display inauthentic ethical leadership, whereby there are discrepancies in their expressed and private identities.

Finding #2 is also congruent with the literature on discretionary and extra-role work behaviour arising from social exchanges at work (e.g. Agarwal et al. 2012; Li, Sanders & Frenkel 2012), highlighted in sub-Section 5.1.1.3. The quality of social exchange or relationships between employees and their supervisors can affect WE (e.g. Agarwal et al. 2012; Li, Sanders & Frenkel 2012). Li, Sanders and Frenkel (2012) explain that when employees perceive inconsistencies between organisational goals, objectives and HR messages, they may see little link between their roles, and feel more stress because of cognitive confusion (Bowen & Ostroff 2004). This feeling can lead to reduced WE and performance (Cho et al. 2006).

[1] Machiavellianism is defined as a strategy of social conduct that involves manipulating others for personal gain (Wilson et al. 1996, p. 295).

Overall, the findings for self-transcendence values appear to be consistent with recent literature (1) relating WE to perceived organisational support, and (2) to ethical leadership, and (3) on the quality of social exchanges at work. Like the previous section on security value type, the findings and the recent literature together illuminate that self-transcendence values can relate negatively to WE whenever work conditions such as perceived organisational support, leadership and quality of social exchanges at work are unfavourable to the fulfilment of self-transcendence values.

*5.1.2.3 Hedonism value type*

The primary findings from the participants in this research as to why and how hedonism value type associates negatively to WE are summarised in Figure 5.7.

**Figure 5.7. Research Findings from the Participants for Hedonism value type to associate negatively to WE**

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|---|
| Finding #1. Hedonism value type relates negatively to WE component absorption. |
| Finding #2. If the work is not of personal interest to the individual, the individual may be less engaged or not be engaged with the work. |

Finding #1 seems to support recent arguments (e.g. Bledow 2013; Lord et al. 2010) on the interplay and self-regulation between demand-perception and self-motivation that involve a broad set of conscious and unconscious intra-individual processes (Lang & Lang 2010) in the pursuit of desired end states. Key to this interplay and self-regulation is the temporal dynamics of affect (Bledow 2013), as espoused in the opponent-process theory of motivation. This posits that there exist automatic systems in the brain that activate an opponent loop to suppress 'the intensity of subjective hedonic quality or affect' (Solomon & Corbit 1974, p. 143) whenever stimulation provokes significant departures of affect from its equilibrium. Bledow (2013) argues that demand-perception and self-motivation in work settings are automatic and adaptive opponent processes to each other in the psychological system. In this argument, demand-perception tends to reduce positive affect and even provoke negative affect (Baumann, Kaschel & Kuhl 2007; Koole 2009). This tendency to reduce positive affect or provoke negative affect inhibits the temporarily positive rate of change in self-efficacy beliefs. As a result, the positive state associated with hedonism (Filep 2007; Kahneman, Diener & Schwarz 1999; Seligman, Parks & Steen 2004), whereby there are high arousal feelings of delight, euphoria and intoxication (Lamont 2012) tends not to persist. It may even change to negative affect, which is contrary to the WE component absorption that features a

persistent cognitive state (Schaufeli et al. 2002b), whereby engaged individuals are happily engrossed in the work. In their review of best practices on positive interventions at work, Salanova et al. (2013) also argue that happiness at work cannot be sustained through hedonism (pursuit of pleasure), but by ensuring life is meaningful.

Finding #2 is in line with recent literature on job passion by Ho, Wong and Lee (2011) whose findings indicate that cognitive engagement mediates the relationship between employees' job passion and their work performance. Using the generic definition of passion by Vallerand et al. (2003), Ho, Wong and Lee (2011, p. 28) explain that job passion involves 'intense liking for the job' and viewing the job 'as personally important to them'. Ho, Wong and Lee (2011, p. 32) reason that individuals become engaged (putting in the time and attention) with the jobs they are passionate about because of 'basic hedonistic tendencies', whereby they find the job 'enjoyable and pleasurable'.

Finding #2 is also in line with other researchers' (e.g. Foster & Hicks 2004; Haines 2013; Lyubomirsky, Sheldon & Schkade 2005; Myers & Diener 1995) perspectives on the subjective nature of hedonism as part of happiness. In these perspectives, work that will bring satisfaction and enjoyment to individuals depends specifically on who these individuals consider themselves to be.

Overall, it would appear that the findings for hedonism value type are consistent with recent literature (1) on the temporal dynamics of affect, (2) on job passion, and (3) on subjective nature of hedonism as part of happiness. Like the previous sections on security and self-transcendence values, the findings and these recent literatures together illuminate that hedonism value type can relate negatively to WE when the work condition does not allow fulfilment of the individual's hedonism values.

#### *5.1.2.4 Summary of discussion for RQ1.2*

Overall for RQ1.2, the findings appear to be consistent with a range of recent literature. Together, the findings and the corresponding recent literature, illuminate that the negative relationships of security, self-transcendence and hedonism values to WE occur when work conditions are unfavourable to the fulfilment of these values. In addition, it appears that security value type has two subtypes of job security and family security, which have different foci. The focus of job security is on work, while that for family security is on caregiving to love ones.

### 5.1.3 Summary of Discussion for RQ1

The findings that achievement, security, self-transcendence and hedonism values

affect WE are consistent with ongoing and recent literature, although it seems the literature that clearly states particular PVs relate to WE is lacking. The apparent congruence of the findings with the local context in Singapore is in line with Brough et al.'s (2013) argument that social factors such as the local economy and level of social welfare may contribute to one's behaviour in organisations (Tsui, Nifadkar & Ou 2007). In addition, the findings to RQ1 are congruent with the recent report by the Singapore government that the core aspirations of Singaporeans are opportunity, purpose, assurance, spirit and trust (Our Singapore Committee 2013). In this report, aspirations of opportunities and purpose refer to being able to make a good living fairly and celebrating beyond economic success. Both aspirations connote value for material and non-material achievements. Assurance, spirit and trust in this report refer to affordable basic needs, a cohesive and compassionate society, and a civic-minded nation with strong family and community values. These three aspirations connote the value of security and self-transcendence.

## 5.2 Research Question 2 (RQ2): How do Demographic Profiles affect the Relationships?

This section is organised into six sub-sections. The first five examine each demographic profile (age, gender, parenthood status, marital status and level of education) studied in this research. Within these five sub-sections, like the previous section addressing RQ1, the findings are first reviewed, evaluated and summarised. The sixth and final sub-section, summarising the discussion of the findings to RQ2 follows these five sub-sections.

### 5.2.1 RQ2.1—How does Age influence which PVs affect WE?

The primary findings from the participants in this research as to whether and how age influences which PVs affect WE are summarised in Figure 5.8.

**Figure 5.8. Research Findings from the Participants for whether and how Age influences which PVs affect WE**

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| Finding #1. Generational differences and life stages can explain how age influences which PVs affect WE. |
| Finding #2. Current younger workers have higher hedonism values and lower WE. |
| Finding #3. Current younger workers value job security as part of adult development. |
| Finding #4. Current older workers have higher self-transcendence values. |
| Finding #5. Current older workers have higher conservation values. |

*5.2.1.1 Generational differences and life stages*

Finding #1 is consistent with recent literature on generational differences in work values (e.g. Kanfer, Beier & Ackerman 2013; Park & Gursoy 2012; Twenge et al. 2010) and differences arising from life stages (e.g. Jin & Rounds 2012; Kanfer, Beier & Ackerman 2013; Patrickson & Ranzijn 2004). Park and Gursoy (2012) found the older workers from 677 employees in a North American hotel were more engaged; they reason this difference is likely because of generational differences among employees. The broad forces affecting each generational cohort, ranging from Baby Boomers (born in the period 1946–1964) to the most recent generation, Millennials (also known as NetGen, GenY, GenerationMe, Gen Net and Digital Natives, and born in the period 1982–1999), such as popular culture, major economic and social events, media, family and friends, tend to create common value systems that differentiate between generational cohorts that grew up during different times (Twenge et al. 2010). Researchers (Scott 2000; Smith & Clurman 1998; Park & Gursoy 2012; Twenge et al. 2010) argue that generation is important, as each cohort tends to share common social or historical life events that are distinct to them and influence the formation of values that remain consistent throughout life. In an investigation of stability and change across the lifespan in work values, Jin and Rounds (2012) also found that work values tend to stabilise after individuals entered the workforce. The importance of considering factors such as generation instead of calendar age when studying values is also reinforced by a recent emphasis (e.g. Kanfer, Beier & Ackerman 2013) that calendar age may not be a salient factor. This is because relatively small relationships were found between age and work performance (Ng & Feldman 2008), work attitudes (Ng & Feldman 2010) and work motives (Kooij et al. 2011).

Finding #1 also reinforced a recent study's finding of more than 3,500 participants from 30 organisations in Singapore's multi-generational workforce, by Tripartite Alliance for Fair Employment Practices (TAFEP 2013). This is a government setup co-led by Singapore National Employers Federation (SNEF) and National Trades Union Congress (NTUC), with members including employer representatives, union leaders and government officials. TAFEP (2013) found that Gen Y tends to value additional annual leave for travel and other personal pursuits (i.e. hedonism), because they are young and are still developing their career and life. Older generations tend to value extended medical benefits for themselves and family (i.e. less hedonism, more benevolence and security), because they are older and concerned about their health and life after retirement.

*5.2.1.2 Current younger workers have higher hedonism values and lower WE*

Finding #2 is congruent with recent studies (e.g. Chao 2005; Schullery 2013; Twenge et al. 2010) that showed younger generations may value leisure more than older generations, where leisure refers to opportunities of freedom and vacation (Herzog 1982; Johnson 2002; Miller, Woehr & Hudspeth 2002). Younger generations are reputed to look for work they enjoy (Schullery 2013), that is meaningful (Arnett 2004; Tulgan 2009) and that brings benefits they feel entitled to (Alsop 2008). They are also known to have increasing desires for a balanced life (Chao 2005), and a decline in work ethics and work centrality (Smola & Sutton 2002), even when they do see the need to 'work to survive' because of depleted social security systems and increased inflation (Twenge et al. 2010, p. 7). As a result, studies show younger generations have lower WE (BlessingWhite Inc. 2011; Schaufeli & Bakker 2003; Schullery 2013; Taipale et al. 2011), and a tendency to job-hop (Alsop 2008; Harman & McCambridge 2011). Given these inclinations of the younger generations, some employers (e.g. Google, eBay, KPMG, Microsoft) are known to lure top younger workers (who are now the Millenials) with 'fun' at work (Schullery 2013, pp. 257–258; Tapscott 2009, p. 92) to encourage WE among younger workers. A recent study by Inceoglu, Segers and Bartram (2012) on age-related differences in work motivation also showed that older workers demonstrated more citizenship behaviours and engaged less in counter-productive behaviours.

*5.2.1.3 Current younger workers value job security as part of adult development*

Finding #3 is consistent with literature in adult development (Jin & Rounds 2012; Kanfer, Beier & Ackerman 2013), as well as other surveys conducted in Singapore (e.g. Goh & Ong 2013). A recent survey by *The Straits Times* showed that younger workers in Singapore valued pay and benefits at work before work-life balance (Goh & Ong 2013). In the adult development literature (e.g. Costa & McCrae 2006; Kanfer, Beier & Ackerman 2013), it has been reported that most young adults had to work to earn financial resources to not only take care of themselves, but to also achieve non-work goals in life, such as owning a home, taking care of family and civic involvement. This is in line with the normative theory of adult development (Erikson 1963) that motivation to work is a result of corresponding biological, psychological and societal forces. As young adults rely on work to fulfil their roles in the family and society, there is an increased adoption of more realistic and prudent values such as security, and less on ideological values (De Cooman et al. 2009), compared to the time when they were still studying as adolescents.

Before young adulthood, the academic environment exposed adolescents primarily to the promotion of intrinsic values such as 'interest and satisfaction' (Jin & Rounds 2012, p.

336) because there were limited opportunities for them to gain knowledge about adult roles in family and society. During adolescence, prior to young adulthood, a period labelled as 'emerging adulthood' (Arnett 2000), possible life directions in love, work and worldviews are explored, and different roles may be tried out before one achieves maturity and determines one's self-identity. In young adulthood, one tends to experience the adjustment between presupposed occupational identity and job realities with its internal rules (Jokisaari & Nurmi 2005), as one's aspirations may become more realistic instead of idealistic (Arnett 2000; Gribbons & Lohnes 1965; Johnson 2005; Johnson & Elder 2002). This is because there is the tendency that adolescents have high internal aspirations and importance placed on intrinsic values that exceed what the labour market can offer (Johnson & Elder 2002; Marini et al. 1996). During this period of young adulthood, one also realises roles in the family and society relate to extrinsic rewards such as salary, benefits and job security (Jin & Rounds 2012).

Other similar studies (Schullery 2013; Twenge et al. 2010) also showed younger generations value extrinsic rewards more than older generations, where extrinsic rewards refer to tangible rewards or material aspects of work such as salary, benefits, status and career advancement gained in return for work done (Ryan & Deci 2000). It has been argued that one tends to increase the importance of values one can attain (e.g. job security) and decrease the importance of other values they cannot attain (e.g. interest and satisfaction) (Schwartz & Bardi 1997). Thus, younger workers tend to value job security as part of adult development, as material well-being is important to meet one's basic needs (Gallie, Felstead & Green 2012).

*5.2.1.4 Current older workers have higher self-transcendence values*

Finding #4 is congruent with recent literature and local studies in Singapore (e.g. Goh & Ong 2013; TAFEP 2013) on the difference in the values (Schullery 2013; Twenge et al. 2010), personal attributes (Kanfer, Beier & Ackerman 2013), and work motivation (Inceoglu, Segers & Bartram 2012) between younger and older workers. In recent local survey by *The Straits Times*, older workers were found to value good bosses and colleagues more than the young (Goh & Ong 2013). TAFEP (2013) also found that older workers in Singapore were more likely to perceive unfair treatment at work than younger workers.

In the values literature, older generations were found to value altruism (e.g. being able to help others or contribute to society) and social rewards (e.g. relatedness needs at work) more than current younger workers (Schullery 2013; Twenge et al. 2010). It has also been found that opportunities to interact with others at work (i.e. relatedness) were considered as an attractive factor for Baby Boomers to continue to work (Kooij et al. 2011; Shacklock 2006). It

has been argued that personality traits have, over generations, become increasingly individualistic and narcissistic (Twenge et al. 2008), such that older generations placed more importance on social approval than younger generations (Twenge & Im 2007). The disconnect between desires and reality arising from placing importance on leisure (which value freedom) and extrinsic values (which emphasise tangible returns for work done) among the younger generations is a sign of over-confidence which explains their narcissistic traits (Twenge & Campbell 2009; Twenge et al. 2010). Narcissistic traits are known to be associated with problems in relationships (Campbell 1999), and this association probably explains the decreased emphasis on self-transcendent values by younger generations.

In the personal attributes literature, Kanfer, Beier and Ackerman (2013) argue that the motives associated with extrinsic rewards show mean-level decline in life (Salthouse 2011), while attributes that support self-transcendence such as job knowledge, conscientiousness and emotion regulation show mean-level increase in life (e.g. Ebner, Freund & Baltes 2006; Kooij et al. 2011; Urry & Gross 2010). In a study of age-related differences in work motivation, Inceoglu, Segers and Bartram (2012) found that intrinsic rewards, such as personal principles (being able to espouse ideals and achieve high ethical and quality standards) were perceived by older age groups to be more motivating. They argue that as one gets older, there is the tendency for one to place higher importance on caring for others and helping society as espoused in the generative theory (McAdams & De St Aubin 1998); the tendency for older workers to uphold self-transcendence values.

*5.2.1.5 Current older workers have higher conservation values*

Finding #5 is congruent with literature (e.g. Chaudhuri & Ghosh 2012; Patrickson & Ranzijn 2004) on older workers and the local context of Singapore (National Population & Talent Division 2013). The current older workers (above 40 years old) are from the Baby Boomers (born in the period of 1946–1964) generation and the older individuals in Gen X (born 1965–1981). This group of older workers is known to value performance, long term employment and doing their best at work (Burke 2004; McGuire, Todnem & Hutchings 2007), and they 'live to work' (Chaudhuri & Ghosh 2012, p. 59; Twenge et al. 2010, p. 6). Thus, they tend to be driven by conservation values, which emphasise self-restriction, order, resistance to change and protection of stability (Schwartz 1992). Patrickson and Ranzijn (2004) reason that the sense of insecurity is the contextual predicament older workers face as they near retirement. Older individuals face constraints that can either hinder them securing employment, leaving employment, or changing employment, such that most older workers are apprehensive of finding alternative employment after leaving a current employer. These

constraints include ageist discrimination, an abundant supply of labour with the same skills, little experience in other work, and perceived resistance to change.

In a recent Population White Paper for Singapore (National Population & Talent Divison 2013) published by the government, it is stressed again, reinforcing earlier announcements made over recent years, that Singaporeans are facing a rapidly ageing population. It projects that Singapore will have to consequently rely on tax increase and an increasingly smaller base of working Singaporeans for economic growth, sustenance and survival. Singaporeans are thus reminded of the need to face up conservatively the consequences of an aging population on the sustenance of the later phase of their lives.

*5.2.1.6 Summary of discussion for RQ2.1*

Overall, it would appear that the findings for the influence of age are consistent with recent literature (1) on generational and age differences in PVs, personal attributes and work motivation, and (2) on life stages (including adult development), and with similar recent local studies on the population in Singapore. However, there is an apparent lack of literature relating all three variables of age, PVs and WE together in a single study.

### 5.2.2 RQ2.2—How does Gender Influence which PVs Affect WE?

The primary findings from the participants in this research as to whether and how gender influences which PVs affect WE are summarised in Figure 5.9.

**Figure 5.9. Research Findings from the Participants for whether and how Gender influences which PVs affect WE**

Finding #1. Men are more positively driven by achievement value type and more engaged at work.

Finding #2. Women are more negatively driven by security value type at work.

Finding #3. Values driving both genders at work may not differ with increasing gender equality and standards of living.

*5.2.2.1 Men are positively driven by achievement value type and more engaged at work*

Finding #1 is consistent with extant findings (e.g. Ferriman, Lubinski & Benbow 2009; Statistics Sweden 2011) and arguments (Schwartz & Rubel 2009) in the gender literature. Ferriman, Lubinski and Benbow (2009) found that men valued full time careers more than women. They found that men placed more emphasis than women on achieving high monetary gains, success and recognition at work. Swedish working fathers have been

found to use parental leave less than Swedish work mothers, and this lends support to the notion that men see their role as 'breadwinner', bearing the responsibility to achieve at work in return for material gains rather than being a caregiver (Statistics Sweden 2012). In countries where there appear to be gender differences in WE levels, men have been found to be more engaged than women (Blessing White Inc. 2011). In the study of the psychometric quality of the WE instrument UWES, Schaufeli and Bakker (2003) found that the WE of men was significantly higher than women in the ten countries studied.

Schwartz and Rubel (2009) posit that this phenomenon may be viewed from an evolutionary psychology perspective (Davies & Shackelford 2008; Kenrick et al. 2002) and a social role theory (Wood & Eagly 2002). In evolutionary analyses, women focus their investment on caregiving and seek mates to support them in fulfilling their goals for loved ones through contributing resources from the mates' achievements. Findings such as women rating higher those attributes associated with achievement of their mate more than men, and the more frequent use of men in displaying these attributes to attract their mates, support the argument (e.g. Buss & Schmitt 1993; 1996) that men are driven by achievement values at work. In the social role analysis, whereby biological and physical features are seen to create role allocations and expectations, Schwartz and Rubel (2009) posit as men are usually larger in physique and strength, and women possess a biological reproduction ability, the interaction of socioeconomic and ecological demands incline men to seek achievement at work, and thus, play the breadwinner role. In this role, men have a strong work-related identity (Simon 1995), whereby work is a man's role (Gutek, Nakamura & Nieva 1981). If men are not employed and associated with economic provision, they are likely viewed as irresponsible to their family (Bernard 1981; Gutek, Searle & Klepe 1991), or as 'bad' fathers if they have children and are not supporting them financially (Miller 2012, p. 41).

*5.2.2.2 Women are negatively driven by security value type at work*

Finding #2 is congruent with recent findings on women's security values and societal roles (e.g. Crespi & Fontaine 2012; Miller 2012; Song, Chang & Sylvian 2013; Tambyah & Tan 2013). In a quality of life survey of 1,500 Singaporeans, Tambyah and Tan (2013) found that women in Singapore are more family-oriented than men. Women in South Africa were found to value work-home balance more than men, such that women place lower value on career progression and influence in the company (Whitehead & Kotze 2003). In a 30-nation psychological study finding of families across cultures, it was found that women value family security, and were the primary caregiver in families, caring for the sick, aged and running the home (Georges et al. 2006). In a study of balancing caregiving with paid work in UK, Miller

(2012) found that the societal expectation for women as a caregiver for the household exists even when paid work is equated to self-esteem and recognition for women. Despite general increases in labour participation by women over the years, there is the continuous expectation for women to take a larger responsibility for children and household (Berntsson, Lundberg & Krantz 2006; Gutek, Searle & Klepe 1991). The responsibility covers caring for everyone in the family, and providing a stable home situation or home maintenance (Gutek, Nakamura & Nieva 1981). Thus, the prescribed primary role of women in the family tends to be caregiver (Eagly & Karau 2002; Eagly, Wood & Diekman 2000) or homemaker (Simon 1995). This traditional unequal division of household tasks of European women as caregiver and men as breadwinner become more salient after the experience of parenthood (Baxter, Hewitt & Haynes 2008; Katz, Priess & Hyde 2010), as governmental and companies' family-friendly policies are generally skewed to mothers' needs rather than the fathers', on the basis that women are the primary family caregiver (Crespi & Fontaine 2012). Similar to Europe, Song, Chang and Sylvian (2013), and Sun (2012b) argue that the Singapore government policies for the balancing of work and family are also skewed to benefit family-centred working women rather than career-centred counterparts. Tai (2013) reasons understanding government policy interplay with women's empowerment is important when examining the gender division of labour.

Finding #2 is also congruent with recent literature on work-family conflict (e.g. Langballe et al. 2011; Miller 2012; Sun 2012b). Through interviews of about 200 men and women, Sun (2012b) argued the findings showed that the 'government's ideal' of Singaporean women was that of a 'superwomen' (Song, Chang & Sylvian 2013, p. 2), whereby Singaporean women are simultaneously responsible for both caregiving and economic activity. Song, Chang and Sylvian (2013) argue that while Singapore's foreign domestic worker policy encourages Singaporean women to participate in the labour force by allowing for privately organised care work, to allow households to balance work and family, the household still has to bear the cost of the foreign domestic help, with a foreign maid levy relief that is less than the maid's cost. The expectations of women to combine caregiving and paid work, yet expecting them to fit their work around caregiving needs (Hobson & Fahlén 2009; Perrons et al. 2007) have given rise to work-family conflict as aspects of role pressures in work and family domains are mutually incompatible (Greenhaus & Beutell 1985). Kinnunen, Geurts and Mauno (2004) showed that job satisfaction was significantly predicted by work-to-family conflict among women. Innstrand et al. (2009) found that work-family interaction affected women more than men. They reason women may have a more fluid boundary between work and family, but less prevalent role segmentation than men. Langballe

et al. (2011) argue inconsistency in work-related identity, along with women's homemaker role generate guilt and conflict (Elvin-Nowak 1999; Livingston & Judge 2008). Miller (2012, p. 39) showed that, despite increased involvement by men in caregiving in the family, there was still a sense of 'guilt' among working women. Gutek, Searle and Klepe (1991) explain that women feel they are imposing on their family obligations and are viewed as selfish or self-centred, or neglecting family responsibilities if they spend much time and invest much effort at work.

Finding #2 is also in line with recent finding by Power and Greenhaus (2010) that family role salience was positively related to femininity, and the evolutionary and social role arguments by Schwartz and Rubel (2009). Power and Greenhaus (2010) reason the family role offers women the chance to apply feminine traits such as compassion, nurturance and sensitivity to the needs (Deaux & LaFrance 1998; Eagly, Wood & Diekman 2000) of important people in their lives. Women's focus on maximising their investment on caregiving, as viewed from an evolutionary psychological perspective, and their social role of reproduction because of their ability to gestate, inclines them as nurturers (Valian 1998). However, it may be worth noting that evolutionary reasoning posits that both men and women value security because of self-protective motivations arising from psychological mechanisms developed that encourage vigilance against threats to health or survival (Kenrick et al. 2002). In this regard of fulfilling their security values, women invest their resources on caregiving to their loved ones while men invest theirs in achievement at work to gain resources.

*5.2.2.3 Values driving both genders at work may not differ with increasing gender equality and standards of living*

Finding #3 is congruent with recent findings and arguments by Tai (2013) on gender labour participation in Singapore. From the time-series data drawn mainly from Singapore government publications, Tai (2013) found that women take up managerial and professional roles at a more rapid rate than men. From 1975 to 2009, the labour participation rates of men and women in Singapore hovered at around 80 per cent for men and saw an increase from 35 to 50 per cent for women. He explains that increasing educational and professional credentials by Singaporean women, because of their capitalisation of gender equality in education and job opportunities, have allowed them to gain access to high-level occupational roles. He reasons that as highly skilled jobs increase and low-skilled jobs decline in Singapore, through the growth of a service sector that requires more sex-neutral occupations where skill and intelligence are more important than biological attributes of strength or energy, there is an increasing level playing-field for Singaporean women to compete with men for jobs. In

addition, with family-friendly policies such as the foreign maid levy relief, Tai (2013) argues that women in Singapore are freed from household duties and can aim for career progression through labour participation.

Finding #3 is also congruent with recent findings by Schwartz and Rubel (2009) on how increased gender equality affects men's and women's value priorities. In their studies of over 67,000 participants in 25 representative national samples and students from 68 countries, they found that with greater gender equality, both men and women placed higher importance on self-transcendence values (benevolence and universalism), openness-to-change values (stimulation and self-direction), and hedonism. They reason that the greater resources of wealth, education and autonomy individuals gained from greater gender equality facilitate the expression and realisation of these values. In these same studies, Schwartz and Rubel (2009) also found that with greater gender equality, both men and women placed lower importance on anxiety-based values such as security, conformity and power. They reason the increased individual resources that greater gender equality gives boost individuals' confidence to control threats and achieved desired goals (Schwartz 2007; Schwartz & Sagie 2000).

Finding #3 also supports recent literature (e.g. Burda, Hamermesh & Weil 2013; Craig, Mullan & Blaxland 2010; Crespi & Fontaine 2012; Miller 2012) on gender equality arising from the increasing egalitarian demands modern societies are facing, concomitant with changes in societal expectation of gender roles and government support for gender equality. Crespi and Fontaine (2012) reason that in modern societies, women are increasingly taking up professional roles, while men are increasingly involved in childcare. There is increasing general acceptance in developed countries for a wife's traditional caregiver role to be interchangeable with the husband's breadwinner role (Andrade & Bould 2012). Gallie, Felstead and Green (2012) note the cultural climate is increasingly one in which women having a career is regarded as the norm, and considered legitimate and desirable as a life objective, unlike earlier times where the culturally defined roles for women were more circumscribed. For instance, some European countries have an explicit policy goal of gender equity in both paid and unpaid work, where unpaid work refers to domestic work and care for the household, such as shared social responsibility of children, mandated parental leave and early education services (Craig, Mullan & Blaxland 2010; Fagnani & Boyer 2007; Leira 2002; Neyer 2006). Craig, Mullan and Blaxland (2010) note that trend studies show a significant decrease in housework among women as their labour force participation rate increases, while men's unpaid work has increased slightly (Bianchi, Robinson & Milkie 2006; Fisher et al. 2007; Sayer 2005; Sullivan & Gershuny 2001). Thus, the gender division of labour is increasing less pronounced than in the past (Sullivan 2006).

Changes in global economies and demographic patterns, and better education opportunities have given rise to women combining unpaid work, caregiving at home, with paid work (Miller 2012). Burda, Hamermesh and Weil (2013) found from a study of 27 countries that gender differences in total work is negatively related to GDP per-capita. They reason the rise in wages and job opportunities due to rising standards of living lowers impact of gender stereotypes because of valuation of market participation. Makiwane (2012, p. 199) argues that concomitant with an increasing cost of living in Singapore and its highly competitive culture, Singaporeans aim for the 'best' that 'money can buy', such as for their children's education. Thus, Singaporean women are also motivated to contribute to household income through their labour participation. In Iran, Karimi (2009) also found an increasing number of working Iranian women as the cost of living rises and more women are educated.

Craig (2006) and Miller (2012) temper the increased labour participation of women and the caregiving contribution of men. They argue that even if both men and women were doing well at work and had higher incomes, and wanted to contribute to caregiving, there are still societal norms and maternal / paternal policies, such as leave from work, that promotes women as primary caregivers and men as primary breadwinner. In Singapore's context, Singaporean women can take up to 16 weeks of paid maternity leave for each child, while Singaporean men can only take up to three days of paid paternity leave (Sun 2012a). In the civil service, women after childbirth are allowed to work part time (Kramer 2012; Sun 2012b). Thus, despite efforts by the Singapore government to encourage Singaporean men to share caregiving responsibilities (Straughan, Chan & Jones 2009), the majority of Singaporean men still place greater focus on financial concerns than on caregiving (Sun 2012a). In addition, many Singapore workplaces still have an unfriendly culture to those who do not prioritise work responsibilities over family (Jones 2012).

#### *5.2.2.4 Summary of discussion for RQ2.2*

Overall, the findings for the influence of gender are consistent with recent literature (1) on gender differences, particularly arising from evolutionary psychology, social role theory and governmental policies, (2) on gender equality, and (3) on work-family conflicts, as well as similar recent studies on gender labour participation in Singapore. However, like the previous section on the influence of age, there is an apparent lack of literature relating all three variables of gender, PVs and WE together in a single study.

### 5.2.3 RQ2.3—How does Parenthood influence which PVs affect WE?

The primary findings from the participants in this research as to whether and how

parenthood status influences which PVs affect WE are summarised in Figure 5.10.

**Figure 5.10. Research Findings from the Participants for whether and how Parenthood influences which PVs affect WE**

| |
|---|
| Finding #1. Having more dependent children can lead to change in PVs affecting WE, particularly a higher emphasis on security value type. |
| Finding #2. Having more dependent children may lead to higher WE because of one's focus on work to ensure financial security, or may lead to lower WE because of one's focus on the family to ensure quality time is spent on caregiving. |

*5.2.3.1 Having more dependent children leads to change in PVs affecting WE, particularly higher emphasis on security value type*

Finding #1 is consistent with recent literature on the effect of parenthood on individuals (e.g. Galdiolo & Roskam 2012; Gallie, Felstead & Green 2012; Miller 2012). When one adopts the social role as a parent (Galdiolo & Roskam 2012), and faces traditional and cultural expectations of parenthood (Katz-Wise, Priess & Hyde 2010; Nomaguchi & Milkie 2003) there can be interpersonal and intrapersonal transformative changes. This can lead to reports of work-to-family and family-to-work interferences when one has more children (Bruck & Allen 2003; Byron 2005). Shift in one's priorities can be expected because of developmental changes and life demands of parenthood (Ferriman, Lubinski & Benbow 2009; Hakim 2000). The changes are major to an individual's life, as becoming a parent is a major life transition involving significant experiences (Crespi & Fontaine 2012).

Miller (2012) found that after parenthood, paid work becomes more economically significant (i.e. financial and job security) and there is more preoccupation with caregiving (i.e. family security), especially with young children. Gallie, Felstead and Green (2012) found that preference for intrinsic values at work, such as variety, creativity and use of one's ability is low for individuals with dependent young children below five years old. They reason this reflects the financial burden to bring up the children, and thus, highlights an emphasis on job and family security.

*5.2.3.2 Having more dependent children may lead to higher WE because of financial security or lower WE because of caregiving*

Finding #2 is consistent with the recent mixed literature on the influence of parenthood on one's work behaviours (e.g. Eek & Axmon 2013; Miller 2012; Sun 2012b; Wallace & Young 2008). From the aspect that parenthood leads to positive work behaviours,

Craig, Mullan and Blaxland (2010) argue that parents have to be sufficiently engaged at work to earn enough money to support their dependent children and ensure they are well looked after. Eek and Axmon (2013) found that parents could be engaged at work because of positive attitudes of management towards parenthood and having a work situation that is flexible. Eek and Axmon (2013) reason that flexibility and positive attitudes at workplaces about parenthood possibly gives parents a sense of control over their life situation to address special needs associated with parenthood. Kramer (2012) and Sun (2012b) argue that in the highly competitive environment of Singapore and its high cost of living, there are Singaporeans who will work hard to give the best possible education for their children. From the aspect that parenthood leads to negative work behaviours, Craig and Bittman (2008) found that households with young children have higher amounts of unpaid work than those without children. The unpaid work includes supervision and related domestic work in taking care of children.

There is also the aspect that parenthood leads to positive work behaviours for men and negative work behaviours for women. Miller (2012) found that parents kept themselves engaged at work to cope with high cost of childcare, albeit the desire for quality childcare, particularly among mothers, obliged parents to balance work with time spent on childcare. Ferriman, Lubinski and Benbow (2009) found that because of parenthood, fathers were more career-focused and women were more communal in their outlook. They found fathers placed higher importance on gaining financial rewards and recognition, and delivering high performance. For women, they found higher importance given to family and friends, with less time spent on career. Men increased their effort at work when they become fathers (i.e. more WE) while women increased their focus on childcare when they become mothers, rather than on work (i.e. less WE) (Andrade & Bould 2012; Ferriman, Lubinski & Benbow 2009). Wallace and Young (2008) found that parenthood involving school-aged children led to lower productivity for mothers and higher productivity for fathers, when compared to non-parents. They also found that family-friendly policies supported fathers' productivity but showed no particular benefit to mothers' productivity. However, Wayne et al. (2013) found that the relationships of family-supportive organisational perceptions (FSOP) to work commitment for men did not differ as expected from women.

*5.2.3.3 Summary of discussion for RQ2.3*

Overall, the findings for the influence of parenthood are consistent with recent literature (1) on the effect of parenthood, (2) on social role as a parent, and (3) on mixed influence of parenthood on personal work behaviours. However, like the previous sections on

the influence of age and gender, there is an apparent lack of literature relating all three variables of parenthood, PVs and WE together in a single study.

### 5.2.4 RQ2.4—How does Marriage influence which PVs affect WE?

The primary findings from the participants in this research as to whether and how marital status influences which PVs affect WE are summarised in Figure 5.11.

*5.2.4.1 Influence of marriage depends on combination of factors*

Findings #1, #2 and #3 are congruent with recent literature on the spillover and crossover of resources among couples (e.g. Bakker & Demerouti 2009; Demerouti 2012; Westman, Etzion & Chen 2009). Bakker and Demerouti (2009) detected the crossover of WE across working couples, while Westman, Etzion and Chen (2009) found the crossover of positive experiences from one's work to one's spouse. Crossover can occur because the considerable time together creates awareness of each other's affective states, and sharing of some stresses, such as cost of living and life events (Westman 2006). Demerouti (2012) argues that marriage obliges working individuals to participate in multiple roles and they can provide opportunities and resources for possible growth and enrichment in both work and family. Jacobs and Gerson (2004) argue that having a spouse is similar to having children, in that both generate responsibilities and hence demands on the partner.

**Figure 5.11. Research Findings from the Participants for whether and how Marriage influences which PVs affect WE**

Finding #1. Marriage can lower WE because the other spouse is able to fulfil the basic financial needs of the family, and / or one values spending more time with family than at work.

Finding #2. Marriage can increase WE because the other spouse is unable to fulfil the basic financial needs of family, and / or one sees the need to seek maximum material gains for one's family to be fulfilling.

Finding #3. Marriage may not affect WE when there is no child.

Findings from #1, #2 and #3 also support recent work-family literature (e.g. Allen et al. 2012; Wayne et al. 2013). Meta-analytical findings by Allen et al. (2012) and Lazarova, Westman and Shaffer (2010) showed that influence of marriage on work-life conflict was inconclusive. Allen et al. (2012) argue that work-family conflicts of married individuals probably depend on a combination factors covering personality characteristics and demographic variables, such as gender, parenthood status and whether either spouse is doing paid work. Lazarova, Westman and Shaffer (2010) argue that work-life balance literature

shows the reciprocal influences of engagement between work and family roles can be positive, negative or non-existent. Negative influences can occur for married individuals, as there will be inevitable trade-offs of focusing one's resources between family and work domains (e.g. Hochschild 1997; Rothbard 2001). In contrast, positive influences can occur for married individuals through positive psychology (Seligman & Csikszentmihalyi 2000), whereby positive feelings may spillover from either family or work contexts to the other context (e.g. Edwards & Rothbard 2000; Grzywacz & Marks 2000).

Wayne et al. (2013) also found that partner's influence on work-family conflict depended on a combination of factors. The factors include number of children, whether the couple is dual-earner or single-earner, and perceived organisational support for family life. Wayne et al. (2013) found evidence that partners tend to reciprocate with positive work behaviour (e.g. WE) when job conditions were supportive of family life. Wayne et al. (2013) also reason that involvement in parenting of the working husband is welcomed in dual-earner couples, but not in single-earner couples, whereby the full time caregiving wife sees it as undermining her role (Buckley & Schoppe-Sullivan 2010). Schieman, Milkie and Glavin (2009) also argue from the findings and observations of past studies (e.g. Grzywacz & Marks 2000; Mennino, Rubin & Brayfield 2005; Reynolds & Renzulli 2005) that the influence of marriage on work-life conflict is inconclusive.

*5.2.4.2 Summary of discussion for RQ2.4*

Overall, it would appear that the findings for the influence of marriage are in line with recent literature (1) on spillover and crossover of resources and WE among couples and among partners, and (2) on work-family balance and conflict. However, as with previous sections on the influence of age, gender and parenthood, there is an apparent lack of literature relating all three variables of marital status, PVs and WE together in a single study.

### 5.2.5 RQ2.5—How does Education influence which PVs affect WE?

The primary findings from the participants in this research as to whether and how education qualification influences which PVs affect WE are summarised in Figure 5.12.

**Figure 5.12. Research Findings from the Participants for whether and how Education influences which PVs affect WE**

Finding #1. Individuals with higher education qualification tend to place higher value on achievement and self-direction, and lower value on conservatism.

Finding #2. Having higher education qualifications increase one's confidence in personal abilities, and this in turn, can lead to positive WE.

*5.2.5.1 Higher educated individuals value achievement and self-direction but not conservation*

Finding #1 is consistent with recent findings (e.g. Gallie, Felstead & Green 2012; Jin & Round 2012) that individuals with higher levels of education tend to value intrinsic values such as learning, interesting and creativity, use of one's abilities, and autonomy. Jin and Rounds (2012) found, from their meta-analysis of longitudinal studies on stability and change in work values, that education tends to educe, reinforce and maintain intrinsic values, where their preference is to achieve in areas that are not extrinsic. In contrast, the less educated tend to value extrinsic aspects of work more, such as income, status, stability and security (Johnson & Elder 2002; Lindsay & Knox 1984). Lindsay and Knox (1984) reason the less emphasis on extrinsic aspects of work among higher educated individuals is because higher educated individuals tend to be working in jobs that are already extrinsically rewarding because of their higher levels of education. Gallie, Felstead and Green (2012) found from their study of two nationally representative surveys of employees that there was increasing intrinsic orientation among employees with higher levels of education and parental encouragement in them, regardless of birth cohorts and gender. Intrinsic orientations cover using abilities, using initiatives, variety at work and interesting work. For Johnson, Sage and Mortimer (2012), in their study of panel data over a 14-year period, they also found that levels of education were related positively to intrinsic orientations. Koçer and Van De Werfhorst (2012) reason that formal education helps establish one's PVs (Hyman & Wright 1979; Pascarella & Terenzini 1991), as education helps individuals 'expand and rationalize social realities that enter into their choices' (Meyer 1977, p. 72).

Finding #1 and the recent literature that higher educated individuals place higher emphasis on intrinsic values are also congruent with recent observations of younger Singaporeans (e.g. Goh & Ong 2013; TAFEP 2013). Younger Singapore residents are 'more educated, tech-savvy and plugged into the world, and have more overseas exposure, from overseas school trips, university internships and study exchanges' (Goh & Ong 2013, p. D2). TAFEP (2013, p. 11) found that young Singaporeans are not only 'tech-savvy', but 'open-minded' and 'goal and achievement oriented', and value opportunities for career and personal development. Study 1's findings that younger participants are more educated, placed more emphasis on self-enhancement values and less on conservation values are congruent with these observations by Goh and Ong (2013) and TAFEP (2013).

*5.2.5.2 Higher education boosts one's confidence in personal abilities and WE*

Finding #2 is consistent with recent literature on the influence of education on

perceived control (e.g. Infurna et al. 2011; Specht, Egloff & Schmukle 2013). Specht, Egloff and Schmukle (2013) found that higher levels of education increased one's perceived control or influence over one's own life than lower levels of education. They explain that higher levels of education have a beneficial effect on one's ability to cope with challenges in life and this leads to success at work, progress in socioeconomic status and less financial problems. They further reason that the consequent higher socioeconomic status of individuals with higher levels of education strengthens their perceived control. Infurna et al. (2011) argue that more time spent on education increases one's perceived control via improvement in one's abilities in problem-solving and also in one's access to control-boosting resources, such as higher income, autonomy at work, and better work conditions. Mirowsky and Ross (2007) explain that education provides the environment for one to develop useful knowledge and master skills through practice, training and learning, and build a sense of control. They also explain that the mark of achieved status by individuals with higher levels of education, such as socioeconomic status (e.g. authority and wealth), can reduce friction, wear and tear from demoralising adversity that can erode one's sense of control. This is because of the increased resources (arising from the achieved status) for handling crises. Finding #2 is also consistent with recent finding by Harris and Ramos (2013) that a clear reason for Singaporean students to take up further studies was to give them the ability to create their own career. They conclude that education was seen as a personal resource to career opportunities.

*5.2.5.3 Summary of discussion for RQ2.5*

Overall, the findings for the influence of education appear to be congruent with recent literature on the effects of education (1) on work values, and (2) on perceived control over one's own life, and recent observations of higher educated Singaporeans. However, like the previous sections on the influence of age, gender, parenthood status and marital status, there is an apparent lack of literature relating all three variables of education qualification, PVs and WE together in a single study.

### 5.2.6 Summary of Discussion for RQ2

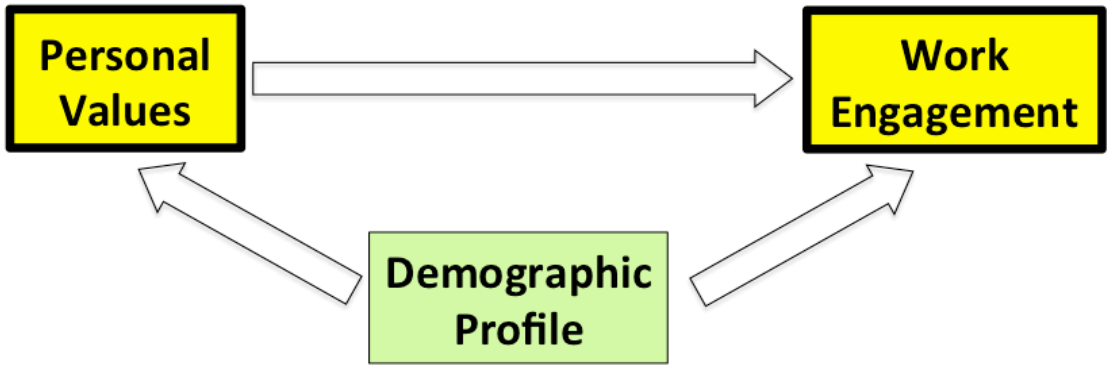
The findings on how age, gender, parenthood, marriage and education influence which PVs affect WE are consistent with ongoing and recent literature, as well as local observations of Singaporeans. However, like the discussion of the findings for RQ1, there is also an apparent lack of literature relating these demographic variables with PVs and WE together in a single study. Nevertheless, as a whole, the change in significant PVs that influences WE as a result of demographic profiles, is consistent with the model outlined by Bardi and Goodwin (2011) for individual value change processes. They posit that new life situations (e.g. life

stage, parenthood and marriage) require new behaviours, and the resulting adaptation to the new behaviour contributes to the internalisation of norms and hence, changes to one's PVs.

## 5.3 Review of Theoretical Model

This research provides confirmatory evidence that (1) PVs are related to WE, and (2) the demographic profiles of age, gender, parenthood status (particularly, the number of dependents), marital status and level of education can influence which PVs affect WE, and the strength of these relationships. Thus, the postulated Model 2 in Chapter 2, as shown in Figure 5.13 below, that demographic profiles moderate the relationships of PVs to WE has support.

**Figure 5.13. Model 2 as Postulated in Chapter 2**

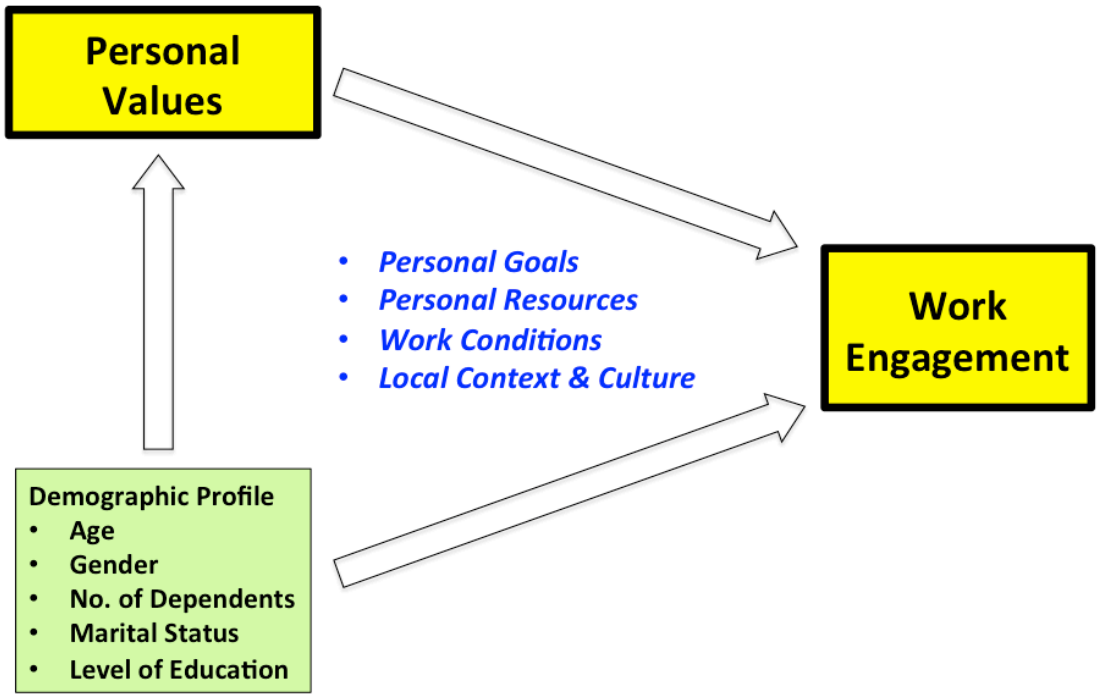



However, this research also shows that (1) contextual factors such as personal goals, personal resources, work conditions, and the local context and culture are additional factors, and (2) they need to be seen in combination with the demographic factors to understand which PVs are more likely to affect WE at different life stages. The revised theoretical model from the findings of this research, illustrating the relationships of PVs to WE, is shown in Figure 5.14. The additions to Model 2 are the BLUE text in Figure 5.14, to highlight the need to consider the combined influence of contextual factors when seeking to understand the relationships of PVs to WE for particular demographic profiles.

For instance, a Singaporean is likely to be driven by achievement and conservation values at work when the Singaporean is a young man, not highly educated, and married with a few young children in a single-income household. He is likely to be engaged at work to seek extrinsic rewards (especially income) and job security to fulfil two particular goals. One goal is to take care of the household's basic financial needs, especially in the light of high cost of living in Singapore. Another goal, if he has the abilities to excel at work (i.e. personal

resources), is to give his children the best developmental and educational experience, given that the Singapore culture advocates meritocracy. He may stay engaged at work as long work conditions are fair and conducive.

**Figure 5.14. Revised Theoretical Model from the Findings**




## 5.4 Limitations

While the findings in this research seem to be consistent with recent literature, there are some limitations. First, despite adopting a mixed method approach to reap the benefits and mitigate the inherent weakness of both qualitative and quantitative methods, as reasoned in Chapter 4 on the Qualitative Study 2, this research is cross-sectional rather than longitudinal. The values data collected from this research that require participants to give feedback on what they value may not necessarily tally with how they actually behave (Hofstede 1991). There is thus a limit to the generalisability of the findings, and the use of longitudinal research may help smooth the findings through participants' answers to the same questions over time.

Second, the sub-sample sizes (particularly for gender and marital status) for quantitative Study 1, and the sample size for qualitative Study 2, are relatively small for their findings to be generalised and be conclusive. In the investigation of the influence of gender,

the sub-sample sizes for men and women were 129 and 158 respectively. For the investigation of the influence of marital status, the sub-sample sizes for married and singles were 132 and 156 respectively. The values of Hoelter's critical N for these sub-samples were below 200. These indicate an inadequacy of these sub-sample sizes for ideal use of SEM analysis (Hoelter 1983). However, as literature does exist (e.g. Hoyle 1995; Loehlin 1992) to support the use of sample size of at least 100 for SEM modelling, the data and results from these sub-samples in Study 1 were used to stimulate the investigation in Study 2. The sample size for the qualitative Study 2 was 22 after achieving theoretical saturation in the interviews. Although this qualitative sample was small, its findings have not been evaluated as a standalone study, but are integrated and evaluated together with the findings from Study 1, to derive insights into the possible underlying processes that encourage WE, and generate potential areas for further investigation.

Third, the values in this research were assessed through self-reports in the interest of time and resources. This might create common method bias or the tendency to answer consistently (Conway 2002), and subjects the survey data to respondents' mood, recent experiences and mental state at the time of data collection. Schaufeli, Taris and Van Rhenen (2008) suggest objective ratings from peers or supervisors may help. Simpson (2009) reasons that acquiring measures of predictor (i.e. PVs) and outcome (i.e. WE) variables from different sources will help control common method bias (Podsakoff et al. 2003). Thus, future investigation on the relationships of PVs to WE may have others, such as supervisors or co-workers, to report levels of participants' WE, rather than self-reports.

Fourth, the quantitative and qualitative studies involved separate samples of participants, as both studies were conducted sequentially in an exploratory nature. The validity of such a sequential explanatory design may be hampered if the findings from the quantitative Study 1's participants are unable to support the findings from the qualitative Study 2's participants (Creswell & Plano-Clark 2007). However, in this research, the inclusion criterion for participants to be recruited was any individual with working experience in Singapore. Thus, while the participants for both studies were different samples, they were drawn from the same population that met the inclusion criterion for this research.

Finally, this research's investigation into the relationships of PVs to WE delves within a relatively new field and thus, the conclusions drawn from the investigation may be circumscribed by a lack of relevant literature to inform it. Nevertheless, this research helps to raise important insights relating PVs to WE for further illumination and confirmation, with potential practical applications to create and / or enhance WE at work to increase organisational performance.

## 5.5 Personal Reflections

### 5.5.1 Researcher's Epiphany

The researcher is a Singaporean, who has worked as a civil servant for about 25 years, in various departments and job capacities. In the course of his work, he has dealt with many people from all walks of life from the public, as well as from the private sectors and fellow co-workers, inclusive of those in other civil service departments. In his various roles in junior management, rising to now middle management, the researcher has had to participate, as well as lead, in various aspects ranging from project development, project management, operational management and human resource management. While the researcher has found the scope of work challenging, he found it rewarding and fulfilling. He has been intrigued by the need to get the best out of people during his work. In the researcher's adolescent years, he was already quite well read on current affairs and fascinated by what motivates and triggers individuals to do things in life. However, he understands getting the best out of people is not always possible. There will be some who seemingly are unable to deliver at work, even when the work is not challenging; occasionally, some bright and talented co-workers or counterparts in private sectors leave their jobs for other ventures, even when they are seemingly doing well at work. The increasing experience of having to manage fellow beings at work and trying to get them to do their best is an epiphany for the researcher. In his day-to-day job, the researcher usually leads and manages four to 100 staff, depending on the department and the role he is occupying.

The defining moment for the researcher came when he was given a concurrent job to setup, lead and manage another department of 800 part time staff. Having to grapple with his daily job and the 800 part time staff was a big challenge but nevertheless, gratifying for him. The researcher tasked himself to do the best he could, to keep both disparate groups of staff engaged and happy at work. Thus, the researcher is interested in a deeper understanding of 'what makes an individual tick?' The researcher feels there can only be so much the organisation can do to motivate individuals at work through human resource policies and incentives, and through work conditions that are conducive. There are telling differences between individuals in the way they respond to what the organisation does, and these differences are manifested in their different work behaviour.

The researcher was selected and offered, during his early adulthood for his past academic performance, a teaching scholarship. However, he decided not to take it up and become an academic, as he felt the need to gain non-academic life experience before considering an academic career. Now that the researcher is about to complete this venture in

non-academic working life, with five years to retirement, he is looking forward to putting his experience into use. He plans to explore, investigate and venture to contribute to the literature on individual motivation, engagement and performance, starting with this research as a stepping stone.

As a whole, there were many key learning outcomes for the researcher in his journey to deliver this thesis. First, the researcher learnt to develop and justify a research proposal whereby extensive background knowledge of the literature relevant to the research question is important. Second, the researcher learnt that being able to discern the findings in the myriad of studies conducted by other researchers, as general or contextual in nature, was important to appropriately apply and / or integrate his research with them. Third, the researcher also learnt that findings derived in his research should not be taken at face value, but be judiciously evaluated in depth, to avoid jumping to conclusions too quickly. Fourth, the researcher learnt and experienced the benefits of conducting mixed methods research, whereby the findings from the two studies complemented each other. Finally, the researcher learnt that the research journey could be laborious but fruitful, as revisits and delving further on the findings and literature could enhance clarity in conclusions. Further details about the researcher's personal reflection are presented in the next two sub-sections.

### 5.5.2 Research Experience

The researcher felt that his experience of research was difficult at times, but very enlightening throughout. The researcher is a part-time candidate and thus, he has to face the difficulty of juggling timelines to deliver his research with what he needs to deliver at work, and at home, as a family man. Fortunately, the researcher's passion for the research topic, along with the support from his family and research supervisor, gave him the drive to complete and report the investigation. The researcher graduated as an engineer and subsequently achieved a Masters in Science, and is thus, not familiar with management research. To overcome this difficulty, the researcher completed a Masters in Business Administration, which together with his management and work experience, widened his academic perspectives beyond engineering. In addition, attending the Graduate Diploma in Management Research conducted as part of the Doctoral Foundation Program was very beneficial as it exposed him to research work.

In the design of quantitative Study 1, the researcher was mindful of the need to collect sufficient data to facilitate quantitative analysis. He decided not to go online to seek survey feedback, out of concerns about its response rate. Nor did he rely on any work organisations for the data collection out of concerns that the demographic profiles in any organisations

might not be sufficiently diverse. Instead, he used the help of research assistants to collect the data from the public to ensure a high response rate and a sample of diverse demographic profiles to promote confidence in external validity and applicability of the findings beyond selected work organisations or groups of online users if it was an online data collection. In addition, with the use of research assistants, the researcher was also able to ensure respondents had opportunities to personally clarify what was expected from them during the conduct of the survey.

In the qualitative Study 2, the researcher was mindful to be a good listener and be tactful, especially during group interviews when group participants shared differing views. All the interviews were nevertheless pleasurable and very enlightening, as the researcher was able to reap insights from the participants. Some of the insights were revelations to the researcher as he grappled with tendencies to fixate with certain interpretations of the findings from Study 1 and be blindsided by them. At times, some of the participants were very engaged and showed their emotions as they shared their views, observations or personal experience. Some of these emotions rubbed off on the researcher as he laughed and shared the excitement, or empathised and shared puzzlement with them.

The transcription of all the audiotaped interviews was painstaking but fruitful as listening to the tone, emphasis and emotion in certain parts of the feedback helped the researcher recollect and interpret what the participants meant or felt during the interviews. The researcher felt that he might not gain this benefit had he employed others to do the transcription, or might have incurred unnecessary costs should he need to check if a paid transcriber did not fully register what the participants felt. This was especially so when some participants chose to use other languages, such as Mandarin or colloquial dialects, during the course of the interview to share their views.

The analysis of the research findings was another laborious affair but it was a very humbling experience for the researcher. The researcher had to make sure that he was not judgmental when he analysed the data from both studies. He had to avoid showing any liking or dislike for any passionate data from participants in the interviews. He had to be careful not to pass judgment as a manifestation of his own identity, rather than the participants'. He had to regularly remind himself the need to be objective during the conduct of the interview and subsequent analysis. There is a need to remain focused and respect the views, actions and lives of the participants given the variety of individual experience and live circumstances.

It was also a very enlightening experience for the researcher as he evaluated the findings from both studies with the literature and wrote this final chapter on discussion and conclusions. In this final phase, the researcher was obliged to revisit his findings in both

studies as he compared them with recent literature. At times, these revisits led the researcher to discover new insights that were not previously registered. New insights and clarity on the findings were also gleaned as the researcher did the final review of all chapters to ensure they were coherent.

### 5.5.3 Unexpected Rewards

The most unexpected and inspiring experience the researcher had was the venture he made, following the advice of his research supervisor, to attend and present his research findings in ANZAM 2012 in Perth, and the pre-conference Doctoral Workshop in Edith Cowan University in December 2012. This is the first time the researcher had been involved in an academic gathering beyond the part-time classes conducted by University of South Australia in Singapore. He had also never attended any other academic conference during full-time studies in his life. It was indeed an eye-opener and exhilarating. He gained a lot from the experience and exposure.

For a start, the researcher received constructive critique on his research investigation and findings during his turn to present in the Doctoral Workshop from the reviewers, academics and fellow doctoral candidates. The feedback was consolidated and used to enhance his subsequent presentation in the ANZAM conference. Further constructive feedback was again gleaned in the conference, and it was encouraging when there were fellow conference members giving their support to the value of this research focus. Besides gaining valuable feedback from the presentations, the researcher took up the numerous opportunities to discuss with like-minded academics and researchers on the research, comparing notes and research experience, and forming new friendships for possible future collaboration and networking. In addition, the researcher also learnt what it is like to be an academic from the Doctoral Workshop, as well as from some academics the researcher came into acquaintance with in the ANZAM conference. With all these encouraging experiences, the researcher looks forward to accomplishing this doctorate and a subsequent life in academia.

## 5.6 Directions for Future Research

Most of the previous research on WE has been on contextual factors such as job and personal resources. The present research has extended this literature by showing evidence that PVs are related to WE. However, the present research also raised some issues that may require further investigation.

A key area the present research revealed is that the combination of other factors of

personal goals, personal resources, work conditions, and local context and culture can interact with the individual's demographic profiles of age, gender, number of dependents, marital status and level of education, to influence which PVs affect WE. These findings suggest a need to clarify whether all these other factors and the demographic profiles are of equal importance or if some are more important than others. The aim of this clarification will thus be to define and develop a deeper understanding of how to better predict which PVs relate to WE.

Another key area the present research revealed is that despite the influence of the various contextual factors and demographic profile, achievement, security, self-transcendence and hedonism were found to be the significant PVs that can affect WE. In the evaluation of these findings, besides evaluating them as congruent with recent literature, they are also evaluated as congruent with the local context and culture in Singapore. The latter suggests a need to clarify whether these significant PVs identified are peculiar to Singapore or if some may be generalisable to all, or similar countries or city-states like Singapore. Thus, further research similar to this present one conducted in Singapore is recommended to be conducted in more countries, as well as similar city-states like Singapore. The aim will be to compare the findings between countries or city-states to elicit coherence or anomalies, seeking further in-depth understanding of the relationships of PVs to WE. In addition, Kim, Kolb and Kim (2013) argue that expanding the scope of research to cover many cultures can reinforce external validity of research conclusions, improve inferences in the research and build a stronger theoretical foundation.

## 5.7 Contributions of this Research

### 5.7.1 Contributions to Literature

There has been much contribution to the WE literature on how contextual factors such as work design and conditions could encourage WE, but there seems to be a lack of contributions regarding whether and if so, how something more core to an individual such as PVs could affect WE. This present research has attempted to investigate this possibility and found evidence that there exist PVs that relate to WE. The findings from this research offer insights into the possible underlying processes for individuals' inertia to any WE, regardless of one's demographic profile, and also insights to possible processes when specific demographic profiles of age, gender, parenthood status, marital status and level of education are considered. Common to all these insights, there is an implied need to take PVs into account if the antecedents of WE are to be comprehensively modelled.

Contributing beyond the WE literature, the present research also suggests that some of the conflicting value types as depicted in Schwartz's Circular Structure of Basic Human Values (Davidov, Schmidt & Schwartz 2008) in Figure 5.15 may contrarily co-exist, and be compatible when individuals relate them to WE. Schwartz (1992, p. 15) reasons that the emphasis on 'pursuit of one's own relative success' in achievement value type is incongruent with the emphasis on 'concerns of others' welfare' in self-transcendence values. Thus, these two values are depicted on the opposite sides about the origin in Figure 5.15. However, the findings in this research showed that WE could be driven positively by achievement and self-transcendence values at the same time; there could be engaged individuals who derive success at work from behaving responsibly and being able to help and care for others. In other words, the research findings here imply that self-transcendence and achievement values can be compatible, rather than conflicting in the context of WE.

**Figure 5.15. Circular Structure of Schwartz's 10 Value Types**




(Davidov, Schmidt & Schwartz 2008, p. 425)

In addition, like recent efforts (Schwartz et al. 2012) to refine this Schwartz's Theory of Basic Human Values, the present research suggests that security value type may be broken into two subtypes of family security and job security when work context is considered. In this research, family security emphasises the caregiving of loved ones (i.e. family focus), and tends to relate negatively to WE if perceived family support at work is lacking, while job

security emphasises the acquisition of material gains from work (i.e. work focus), and also tends to relate negatively to WE if work conditions are unfavourable.

Finally, the findings from this present research also help to answer the call for more research related to positive organisational behaviours (Bakker & Schaufeli 2008), as there are relatively fewer academic publications on them than the literature on negative organisational behaviours such as poor performance, low motivation, the lack of well-being, ill-health, stress and burnout.

### 5.7.2 Contributions to Practice

In terms of practical implications, while the findings from this present research indicate that the factors that influence WE would appear to be personal, organisational and societal, there is still no clear indication as to which type of influence is more important. The findings showed different PVs are moderated by a combination of demographic and contextual factors. What organisations may need to consider is that their efforts to improve engagement levels may need to address both individual employee characteristics, as well as the sponsorship of employer-driven organisational interventions.

Hiring employees with appropriate PVs that are likely to be associated with WE, and capitalising on the self-motivation characteristics of such employees' PVs to stay engaged with their work, are both recommended for success in raising engagement levels (Feldman 2003; Halman & De Moor 1994; Maslach & Leiter 2008; Roe & Ester 1999). Alternatively, organisations may wish to consider setting up their business in certain geographic locations, whereby the community demonstrates these appropriate PVs, and capitalise on them, as already mentioned.

Organisations may also consider whether they may need to clarify their own values so that they can appeal to targeted employees, to capitalise on value congruence (Meglino & Ravlin 1998) between employees and the organisation, and thus further encourage engaged employees.

## 5.8 Conclusions

In conclusion, this research has set out to explore whether PVs relate to WE and if so, how they are related. At the end of two studies involving quantitative data collection and analysis followed by qualitative investigation, the findings showed that certain PVs do relate to WE and their relationships are influenced by a combination of demographic (age, gender, parenthood status, marital status and level of education) and contextual factors (personal

goals, personal resources, work conditions, and local context and culture). However, further research is required to discern which factors are more important than others.

Nevertheless, this research has confirmed that WE is influenced both by employee characteristics such as PVs and contextual organizational practices designed to capture employee attention and stimulate their efforts. In other words, this research not only confirms the importance of work designs to WE, but also shows that work designs are by no means the complete answer to why work designs may work better with some individuals than with others. Some individuals bring with them PVs that are more likely to be associated with WE than others. In others, those individuals may respond even more favourably to work designs than others. Therefore, this research posits that it may not be sufficient for organizations to simply provide the 'at work' type of interventions that assist engagement unless this is supplemented by supporting strategies that select employees with the 'right targeted' PVs at recruitment or provide opportunities for their further reinforcement once they have been hired.

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## APPENDIX 1: RECRUITMENT MATERIAL FOR STUDY 1

**Thank you for your attention to this survey request.**

Your responses will help create a deeper understanding of how to create a better working environment for any organizations and employees.

This anonymous survey should not take longer than 10 minutes to complete.

Attached are

- An information sheet of this survey, and
- The survey questionnaires.

Thank you.

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# APPENDIX 2: INFORMATION SHEET FOR STUDY 1

**UNIVERSITY OF SOUTH AUSTRALIA**
**Division of Business**
**International Graduate School of Business**

You are cordially invited to participate in this survey *to create a deeper understanding of how to create a better working environment for organizations and their employees*.

Brief details on this survey are as follows:

Title of Research Project: Relating Personal Values to Work Engagement

Name of Researcher: Yeow-Kiang Goh

Qualification: MBA in International Business
Salem International University

Graduate Diploma in Management Research
University of South Australia

Contact Number: 65-96366438

Supervisor: Assoc Prof Margaret Patrickson

Contact Number: 61-883020433

1. The data required in this survey are sharing of job experience, personal preferences to things in life and anonymous demographic data.

2. This survey is strictly voluntary. Participants are not obligated to complete all the questions and may choose to exit this survey at any point in time.

3. The data collected is strictly kept confidential for the purpose of this research. The responses to the questionnaires will be aggregated and tabulated for statistical analysis. No specific reference will be made to individual response.

4. As per University policy, the data in this research will be stored on CDRom as well as hard copy for 5 years in a locked filing cabinet at home and in the University of South Australia in the International Graduate School of Business, City West Campus. As the survey is anonymous in nature, it will not be possible to identify from whom the data is from.

5. The University of South Australia's Human Research Ethics Committee has reviewed this study. Should you wish to discuss the project with someone not directly involved, in particular in relation to matters concerning policies, information about the conduct of the study, or your rights as a participant, please contact

Ms Vicki Allen, Executive Officer
Human Research Ethics Committee

University of South Australia
GPO BOX 2471
Adelaide SA 5000
Email: Vicki.Allen@unisa.edu.au
Tel: +61 8 8302 3118

6. Findings of this survey are expected by Jan 2015. Summary of the findings will be made available to you upon request from yeowkiang@gmail.com.

## APPENDIX 3: SURVEY QUESTIONNAIRES FOR STUDY 1

### 1. Demographic Data

1. Gender ○ Male ○ Female

2. Age
○ 18 – 20 years old
○ 21 – 30 years old
○ 31 – 40 years old
○ 41 – 50 years old
○ 51 – 60 years old
○ > 60 years old

3. Number of children ○ 0 ○ 1 ○ 2 ○ 3 ○ 4 or more

4. Marital status ○ Single ○ Married ○ Widowed ○ Divorced

5. Highest level of qualification
○ Junior or Primary and below
○ High School or Secondary
○ Higher Secondary, Polytechnic or College
○ Degree , Post Graduate Diploma or Master
○ PhD or Doctorate

## 2. Sharing of Job Experience

(Job experience refers to the most recent job experience you have)

How do you feel about each of the following:

| | Never 1 | 2 | 3 | Sometimes or Few times a month 4 | 5 | 6 | Always or Everyday 7 |
|---|---|---|---|---|---|---|---|
| 1. At my work, I feel bursting with energy | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 2. At my job, I feel strong and vigorous | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 3. I am enthusiastic about my job | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 4. My job inspires me | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 5. When I get up in the morning, I feel like going to work | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 6. I feel happy when I am working intensely | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 7. I am proud of the work that I do | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 8. I am immersed in my work | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 9. I get carried away when I am working | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

## 3. Personal Preference

There are ten value types listed below.

**Type 1** – **Power** (social power, authority, wealth)

**Type 2** – **Achievement** (success, capability, ambition, influential)

**Type 3** - **Hedonism** (pleasure, satisfaction, self-indulgence)

**Type 4** – **Stimulation** (daring, exciting, varied & challenging)

**Type 5** – **Self-direction** (creativity, freedom, curiosity)

**Type 6** – **Universalism** (equality, world at peace, love nature)

**Type 7** – **Benevolence** (helpful, honest, forgiving, loyal, responsible)

**Type 8** – **Tradition** (respect, humble, devoted, modest)

**Type 9** – **Conformity** (obedient, respect, discipline, polite)

**Type 10** – **Security** (national / family security, social order, cleanliness, reciprocation of favors)

| Among them, | **Types 1 to 10** |
|---|---|
| a. Which one is most important to you? | 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ |
| b. Which one is least important to you? | 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ |

For the remaining 8, rate each value type on how important it is to you.

| | Against it -1 | Not important 0 | 1 | 2 | Important 3 | 4 | Supreme importance 5 |
|---|---|---|---|---|---|---|---|
| c. **Type 1** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| d. **Type 2** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| e. **Type 3** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| f. **Type 4** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| g. **Type 5** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| h. **Type 6** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| i. **Type 7** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| j. **Type 8** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| k. **Type 9** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| l. **Type 10** | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

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## APPENDIX 4: SEM RESULTS – COVARIANCE MATRIX & PATH DIAGRAMS

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | |
| **V1** | 0.080 | 0.010 | -0.352 | 0.281 | -0.137 | 0.397 | 0.146 | 0.310 | 0.144 | 0.083 | 2.419 | | |
| **V2** | 0.220 | 0.224 | -0.032 | 0.227 | -0.020 | 0.174 | 0.083 | 0.187 | 0.143 | 0.122 | 1.202 | 1.485 | |
| **V3** | 0.146 | 0.141 | -0.033 | 0.166 | -0.078 | 0.149 | 0.156 | 0.141 | 0.132 | 0.034 | 1.127 | 1.215 | 1.425 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 1. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Vigor for All Gender (N = 294)**

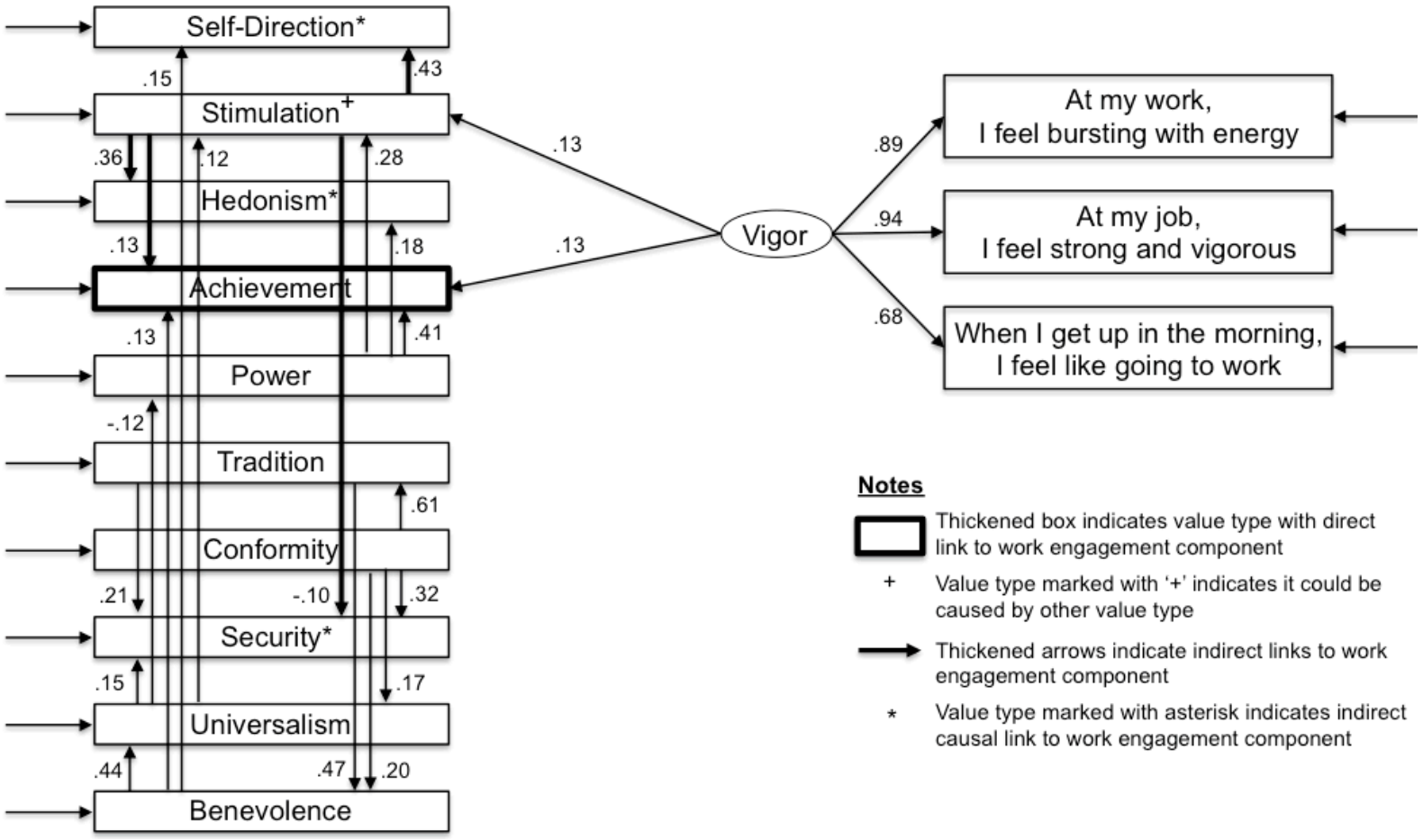


**Figure 2. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Vigor for All Gender (*N* = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.74 | | | | | | | | | |
| **S5** | -0.016 | 0.53 | 0.643 | 0.874 | 2.412 | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.84 | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.01 | 0.965 | 1.961 | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | |
| **S10** | 0.21 | 0.172 | -0.033 | 0.09 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | |
| **V4** | 0.207 | 0.181 | -0.089 | 0.431 | 0.133 | 0.113 | 0.023 | 0.139 | 0.193 | 0.020 | 1.913 | | |
| **V5** | 0.269 | 0.256 | -0.146 | 0.359 | -0.101 | 0.099 | 0.157 | 0.386 | 0.136 | 0.070 | 1.450 | 2.237 | |
| **V6** | 0.213 | 0.207 | -0.078 | 0.314 | -0.065 | 0.147 | 0.123 | 0.215 | 0.215 | 0.097 | 1.263 | 1.539 | 1.641 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 3. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Dedication for All Gender (*N* = 294)**

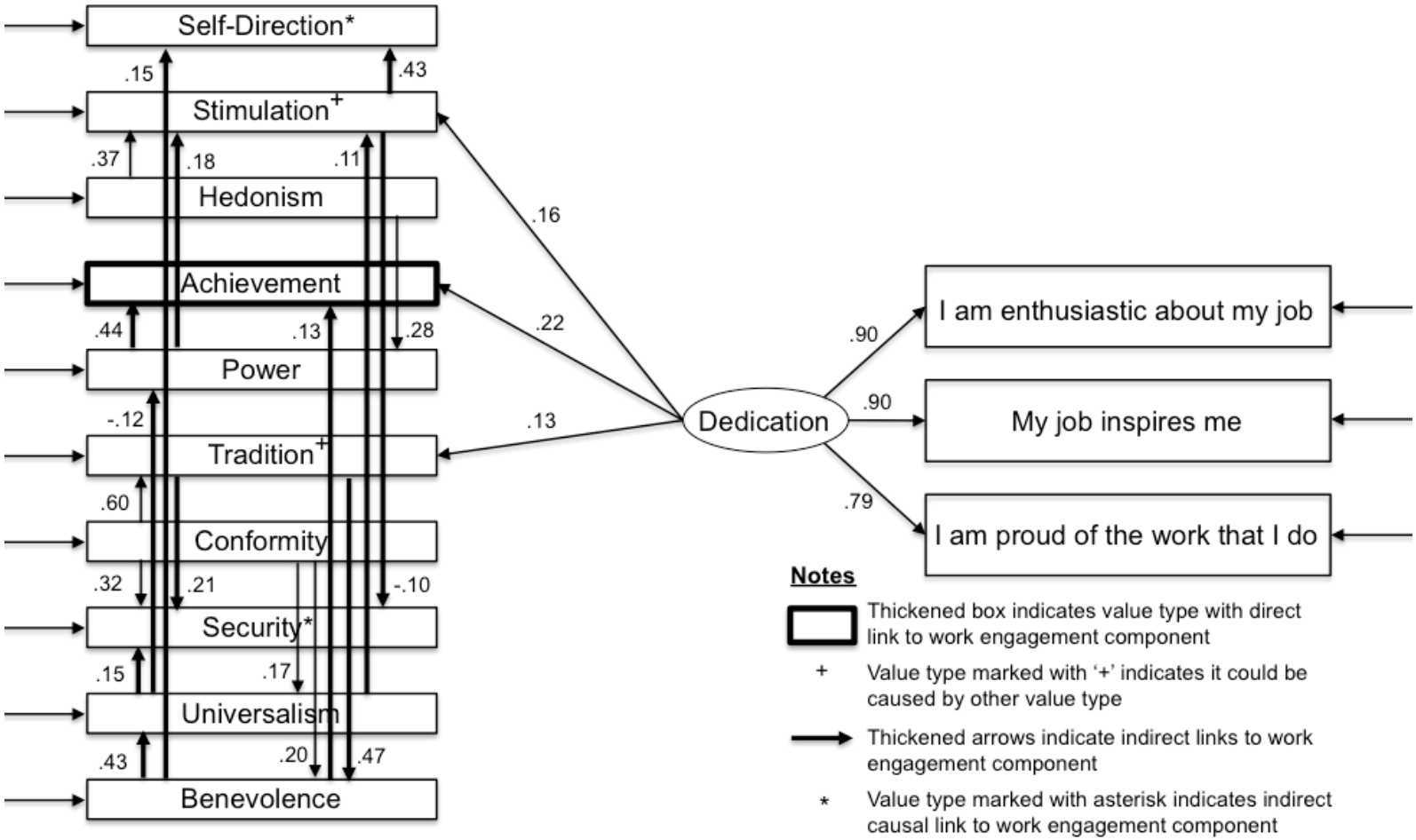


**Figure 4. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Dedication for All Gender (*N* = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | |
| **V7** | 0.270 | 0.093 | -0.208 | 0.377 | -0.055 | 0.157 | -0.079 | 0.100 | 0.220 | 0.183 | 1.900 | | |
| **V8** | 0.174 | 0.287 | -0.061 | 0.279 | 0.095 | 0.088 | 0.133 | 0.209 | 0.248 | 0.083 | 1.043 | 2.297 | |
| **V9** | 0.170 | 0.097 | -0.225 | 0.365 | 0.009 | 0.162 | -0.028 | 0.099 | 0.128 | 0.007 | 1.229 | 1.256 | 1.683 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 5. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Absorption for All Gender (*N* = 294)**

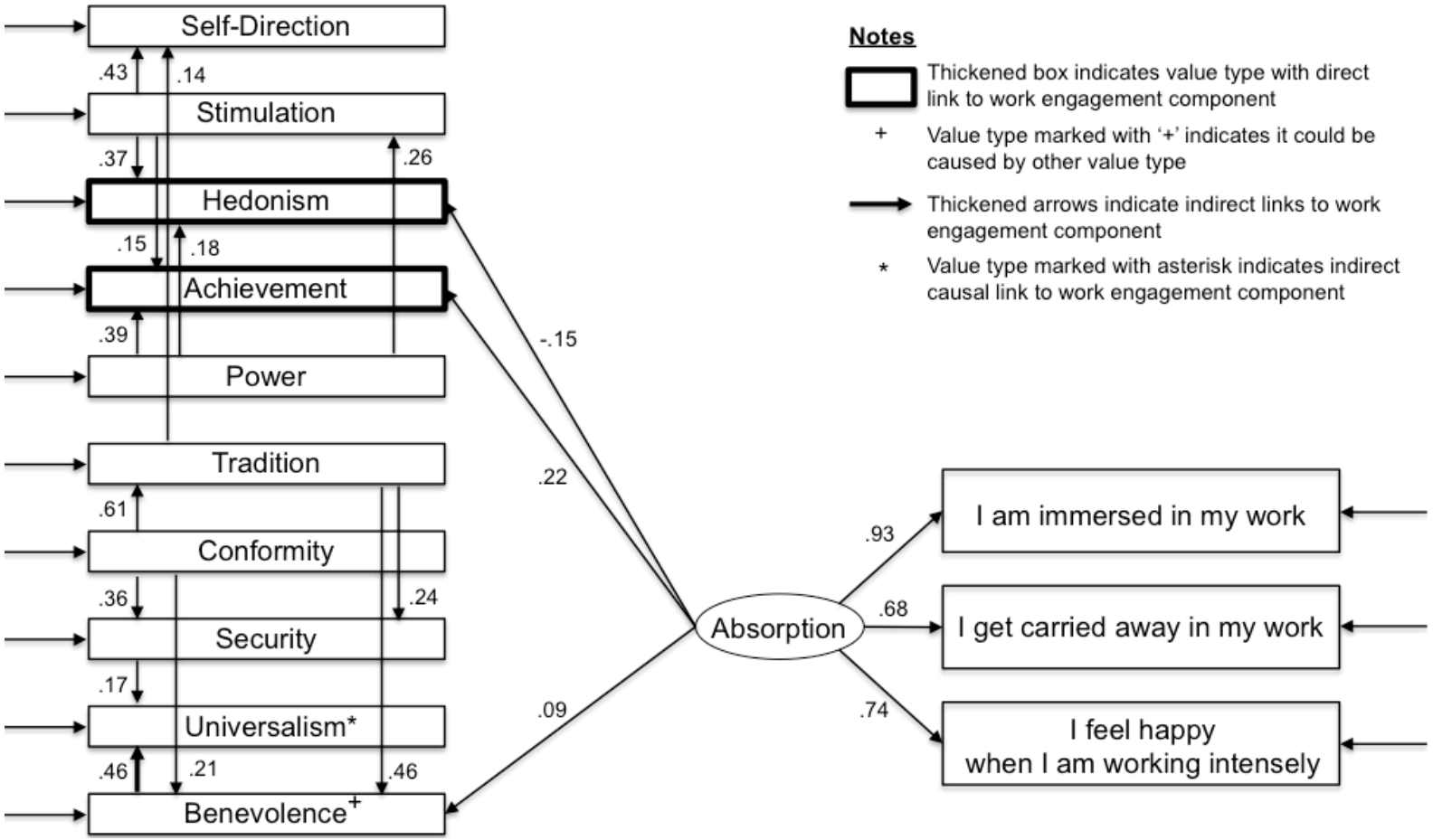


**Figure 6. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Absorption for All Gender (*N* = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.348 | | | | | | | | | | | | |
| **S2** | 0.566 | 1.624 | | | | | | | | | | | |
| **S3** | 0.033 | 1.104 | 2.438 | | | | | | | | | | |
| **S4** | 0.220 | 0.588 | 0.530 | 1.977 | | | | | | | | | |
| **S5** | 0.006 | 0.769 | 1.002 | 1.017 | 2.767 | | | | | | | | |
| **S6** | 0.153 | -0.220 | -0.159 | -0.096 | -0.364 | 1.901 | | | | | | | |
| **S7** | -0.022 | 0.058 | 0.301 | 0.036 | -0.372 | 1.017 | 2.364 | | | | | | |
| **S8** | 0.244 | 0.196 | -0.089 | 0.058 | -0.421 | 0.748 | 1.271 | 1.979 | | | | | |
| **S9** | 0.269 | 0.226 | -0.145 | 0.234 | -0.439 | 0.572 | 0.915 | 1.137 | 1.506 | | | | |
| **S10** | 0.252 | 0.169 | -0.241 | -0.006 | -0.593 | 0.569 | 0.840 | 0.896 | 1.014 | 2.388 | | | |
| **V1** | 0.149 | 0.081 | -0.469 | 0.313 | -0.355 | 0.771 | 0.386 | 0.570 | 0.312 | 0.402 | 2.361 | | |
| **V2** | 0.265 | 0.275 | 0.006 | 0.378 | -0.109 | 0.374 | 0.279 | 0.403 | 0.349 | 0.460 | 0.983 | 1.139 | |
| **V3** | 0.149 | 0.200 | -0.017 | 0.254 | -0.098 | 0.400 | 0.427 | 0.336 | 0.277 | 0.270 | 0.843 | 0.899 | 1.139 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 7. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Vigor for Men (*N* = 129)**

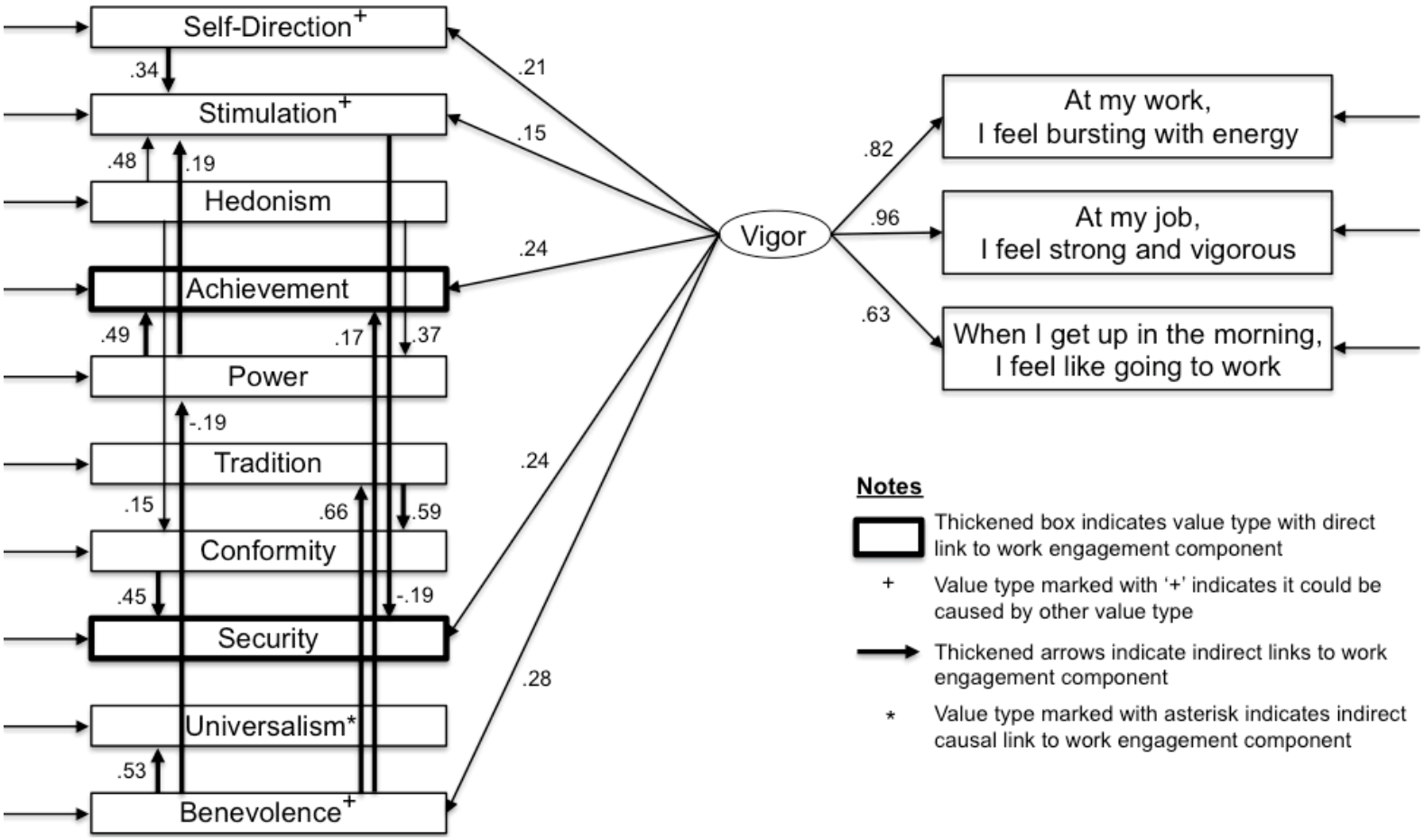


**Figure 8. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Vigor for Men (*N* = 129)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.348 | | | | | | | | | | | | |
| **S2** | 0.566 | 1.624 | | | | | | | | | | | |
| **S3** | 0.033 | 1.104 | 2.438 | | | | | | | | | | |
| **S4** | 0.220 | 0.588 | 0.530 | 1.977 | | | | | | | | | |
| **S5** | 0.006 | 0.769 | 1.002 | 1.017 | 2.767 | | | | | | | | |
| **S6** | 0.153 | -0.220 | -0.159 | -0.096 | -0.364 | 1.901 | | | | | | | |
| **S7** | -0.022 | 0.058 | 0.301 | 0.036 | -0.372 | 1.017 | 2.364 | | | | | | |
| **S8** | 0.244 | 0.196 | -0.089 | 0.058 | -0.421 | 0.748 | 1.271 | 1.979 | | | | | |
| **S9** | 0.269 | 0.226 | -0.145 | 0.234 | -0.439 | 0.572 | 0.915 | 1.137 | 1.506 | | | | |
| **S10** | 0.252 | 0.169 | -0.241 | -0.006 | -0.593 | 0.569 | 0.840 | 0.896 | 1.014 | 2.388 | | | |
| **V4** | 0.230 | 0.176 | -0.009 | 0.592 | 0.270 | 0.337 | 0.322 | 0.251 | 0.443 | 0.424 | 1.552 | | |
| **V5** | 0.373 | 0.290 | -0.115 | 0.523 | -0.072 | 0.422 | 0.490 | 0.727 | 0.290 | 0.331 | 1.103 | 2.109 | |
| **V6** | 0.242 | 0.364 | 0.048 | 0.547 | -0.059 | 0.454 | 0.445 | 0.521 | 0.427 | 0.515 | 0.880 | 1.282 | 1.379 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 9. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Dedication for Men (*N* = 129)**

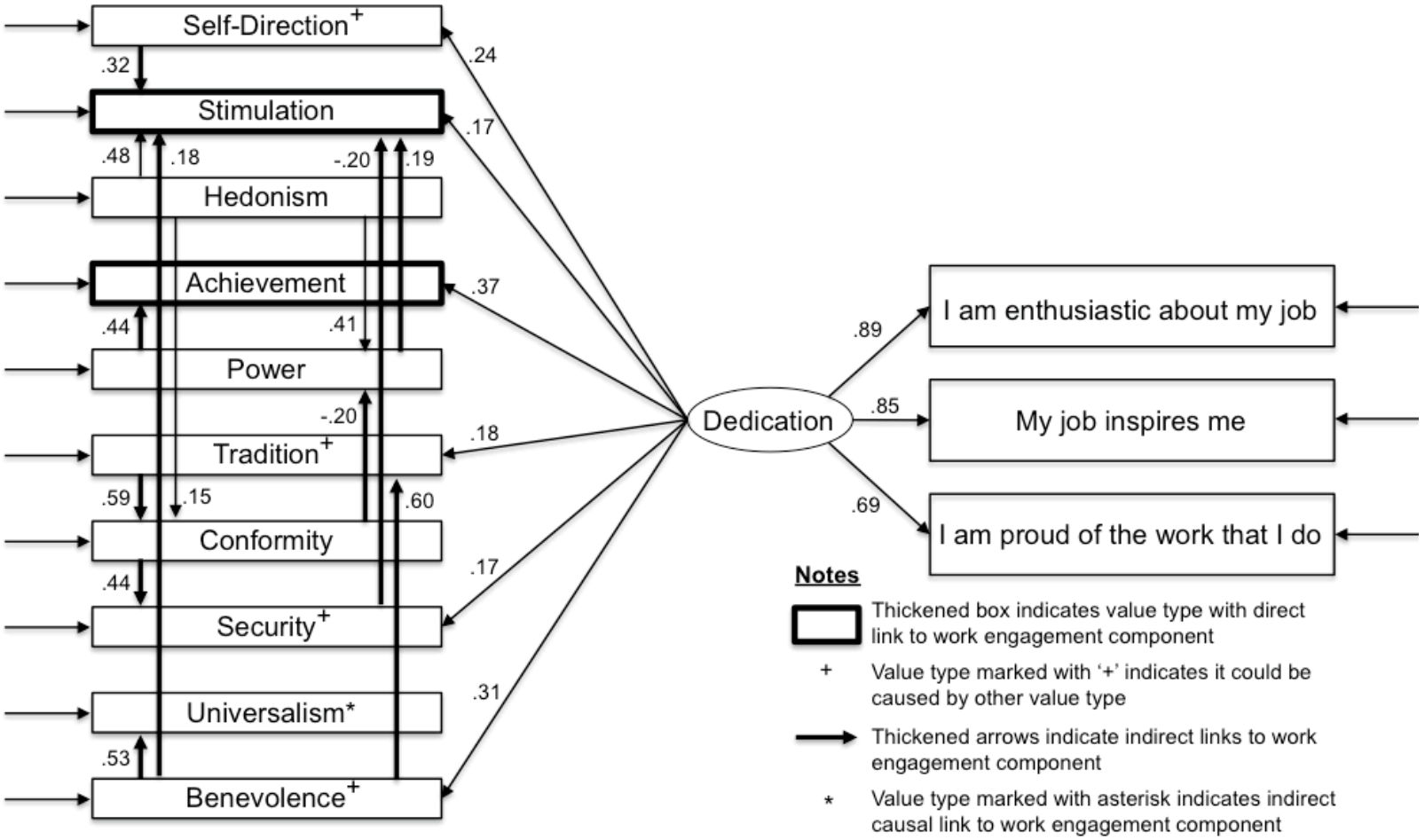


**Figure 10. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Dedication for Men (*N* = 129)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.348 | | | | | | | | | | | | |
| **S2** | 0.566 | 1.624 | | | | | | | | | | | |
| **S3** | 0.033 | 1.104 | 2.438 | | | | | | | | | | |
| **S4** | 0.220 | 0.588 | 0.530 | 1.977 | | | | | | | | | |
| **S5** | 0.006 | 0.769 | 1.002 | 1.017 | 2.767 | | | | | | | | |
| **S6** | 0.153 | -0.220 | -0.159 | -0.096 | -0.364 | 1.901 | | | | | | | |
| **S7** | -0.022 | 0.058 | 0.301 | 0.036 | -0.372 | 1.017 | 2.364 | | | | | | |
| **S8** | 0.244 | 0.196 | -0.089 | 0.058 | -0.421 | 0.748 | 1.271 | 1.979 | | | | | |
| **S9** | 0.269 | 0.226 | -0.145 | 0.234 | -0.439 | 0.572 | 0.915 | 1.137 | 1.506 | | | | |
| **S10** | 0.252 | 0.169 | -0.241 | -0.006 | -0.593 | 0.569 | 0.840 | 0.896 | 1.014 | 2.388 | | | |
| **V7** | 0.301 | 0.218 | -0.290 | 0.621 | -0.151 | 0.442 | 0.205 | 0.359 | 0.505 | 0.502 | 1.862 | | |
| **V8** | 0.273 | 0.468 | 0.189 | 0.473 | 0.216 | 0.336 | 0.447 | 0.497 | 0.555 | 0.649 | 1.027 | 2.161 | |
| **V9** | 0.166 | 0.099 | -0.216 | 0.555 | -0.022 | 0.397 | 0.074 | 0.140 | 0.299 | 0.391 | 1.315 | 1.039 | 1.526 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 11. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Absorption for Men (*N* = 129)**

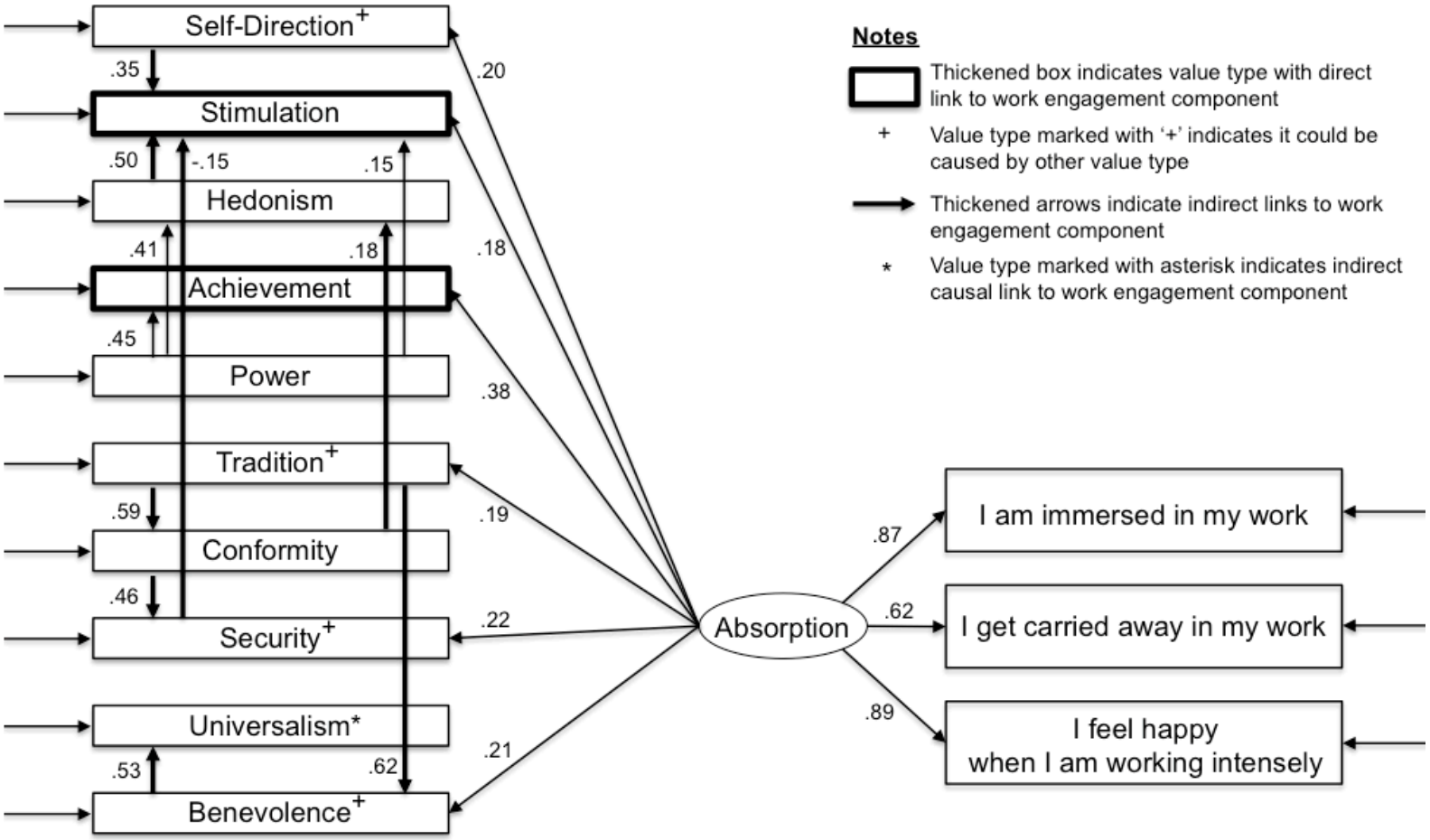


**Figure 12. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Absorption for Men (*N* = 129)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.489 | | | | | | | | | | | | |
| **S2** | 0.778 | 1.746 | | | | | | | | | | | |
| **S3** | 0.315 | 0.571 | 2.070 | | | | | | | | | | |
| **S4** | 0.127 | 0.325 | 0.353 | 1.470 | | | | | | | | | |
| **S5** | -0.027 | 0.377 | 0.372 | 0.760 | 2.183 | | | | | | | | |
| **S6** | 0.099 | -0.104 | 0.091 | 0.179 | 0.229 | 1.788 | | | | | | | |
| **S7** | -0.055 | -0.113 | 0.049 | -0.004 | 0.337 | 0.907 | 1.604 | | | | | | |
| **S8** | 0.263 | 0.036 | 0.092 | -0.006 | 0.097 | 0.869 | 0.979 | 1.563 | | | | | |
| **S9** | 0.218 | 0.019 | 0.001 | 0.188 | 0.129 | 0.619 | 0.671 | 0.733 | 1.262 | | | | |
| **S10** | 0.108 | 0.137 | 0.107 | 0.214 | 0.014 | 0.670 | 0.591 | 0.495 | 0.670 | 1.525 | | | |
| **V1** | 0.021 | -0.087 | -0.158 | 0.078 | -0.025 | 0.067 | 0.023 | 0.137 | 0.077 | -0.044 | 2.086 | | |
| **V2** | 0.189 | 0.156 | 0.011 | -0.051 | -0.001 | -0.003 | 0.000 | 0.061 | 0.050 | -0.034 | 1.053 | 1.498 | |
| **V3** | 0.163 | 0.085 | 0.010 | -0.017 | -0.110 | -0.039 | 0.026 | 0.047 | 0.087 | -0.035 | 1.130 | 1.272 | 1.512 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 13. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Vigor for Women (*N* = 158)**

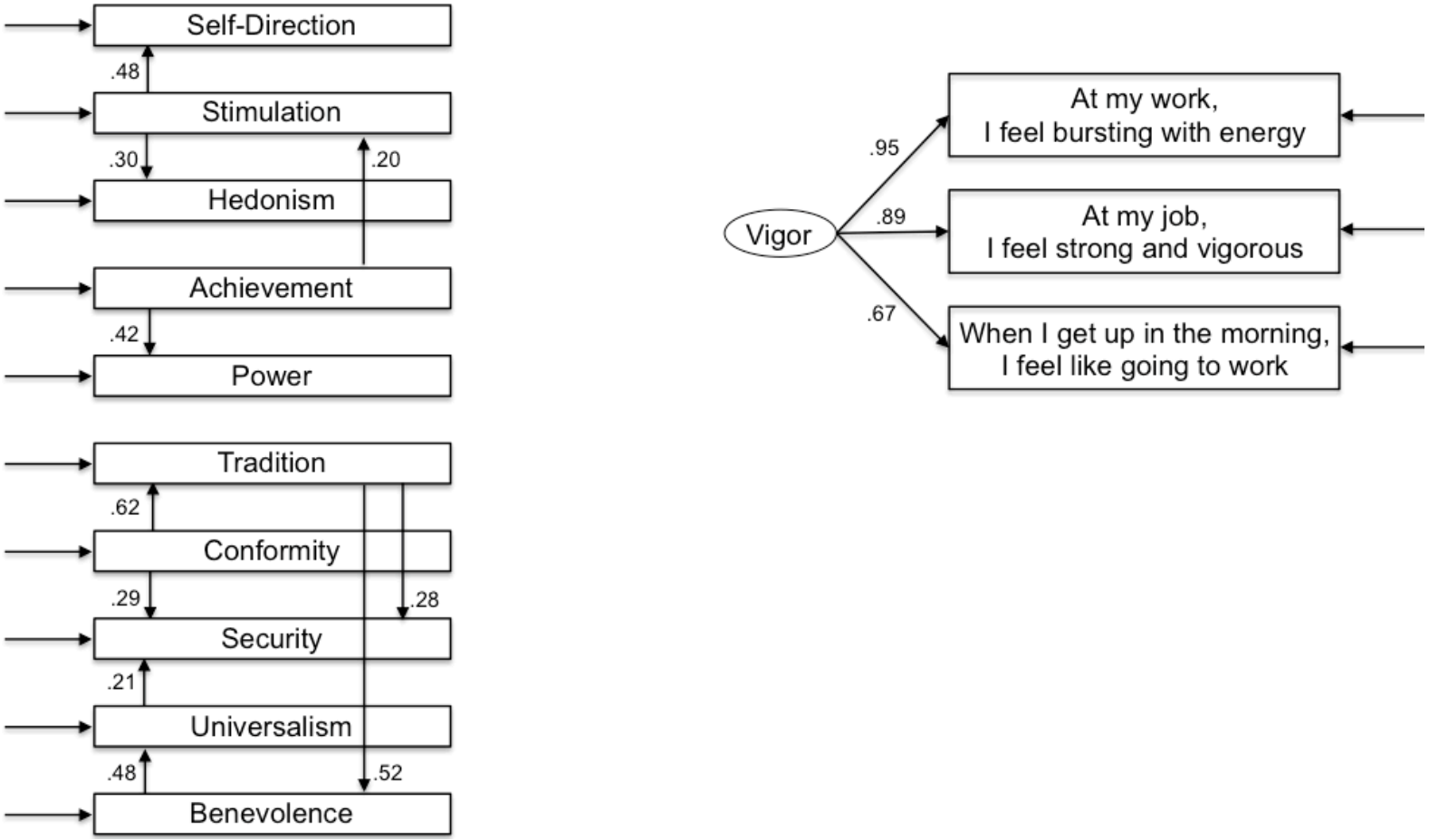


**Figure 14. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Vigor for Women (*N* = 158)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.489 | | | | | | | | | | | | |
| **S2** | 0.778 | 1.746 | | | | | | | | | | | |
| **S3** | 0.315 | 0.571 | 2.070 | | | | | | | | | | |
| **S4** | 0.127 | 0.325 | 0.353 | 1.470 | | | | | | | | | |
| **S5** | -0.027 | 0.377 | 0.372 | 0.760 | 2.183 | | | | | | | | |
| **S6** | 0.099 | -0.104 | 0.091 | 0.179 | 0.229 | 1.788 | | | | | | | |
| **S7** | -0.055 | -0.113 | 0.049 | -0.004 | 0.337 | 0.907 | 1.604 | | | | | | |
| **S8** | 0.263 | 0.036 | 0.092 | -0.006 | 0.097 | 0.869 | 0.979 | 1.563 | | | | | |
| **S9** | 0.218 | 0.019 | 0.001 | 0.188 | 0.129 | 0.619 | 0.671 | 0.733 | 1.262 | | | | |
| **S10** | 0.108 | 0.137 | 0.107 | 0.214 | 0.014 | 0.670 | 0.591 | 0.495 | 0.670 | 1.525 | | | |
| **V4** | 0.201 | 0.153 | -0.094 | 0.139 | -0.049 | -0.086 | -0.161 | 0.092 | 0.061 | -0.197 | 1.945 | | |
| **V5** | 0.175 | 0.196 | -0.103 | 0.086 | -0.168 | -0.209 | -0.059 | 0.147 | 0.057 | -0.073 | 1.522 | 2.184 | |
| **V6** | 0.199 | 0.054 | -0.124 | -0.009 | -0.125 | -0.098 | -0.065 | 0.018 | 0.112 | -0.139 | 1.358 | 1.591 | 1.698 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 15. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Dedication for Women (*N* = 158)**

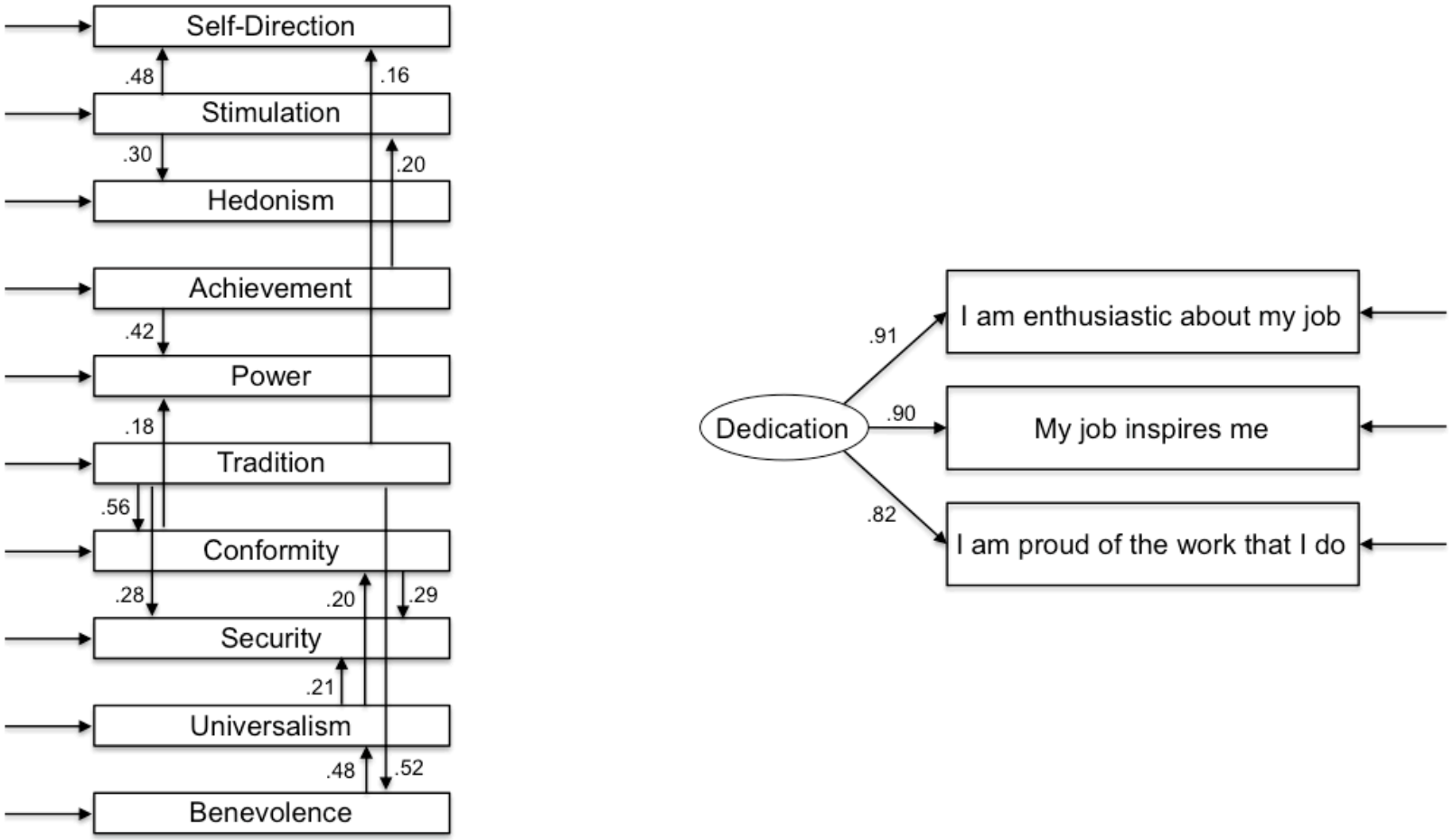


**Figure 16. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Dedication for Women (*N* = 158)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.489 | | | | | | | | | | | | |
| **S2** | 0.778 | 1.746 | | | | | | | | | | | |
| **S3** | 0.315 | 0.571 | 2.070 | | | | | | | | | | |
| **S4** | 0.127 | 0.325 | 0.353 | 1.470 | | | | | | | | | |
| **S5** | -0.027 | 0.377 | 0.372 | 0.760 | 2.183 | | | | | | | | |
| **S6** | 0.099 | -0.104 | 0.091 | 0.179 | 0.229 | 1.788 | | | | | | | |
| **S7** | -0.055 | -0.113 | 0.049 | -0.004 | 0.337 | 0.907 | 1.604 | | | | | | |
| **S8** | 0.263 | 0.036 | 0.092 | -0.006 | 0.097 | 0.869 | 0.979 | 1.563 | | | | | |
| **S9** | 0.218 | 0.019 | 0.001 | 0.188 | 0.129 | 0.619 | 0.671 | 0.733 | 1.262 | | | | |
| **S10** | 0.108 | 0.137 | 0.107 | 0.214 | 0.014 | 0.670 | 0.591 | 0.495 | 0.670 | 1.525 | | | |
| **V7** | 0.228 | -0.044 | -0.073 | 0.050 | -0.021 | -0.125 | -0.284 | -0.095 | 0.025 | -0.014 | 1.759 | | |
| **V8** | 0.055 | 0.156 | -0.192 | 0.000 | -0.020 | -0.170 | -0.068 | -0.023 | 0.046 | -0.347 | 0.922 | 2.246 | |
| **V9** | 0.144 | 0.038 | -0.168 | 0.071 | 0.006 | -0.092 | -0.091 | 0.066 | 0.019 | -0.273 | 0.960 | 1.284 | 1.615 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 17. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Absorption for Women (*N* = 158)**

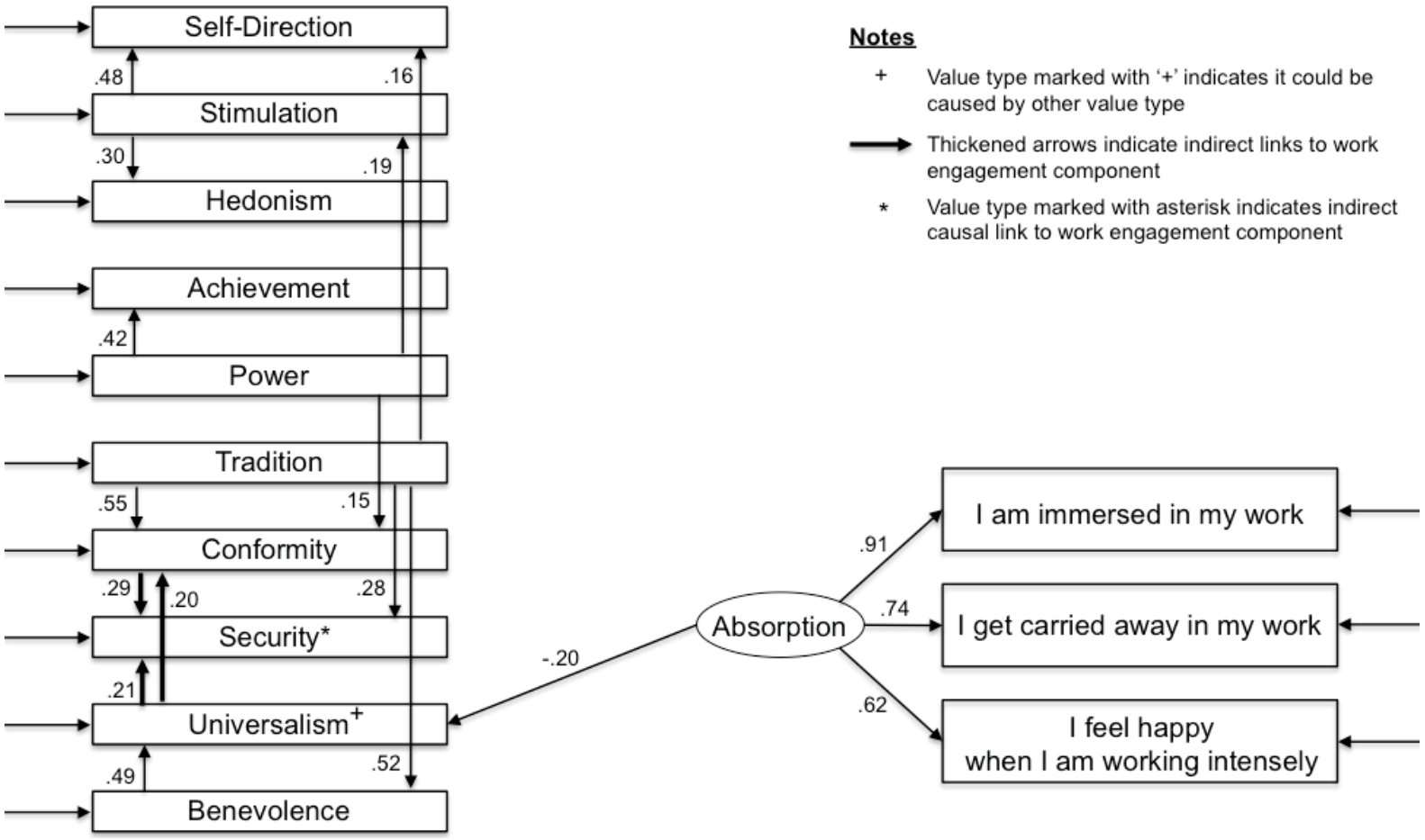


**Figure 18. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Absorption for Women (*N* = 158)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.134 | | | | | | | | | | | | |
| **S2** | 0.535 | 1.686 | | | | | | | | | | | |
| **S3** | 0.210 | 0.839 | 2.156 | | | | | | | | | | |
| **S4** | 0.423 | 0.747 | 0.608 | 1.949 | | | | | | | | | |
| **S5** | 0.149 | 0.753 | 0.771 | 0.774 | 2.434 | | | | | | | | |
| **S6** | 0.190 | -0.210 | 0.014 | -0.136 | -0.163 | 1.589 | | | | | | | |
| **S7** | 0.206 | -0.169 | -0.131 | -0.027 | -0.431 | 1.062 | 1.856 | | | | | | |
| **S8** | 0.260 | 0.122 | -0.239 | 0.046 | -0.364 | 0.742 | 1.075 | 1.648 | | | | | |
| **S9** | 0.249 | 0.056 | -0.240 | 0.166 | -0.325 | 0.540 | 0.802 | 0.886 | 1.224 | | | | |
| **S10** | 0.337 | 0.029 | -0.249 | 0.097 | -0.423 | 0.588 | 0.915 | 0.790 | 0.857 | 1.819 | | | |
| **V1** | 0.438 | 0.282 | -0.005 | 0.479 | 0.134 | 0.134 | 0.218 | 0.254 | 0.233 | 0.174 | 1.634 | | |
| **V2** | 0.331 | 0.288 | 0.049 | 0.305 | 0.138 | 0.075 | 0.194 | 0.278 | 0.155 | 0.101 | 0.909 | 1.137 | |
| **V3** | 0.257 | 0.179 | -0.006 | 0.073 | 0.048 | 0.021 | 0.234 | 0.184 | 0.116 | 0.034 | 0.809 | 0.894 | 1.022 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 19. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Vigor for Married Participants (*N* = 132)**

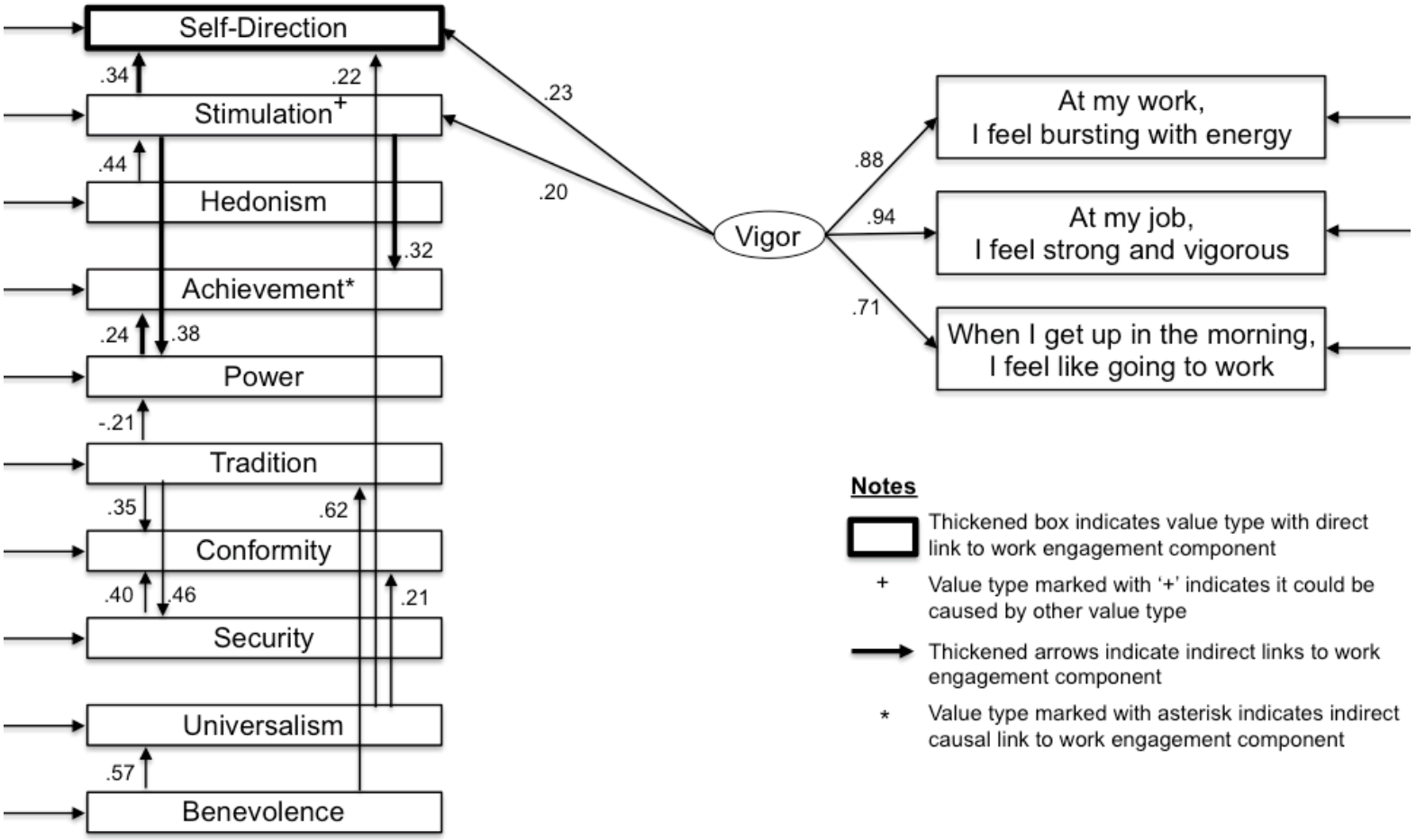


**Figure 20. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Vigor for Married Participants (*N* = 132)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.134 | | | | | | | | | | | | |
| **S2** | 0.535 | 1.686 | | | | | | | | | | | |
| **S3** | 0.210 | 0.839 | 2.156 | | | | | | | | | | |
| **S4** | 0.423 | 0.747 | 0.608 | 1.949 | | | | | | | | | |
| **S5** | 0.149 | 0.753 | 0.771 | 0.774 | 2.434 | | | | | | | | |
| **S6** | 0.190 | -0.210 | 0.014 | -0.136 | -0.163 | 1.589 | | | | | | | |
| **S7** | 0.206 | -0.169 | -0.131 | -0.027 | -0.431 | 1.062 | 1.856 | | | | | | |
| **S8** | 0.260 | 0.122 | -0.239 | 0.046 | -0.364 | 0.742 | 1.075 | 1.648 | | | | | |
| **S9** | 0.249 | 0.056 | -0.240 | 0.166 | -0.325 | 0.540 | 0.802 | 0.886 | 1.224 | | | | |
| **S10** | 0.337 | 0.029 | -0.249 | 0.097 | -0.423 | 0.588 | 0.915 | 0.790 | 0.857 | 1.819 | | | |
| **V4** | 0.400 | 0.366 | 0.124 | 0.482 | 0.279 | 0.003 | 0.078 | 0.233 | 0.251 | 0.072 | 1.558 | | |
| **V5** | 0.372 | 0.337 | 0.044 | 0.467 | 0.097 | -0.104 | 0.138 | 0.267 | 0.167 | 0.097 | 1.177 | 1.474 | |
| **V6** | 0.394 | 0.342 | 0.038 | 0.487 | 0.077 | 0.034 | 0.105 | 0.211 | 0.246 | 0.113 | 0.875 | 0.980 | 1.108 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 21. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Dedication for Married Participants (*N* = 132)**

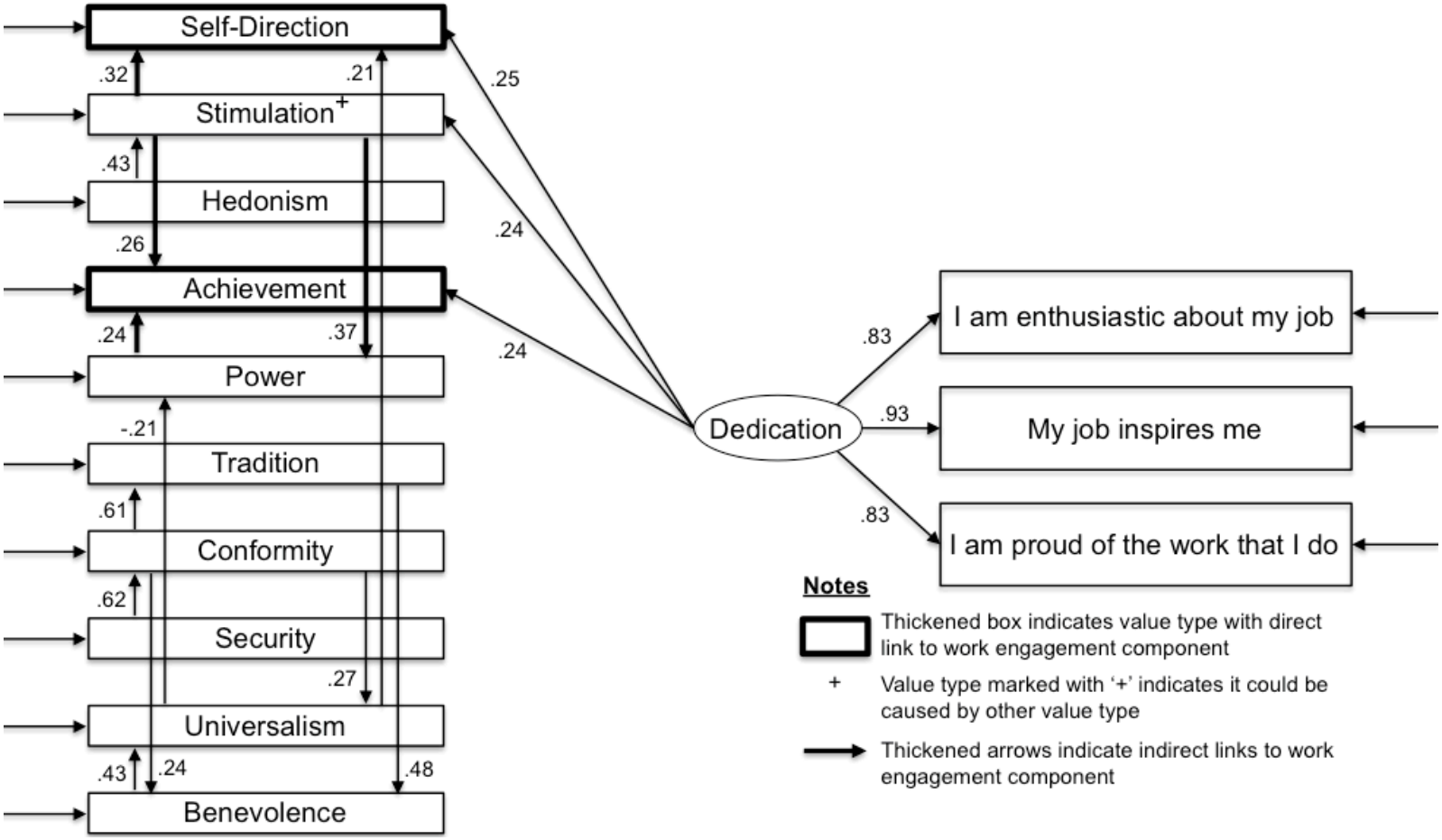


**Figure 22. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Dedication for Married Participants (*N* = 132)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.134 | | | | | | | | | | | | |
| **S2** | 0.535 | 1.686 | | | | | | | | | | | |
| **S3** | 0.210 | 0.839 | 2.156 | | | | | | | | | | |
| **S4** | 0.423 | 0.747 | 0.608 | 1.949 | | | | | | | | | |
| **S5** | 0.149 | 0.753 | 0.771 | 0.774 | 2.434 | | | | | | | | |
| **S6** | 0.190 | -0.210 | 0.014 | -0.136 | -0.163 | 1.589 | | | | | | | |
| **S7** | 0.206 | -0.169 | -0.131 | -0.027 | -0.431 | 1.062 | 1.856 | | | | | | |
| **S8** | 0.260 | 0.122 | -0.239 | 0.046 | -0.364 | 0.742 | 1.075 | 1.648 | | | | | |
| **S9** | 0.249 | 0.056 | -0.240 | 0.166 | -0.325 | 0.540 | 0.802 | 0.886 | 1.224 | | | | |
| **S10** | 0.337 | 0.029 | -0.249 | 0.097 | -0.423 | 0.588 | 0.915 | 0.790 | 0.857 | 1.819 | | | |
| **V7** | 0.555 | 0.356 | -0.027 | 0.513 | 0.059 | -0.015 | 0.162 | 0.177 | 0.277 | 0.263 | 1.546 | | |
| **V8** | 0.375 | 0.439 | 0.000 | 0.481 | 0.186 | -0.115 | 0.039 | 0.298 | 0.364 | 0.225 | 1.006 | 1.881 | |
| **V9** | 0.433 | 0.292 | -0.040 | 0.470 | 0.219 | -0.108 | 0.009 | 0.099 | 0.253 | 0.059 | 1.072 | 1.182 | 1.466 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 23. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Absorption for Married Participants (*N* = 132)**

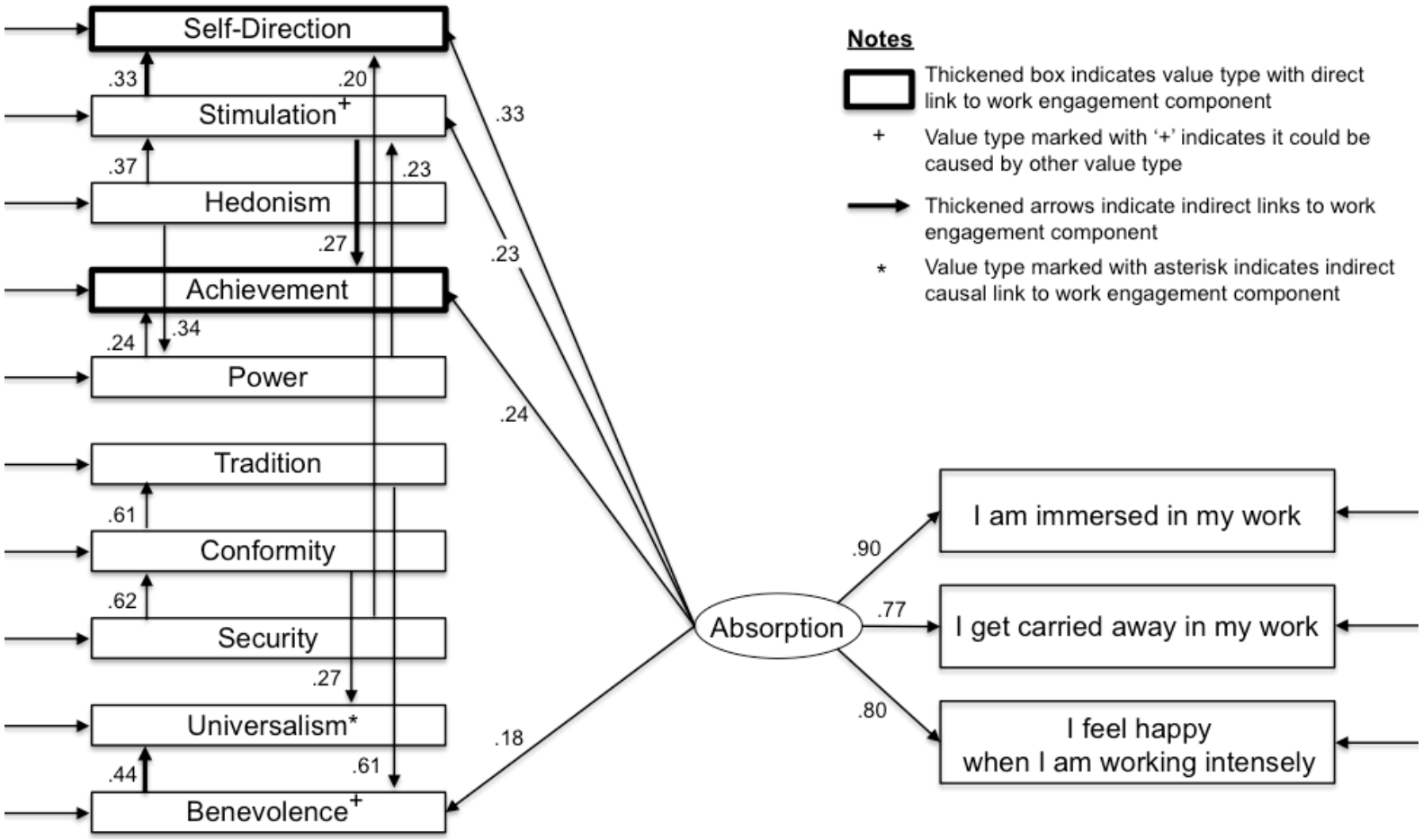


**Figure 24. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Absorption for Married Participants (*N* = 132)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.690 | | | | | | | | | | | | |
| **S2** | 0.781 | 1.685 | | | | | | | | | | | |
| **S3** | 0.086 | 0.682 | 2.179 | | | | | | | | | | |
| **S4** | -0.041 | 0.211 | 0.222 | 1.591 | | | | | | | | | |
| **S5** | -0.192 | 0.322 | 0.489 | 0.950 | 2.413 | | | | | | | | |
| **S6** | 0.119 | -0.013 | -0.001 | 0.251 | 0.105 | 1.930 | | | | | | | |
| **S7** | -0.211 | 0.118 | 0.435 | 0.000 | 0.397 | 0.824 | 2.056 | | | | | | |
| **S8** | 0.285 | 0.105 | 0.162 | 0.031 | 0.076 | 0.806 | 1.103 | 1.677 | | | | | |
| **S9** | 0.251 | 0.178 | 0.079 | 0.217 | 0.022 | 0.613 | 0.767 | 0.893 | 1.486 | | | | |
| **S10** | 0.104 | 0.302 | 0.140 | 0.095 | -0.159 | 0.674 | 0.595 | 0.593 | 0.817 | 2.038 | | | |
| **V1** | -0.128 | -0.039 | -0.443 | 0.182 | -0.238 | 0.367 | -0.025 | 0.267 | 0.027 | 0.003 | 2.619 | | |
| **V2** | 0.183 | 0.275 | 0.027 | 0.192 | -0.085 | 0.124 | -0.065 | 0.075 | 0.108 | 0.123 | 1.203 | 1.669 | |
| **V3** | 0.087 | 0.163 | -0.003 | 0.279 | -0.141 | 0.151 | 0.026 | 0.019 | 0.109 | 0.006 | 1.231 | 1.417 | 1.712 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 25. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Vigor for Singles (*N* = 156)**

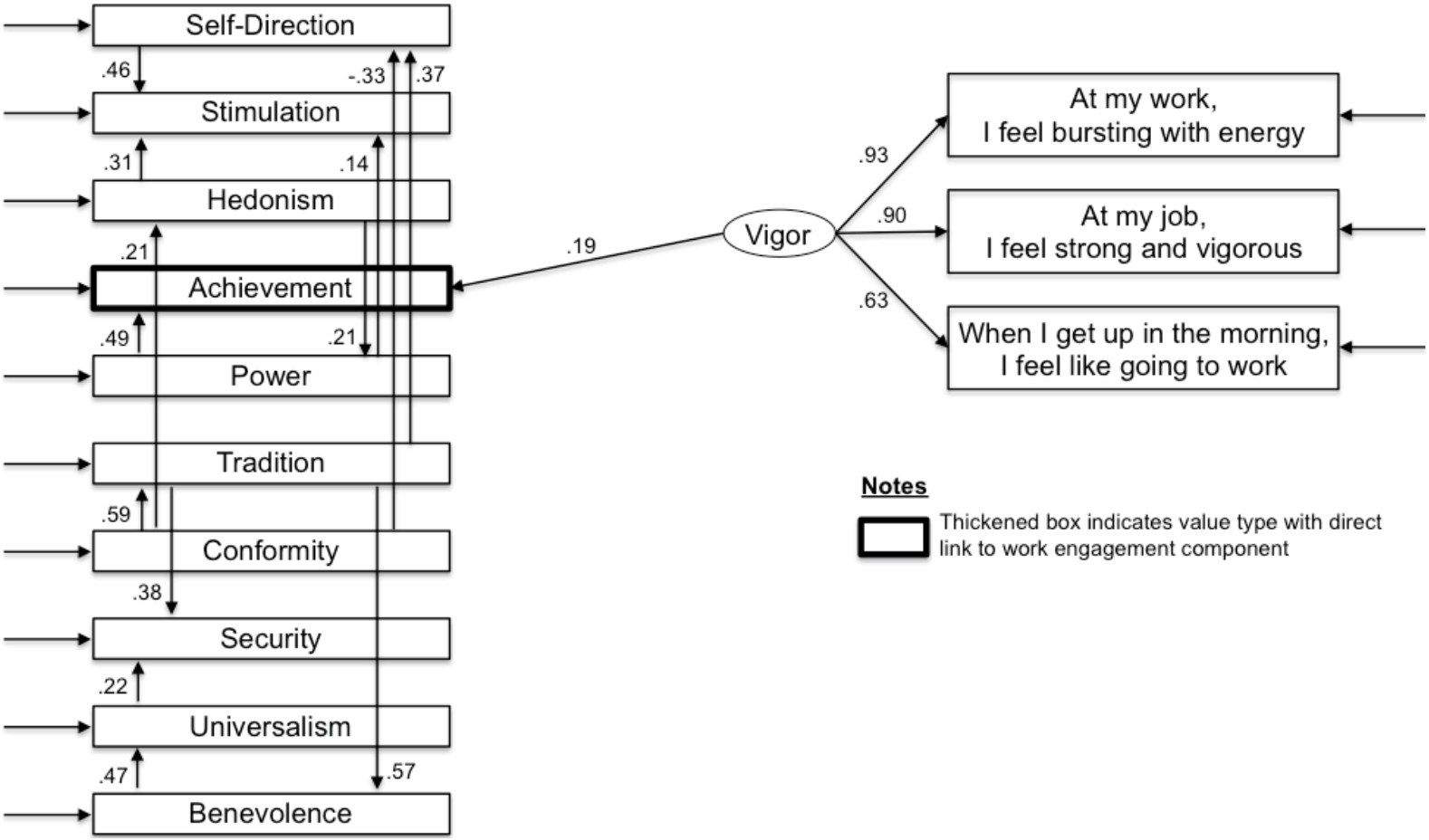


**Figure 26. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Vigor for Singles (*N* = 156)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.690 | | | | | | | | | | | | |
| **S2** | 0.781 | 1.685 | | | | | | | | | | | |
| **S3** | 0.086 | 0.682 | 2.179 | | | | | | | | | | |
| **S4** | -0.041 | 0.211 | 0.222 | 1.591 | | | | | | | | | |
| **S5** | -0.192 | 0.322 | 0.489 | 0.950 | 2.413 | | | | | | | | |
| **S6** | 0.119 | -0.013 | -0.001 | 0.251 | 0.105 | 1.930 | | | | | | | |
| **S7** | -0.211 | 0.118 | 0.435 | 0.000 | 0.397 | 0.824 | 2.056 | | | | | | |
| **S8** | 0.285 | 0.105 | 0.162 | 0.031 | 0.076 | 0.806 | 1.103 | 1.677 | | | | | |
| **S9** | 0.251 | 0.178 | 0.079 | 0.217 | 0.022 | 0.613 | 0.767 | 0.893 | 1.486 | | | | |
| **S10** | 0.104 | 0.302 | 0.140 | 0.095 | -0.159 | 0.674 | 0.595 | 0.593 | 0.817 | 2.038 | | | |
| **V4** | 0.092 | 0.124 | -0.149 | 0.417 | 0.071 | 0.072 | -0.071 | 0.044 | 0.126 | -0.030 | 2.142 | | |
| **V5** | 0.241 | 0.278 | -0.227 | 0.350 | -0.166 | 0.102 | 0.085 | 0.362 | 0.074 | 0.048 | 1.593 | 2.707 | |
| **V6** | 0.113 | 0.192 | -0.075 | 0.221 | -0.103 | 0.083 | 0.069 | 0.141 | 0.164 | 0.095 | 1.490 | 1.858 | 1.960 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 27. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Dedication for Singles (*N* = 156)**

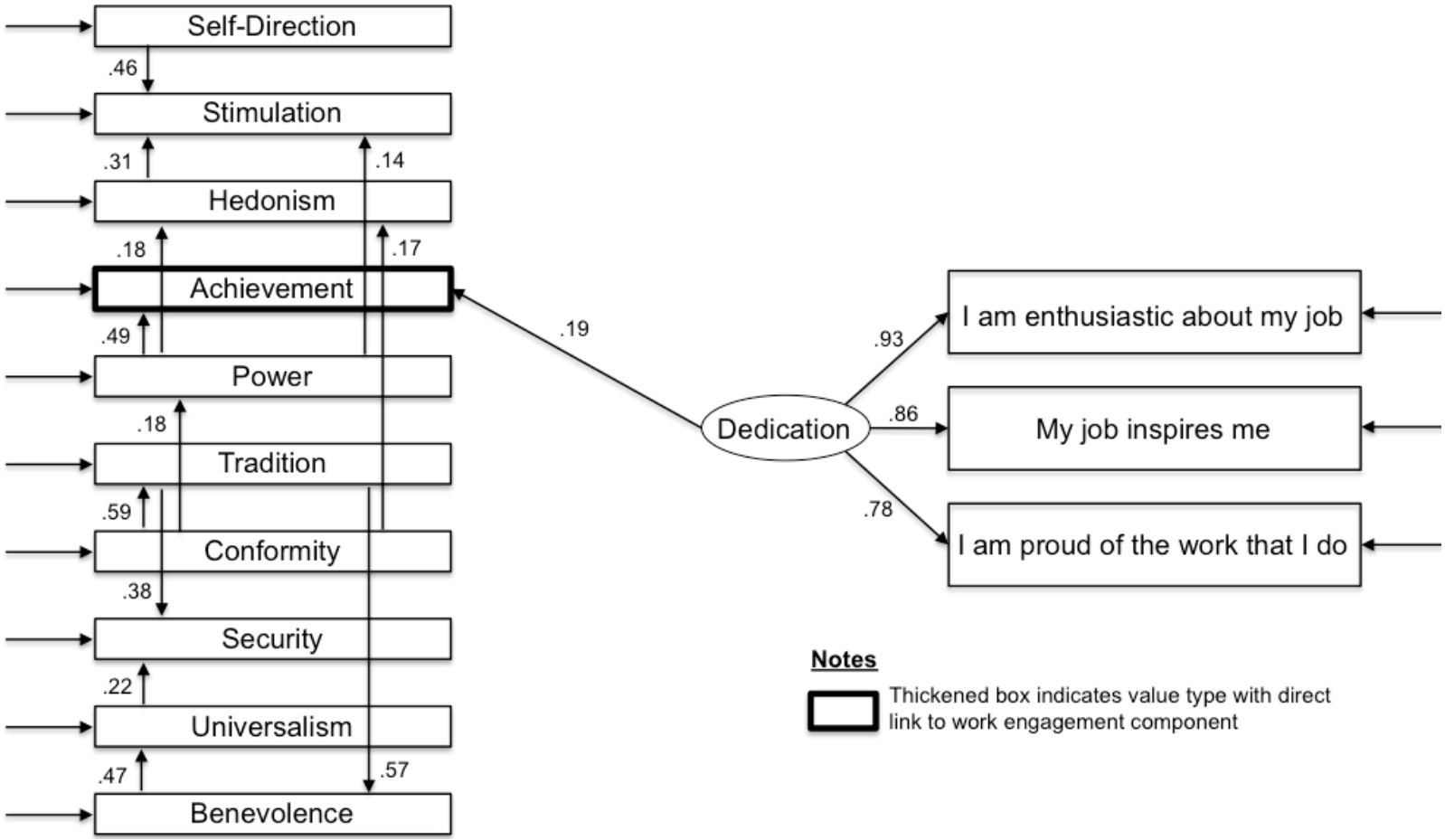


**Figure 28. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Dedication for Singles (*N* = 156)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.690 | | | | | | | | | | | | |
| **S2** | 0.781 | 1.685 | | | | | | | | | | | |
| **S3** | 0.086 | 0.682 | 2.179 | | | | | | | | | | |
| **S4** | -0.041 | 0.211 | 0.222 | 1.591 | | | | | | | | | |
| **S5** | -0.192 | 0.322 | 0.489 | 0.950 | 2.413 | | | | | | | | |
| **S6** | 0.119 | -0.013 | -0.001 | 0.251 | 0.105 | 1.930 | | | | | | | |
| **S7** | -0.211 | 0.118 | 0.435 | 0.000 | 0.397 | 0.824 | 2.056 | | | | | | |
| **S8** | 0.285 | 0.105 | 0.162 | 0.031 | 0.076 | 0.806 | 1.103 | 1.677 | | | | | |
| **S9** | 0.251 | 0.178 | 0.079 | 0.217 | 0.022 | 0.613 | 0.767 | 0.893 | 1.486 | | | | |
| **S10** | 0.104 | 0.302 | 0.140 | 0.095 | -0.159 | 0.674 | 0.595 | 0.593 | 0.817 | 2.038 | | | |
| **V7** | 0.075 | -0.049 | -0.273 | 0.290 | -0.102 | 0.184 | -0.335 | 0.006 | 0.156 | 0.126 | 2.160 | | |
| **V8** | 0.045 | 0.245 | -0.039 | 0.179 | 0.115 | 0.112 | 0.145 | 0.042 | 0.131 | -0.042 | 0.997 | 2.527 | |
| **V9** | 0.000 | 0.031 | -0.265 | 0.319 | -0.092 | 0.247 | -0.121 | 0.052 | -0.003 | -0.052 | 1.275 | 1.206 | 1.759 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 29. Covariance Matrix for the Variables in Model 0 relating Personal Values to Work Engagement Dimension Absorption for Singles (*N* = 156)**

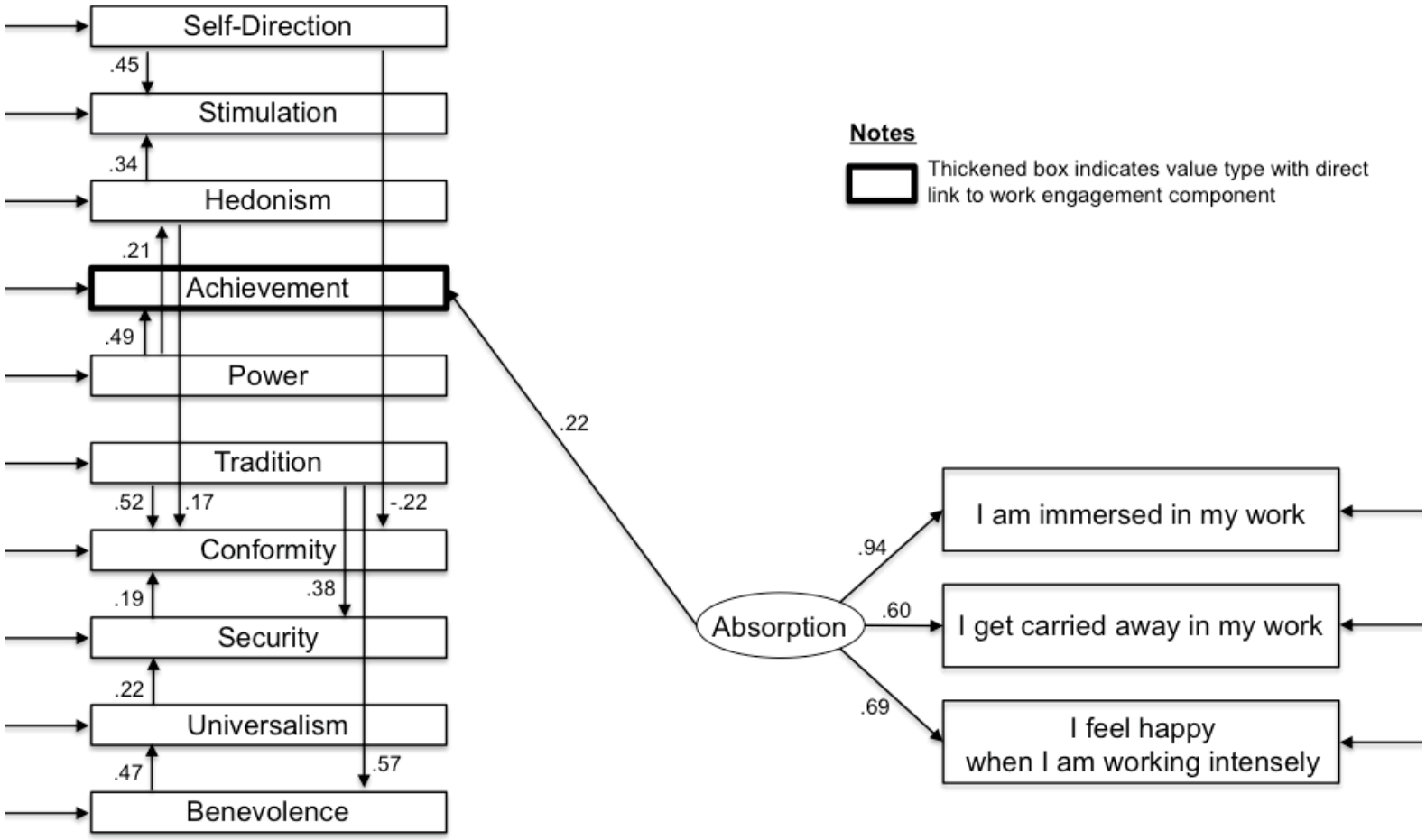


**Figure 30. Fit of the Hypothesized Model 0 relating Personal Values to Work Engagement Dimension Absorption for Singles (*N* = 156)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 | Age |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | | |
| **V1** | 0.080 | 0.010 | -0.352 | 0.281 | -0.137 | 0.397 | 0.146 | 0.310 | 0.144 | 0.083 | 2.419 | | | |
| **V2** | 0.220 | 0.224 | -0.032 | 0.227 | -0.020 | 0.174 | 0.083 | 0.187 | 0.143 | 0.122 | 1.202 | 1.485 | | |
| **V3** | 0.146 | 0.141 | -0.033 | 0.166 | -0.078 | 0.149 | 0.156 | 0.141 | 0.132 | 0.034 | 1.127 | 1.215 | 1.425 | |
| **Age** | -0.053 | -0.329 | -0.427 | -0.157 | -0.371 | 0.351 | 0.081 | 0.196 | 0.036 | -0.009 | 0.756 | 0.376 | 0.251 | 1.872 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 31. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Vigor under the influence of Age (*N* = 294)**

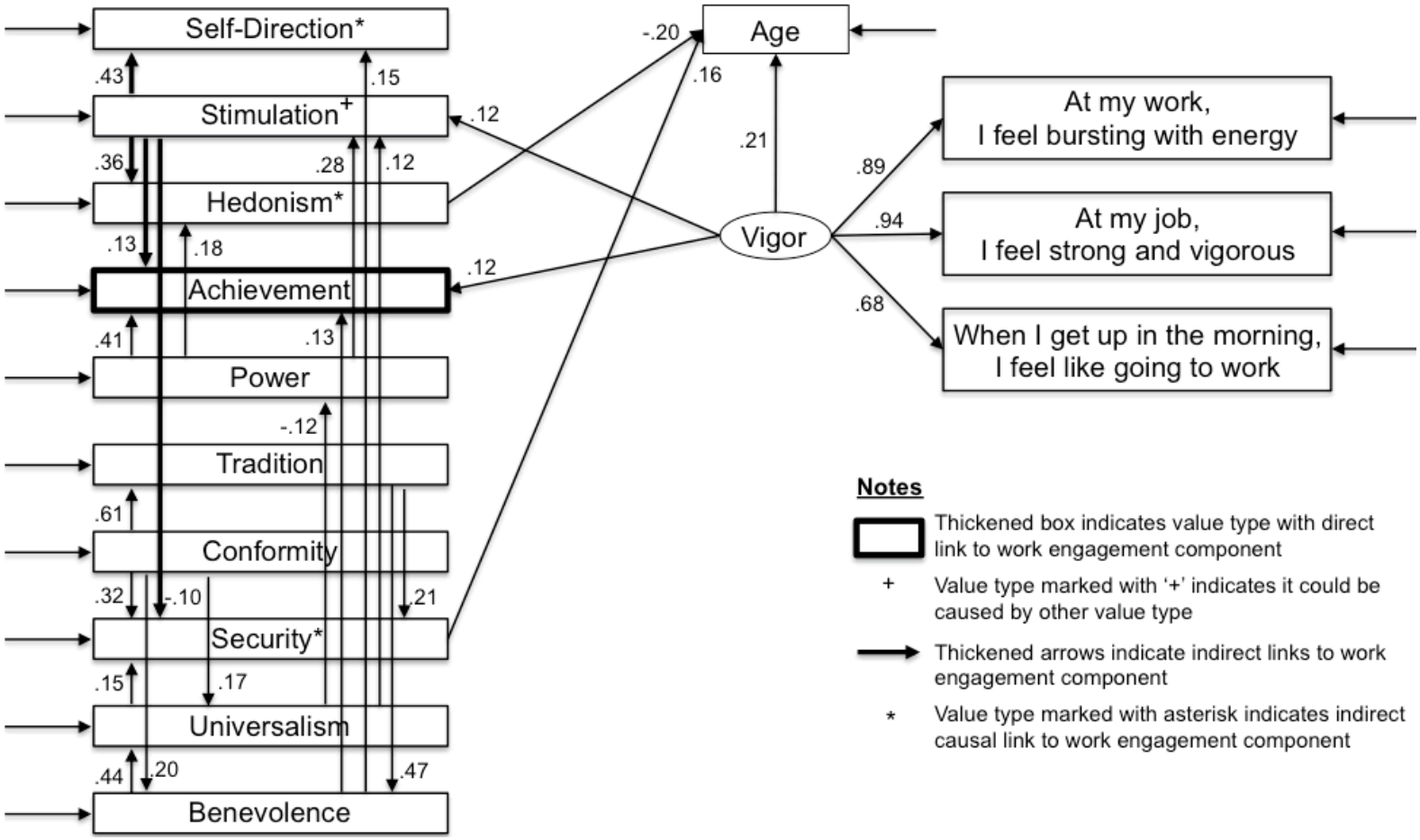


**Figure 32. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Vigor under the influence of Age (*N* = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 | Age |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | | |
| **V4** | 0.207 | 0.181 | -0.089 | 0.431 | 0.133 | 0.113 | 0.023 | 0.139 | 0.193 | 0.020 | 1.913 | | | |
| **V5** | 0.269 | 0.256 | -0.146 | 0.359 | -0.101 | 0.099 | 0.157 | 0.386 | 0.136 | 0.070 | 1.450 | 2.237 | | |
| **V6** | 0.213 | 0.207 | -0.078 | 0.314 | -0.065 | 0.147 | 0.123 | 0.215 | 0.215 | 0.097 | 1.263 | 1.539 | 1.641 | |
| **Age** | -0.053 | -0.329 | -0.427 | -0.157 | -0.371 | 0.351 | 0.081 | 0.196 | 0.036 | -0.009 | 0.423 | 0.506 | 0.372 | 1.872 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 33. Covariance Matrix for the Variables in Model 2 relatingPersonal Values to Work Engagement Dimension Dedication under the influence of Age (*N* = 294)**

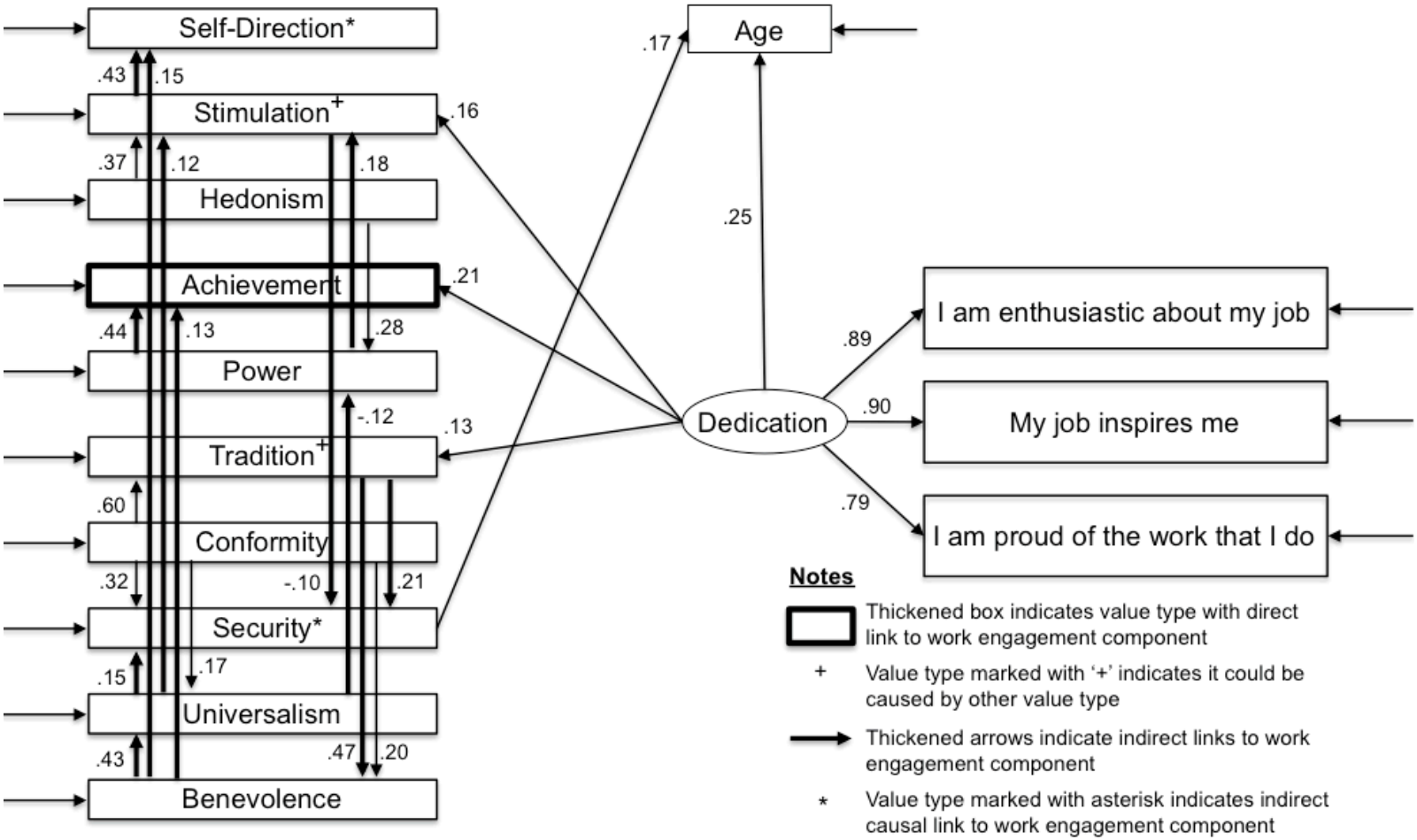


**Figure 34. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Dedication under the influence of Age ($N$ = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 | Age |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | | |
| **V7** | 0.270 | 0.093 | -0.208 | 0.377 | -0.055 | 0.157 | -0.079 | 0.100 | 0.220 | 0.183 | 1.900 | | | |
| **V8** | 0.174 | 0.287 | -0.061 | 0.279 | 0.095 | 0.088 | 0.133 | 0.209 | 0.248 | 0.083 | 1.043 | 2.297 | | |
| **V9** | 0.170 | 0.097 | -0.225 | 0.365 | 0.009 | 0.162 | -0.028 | 0.099 | 0.128 | 0.007 | 1.229 | 1.256 | 1.683 | |
| **Age** | -0.053 | -0.329 | -0.427 | -0.157 | -0.371 | 0.351 | 0.081 | 0.196 | 0.036 | -0.009 | 0.365 | 0.426 | 0.490 | 1.872 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 35. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Absorption under the influence of Age (*N* = 294)**

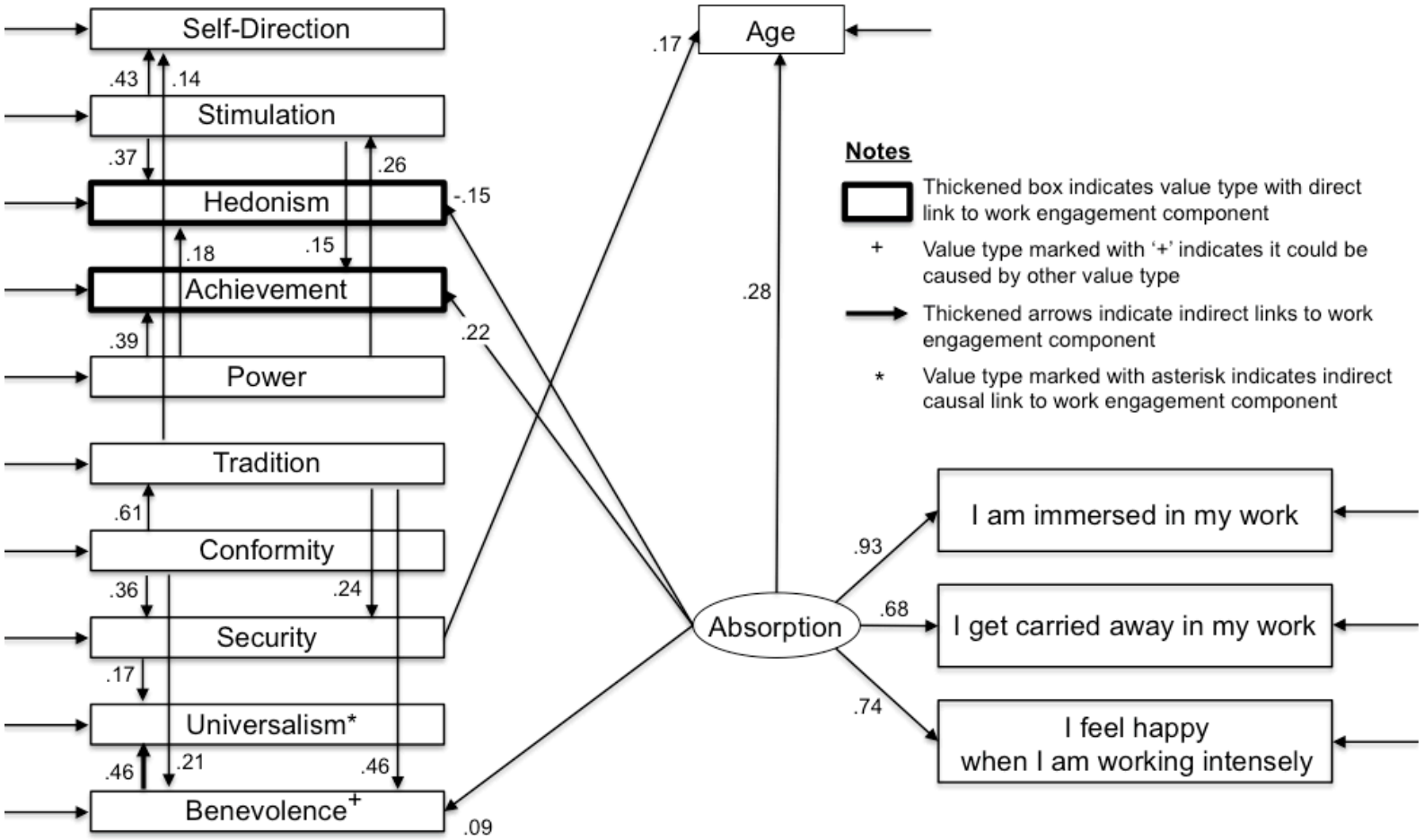


**Figure 36. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Absorption under the influence of Age (*N* = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 | Number of Children |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.435 | | | | | | | | | | | | | |
| **S2** | 0.680 | 1.706 | | | | | | | | | | | | |
| **S3** | 0.173 | 0.796 | 2.235 | | | | | | | | | | | |
| **S4** | 0.178 | 0.459 | 0.401 | 1.755 | | | | | | | | | | |
| **S5** | -0.022 | 0.531 | 0.646 | 0.883 | 2.424 | | | | | | | | | |
| **S6** | 0.146 | -0.135 | -0.020 | 0.058 | -0.036 | 1.848 | | | | | | | | |
| **S7** | -0.020 | -0.019 | 0.183 | -0.026 | 0.008 | 0.970 | 1.974 | | | | | | | |
| **S8** | 0.273 | 0.121 | 0.015 | 0.002 | -0.140 | 0.821 | 1.129 | 1.756 | | | | | | |
| **S9** | 0.255 | 0.125 | -0.053 | 0.186 | -0.128 | 0.606 | 0.800 | 0.917 | 1.371 | | | | | |
| **S10** | 0.214 | 0.179 | -0.029 | 0.088 | -0.269 | 0.648 | 0.749 | 0.703 | 0.849 | 1.973 | | | | |
| **V1** | 0.087 | 0.016 | -0.350 | 0.283 | -0.127 | 0.391 | 0.145 | 0.305 | 0.138 | 0.078 | 2.432 | | | |
| **V2** | 0.222 | 0.229 | -0.030 | 0.227 | -0.019 | 0.174 | 0.080 | 0.185 | 0.142 | 0.119 | 1.213 | 1.497 | | |
| **V3** | 0.150 | 0.146 | -0.030 | 0.167 | -0.072 | 0.147 | 0.156 | 0.137 | 0.128 | 0.029 | 1.132 | 1.226 | 1.434 | |
| **Number of Children** | -0.049 | -0.166 | -0.183 | -0.116 | -0.157 | 0.272 | 0.197 | 0.206 | 0.118 | 0.079 | 0.441 | 0.203 | 0.174 | 1.078 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 37. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Vigor under the influence of Parenthood Status (*N* = 291)**

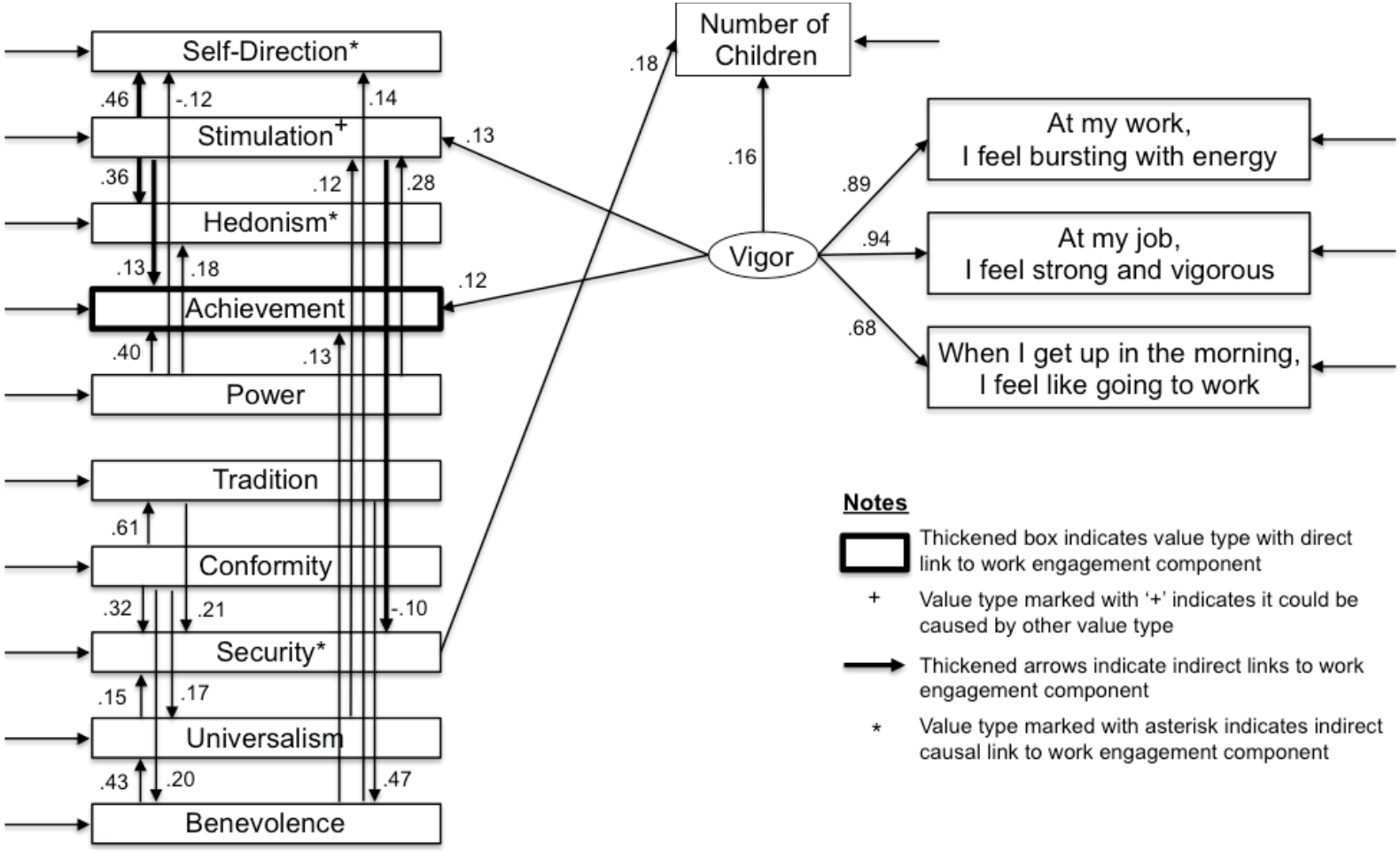


**Figure 38. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Vigor under the influence of Parenthood Status ($N$ = 291)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 | Number of Children |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.435 | | | | | | | | | | | | | |
| **S2** | 0.680 | 1.706 | | | | | | | | | | | | |
| **S3** | 0.173 | 0.796 | 2.235 | | | | | | | | | | | |
| **S4** | 0.178 | 0.459 | 0.401 | 1.755 | | | | | | | | | | |
| **S5** | -0.022 | 0.531 | 0.646 | 0.883 | 2.424 | | | | | | | | | |
| **S6** | 0.146 | -0.135 | -0.020 | 0.058 | -0.036 | 1.848 | | | | | | | | |
| **S7** | -0.020 | -0.019 | 0.183 | -0.026 | 0.008 | 0.970 | 1.974 | | | | | | | |
| **S8** | 0.273 | 0.121 | 0.015 | 0.002 | -0.140 | 0.821 | 1.129 | 1.756 | | | | | | |
| **S9** | 0.255 | 0.125 | -0.053 | 0.186 | -0.128 | 0.606 | 0.800 | 0.917 | 1.371 | | | | | |
| **S10** | 0.214 | 0.179 | -0.029 | 0.088 | -0.269 | 0.648 | 0.749 | 0.703 | 0.849 | 1.973 | | | | |
| **V4** | 0.213 | 0.193 | -0.081 | 0.428 | 0.145 | 0.104 | 0.013 | 0.127 | 0.183 | 0.005 | 1.903 | | | |
| **V5** | 0.275 | 0.261 | -0.145 | 0.362 | -0.095 | 0.096 | 0.158 | 0.386 | 0.133 | 0.066 | 1.456 | 2.256 | | |
| **V6** | 0.217 | 0.213 | -0.075 | 0.314 | -0.062 | 0.145 | 0.120 | 0.212 | 0.213 | 0.092 | 1.264 | 1.552 | 1.652 | |
| **Number of Children** | -0.049 | -0.166 | -0.183 | -0.116 | -0.157 | 0.272 | 0.197 | 0.206 | 0.118 | 0.079 | 0.241 | 0.304 | 0.238 | 1.078 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 39. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Dedication under the influence of Parenthood Status (*N* = 291)**

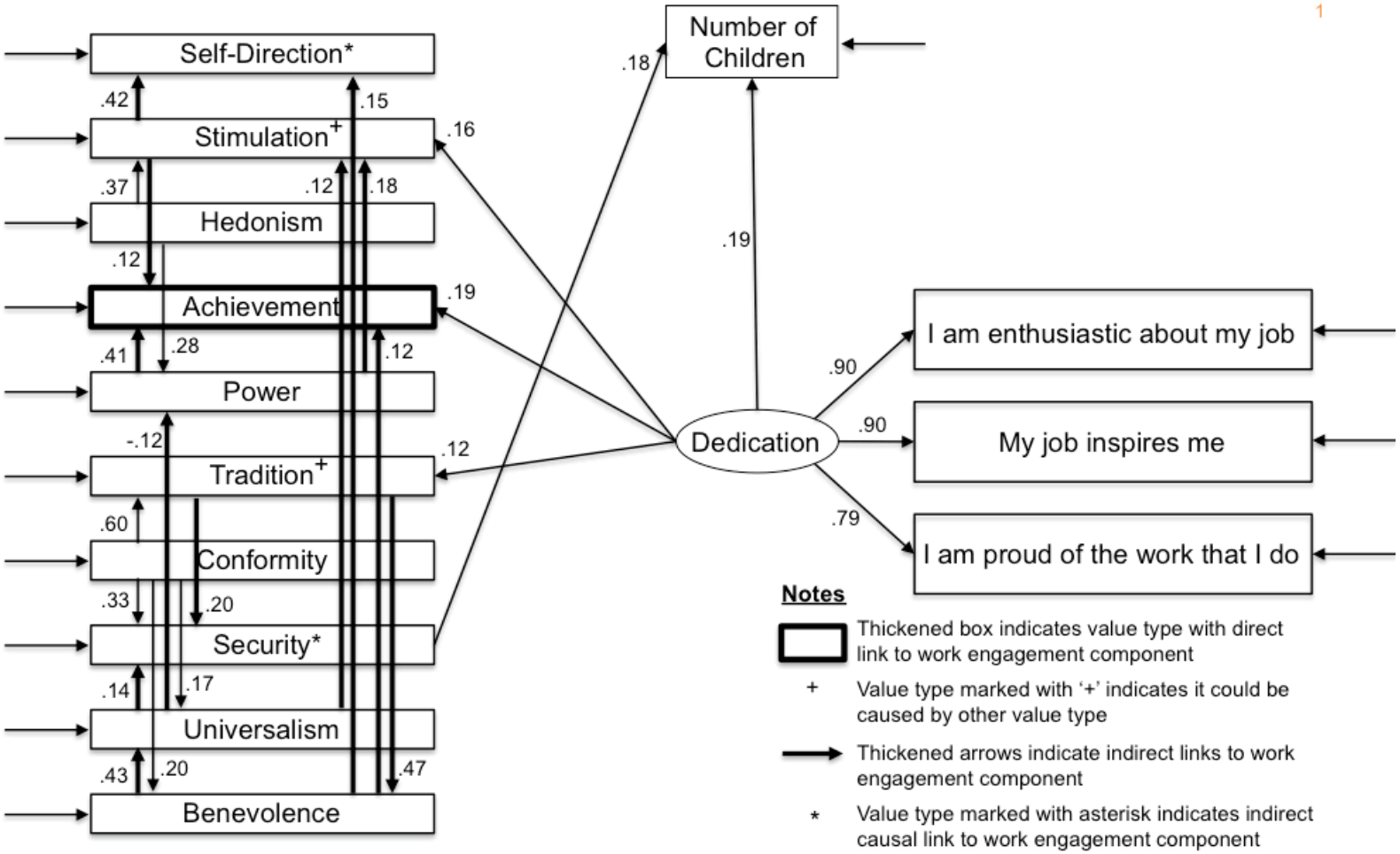


**Figure 40. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Dedication under the influence of Parenthood Status (*N* = 291)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 | Number of Children |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.435 | | | | | | | | | | | | | |
| **S2** | 0.680 | 1.706 | | | | | | | | | | | | |
| **S3** | 0.173 | 0.796 | 2.235 | | | | | | | | | | | |
| **S4** | 0.178 | 0.459 | 0.401 | 1.755 | | | | | | | | | | |
| **S5** | -0.022 | 0.531 | 0.646 | 0.883 | 2.424 | | | | | | | | | |
| **S6** | 0.146 | -0.135 | -0.020 | 0.058 | -0.036 | 1.848 | | | | | | | | |
| **S7** | -0.020 | -0.019 | 0.183 | -0.026 | 0.008 | 0.970 | 1.974 | | | | | | | |
| **S8** | 0.273 | 0.121 | 0.015 | 0.002 | -0.140 | 0.821 | 1.129 | 1.756 | | | | | | |
| **S9** | 0.255 | 0.125 | -0.053 | 0.186 | -0.128 | 0.606 | 0.800 | 0.917 | 1.371 | | | | | |
| **S10** | 0.214 | 0.179 | -0.029 | 0.088 | -0.269 | 0.648 | 0.749 | 0.703 | 0.849 | 1.973 | | | | |
| **V7** | 0.280 | 0.102 | -0.203 | 0.379 | -0.046 | 0.146 | -0.085 | 0.091 | 0.215 | 0.178 | 1.905 | | | |
| **V8** | 0.182 | 0.293 | -0.059 | 0.284 | 0.105 | 0.082 | 0.136 | 0.207 | 0.247 | 0.083 | 1.046 | 2.311 | | |
| **V9** | 0.175 | 0.106 | -0.220 | 0.363 | 0.014 | 0.155 | -0.037 | 0.090 | 0.123 | -0.002 | 1.231 | 1.268 | 1.686 | |
| **Number of Children** | -0.049 | -0.166 | -0.183 | -0.116 | -0.157 | 0.272 | 0.197 | 0.206 | 0.118 | 0.079 | 0.185 | 0.202 | 0.230 | 1.078 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 41. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Absorption under the influence of Parenthood Status (*N* = 291)**

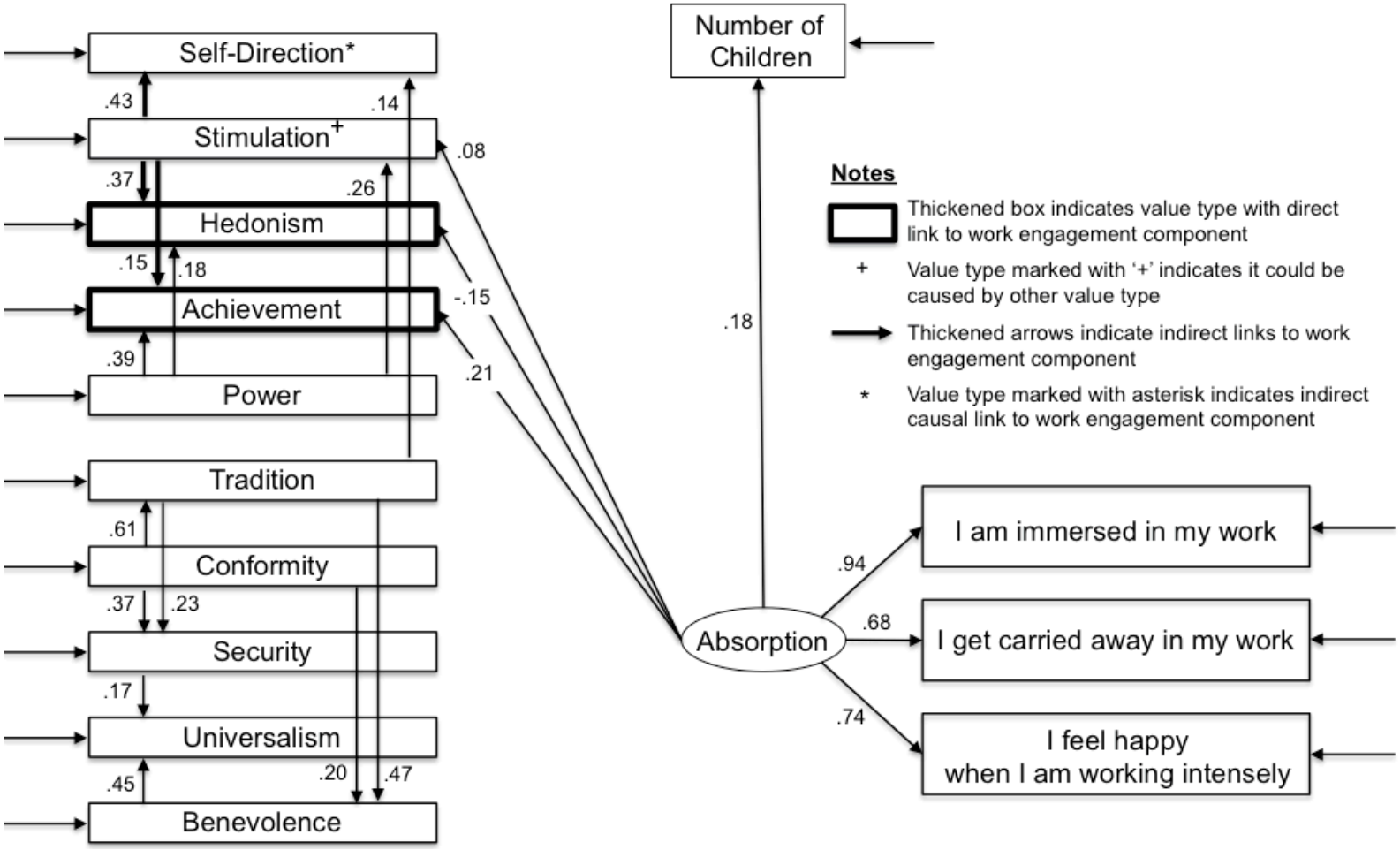


**Figure 42. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Absorption under the influence of Parenthood Status (*N* = 291)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V1 | V2 | V3 | Education Qualification |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | | |
| **V7** | 0.080 | 0.010 | -0.352 | 0.281 | -0.137 | 0.397 | 0.146 | 0.310 | 0.144 | 0.083 | 2.419 | | | |
| **V8** | 0.220 | 0.224 | -0.032 | 0.227 | -0.020 | 0.174 | 0.083 | 0.187 | 0.143 | 0.122 | 1.202 | 1.485 | | |
| **V9** | 0.146 | 0.141 | -0.033 | 0.166 | -0.078 | 0.149 | 0.156 | 0.141 | 0.132 | 0.034 | 1.127 | 1.215 | 1.425 | |
| **Education Qualification** | 0.073 | -0.028 | -0.082 | 0.139 | -0.069 | -0.073 | -0.241 | -0.128 | -0.073 | -0.052 | 0.237 | 0.192 | 0.204 | 0.635 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V1 - 'When I get up in the morning, I feel like going to work'
V2 - 'At my job, I feel strong and vigorous'
V3 - 'At my work, I feel bursting with energy'

**Figure 43. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Vigor under the influence of Education Qualification (*N* = 294)**

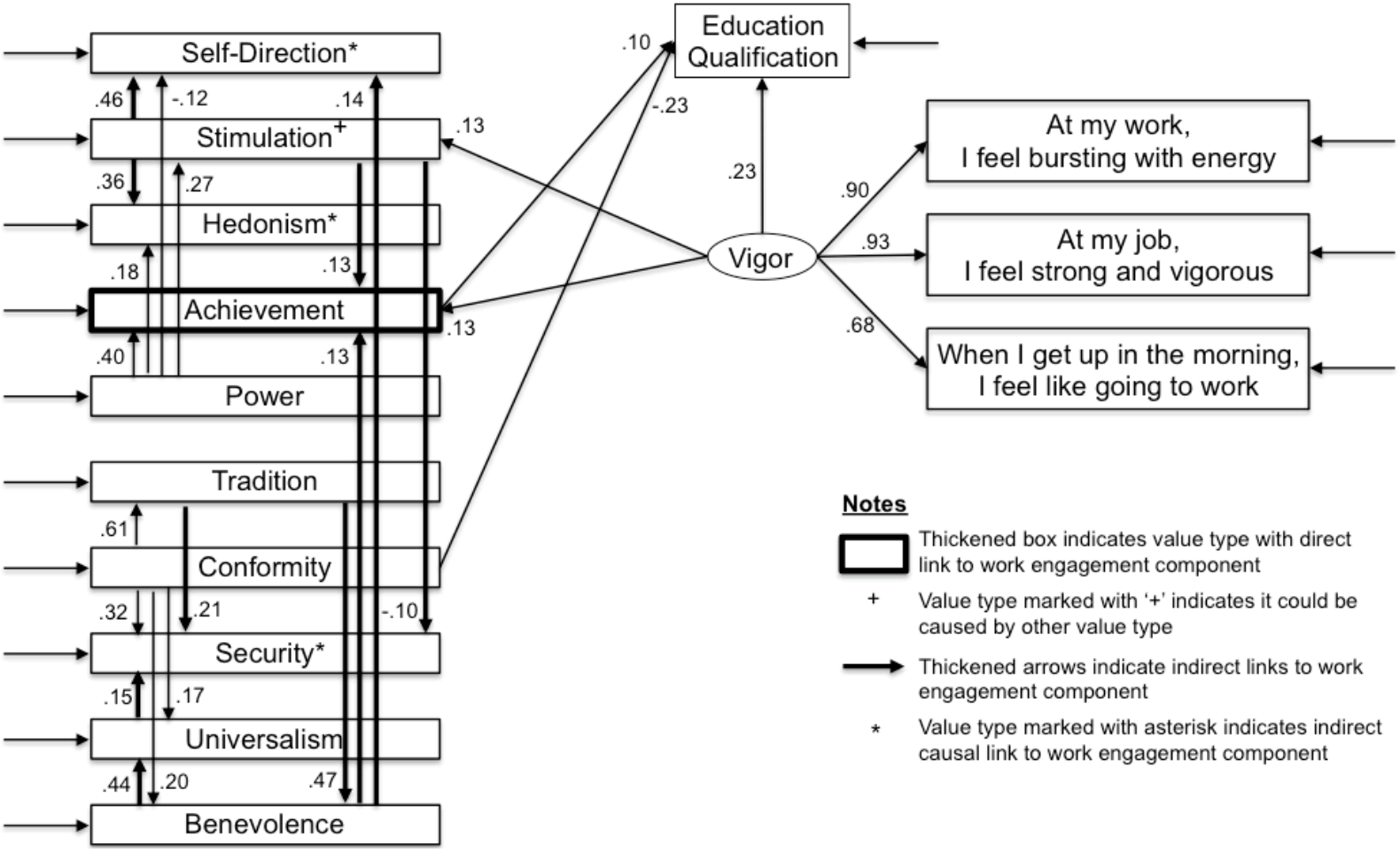


**Figure 44. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Vigor under the influence of Education Qualification (*N* = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V4 | V5 | V6 | Education Qualification |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | | |
| **V4** | 0.207 | 0.181 | -0.089 | 0.431 | 0.133 | 0.113 | 0.023 | 0.139 | 0.193 | 0.020 | 1.913 | | | |
| **V5** | 0.269 | 0.256 | -0.146 | 0.359 | -0.101 | 0.099 | 0.157 | 0.386 | 0.136 | 0.070 | 1.450 | 2.237 | | |
| **V6** | 0.213 | 0.207 | -0.078 | 0.314 | -0.065 | 0.147 | 0.123 | 0.215 | 0.215 | 0.097 | 1.263 | 1.539 | 1.641 | |
| **Education Qualification** | 0.073 | -0.028 | -0.082 | 0.139 | -0.069 | -0.073 | -0.241 | -0.128 | -0.073 | -0.052 | 0.204 | 0.214 | 0.268 | 0.635 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V4 - 'I am proud of the work that I do'
V5 - 'My job inspires me'
V6 - 'I am enthusiastic about my job'

**Figure 45. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Dedication under the influence of Education Qualification (*N* = 294)**

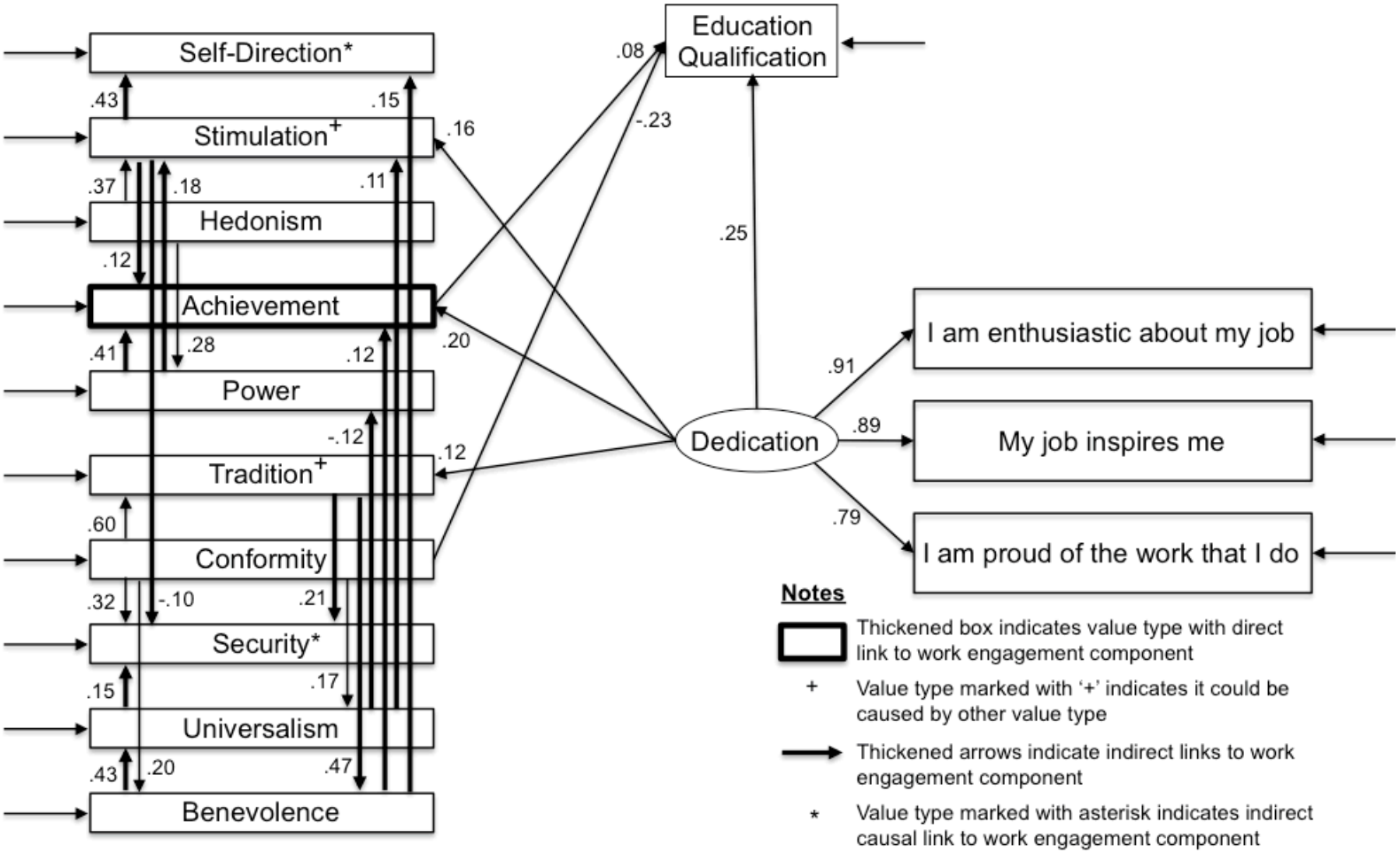


**Figure 46. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Dedication under the influence of Education Qualification (*N* = 294)**

| | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | V7 | V8 | V9 | Education Qualification |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S1** | 1.425 | | | | | | | | | | | | | |
| **S2** | 0.677 | 1.694 | | | | | | | | | | | | |
| **S3** | 0.174 | 0.792 | 2.217 | | | | | | | | | | | |
| **S4** | 0.177 | 0.453 | 0.396 | 1.740 | | | | | | | | | | |
| **S5** | -0.016 | 0.530 | 0.643 | 0.874 | 2.412 | | | | | | | | | |
| **S6** | 0.139 | -0.141 | -0.026 | 0.059 | -0.042 | 1.840 | | | | | | | | |
| **S7** | -0.021 | -0.023 | 0.177 | -0.022 | 0.010 | 0.965 | 1.961 | | | | | | | |
| **S8** | 0.266 | 0.114 | 0.009 | 0.005 | -0.146 | 0.821 | 1.123 | 1.746 | | | | | | |
| **S9** | 0.249 | 0.119 | -0.056 | 0.186 | -0.135 | 0.605 | 0.793 | 0.913 | 1.364 | | | | | |
| **S10** | 0.210 | 0.172 | -0.033 | 0.090 | -0.272 | 0.646 | 0.746 | 0.703 | 0.846 | 1.961 | | | | |
| **V7** | 0.270 | 0.093 | -0.208 | 0.377 | -0.055 | 0.157 | -0.079 | 0.100 | 0.220 | 0.183 | 1.900 | | | |
| **V8** | 0.174 | 0.287 | -0.061 | 0.279 | 0.095 | 0.088 | 0.133 | 0.209 | 0.248 | 0.083 | 1.043 | 2.297 | | |
| **V9** | 0.170 | 0.097 | -0.225 | 0.365 | 0.009 | 0.162 | -0.028 | 0.099 | 0.128 | 0.007 | 1.229 | 1.256 | 1.683 | |
| **Education Qualification** | 0.073 | -0.028 | -0.082 | 0.139 | -0.069 | -0.073 | -0.241 | -0.128 | -0.073 | -0.052 | 0.281 | 0.247 | 0.262 | 0.635 |

**Notes**

S1 - Self-direction
S2 - Stimulation
S3 - Hedonism
S4 - Achievement
S5 - Power
S6 - Security
S7 - Conformity
S8 – Tradition
S9 - Benevolence
S10 - Universalism
V7 - 'I feel happy when I am working intensely'
V8 - 'I get carried away in my work'
V9 - 'I am immersed in my work'

**Figure 47. Covariance Matrix for the Variables in Model 2 relating Personal Values to Work Engagement Dimension Absorption under the influence of Education Qualification (*N* = 294)**

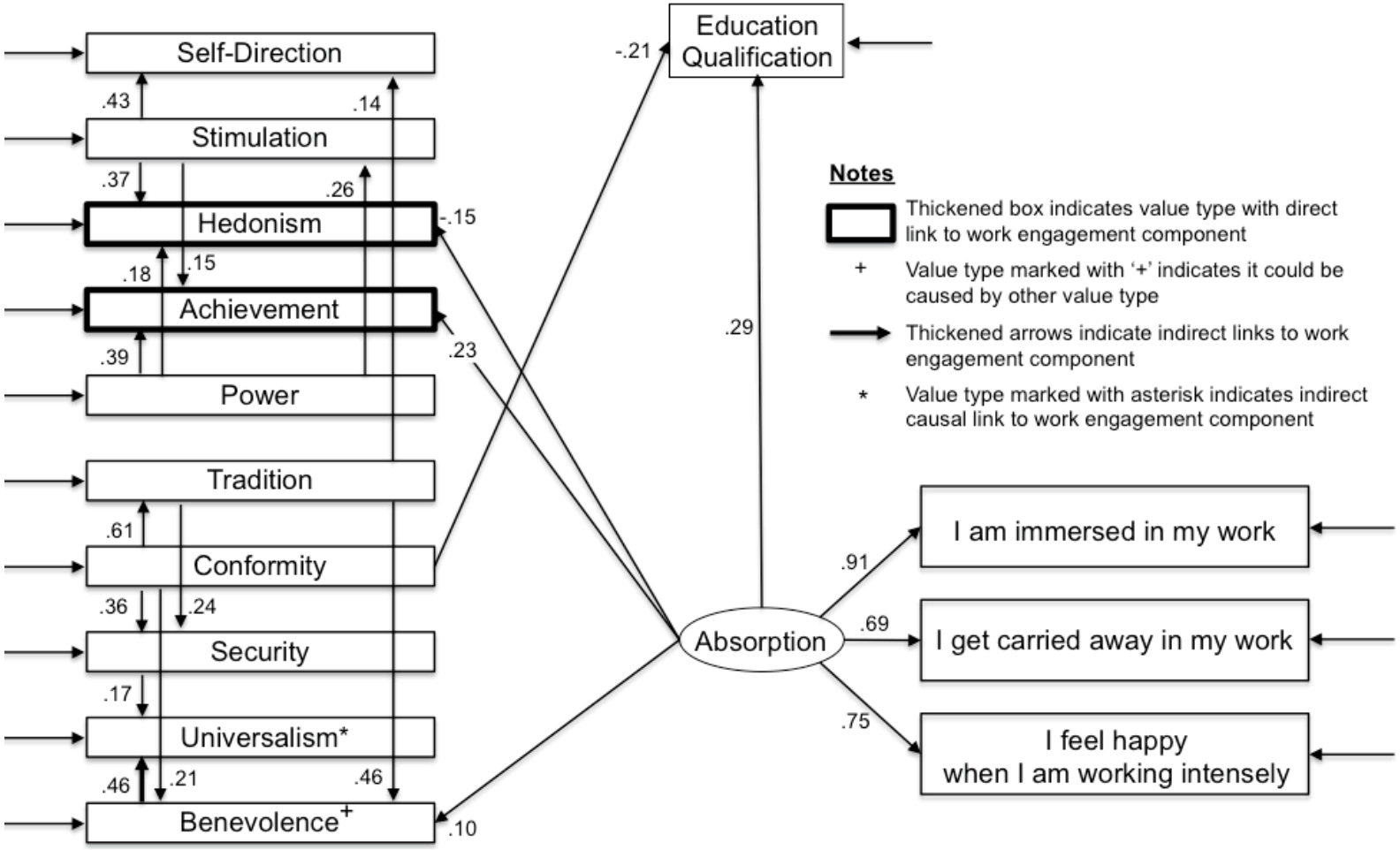


**Figure 48. Fit of the Hypothesized Model 2 relating Personal Values to Work Engagement Dimension Absorption under the influence of Education Qualification (*N* = 294)**

## APPENDIX 5: INFORMATION SHEET FOR STUDY 2

**UNIVERSITY OF SOUTH AUSTRALIA**
**Division of Business**
**International Graduate School of Business**

Thank you for your interest to participate in this interview *to create a deeper understanding of how to create a better working environment for organizations and their employees*.

Brief details on this interview are as follows:

Title of Research Project: Relating Personal Values to Work Engagement

Name of Researcher: Yeow-Kiang Goh

Qualification: MBA in International Business
Salem International University

Graduate Diploma in Management Research
University of South Australia

Contact Number: 65-96366438

Supervisor: Assoc Prof Margaret Patrickson

Contact email: Margaret.patrickson@unisa.edu.au

1. This interview is strictly voluntary. Your consent to this interview as well as its audio-taping for transcription at a later date is sought via the attached consent form. In this interview, you have the right to:

   a. Ask questions about the study at any time;
   b. Terminate the interview at any point in time;
   c. Re-schedule the interview if necessary;
   d. Withdraw any statements made by you during the interview;
   e. Not reply to any questions pose to you;
   f. Ask for the tape recorder to be turned off;
   g. Erase a portion of the tape.

2. With the aim to create an in-depth understanding of a better working environment for organizations and the employees, your opinions in the following two areas would be sought:

   a. Considering work engagement as one's level of energy, dedication and tendency to get carried away in work, what personal values affect work engagement?
   b. Noting that personal values affect work engagement, is it possible that some demographic characteristics of oneself influence the extent personal values affect work engagement and why you think so?

Note 1 and Note 2 at the end of this information sheet explain briefly the interpretations of work engagement and personal values in this study.

3. The data collected is strictly kept confidential for the purpose of this research. The responses to the questions in the interview will be aggregated for qualitative analysis. Participants will not be identified in any way in the research report, or in any subsequent publications that may develop from the findings of the study. Pseudonyms will be used in published work. The anonymous demographic profile requested from you via the enclosed demographic data form at the end of this interview is strictly for the purpose of this research.

4. As per University policy, the data in this research, inclusive of the audio-tapes, will be stored on CDRom and hard copy for 5 years in a locked filing cabinet at home and a copy in the school. As the interview is anonymous in nature, it will not be possible to identify from whom the data is from.

5. The University of South Australia's Human Research Ethics Committee has reviewed this study. Should you wish to discuss the project with someone not directly involved, in particular in relation to matters concerning policies, information about the conduct of the study, or your rights as a participant, please contact

Ms Vicki Allen, Executive Officer
Human Research Ethics Committee
University of South Australia
GPO BOX 2471
Adelaide SA 5000
Email: Vicki.Allen@unisa.edu.au
Tel: +61 8 8302 3118

6. Findings of this study are expected by Jan 2015. Summary of the findings will be made available to you upon request from yeowkiang@gmail.com.

**Note 1: Work Engagement** (according to Schaufeli & Bakker)

1. Work engagement is a positive, fulfilling, work-related state of mind that is characterized by:

   a. Vigor (i.e. high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence also in the face of difficulties);
   b. Dedication (i.e. a sense of significance, enthusiasm, inspiration, pride and challenge); and
   c. Absorption (i.e. being fully concentrated and engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work).

**Note 2: Personal Values** (according to Schwartz Theory of Basic Human Values)

1. Major value orientations recognized across cultures may be expressed in *10 motivationally distinct values* as shown in ***Table 1***.

**Table 1: 10 Distinct Values in Schwartz's Theory of Basic Human Values**

| |
|---|
| 1. POWER: Social status and prestige, control or dominance over people and resources. |
| 2. ACHIEVEMENT: Personal success through demonstrating competence according to social standards. |
| 3. HEDONISM: Pleasure and sensuous gratification for oneself. |
| 4. STIMULATION: Excitement, novelty, and challenge in life. |
| 5. SELF-DIRECTION: Independent thought and action – choosing, creating, exploring. |
| 6. UNIVERSALISM: Understanding, appreciation, tolerance and protection for the welfare of all people and for nature. |
| 7. BENEVOLENCE: Preservation and enhancement of the welfare of people with whom one is in frequent personal contact. |
| 8. TRADITION: Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self. |
| 9. CONFORMITY: Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms. |
| 10. SECURITY: Safety, harmony and stability of society, of relationships, and of self. |

(Davidov et al. 2008, p. 424)

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## APPENDIX 6: CONSENT FORM FOR STUDY 2

**Project title** Relating Personal Values to Work Engagement

**Researcher's name** Yeow-Kiang Goh

**Supervisor's name** Assoc Prof Margaret Patrickson

I have read the Participant Information Sheet, and the nature and the purpose of the research project have been explained to me. I understand and agree to take part.

I understand that I may not directly benefit from taking part in the project.

I understand that I can withdraw from the study at any stage and that this will not affect my status now or in the future.

I confirm that I am over 18 years of age.

I understand that I will be audiotaped during the study.

I understand that the tape will be stored for 5 years in a locked filing cabinet at researcher's home and a copy in the school as per University policy. As the interview is anonymous in nature, it will not be possible to identify from whom the data is from.

**Name of participant** _____

**Signed** _____

**Dated** _____

I have explained the study to subject and consider that he/she understands what is involved.

**Researcher's signature and date** _____

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## APPENDIX 7: DEMOGRAPHIC INPUT FORM FOR STUDY 2

1. Gender ○ Male ○ Female

2. Age
○ 18 – 20 years old
○ 21 – 30 years old
○ 31 – 40 years old
○ 41 – 50 years old
○ 51 – 60 years old
○ > 60 years old

3. Number of children ○ 0 ○ 1 ○ 2 ○ 3 ○ 4 or more

4. Marital status ○ Single ○ Married ○ Widowed ○ Divorced

5. Highest level of qualification
○ Junior or Primary and below
○ High School or Secondary
○ Higher Secondary, Polytechnic or College
○ Degree , Post Graduate Diploma or Master
○ PhD or Doctorate

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## APPENDIX 8: INTERVIEW QUESTIONS FOR STUDY 2

In support of the two research questions identified in this study, the following questions were used to guide the interviews in Study 2:

**Research Question 1: Do personal values affect work engagement? If so, which personal values have positive or negative effect on work engagement? Why and how do such relationships exist?**

Corresponding Interview Questions:

a. Considering work engagement as one's level of energy, dedication and tendency to get carried away in work, what personal values affect work engagement?

b. Among these personal values, what are the significant ones that are positively or negatively related to work engagement?

c. In your opinion, why do you think these personal values can significantly affect work engagement?

d. Can you describe examples of these relationships?

**Research Question 2: Do demographic profiles such as gender, age, marital status, number of children, and education qualification, influence the extent personal values affect work engagement? If so, why and how do they influence?**

Corresponding Interview Questions:

a. Noting that personal values affect work engagement, is it possible that any of the following demographic profiles of oneself influence the extent personal values affect work engagement? In your opinion, why do you think so? How do they influence?

i. Gender

ii. Age

iii. Marital status

iv. Parenthood

v. Education qualification

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## APPENDIX 9: SAMPLE QUOTES FOR STUDY 2

**Table 1. Sample Quotes for supporting the findings that 'PVs are related to WE'**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Male, single, and in mid 40s with tertiary education | Definitely there is a direct relationship between PVs and WE. The very nature of the facts is that organizations have different people and each performs differently. So differences in performance cannot be from the work situation and the environment as the only factors but from the individual differences too such as PVs. |
| Female, married, and in late 30s with tertiary education and one child | Individuals have their own perspectives [of work]. |
| Male, married, and in mid 50s with tertiary education and two children | Intrinsic values that one embraces would tend to determine the degree of engagement or lack of it. |

**Table 2. Sample Quotes for supporting the findings for Influence of Achievement Value Type**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.5.1.1 on 'Return for desired gains' | |
| Male, single, and in mid 40s with tertiary education | There must be a certain sense of achievement. But the measurement of that can be different. It can be material and / or non-material. Some will respond better if they get paid more as these people aspire towards that. This may be the most common. |
| Male, married, and in mid 40s with tertiary education and one child | There is a need for a certain level of satisfaction [among engaged individuals]. The satisfaction will be based on after they engaged themselves into the work, what kind of benefits they get out of it. The benefits can be monetary or otherwise. So when they know they can achieve certain level of returns, they will be motivated to be engaged in that work. |
| Female, married and in mid 40s with tertiary education and two children | In Singapore context, through my interactions from others' experiences as well, Singaporeans work mainly for money, i.e. income. Material gain for survival. |
| Corresponding to sub-section 4.5.1.2 on 'Non-material gains' | |
| Female, married, and in early 40s with tertiary education and no children | I will be proud because nobody else has done this before. I am the first person to have re-engineered the entire system after people have been using the old application for so many years. So it is the good feeling that I am delivering something that is a lot of good for my users. At the end of the day, everybody will be very happy with the product. I would feel very proud that I engineer this. So it is pride. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Male, married, and in mid 50s with tertiary education and two children | If one embraces a strong sense of achievement, one will want to portray oneself as successful by demonstrating one's competence and does not want to be perceived as incompetent. One will apply more energy and be more prepared to invest time and effort and be more persistent in one's work so as to be seen to be able to do well and achieve high standards. |
| Female, married and in early 50s with tertiary education and two children | I think it could be self-actualization. My boss is an accounting manager who is a non-degree holder. She rose through the ranks despite lacking professional training. She is now the finance account manager in my company. And she is doing way too much work. She is doing accounting work herself. Bringing work home to do and it can be weekend or public holiday. And in office, she has to attend to junior staff that do not know and ask her to teach and so on. In addition, she has to attend course, and client calls. She is doing a lot of the things herself. So much so that if she cannot finish her work, she stays at home and says 'I am on urgent leave', and I know she is doing work at home. If she is in office, she works until past midnight, 2, 3 or 4 o'clock. She is very proud of her work. She is very satisfied that she can finish all her work. |
| Corresponding to sub-section 4.5.1.3 on 'Local context & Singapore culture – Meritocracy' | |
| Male, single, and in mid 40s with tertiary education | Meritocracy pushes people and because of it, people can get a sense of achievement and the natural sense of people wanting to do better. The idea of meritocracy is when I give you a test and you do well, you get rewarded. |
| Male, married and in mid 50s with polytechnic education and two children | Singapore has this KIASU culture. If possible, we will try to outdo each other. For some other countries, if they don't have a job, they can still get paid. But there is not much of a welfare system here. If there is too much welfare, the people may tend not to work as hard. Singapore adopts a policy whereby one needs to work in order to get a |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | certain level welfare. And even if one may be given welfare for a short period, it will not be indefinite. |
| Male, single and in early 20s with secondary education | [Achievement value is common and advocated.] From house, to outside, to school, at the workplace, in Army also. |
| Corresponding to sub-section 4.5.1.4 on 'Extent of Influence on WE tempered by personal resources' | |
| Female, married and in early 50s with tertiary education and two children | If one is unable to handle personal problem, one's work performance can be affected. |
| Male, married and in mid 50s, and middle management with tertiary education and two children | If the person has enough energy and intelligence while struggling for his family, the person can still contribute. But not many people can do that. So it is very subjective. |
| Female, married and in early 40s with tertiary education and no child | It has to do with confidence. For instance, those less educated may probably feel no matter how hard they are to work this is only what can be achieved at the maximum. For those highly educated, they probably feel that they can achieve more. |
| Corresponding to sub-section 4.5.1.5 on 'Extent of Influence on WE tempered by personal goals' | |
| Female, married and in late 40s with tertiary education and one child | It could also be because whether the person learns something like knowledge. This is because the person will learn from the experience and so take up the challenge. The person is thus inspired to do it. It means the person wish to achieve something, so by hook or by crook, the person will not take time as an issue, and concentrate / focus on getting the work done until may be hunger stop the person from |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | continuing. The aim is to achieve. |
| Female, married and in early 50s with tertiary education and two children | There are these people in the twenties up to thirty years old. Most of them do not have the qualification and are still studying for their exams at different levels to be accountants. It may not be to their liking of what the manager tells them, but they would still do their work although they would complain. They got targets to meet, deadline to meet, and they would meet them. Motivation to them comes more from the pay packet at the end of the day, and the time-off the company gives to them to study and take exam. And once they have the qualification or the experience, they can take up higher positions or go elsewhere for better jobs. For those who plan to get better jobs elsewhere, the current job is a temporary job to them and they come into the current job with that mentality. |
| Male, married and in mid 50s, and middle management with tertiary education and two children | People can have different priorities in their work. They may be using current job as a 'stepping stone' to other things. Some people use their engagement with current job as a means of their career path. They want to build their career, or at least get a promotion within the company before they land on another job. And there are some whose objectives are to past time because they are doing some part-time study somewhere or they want to make sure that they have a balance between work and family life. And these people will just put in sufficient effort to be seen to be working. |
| Corresponding to sub-section 4.5.1.6 on 'Extent of Influence on WE tempered by work conditions' | |
| Male, married and in mid 50s, and middle management with tertiary education and two children | The working environment can be one where people can be more engaged in their work when there are good training programs and resources. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Male, married and in mid 50s with higher secondary education and one child | Sometimes, it is because of the kind of experience, whether the experience is good or bad. If you have bad experience, you might not put in your full effort but to just put in sufficient effort. This is because after having bad experience, you will subsequently assess whether the effort is worth it. If you do well, you may feel that others would respect you and you can feel the achievement. But once you meet a certain obstacle or bad experience, your energy level can drop or speed would slow down. You may feel that no matter how good you do, no one will appreciate. |
| | Once a person got the job, the person will check out the work environment. If the boss is not very good, the person may decide to resign and look for another job. |
| Female, married and in early 50s with tertiary education and two children | [When there are] office politics and conflicts [at work and] if one cannot get along with colleagues, one does not feel like going to work. |

**Table 3. Sample Quotes for supporting the findings for Influence of Security Value Type**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.5.2.1 on 'Achieve material gains to meet basic needs' | |
| Female, married and in early 50s with tertiary education and two children | Most people work because they need money to survive, and by working hard, they hope they can hold onto their job, get a steady stream of income, and then, can maintain their family and therefore, maintain the relationships in the family. So security I think would be a more common reason, a more common motivation for most people. |
| Female, married and in early 40s with tertiary education and no child | When I just graduated, I was enthusiastic with my work as it was my first time as a working professional. To me, I would say that it was more of security. I want to establish myself and I also want to prove my capability. |
| Corresponding to sub-section 4.5.2.2 on 'Local context & Singapore culture – Conservative' | |
| Female, married and in mid 40s with tertiary education and two children | To me, Singapore is the one country like Hong Kong, who cannot survive independently. For example, if I were to look at my relatives in neighboring Malaysia, they stay in their village or rural houses and they can be self-sustaining. For water, they can get it from the well. For food, they can grow or rear livestock. They got land and natural resources. In fact, they can do without electricity. They can use the traditional way to light up the house. TV and electrical stuff are not necessary. But if you look at Singapore, you cannot survive without paying for something. There is a need to pay for basic living. In other words, if we know that we need money to sustain ourselves, money is the main goal that everybody wants to achieve. The perception in Singapore and its culture is that no money means that you cannot survive. |
| Male, single and in mid 40s with tertiary education | I don't really blame the parents. This is because parents want the best for their kids. They are worried if they don't push the kids, the kids may lose out when they grow up. Many parents aim to send their kids to the best nursery, and then to the best kindergarten so that they can |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | have a head start. Some even supplement their kids with tuition at the nursery level. |
| Male, married and in late 40s with polytechnic education and one child | In Singapore, if you know the company is not doing well, workers are even willing to get a pay cut. When times become bad, the people understand. In other countries, the workers may go on strike if they are told about a pay cut. |
| Corresponding to sub-section 4.5.2.3 on 'Security is a basic value that needs to be fulfilled first' | |
| Male, married and in mid 50s with higher secondary education and one child | Individuals need to survive, and so security value is the first one. When you have a secured job, then you can have a life. |
| Female, married and in mid 40s with tertiary education and two children | For older generation like my father's, they will stick to one job. This is because during my father's time, his parents were poor and so his basic needs were not met yet. Thus, he was steep in security values. Regardless of what work given to them, they will be loyal to their employers as long the employers give them security. My father's generation will generally not have other aspirations except the need for a sense of security. And when we come to our generation with our parents able to afford basic security and slightly more than that, our focus on security is still there albeit slight lesser. And for the children of our generation, they already have the basic security provided by us as their parents. If they were to fail in anything they do, they can fall back on the parents. So they will go for the next level of PVs. They will go for something that is of meaning to them whatever that meaning is. They no longer look for something that just meet their basic needs. Because their basic needs are already met. They already have their sense of security. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Female, single and aged about 20 with secondary education | My friend would rather work and get on with it. She just wants to earn money. She is not aiming for stimulation or self-direction. She just wants to work to support family. Her family's background is different from ours. |
| Corresponding to sub-section 4.5.2.4 on 'No guarantee that WE will be high' | |
| Male, married and in early 40s with college education and one child | There are people that just work for the sake of security. They just need their salary. It is not in their interest to work if they had a choice. As they need a job and got nowhere to go, they just grab a job. |
| Male, married and in mid 50s, and top management with tertiary education and two children | In the workplace, there are some individuals who try not to be smart and just do a fair bit for a fair day's job. These individuals may come across as less engaged at work. This is because such an individual is only prepared to do the basic to get by each day, keeping within a comfort zone of work and trying not to do new things. This is in order not to be too smart and end up doing a lot more things. |
| Corresponding to sub-section 4.5.2.5 on 'Extent of Influence on WE tempered by work conditions' | |
| Female, married and in early 40s with tertiary education and no child | If you do not have like-minded people who think the same as you, then it will be very difficult to put any proposition across. |
| Male, married and in mid 50s with polytechnic education and two children | Sometimes in companies itself, they got their own politics. Even If one was to work very hard and be given a lot of work, one may not be promoted because the boss may not like the person for various reasons. |

**Table 4. Sample Quotes for supporting the findings for Influence of Self-transcendence Values**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.5.3.1 on 'Common resentment at unfair practices & lack of welfare at work' | |
| Male, married and in mid 50s with polytechnic education and two children | [This other group] get bonus and other additional things. They got more while this group got less. This group is frustrated because their feedback is not addressed. It has to do with work environment and unfair treatment. Individuals' welfare is important. For this example, the conditions of the accommodation provided for this group were poor. |
| Male, single and in mid 40s with tertiary education | I guess treasuring fairness is universal. This is because if you are treated unfairly at any circumstances, like you are standing a queue and suddenly somebody cuts in the queue, you will feel it is unfair. And at work, unfair treatment is one of the main grouses of people. This could be because of oneself. Everybody thinks at times they are better than everybody else. Somehow one's ego does not allow one to feel that others are better than oneself in the case of promotion. While there can be indeed unfair practices happening, the sense of unfair treatment can be subjective. |
| Married couple in the 40s with secondary education and three children | [Self-transcendence values apply] in other countries too. If the work environment is unfair, nobody will want to work there. |
| Corresponding to sub-section 4.5.3.2 on 'Being able to care for others in need' | |
| Female, single and aged about 20 with college education | Some people want to be lawyers so that they can help families. |
| Female, married and | My PV is to help people. Working in the healthcare industry gives me |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| in mid 40s with tertiary education and two children | the ability to help needy people. My WE is consequently higher. |
| Male, single and in mid 40s with tertiary education | The reason I worked 18 years as a teacher is because I want to do something good. I want to help kids find their potentials, which are real beliefs that teachers can have as their passion. They probably like kids. They want to help and develop kids. |
| | If you do not perform in a bank, what is affected is the bank profits or your performance bonus or increment. But for teachers if they do not perform, the kids in their classes for each period will be affected. Imagine each class has about 40 kids and if each teacher has 5 classes, the performance of any particular teacher may affect about 200 kids. |
| Corresponding to sub-section 4.5.3.3 on 'Obligation, duty & responsibility' | |
| Male, married and in mid 50s with higher secondary education and one child | If the feeling is that of a duty to the work, then energy level will be there with the effort. For degree holder, I would think it is feeling of their duty and responsibility especially when they are paid more, holding a title, having subordinates. They are thus likely to put in effort. |
| Male, single and in late 30s with tertiary education | If one feels that one is part of the organization, being recognized for one's contribution and feels the sense of significance to the organization, one would be dedicated. On the contrary, if one has put a lot of effort into the job but end of the day, the boss does not recognized it. One will then question why one has put in the effort, and this in turn can lead to one's disengagement at work. |
| Female, married and in mid 40s with secondary education and three children | It is not just work is work. Work is something like you got to contribute. You got to be responsible. You got to just put all your might in it. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.5.3.4 on 'Extent of Influence on WE tempered by work conditions' | |
| Male, married and in late 40s with polytechnic education and one child | I think WE depends on both sides – the boss and the employees. It is not the employees alone. I think if the boss is willing to treat the workers well, I think the workers would be willing to engage more. |
| Female, married and in early 40s with tertiary education and no child | If I recognize that this person is trying to help the team, I will also feel the need to chip in to contribute to the effort as well. If you have such a team of people who share the same value, then of course, the infectious like-minded people can really multiply and it can be positive for work. However, there are some who feel that 'why am I the only person so bothered about a particular problem at work.' They feel that 'nobody care, so why should I care'. Thus a negative impact is triggered since one person does not care, the next person also does not care. |

**Table 5. Sample Quotes for supporting the findings for Influence of Hedonism Value Type**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.5.4.1 on 'Happy at doing the work' | |
| Male, single and in mid 40s with tertiary education | At that time, there was no career route to be Master Teacher, now there is. Last time was simply for good teacher to promote to Head of Department, Vice-Principal, Principal and then go ministry. And that's the route. So now the thing is when one becomes a HOD, one would teach less which is not what I like. So on the contrary, one feels like being punished as one's is given lesser opportunities to do something one likes, which is teach. So the reward for good work ended like punishing because I have to do stuff which you don't really like or good at. I would consequently not be happy doing it. And worst still, because I am disillusioned and yet expected to inspire other people, I can't. |
| Male, married and in mid 50s with higher secondary education and one child | I think happiness should come in first. Then [secondly], one would think about achievement. If happiness did not come first, one would not focus on achievement. And energy would be the third thing to be put in after happiness and achievement. When one is happy, one can forget all other things and be focus on a goal or achievement. |
| Corresponding to sub-section 4.5.4.2 on 'Sensuous gratification' | |
| Female, married and in late 30s with tertiary education and one child | Individuals who value hedonism tend to say they want their own free time and enjoyment in life, rather than working so hard for monetary achievement. For sensual pleasure and self-gratification. |
| Male, single and in late 30s with tertiary education | I have been in many cases like this before. I get so engrossed in doing certain things that I refuse to stop, wanting to perfect it and prove that it will work. |
| Female, married and | To me it is the interest. Let's say one is doing computer |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| in late 40s with tertiary education and one child | programming and the person is trying to get it done. Trying to program until one can get it to work. That can take some time. That can go past normal hours. By so doing, one wants to achieve success at the computer programming. |
| Corresponding to sub-section 4.5.4.3 on 'Does not necessary lead to WE because of subjectivity' | |
| Female, married and in late 40s with tertiary education and one child | There are people who like certain kind of work only. When they are tasked to do a piece of work rather than spend time to do the kind of work they like, the energy expanded by them will not be there. The energy expanded is based on what the person like to do. |
| Male, married and in early 40s with college education and one child | Regardless of education level, age or gender, it got to do with interest. Whether one likes the job. If one has interest in the job, one will tend to achieve something because one already likes it. One may find it a pleasure to work on something one likes. What one likes or is interested in depends a lot on the person. |
| Male, married and in mid 50s, and top management with tertiary education and two children | Individualism can be either way. Because they can fall into very engaged, let's say they are motivated or driven by something which drives them in a right way… and if it goes against their self-interest, then they will be disengaged. They value their own sense of freedom. So it can go the other way and make them disengaged. For instance, somebody who harbors a sense of self-gratification, very inward looking such that they can swing either way. You give them the right way, they can die for you or it can be the other way round. |

**Table 6. Sample Quotes for supporting the findings for Influence of Other Value Types**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.5.5 on 'Other Value Types' | |
| Female, married and in mid 40s with tertiary education and two children | I have some staff that has to have whatever meaning they can find in their job. Could be a combination of the values and their ideals. They no longer look for something that just meet basic needs because the basic needs for them are already met, i.e. they already have their sense of security. |
| Male, married and in mid 40s with tertiary education and one child | All the PVs are relevant to WE. For engaging in work, there is a need for certain level of satisfaction. The satisfaction will be based on after they engaged themselves into the work, what kind of benefits they get out of it. |
| Female, married and in mid 40s with tertiary education and two children | Definitely work experience plays a part. It goes back to the component of job position as well. If you start from lower management to senior or middle to top, all these depend on the work experience. As you are more exposed to the kind of work that is available to you, it will change the perspective of what you need to do. |
| Corresponding to sub-section 4.5.5.1 on 'Self-direction value type' | |
| Male, married and in late 40s with secondary education and three children | Self-direction is a driver for WE because in WE, the individual has to be a willing partner. For one to be willing, there is some level of independent thoughts to accept the work to be done and have in mind how to do it. There is self-direction because that will explain why one will be willing to put in effort or take pride or be absorbed when they find the work is of interest to them. In self-direction and WE, one will figure out how to handle challenges, take initiative and be creative to perform at work. |
| Male, married and in mid 40s with tertiary | Sense of achievement is different when a team completes the project in on its own. Then they will feel the achievement once the job is |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| education and one child | accomplished. My side does a lot of projects. Every project can last a few weeks or a few days. I think most of the staff that has joined me after a while will realize that the achievement comes from seeing the project from head to toe and then completes it. Once, they complete it and the customers are satisfied, many of them will feel satisfied. |
| Male, single and in mid 40s with tertiary education | I think self-direction can probably be the biggest thing management can give to employees. This is because this approach allows the individuals to find their own. |
| Corresponding to sub-section 4.5.5.2 on 'Stimulation value type' | |
| Female, married and in early 50s with tertiary education and two children | Those who are higher educated may abandon tradition, tend to be more confident and value stimulation more. One will be looking for challenge for something that matches one's qualification. Tendency to do a bit more, not just within one's scope but to challenge oneself more. |
| Female, married and in late 40s with tertiary education and two children | A person who is looking at excitement, novelty and challenge would not be working with little energy. For someone who likes challenges, one would response with energy to show the ability to take on the work. |
| Female, married and in early 40s with tertiary education and no child | Over the years, especially as of now, I feel that it is more of stimulation in that I want challenge. Because I have met my basic needs. Now, I also want to have personal success not so much of status and prestige but more of stimulation. It is not to prove myself but rather of passion in my work. I would want to continue to work because I like my work. It is my passion. I feel that I am satisfied when I have achieved something. And every time if I managed to do more than what was previously completed, I would then feel very self-fulfilling. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | Each time I completed the project, I feel that this is what I have achieved. But if the next project were going to be the same nature, I would not feel satisfied or feel challenged as well. I want to do something that is more difficult than the previous one I attempted before. So it keeps me motivated when the bar is raised. |
| Corresponding to sub-section 4.5.5.3 on 'Power value type' | |
| Female, married and in late 40s with tertiary education and one child | For those who are higher educated, they expect a certain level of pay and to me it is also status in whatever job they take on. They will not accept any job. They will see whether it is compatible with what they have put in. So may have to do with power. |
| Female, single and in late 20s with tertiary education | For me, it is also social status. It is the power. Once you got the social status, i.e. reached that stage, you can have the authority and autonomy to do things. Then you will feel inspired. |
| Male, single and in late 30s with tertiary education | While the primary PVs depend on the person, generally, achievement is the main one. If the company is able to motivate them to climb the corporate ladder, then they will go for power so as to climb to the highest post by sacrificing other areas like family, friendship or morale or values so that they can achieve higher up the ladder. |
| Corresponding to sub-section 4.5.5.4 on 'Conformity value type' | |
| Female, single and aged about 20 with college education | In the admin work I used to work, there is not much achievement required but more of conformity. One or two of my fellow part-time colleagues will work very hard so that they can get a permanent job at this workplace when they graduate. For these colleagues, ability to get a permanent job is their desired kind of achievement in this case. In other words, they are using current effort as a stepping-stone to get a permanent job at the workplace. |

| PARTICIPANT'S PROFILE | QUOTES |
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| Male, married and in mid 50s, and top management with tertiary education and two children | Somebody who respects conformity and perhaps, universalism will probably tend to be more dedicated because they will not want to go against organizational directives or their superiors' instructions. Because they are brought up not to upset or violate things. |
| Female, married and in early 50s with tertiary education and two children | These are people in the twenties up to thirty years old in the accounts department. Most of them do not have the qualification. They have not reached the qualification yet [to be accountants] because they are still studying for their exams [in accounting] at different levels. So for them, it is conformity. What the manager tell them, it may not be up to their liking. They would complain, complain, complain, but they would still do their work. They got targets to meet, deadline to meet, they do. So that's conformity. Motivation comes more from the pay packet at the end of the day, more of conformity; just conform, follow the rules, get their work done. |
| Corresponding to sub-section 4.5.5.5 on 'Tradition value type' | |
| Male, married and in mid 50s, and top management with tertiary education and two children | Now that I want a family, as I want things to be better for my family, I become more engaged. For instance, the person may harbor traditional values that now I am married with a housewife who takes care of the home, I will have to put in energy and be very engaged. |
| Female, married and in mid 40s with tertiary education and two children | For someone without children, a man will tend to find things that are more self-fulfilling like stimulation and self-direction. But for the person with children tend to go for security. They will conform, be traditional and do anything they can to play safe to support security. I have seen a person who has been in the job for 20 to 30 years and stuck at that position. He does not want to move. He says that as long as I do my work right because I got children to support. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Male, married and in mid 50s, and middle management with tertiary education and two children | Because when in senior position, one is likely to have work long enough and would like to create more of universalism, benevolence, security, conformity and tradition values in order to create stability for the mass of the staff. There is the emphasis on tradition and security so that the staff turnover won't be so high. |
| Corresponding to sub-section 4.5.5.6 on 'Extent of influence depends on job requirements' | |
| Male, married and in mid 50s, and middle management with tertiary education and two children | Each job has their own targets, so all is very objective driven kind of things. And these actually translate to what kind of values required at that point in time. |
| Female, married and in mid 40s with tertiary education and two children | For lower management, conformity is higher because there are so many of them in a pyramid kind of structure whereby the lower level tend to be more than the higher level. They are likely to make sure that among themselves and colleagues, they behave and do the work in almost the same way. They try not to do things that will attract or rock the boat too much. When you are or want to get to middle management, you tend to know that you have to rock the boat more and make yourself more significant. For those in leadership positions, they may not conform too much and they have to appear different. More self-directed. More independent. The moment you get to top management, you start not being conformist. Because you have to be different. If not, how to set the organization to have the competitive advantage? You got to be different from the rest. The shareholders expect it. For instance, coming out with new products. If you look at Steve Jobs and Bill Gates, they are non-conformist. Otherwise, how they set the trend. They have to be different. And their self-direction is also different. They are very independent. They are thought leaders. They are not following others. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Male, married and in mid 40s with tertiary education and two children | Some occupations just have a bare requirement. To me, it all depends. Factors like society requires certain jobs to have certain PVs. So end up, you are force to have that. |

**Table 7. Sample Quotes for supporting the findings for Influence of Gender**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.6.1.1 on 'Gender does affect with men more engaged at work' | |
| Male, married and in early 40s with college education and one child | [Traditionally,] women would have to go back and take care of children and cook. |
| Male, married and in mid 40s with tertiary education and one child | Some of the reasons are family needs and responsibilities. For men, it would be fulfilling all the monetary needs of the family most of the time. For women, they might not so much come into work, [but instead] they might focus more on the family. So different values when they look at it. Some of them, their children are more important and thus, their motivation is more from the children. For guys, they need to support the family and so different kinds of stimulation. |
| Female, married and in early 40s with tertiary education and no child | Guys are always the breadwinners. |
| Corresponding to sub-section 4.6.1.2 on 'Women tend to value security more and achievement less' | |
| Female, married and in late 30s with tertiary education and one child | Women will not work as hard. They will spend more effort and time with their children. Men are not as affected by the number of children. This is because Singapore's labor policies have so far given the benefits and leave for taking care of children to the mother and not the father. |
| Male, married and in mid 40s with tertiary education and one child | Women need to feel more secure. For guys, somehow not so much. For example, when you ask women to go overseas, they tend to hold back. For guys, they got no problem. When I tell them the job requires to go overseas, he can say ok good no problem. For girl, she |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | will say cannot and is worried. |
| Female, married and in mid 40s with tertiary education and two children | For women, it is a bit different. From my experience and contact with other female colleagues, women will try to find meaning in the job. They will look for a sense of security in a job more than men. A male will tend to look more for a sense of achievement. Women do strive to achieve too but that is not their main goal. Achievement is a by-product from what I need to do to get the security from the money that comes with it. For example, among my female colleagues in the medical service industry, the goal at the end of the day is not to get a senior staff nurse position by a certain time. If they were told they were not promoted, it would not be surprising to hear them say it was ok and that they would be willing to wait for another year. This is unlike the male colleagues in the same medical service industry who will get very upset and may quit the job if they do not get promoted. Thus, their engagement and outlook are different. |
| Corresponding to sub-section 4.6.1.3 on 'Gender may not affect WE' | |
| Female, married and in early 40s with tertiary education and no child | I have seen women who have place priority of their family over work but I have also seen women who place work as priority over their family. So in my current workplace, I would say from my line manager and myself, it so happens that we are all ladies, and the rest of the people whom we are managing are all guys. Thus, I feel that it depends on what they want to achieve. |
| Male, married and in mid 50s with polytechnic education and two children | In olden days, guys need to work while women need to stay home to take care of family. However today, the increasing cost of living obliges women to work to bring additional income to the home [while making alternative arrangements to take care of the family] unless the income by the men is able to support the home. |
| Male, married and in mid 40s with tertiary | I notice as time goes by now, the line is getting blur in the sense that more women are getting more daring because of the upbringing and |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| education and two children | the culture. |
| Female, married and in mid 40s with secondary education and three children | Last time, it has been socially the case whereby the men are expected to be the one to work. But now, it is a social case of gender equality. Last time, society expects women to be at home and they lack the opportunities to study and work. But now, it is socially acceptable for women to fight for gender equality at work. |

**Table 8. Sample Quotes for supporting the findings for Influence of Age**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.6.2 on 'Age' | |
| Female, married and in late 30s with tertiary education and one child | Age does make a difference [to PVs]. Because as one ages, one's values can change as the environment changes and the conditions change. So therefore, one would have to adjust oneself accordingly. |
| Male, single and in late 30s with tertiary education | When I was younger and started to work, I am inspired to be the successful people I see in terms of positions and income. However, once I started to work, I ask myself is this really what I want in life at the end of the day? Just about making money? Having the position and power or things like that? Is there quality in life or not in trying to achieve all these? |
| Corresponding to sub-section 4.6.2.1 on 'Life stage' | |
| Male, married and in mid 50s, and middle management with tertiary education and two children | I think it depends on circumstances they are in. These are all the distinct values of human. But each one's focus varies differently at different times. At certain stage of their life, they will focus more on achievement type. So when they do work, they will take the initiative to do certain things, depending on their stage of time. |
| Male, single and in mid 40s with tertiary education | Values change over time and depend on the situation. [It can be because of] the more experience you have, or you have a family and more responsibilities. Thus, it depends on the life stages. It is no longer about oneself. Considering that there are different values one can have and can be important at different stages of one's life because different things happen in one's life. |
| Female, married and in late 40s with tertiary education and two children | I think the stages of life in relation to values are like a 'bath tub'. When one is young in the early stage in life, the values one has tend to be self-enhancement and openness to change in nature. At the middle stage in life, one's values may become self-transcendence and |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | conservation in nature. When one is older in the later stage in life, one may return to treasure values that are self-enhancement and openness to change in nature again. This is because when one is in the middle stage in life, one may have young children and other responsibilities. When one is in the later stage in life, that is the age of the empty nester, whereby the 'second honeymoon' comes, and one can focus. This is because by then, one's children would be older and one can be as good as being singles albeit not young but 'free' and with experience. Employers just need to match this older group of people with jobs that motivate them. |
| Corresponding to sub-section 4.6.2.2 on 'Young achieves for security if basic needs are not yet met' | |
| Female, married and in early 40s with tertiary education and no child | When I just graduated, I felt that I was very enthusiastic, as I was a working professional for my first time. To me, I would say that it was more of security. I want to establish myself and I also want to prove my capability. |
| Male, married and in mid 50s, and middle management with tertiary education and two children | For a person that is young, he would be concentrating more on showing results, prove to the superior. |
| Female, married and in mid 40s with tertiary education and two children | I had an ex boss who was a psychiatrist and worked for security reasons. And now that he reached 40+ years old, he says he has reached a point in life whereby he has earned a lot of money, has a landed property and his children are doing well in school. He felt this point reached is where he wants to do something good for the society whether it is within the job or outside the job. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.6.2.3 on 'Young achieves for other values or interests if basic needs were already met' | |
| Male, single and in early 20s with secondary education | I will go for achievement, hedonism, self-direction and stimulation, and also benevolence, universalism and tradition. Go for stimulation, something challenging, also some independence, freeplay and of course, pleasure. But not many people get the job they wish. They will have to think before they choose. It may be different from another family. Must see the background. I have a friend that just want the money to support family and that's all. The values are focused on supporting the family towards that thing which is called money. That is why even though my friend like working in the aerospace sector, he is now working as a security guard. He does so just for the sake of supporting the family because of his circumstances. For us, if we can go higher, we will go higher. I will pursue until I get what I want. From there, there will be some rethinking and see whether can still achieve anymore or is already a stable job and a fun kind which is hedonism to pleasure myself. Fun is quite important. I need some fun. |
| Female, single and aged about 20 with secondary education | I will take achievement and also stimulation and something exciting in the work I want. But these preferences are not common because for work, not many people get the job they wish. Then once they don't get the job they wish, they will be de-motivated. Some people have no choice. Different families have different perspectives. I know my friend does not think the same way as me. She rather work and get on with it. She will just put in energy and no dedication. She just wants to earn money. For my friend, she does not have a sense like stimulation or self-direction. |
| Female, married and in mid 40s with tertiary education and | Their parents may have met their basic needs and thus, provide them with the sense of security. The needs include providing a roof over their head and food on their table. As a result, these younger workers |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| two children | can be more independent and fulfill their aspirations. However, once they have a family, have their own houses and have responsibilities without the support of their parents, they may realize that they need to go back to ensure their security is taken care of. |
| Corresponding to sub-section 4.6.2.4 on 'Dependence on generations' | |
| Female, married and in early 50s with tertiary education and two children | It is more of the times we grow up. I think the era which we grew up in is very important because I have heard what young people who are in the 20s saying that their seniors were willing to work overtime while his peers of the same age were not willing to work overtime; not willing to put in the extra hours. Thus, the values that drive them in their work are different. |
| Male, married and in late 40s with secondary education and three children | Nowadays, if you look at young ones, like the current generation, they would depend on their parents. Thus, they may not be steeped in security values. They are not working because of security. It is already there. The parents are providing the backup. The standard of living is already there. From my encounters with various young people, they mention they are prepared to change job once they received their year-end bonus if they find their work got no career prospects. |
| Male, single and in mid 40s with tertiary education | In our parents' time, you work in one company for your whole life. You look for job and work until you retire. Then for our time, most of us stay in the same line or industry although not in the same company. This is because we were told by our parents to study hard so that we can get a job and then look after them. We were raised up with this concept. Although we may see and do things a bit differently from our parents, the bits of this concept are still at the back of our heads. So when we find a job, we look for job security. The young today are apparently not so concern with job security. They change jobs not because they are flaky but because for them, they want to continuously have that sense of vigor. If they were to |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | stay at one place, they fear that the rot sets in. So to them, they see a need to change job. |
| Corresponding to sub-section 4.6.2.5 on 'Older workers tend to be steeper in self-transcendence and conservation values' | |
| Male, married and in mid 40s with tertiary education and one child | Younger ones will be more daring but they do not sustain long. The older ones will be more careful, more detail and dedicated in their jobs. The older ones are more experienced and tend to have more pride in their work. They will complete the job most of the time no matter how harsh the environment is. The younger ones may quit if the environment is harsher. |
| Male, married and in mid 50s, and top management with tertiary education and two children | As one grows older, one becomes more understanding, and shows appreciation and focus on welfare, and want people to respect them, and also focus on security whereby one would not want to take high risk. So because of that shift in values, it will affect the degree of vigor, dedication and absorption. |
| Male, married and in mid 40s with tertiary education and two children | As you grow older and more experienced, you can become so comfortable with the role, you may not want to do new things. There will be the tendency to conform and the sense of security becomes very strong. If one is already earning a certain income, one may be adverse to the idea to start from scratch in a new job or position at work. |

**Table 9. Sample Quotes for supporting the findings for Influence of Marital Status**

| PARTICIPANT'S PROFILE | QUOTES |
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| Corresponding to sub-section 4.6.3.1 on 'Marriage can affect' | |
| Male, married and in late 40s with polytechnic education and one child | Definitely got difference. Unmarried workers just need to think for themselves. Married workers need to think for the spouse in whatever the worker does. |
| Female, married and in mid 40s with secondary education and three children | The differences in PVs that drive WE between singles and married individuals are the same as those with and without kids. Both groups can be engaged at work for different reasons. Singles might work hard to save up for the future. Married got to focus on their family. |
| Male, single and in mid 40s with tertiary education | Personally, people want to get married because they want to start a family. Even without kids, they are still responsible for their partners. Security will thus play a part. The reason why I can go around and do social work and work part-time or contract basis is because I am still a single. I am not responsible to anybody. I can be self-directed and strive for non-material achievement. After marriage, I will not be able to have much time to do social visit at night compared to when I am single now. It is because I do not want to, as there are things directly in life that are more important after marriage. |
| Corresponding to sub-section 4.6.3.2 on 'Marriage may lower WE' | |
| Male, married and in mid 50s, and top management with tertiary education and two children | When one is married, having children or not, it can lead to less engagement because married people may be concern about quality of work-life balance and may just do enough so as to have quality of life with family. And so may not be too concern about fast track to promotion and one can be ok with oneself as long one has delivered enough. So it is a case of staying just sufficiently engaged and may be not absorption. It is a case of giving basic amount of energy, and really not additional energy. So the person is prepared to be |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | mediocre, doing enough so as not to be sacked. |
| Female, married and in late 40s with tertiary education and one child | For singles, they have more drive. For those married, they have to balance work with family. Married personnel have not much time and that part about absorption would be affected. They would have to deviate. For singles, they tend to be able to able to meet the expectations like in information technology sector where long hours are required. |
| Female, married and in late 30s with tertiary education and one child | Singles can work harder than married. It could be because of pride, because of self-achievement. Married individuals may not work as hard. There are other priorities in life. While there may be married responsibilities, they may generally work because they need to work for sufficient material gains. |
| Corresponding to sub-section 4.6.3.3 on 'Marriage may increase WE' | |
| Male, married and in mid 50s, and top management with tertiary education and two children | Now that I want a family, I want things to be better for my family. I will then become more engaged. I may harbor traditional values because I am married with a housewife who takes care of the home, and I will have to put in energy and be very engaged. Thus, the stimulation in excitement and challenge come not from the workplace but from the family. The family gives the challenge and vigor for me to put in more energy into the organization and thereby, in turn, enjoy and reap the benefit of work which in turn benefits the family. |
| | A possibility is that an unmarried person may tend to be 'happy-go-lucky', driven by hedonism and this may make the person less engaged. But if the person is married, the person may feel the need to value security and may even feel steep in tradition and conformity. The person may then realize the importance of staying engaged. The person will feel that the person cannot 'play a fool' and take care of only oneself because there is a family. Thus, the married person may |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| | be more engaged. Thus, there can be shift or change in values from unmarried to married. |
| Female, married and in late 40s with tertiary education and two children | I think married individuals would be more engaged than singles. I think very broadly married people will have values of universalism, benevolence, tradition, conformity and security while unmarried will have values of power, achievement, hedonism, stimulation and self-direction. |
| Corresponding to sub-section 4.6.3.4 on 'Marriage may not affect' | |
| Female, married and in early 50s with tertiary education and two children | Before I got kids, it does not matter because I will make sure I finish my work. I even brought work home and when husband was sleeping, I would continue to work. So married and unmarried does not matter. |
| Male, married and in early 40s with college education and one child | There may not be much difference in what PVs relate to WE between singles and married individuals. However, there can be differences when the individuals have children. |
| Male, married and in mid 50s with polytechnic education and two children | Singles have no children or major responsibilities to others. So what drive them at work could be their interests. If there is need to sustain the interest, they will want to work and earn more. Want to be happy and tend to earn more. For married, same thing. If they have no children, there may not be much difference from those who are singles, i.e. depends on their interests. |
| Corresponding to sub-section 4.6.3.5 on 'Depends on circumstance of individuals after marriage' | |
| Male, single and in late 30s with tertiary education | For a married couple, if the wife has a better job position than the man. The role [as a bread winner] in the family can sometimes be reversed. The male may instead give up his job and take over the role of the lady at home. |

| PARTICIPANT'S PROFILE | QUOTES |
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| Female, married and in mid 40s with tertiary education and two children | Speaking from experience, when you are married, you got two incomes. So the other half might be more willing to try something and be more entrepreneurial and daring. This is because if it fails, there is still income to survive. There is a safety net. When you are a single and supporting yourself, you may be scared to venture out. But when you are married and provided your partner is very supportive, you may be able to venture. I do not think this is uncommon. I have seen quite a few married couples doing this although not a lot. In our case, the income was sufficient to meet our security needs. Thus, I was more daring. If you ask me to do so if the incomes just meet, I would not dare. |

**Table 10. Sample Quotes for supporting the findings for Influence of Parental Status**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.6.4 on 'Parenthood Status' | |
| Female, married and in early 40s with tertiary education and no child | I have seen people who have placed priority of their family over work but I have also seen people who placed work as priority over their family. |
| Male, married and in mid 50s, and top management with tertiary education and two children | Back in my mind, when one is married, having children or not, the values may shift but the level of engagement can either be more or even be less. |
| Corresponding to sub-section 4.6.4.1 on 'Having children may increase WE' | |
| Male, married and in mid 50s with polytechnic education and two children | For those with children, they would need to cater for sufficient money for the education of the children. This money is necessary for the future of the children. |
| Male, married and in late 40s with polytechnic education and one child | With more children, they would be more concern in terms of financial issues unlike those without children. More children will be more achievement oriented. Those without children will be a bit like those who are singles, very self-directed. They might still want to achieve. It depends on their interests. |
| Female, married and in mid 40s with tertiary education and two children | Person with children tends to go for security. They will conform, be traditional and do anything they can to play safe to support security. I have seen a person who have even been in the job for 20 to 30 years and stuck at that position. He says he does not want to move as long as he does his work right because he has children to support. |
| Corresponding to sub-section 4.6.4.2 on 'Having children may lower WE' | |
| Male, married and in | Some of those individuals with children will say as far as they are |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| mid 50s, and middle management with tertiary education and two children | concern, they will make sure that they have a balanced family life and work life. They will put in enough quality effort to finish the work on time. But they would not put extra aspect of it. |
| Male, married and in mid 40s with tertiary education and one child | For those workers with children, we got to give them a bit of flexibility because sometimes with children depending on their age, you got to give them time off. For example, I got this lady working for me. I let her work at home if necessary, i.e. flexible working hours. I have to adapt to her personal needs. If not, she will resign. |
| Female, single and in late 20s with tertiary education | I have come across parents at work who are not so responsive. This is because of their commitment at home. That is why it is affecting their work. |
| Corresponding to sub-section 4.6.4.3 on 'Individuals without children tend to value self-direction and own interests' | |
| Male, married and in late 40s with polytechnic education and one child | Those without children will be a bit like those who are singles, who are very self-directed. They might still want to achieve. It depends on their interests. |
| Male, married and in mid 50s with polytechnic education and two children | For no children, they do not have any burden. They only have to be responsible for their own sustainability. So they might not want to earn as much as those have children. They earn more to satisfy their interests or hobbies. |
| Female, married and in mid 40s with secondary education and three children | The reasons for WE would be different between those with children and those without children. For no children, they will try to achieve for oneself and pleasure. They will value self-direction. For those with kids, they will value mainly security. |

**Table 11. Sample Quotes for supporting the findings for Influence of Education**

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Corresponding to sub-section 4.6.5.1 on 'Higher educated individuals have high personal resources' | |
| Male, married and in mid 40s with tertiary education and one child | I think there are differences in the values because of education. Those who are more educated somehow do things differently from those who are slightly educated. I think this is because of the number of years of molding. Somehow, they think differently from those who have lesser years of education. They are able to do much better work, better research and more thorough. They are more resourceful. |
| Male, single and in late 30s with tertiary education | For those higher educated, I would think the fact that they are already going at that higher level, they are trying to achieve something for themselves. You have always been studying and progressing and progressing. I would say that it is kind of related. |
| Female, married and in early 40s with tertiary education and no child | For those higher educated, the fact that you are in front, you want to always be at the top. It has to do with confidence. |
| Corresponding to sub-section 4.6.5.2 on 'Higher educated tend to value self-enhancement and openness to change' | |
| Male, married and in late 40s with polytechnic education and one child | Higher educated individuals tend to be more capable, more independent in thoughts and action, more creative and exploring at work. |
| Female, married and in late 40s with tertiary education and one child | Whatever job they take on, they expect a certain level of pay and to me it is also status. Thus, they won't accept any job. They would see whether it is compatible with what they have put in. |
| Female, married and in early 50s with tertiary | Those who are higher educated may abandon tradition. They will tend to value stimulation. The more educated you are, the higher |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| education and two children | would this factor. You would be looking for challenge for something that matches your qualification. |
| Corresponding to sub-section 4.6.5.3 on 'Lower educated tend to value conservation' | |
| Female, married and in late 40s with tertiary education and one child | For those lower educated, they are not studying anymore and they need to earn. The idea is to get a salary for stability of self to meet the immediate needs. |
| Female, single and aged about 20 with college education | I think for individuals with lower educational qualification, they would value security, as they want to work hard to keep their job. Without a 'piece of paper', they have to 'bang' on something else. |
| Male, single and in mid 40s with tertiary education | To the people who are lower in the education levels who I met as part of my social work, security is the one and only thing. They do not care about anything else. They are worried about the next paycheck that is coming. For those driven by desperation after being without work for a long time, any paying job is a paying job. They are not really bothered about whether if they will be earning less than someone as long the pay is sufficient to pay for basic things. |
| Corresponding to sub-section 4.6.5.4 on 'Lower educated may value achievement too' | |
| Female, single and aged about 20 with college education | For those who are lower educated, achievement can make up for their lack of self-security. They value achievement too because they want to rise up the career ladder. |
| Male, married and in mid 40s with tertiary education and one child | Lower educated may also want to learn. Those staff that I employ hope management will give them opportunity to upgrade themselves. This also helps to take care of their morale, as they may feel not so confident in their job when they compare with others who are better trained. |
| Male, married and in late | For the lower educated during certain phase or stage in life, one |

| PARTICIPANT'S PROFILE | QUOTES |
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| 40s with secondary education and three children | may experience and realize that he needs to be independent and support oneself. One will then strive to meet his goal and satisfy his esteem. |
| Corresponding to sub-section 4.6.5.5 on 'Lack of education may not matter' | |
| Female, married and in mid 40s with tertiary education and two children | I won't put too much emphasis on education because education is just a formal way of learning something. Those that study formally just get their knowledge faster because it is easier and accessible to them. I do know people who don't have the degree or masters who can do better than those who have them. Values are because of life experiences and what the person experience in life and not just tied to education. If a person goes to any higher education, what values they develop is from a lot of readings, a lot of things they are exposed to through their education. What I am seeing is that all these exposure could also be gotten by someone who did not go through formal education and get it through some other ways. It is more of the amount of exposure you get. Education gives you more exposure. The higher you study; you are exposed to more knowledge and new ideas. It does not mean that people who do not go through all these education, their values will be lesser. It is just that if this person has more life experiences, he may even have the same values as the one who is educated as well. So it does not mean he is not so achievement-oriented, self-directed. He can still be very stimulated. He can be good at certain skill sets and do very well in them. You look at Bill Gates. Bill Gates did not complete his education. While that is in Western context, in Singapore context, I have seen people like my ex boss who was put in a management position simply because of his street-smartness. He knows how to get things done. He is self-directed and got universalism and everything. And it is not through education but his life experiences. |

| PARTICIPANT'S PROFILE | QUOTES |
|---|---|
| Male, married and in mid 50s with polytechnic education and two children | If they are their own boss, education does not matter. They are already in charge of their own company. Education may not play a part if the individual is already quite capable. |
| Male, married and in early 40s with college education and one child | For engagement level, it is not necessary that lower educated individuals may not be engaged at work. Certain level or certain job does not need the level of education. Thus, lower educated individuals can still do very well and be engaged at work. They can be engaged because of interest. It is whether they like the job. Whether they find pleasure in. If they have interest in it, they would achieve something because they already like it. |