

**Work-life balance in the career life stages of female engineers:
a hermeneutic phenomenological perspective**

by

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DECLARATION

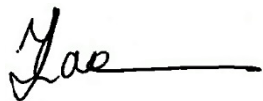
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I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been clearly indicated and acknowledged by means of complete references.



27 November 2017

Signature

Date

IMPORTANT INFORMATION TO NOTE

- 1) This dissertation of limited scope consists of four chapters, namely:
 - Chapter 1: Scientific orientation to the study
 - Chapter 2: Literature review
 - Chapter 3: Research article
 - Chapter 4: Conclusions, limitations and recommendations
- 2) A complete reference list is provided at the end of the dissertation
- 3) The editorial style and references are based on the format as prescribed by the latest publication manual of the **American Psychological Association** (APA).
- 4) Chapter 3 consists of a research article which was based on the qualitative research guidelines as specified by the *South African Journal of Industrial Psychology* (SAJIP) and which contains a separate reference list.

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“For I know the plans I have for you” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future. Then you will call on me and come and pray to me, and I will listen to you. You will seek me and find me when you seek me with all your heart” (Jeremiah 29:11–13).

SUMMARY

WORK-LIFE BALANCE IN THE CAREER LIFE STAGES OF FEMALE ENGINEERS: A HERMENEUTIC PHENOMENOLOGICAL PERSPECTIVE

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The purpose of this study was to explore the work-life balance experiences of female engineers as they progress through various career life stages. Research has demonstrated that female engineers experience unique challenges as a result of gendered norms within male-dominated occupations, with changing life-roles, needs and expectations across the various career life stages, impacting how they negotiate and perceive work-life balance. A qualitative research approach was followed using a hermeneutic phenomenology paradigm that employed a multiple case study approach consisting of semi-structured interviews with nine female engineers across three career life stages. The findings of the study confirmed current research into work-life balance, highlighting that work-life balance needs and expectations are different across the lifespan and are particularly affected by the changing nature of the work role within the lives of female engineers. Companies should consider changing their organisational culture to acknowledge the needs of female engineers in both family and work domains.

Keywords: Work-life balance; work-family conflict; work-life interface; career life stages of women; Kaleidoscope Career Model; role salience; career centrality; female engineers; women in male-dominated occupations; hermeneutic phenomenology; interpretative phenomenology

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CHAPTER 1

SCIENTIFIC ORIENTATION TO THE STUDY

“To dwell is to garden” – Martin Heidegger

In this dissertation I focused on the work-life balance of female engineers in different career life stages, from a hermeneutic phenomenological perspective. As the quote above mentions, my aim with this research was to “dwell” and “dig deeper” into the lived experiences of my participants, in an attempt to unfold and perhaps uncover new meanings of the phenomena studied. According to Lavery (2003), all understanding is connected to a given set of fore-structures, including one’s historicity – which cannot be eliminated. I endeavoured to be open and transparent in my approach, highlighting possible ways of how my own perceptions of the phenomena could impact on this study.

In this chapter, I begin by highlighting the importance of work-life balance among women within male-dominated occupations, as well as outlining the career life stages of women. I outline the research aims and problem statement of this study and discuss the paradigms I identify with and ultimately selected in terms of their ontological, epistemological and methodological assumptions. I highlight the research design chosen and discuss sampling, data collection and data analysis, as well as strategies to ensure quality and ethics. I conclude this section with a chapter layout of my dissertation, as well as a chapter summary. With this chapter, I truly hope to convey my passion and interest in what I believe is a very important subject within the field of industrial and organisational psychology.

1.1 INTRODUCTION

Demographic trends in terms of home life have changed considerably over the last few years. Trends such as an increase in working mothers, women in non-traditional occupations, dual-earner couples, single parents, blended families, employees with elder-care responsibilities and the increased involvement of men in the family structures, have all increased the relevance and importance of balancing work and life roles for many employees (Koekemoer & Mostert, 2010; Potgieter & Barnard, 2010; Soni, 2013; Steyl & Koekemoer, 2011). Research has also shown that the challenge

of balancing the demands of both work and family life has become increasingly prevalent among women over the last few decades as women's participation in the workforce has continued to grow (Franks, Schurink & Fourie, 2006; Grady & McCarthy, 2008; Mostert, 2009; Opie & Henn, 2013; Van Aarde & Mostert, 2008; Whitehead & Kotze, 2003).

Despite the growth in the employment of women, societal gender norms still dictate the work role as men's primary domain, while women are still seen as the primary caretaker of the home and children in addition to their work roles (Opie & Henn, 2013; Sullivan, 2015; Toffoletti & Starr, 2016; Wattis, Standing & Yerkes, 2013). This pressure to meet the demands from both work and caretaker roles makes work-family conflict almost impossible to avoid for most women. Simultaneously performing the role of employee, parent and spouse often results in conflict and role overload as women struggle to manage the multiple demands and expectations placed on them in these various roles with reference to time, energy and emotional commitment (Franks et al., 2006; Mostert, 2009; Opie & Henn, 2013; Ruppner & Huffman, 2014).

The struggle of women to manage these multiple responsibilities has resulted in fewer women occupying senior management positions, due to the pressure of long working hours and high performance expectations (Ezzedeen & Ritchley, 2009; Ford & Collinson, 2011), with many women choosing alternative career paths to accommodate their need to balance work and family (Herman, 2015; Maher, 2013; Rehman & Roomi, 2012). Wattis et al. (2013) argue that childcare responsibilities are a key factor contributing to women's fragmented labour force participation and a significant barrier to occupational mobility.

Current work-life balance discourses place the responsibility of effectively managing these multiple roles firmly on the shoulders of the individual, often demanding tough choices that result in stress and guilt while ignoring overarching cultural and societal norms that perpetuate these stereotypical gender norms (Gatrell, Burnett, Cooper & Sparrow, 2013; Gregory & Milner, 2009; Sullivan, 2015). Most organisations attempt to address work-life balance by providing individuals with options such as flexible working arrangements or childcare support, but fail to consider the powerful forces such as work overload, a culture of long hours, adverse career consequences and gendered role stereotypes that undermine and negate the effectiveness of these policies (Todd & Binns, 2013).

Current statistics and research trends indicate that while work-life balance has received much attention and focus over the last few years; it still remains a problem for many employees and, ultimately, organisations across the globe (Gatrell et al., 2013; Kossek, Baltes & Matthews, 2011). Fondas (2014) expresses concern over the work-life balance of American workers, with results indicating that the majority of employees struggle to achieve an acceptable balance between work and family, resulting in negative consequences on worker loyalty, health and performance.

Visser (2013) discusses an international survey (including South Africa) conducted by Accenture and highlights the increasing importance of work-life balance for employees, with 67% of South Africans stating that they have turned down a job offer that would have affected their existing work-life balance – which they considered more important than money and recognition. The Hay Group conducted research on five (5) million employees in 400 organisations worldwide and reported that South Africa ranked among the lowest regions, with only 43% (a nine percentage point decrease from the previous year) of employees perceiving work-life balance from their organisations (Royal, 2013).

A meta-analysis conducted by Amstad, Meier, Fasel, Elfering and Semmer (2011) clearly demonstrates the effect of work-family conflict on the behaviour and well-being of individuals with respect to both family and working life. Research has proven that managing work and family life may have an overwhelming influence on the overall functioning and psychological well-being of an individual (Ahmad, 2010; Mostert, 2009) and may negatively impact on an individual's job, family-, marital- and overall life satisfaction (Charkhabi, Sartori & Ceschi, 2016; Mostert, 2009; Opie & Henn, 2013; Tasdelen-Karckay & Bakalim, 2017). From an organisational point of view, work-family conflict may result in high turnover levels, escalated absenteeism, reduced productivity, lower employee satisfaction levels and lower organisational commitment (Hassan, Dollard & Winefield, 2010; Opie & Henn, 2013; Streich, Casper & Salvaggio, 2008).

In August 2015, the South African government issued the first ever report on the status of women in the South African economy (South African Department of Women, 2015). The results of the report indicated that women spend considerably more time on unpaid/household work than their male counterparts, with the gap particularly large in the years around age thirty, which are considered prime ages for childbearing and

childrearing, placing particular demands on women's time. Combining time spent in unpaid work with time spent in the workplace revealed that a woman in South Africa would cumulatively spend an estimate of 15 500 hours more than a man in productive work (unpaid and paid work combined) across their lifespan, or between the ages of ten and 70 years. The report highlighted that the demands that women face on their time hold important implications for their labour force participation and that societal changes are needed to ensure more equitable gender distribution of unpaid work through changed social norms regarding the distinction between "women's work" and "men's work" within the home (South African Department of Women, 2015).

While there is overwhelming evidence for better work-life balance among women, organisations in the 21st century world of work experience a differing reality that often hampers any attempts to provide work-life balance. Global competition, volatile labour markets and constant technological changes have placed organisations under considerable pressure to perform faster and be more cost-effective (Downes & Koekemoer, 2011; Soni, 2013). In the 21st century world of work, employees are expected to go above and beyond a typical job description and work longer hours with greater job demands, placing additional pressure on employees in maintaining a balanced commitment to their work and personal life (Franks et al., 2006; Koekemoer & Mostert, 2010; Soni, 2013).

These challenges are particularly prevalent among women in male-dominated occupations such as science, engineering and technology (SET), as they continue to face a number of unique and tough obstacles that all stem from the gendered norms and assumptions of these organisations (Cervia & Biancheri, 2017; Herman, 2015; Herman & Lewis, 2012). The South African government also acknowledges the gendered norms of certain professions by stating that, in South Africa, women tend to gravitate towards gender-defined fields and this may indicate why women are graduating as nurses or health workers, rather than in high-degree specialisation areas such as engineering (South African Department of Women, 2015).

According to Martin and Barnard (2013), these challenges include formal and covert organisational practices that maintain discrimination and bias, physical- and health-related difficulties, negative work-identity perceptions and work-life imbalance. Women working in male-dominated occupations continue to struggle against the normative assumptions of the profession that view the ideal engineer as being male, continu-

ously available for full-time employment and internationally mobile (Herman, 2015; Herman & Lewis, 2012). This culture that continuously compares women to their male counterparts as the “ideal engineer”, forces them to work harder, with longer hours, to prove their commitment to the organisation (Whitehead & Kotze, 2003).

Findings from research conducted by Watts (2009) among civil engineers highlighted that all the women in the study experienced a culture of long work hours with expectations from management that they would remain at work until the job was completed. Women in masculine organisational cultures seem to be faced with two very difficult choices: they either adopt “male success criteria” and adhere to the culture as defined and created by their male colleagues, or they accept lower work status and make career changes that often impact their long-term career success (Cahusac & Kanji, 2014; Gregory & Milner, 2009; Haas, Koeszegi & Zedlacher, 2016; Watts, 2009),

Female engineers are considered scarce and critical resources within most technological companies; however, qualified female engineers tend to leave their hard-earned positions faster than their male counterparts, predominantly due to difficult working conditions and unsupportive organisational practices that exacerbate their conflict in managing work and family responsibilities (Buse & Bilimoria, 2014; Du Plessis & Barkhuizen, 2012; Fouad & Singh, 2011; Frehill, 2012). Statistics from the Engineering Council of South Africa (ECSA) from 2013 showed that 70% of the women who graduated with engineering degrees left the sector after starting their careers, because they felt isolated in their jobs as they continued to battle old stigmas and gender matters that seem to surface, time and time again, in this male-dominated industry (South African Government, 2014; Thompson, 2015).

While the professional career pathways in SET organisations generally follow the typical linear, hierarchical career development models based on the traditions that employees were focused on upward movement within one or two companies over their lifespan, many women in male-dominated occupations have opted for a range of non-typical career patterns and transitions out of necessity, in their attempts to care for children, cope with aging parents, manage personal demands and deal with spousal issues (Herman, 2015; Mainiero & Sullivan, 2005; Sullivan & Mainiero, 2007).

A number of researchers have argued that women’s career progression differs extensively from that of their male counterparts as they face a number of complex choices

and constraints stemming from personal, organisational and societal expectations that manifest in career trajectories that differ from the traditional career models (Mainiero & Sullivan, 2005; Zimmerman & Clark, 2016). The predominant difference in women's career patterns is based on the fact that their work is embedded in their larger life context, with both family and career central to their lives, resulting in shifts in the pattern of their careers to arrange their roles and relationships in new ways, in order to find the best fit for their current life circumstances (Mainiero & Sullivan, 2005; O'Neil, Hopkins & Bilimoria, 2008). Vinkenburg and Weber (2012) state that there is a need to study women's career patterns beyond work, by including family and other life domains, as the patterns of women's careers shift relative to the way they reconcile their roles, relationships and domain participation.

Research indicates that women in the early career stage have a career need for challenging work and will make career decisions based on their need for career satisfaction and achievement (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). The need to balance family and work is a huge concern for women in the mid-career life stage, while women in late career seek authenticity and meaning through living integrated lives that are influenced by factors such as marriage, family, life ambitions and work ambitions (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005).

These different needs and expectations at different career life stages potentially hold many implications for understanding the work-life balance of women; however, there seems to be very limited research distinguishing women's work-life balance experiences in different career stages. Research by Darcy, McCarthy, Hill and Grady (2012) suggests that factors which impact on work-life balance differ across various career stages and that organisations need to understand the differing needs of women in various career life stages, in order to foster a culture that values work-life balance across the organisation, instead of only focusing on small groups (such as working mothers).

1.2 PROBLEM STATEMENT

Based on the preceding discussion, it is evident that while much research has been done in the field of work-life balance, it remains a consistent challenge for many employees and organisations. While some organisations are still doing little to assist employees achieve better work-life balance, other organisations are attempting to im-

plement work-life balance practices; however, they are often not achieving the necessary and intended results (Downes & Koekemoer, 2011; Kossek et al., 2011; Soni, 2013; Todd & Binns, 2013). Hari (2017) and Pumroy (2016) state that while work-life balance initiatives are presented as gender neutral, they are still based on the heteronormative male-breadwinner-female-caregiver model, and that to truly support the career development of women, organisational cultures would need to change in order to support the new “ideal worker” as someone involved in both work and non-work responsibilities.

While there is considerable evidence to support the argument that women’s career development differs from that of their male counterparts, as the pattern of women’s careers shift relative to the way they reconcile their roles and relationships (Lewis, Harris, Morrison & Ho, 2015; Mainiero & Sullivan, 2005; O’Neil & Bilimoria, 2005), there have been a few studies that have investigated work-life balance in a particular career life stage, but very limited work-life balance research across all career life stages of women, in one study. Darcy et al. (2012) argue that research has failed to adequately address how work-life balance issues develop and progress through various career stages and that work-life balance is a concern for all employees, not just parents with young children; however, their needs and perceptions vary, depending on their career life stage.

Work-life balance continues to remain a huge challenge for women in male-dominated occupations (Cahusac & Kanji, 2014; Herman, 2015; Martin & Barnard, 2013), with many women desiring non-linear career paths to assist with the demands of both work and family. Instead women face severe opposition due to the normative assumptions specifically in SET professions that demand full-time and continuous employment (Herman, 2015). Pumroy (2016) highlights that most of the research on women in engineering focuses on women academics, gendered cultures and the identity negotiation of women in the profession, with limited research on women working in the profession and their career development. This research will meet this gap by focusing on women working in the engineering profession as they attempt to manage work-life balance and the impact it has on their career development throughout the various career life stages.

In light of the above, I formulated my research question as follows:

What are the lived work-life balance experiences of female engineers in the early, mid- and late career life stages?

This research will assist organisations, industrial psychologists and human resource professionals to understand the unique work-life balance needs of female engineers across various career life stages and will contribute to the growing body of knowledge regarding women operating in male-dominated occupations. According to the researcher, and based on the literature review conducted, this would be the first study that investigates the work-life balance perspectives of female engineers across different career life stages.

1.3 RESEARCH OBJECTIVES

This research is an *interpretive study* that seeks to explore and uncover people's experiences and their views or perspectives of these experiences (Gray, 2014). Based on the problem statement and the purpose of this research, the **general aim** is to gain a deeper understanding of the lived work-life balance experiences of female engineers in the early, mid- and late career life stages.

The specific *literature aims* are as follows:

- To understand the theoretical background of work-life balance as a construct within industrial psychology
- To identify and understand the specific career life stages of women and the unique career needs of each stage
- To discuss the issues facing women in male-dominated occupations

The specific *empirical aims* are as follows:

- To describe and interpret the lived work-life balance experiences of female engineers through the lens of their specific career life stages
- To gain a deeper understanding of the unique work-life balance needs and challenges evident from female engineers' lived experiences within their different career life stages

1.4 MY EVOLVING INTEREST IN THE STUDY

I have a very deep and passionate interest in work-life balance that only developed later in my life, once I had the privilege of becoming a mother. I remember starting my career in the human resources profession in my early twenties with such youthful ambition and determination to conquer the corporate world. I was single-minded in my quest to develop my career and grow as a professional. This all changed when I got married and had my precious daughter and, five years later, a beautiful son. All of a sudden, I found myself torn in two between the demands of a very busy and stressful career and the needs of my children.

I am a Generation X baby, born to Baby Boomer parents (*cf.* Codrington & Grant-Marshall, 2004), who worked in very demanding jobs that prevented them from fetching me from school and attending many of my extra-mural activities. This had a profound impact on my life and definitely influenced my beliefs on how I wanted to raise my own children. I had a deep desire for flexibility that would give me the opportunity to still work, which I love, but allow me the freedom to spend time with my children in the afternoons. I became increasingly dissatisfied with the corporate world and the lack of flexibility and support for working mothers. In the end, I chose my family and decided to leave my current employment. I love the term used by Grady and McCarthy (2008) of a “career tree” rather than a “career ladder” to describe the career progression of women, because while I have chosen to leave formal employment, I have in no way given up on my career; I have just sprouted a new branch in a different direction. I still have plans for my career and completing my Master’s is one step closer to my dream of perhaps opening my own practice as a career psychologist. Managing my own time would give me the flexibility I so desperately need in meeting my own work-family demands.

I have had the privilege of developing so many wonderful relationships with female engineers in my previous employment and I have realised that so many professional women are struggling with the same issues in their attempts to achieve work-life balance. I have seen female engineers with Master’s and PhD degrees become increasingly dissatisfied with their careers as they struggled to manage both a family and the demands of their career. At the end of day, we want to be the best mothers possible, but still have the personal fulfilment and meaningfulness that a career provides.

My informal interactions at work with so many different women in various career life stages, has taught me two very important lessons. Firstly, the achievement of work-life balance is a deeply personal and very different journey for each individual. Our decisions on what work-life balance means for us is dependent on so many factors, such as our childhood experiences, personality traits, self-identity, career choices, as well as our personal life circumstances such as spousal support or financial stability. Secondly, there is no right or wrong decision on how to achieve work-life balance, but simply a quest to find the best possible solution for ourselves and our families. My decision to stop working was the best one at the time for my family, given our unique set of circumstances; however, it may not be the best solution for others.

This mind-set is very important when completing this research. As a researcher, I recognise that my own background is already shaping my choice and approach to the phenomenon studied, and that I need to position myself in the research to acknowledge how my interpretation flows from my own personal, cultural and historical experiences (*cf.* Creswell, 2003). I acknowledge that I have my own preconceived views and beliefs on work-life balance that could influence my research. When choosing an interpretive paradigm, I am the primary research instrument and therefore need to understand myself and be open to personal change through this master's research journey. It may be possible to do positivist research simply by following instructions, but one has to *become* an interpretive researcher (Terre Blanche & Durrheim, 1999). To this end, I have included a preliminary self-reflection here on my evolving interest in the study and will continue to act reflexively in an explicit way throughout my study.

1.5 THE PARADIGM PERSPECTIVE

The following section of this chapter outlines the disciplinary context within which my study has taken place, my psychological and research paradigms, as well as the conceptual definitions used for the concepts explored in this study.

1.5.1 The disciplinary context

The study was conducted within the industrial and organisational psychology discipline and will provide valuable information for the sub-disciplines of career psychology and organisational psychology. Cascio (1998, p. xiii) defines industrial and or-

organisational psychology as the “study of human behaviour in the work setting”. Strümpfer (2007) confirms that industrial and organisational psychology is simply psychology applied in industry and organisations.

Career psychology can be seen as the process of helping people adjust to the changing nature of careers in the 21st century by applying models, stages, paradigms and theories to better understand and improve career development behaviour within an organisational context (Coetzee & Roythorne-Jacobs, 2012). Van Vuuren (2010) lists the following focus areas for career psychology: meaning of work in people’s lives, quality of work-life, vocational and career counselling, organisational mental health, stress, and work-personal life balance issues. Understanding the work-life balance experiences of women across career life stages will help employees, as well as organisations, improve the quality of their work-life.

According to Van Vuuren (2010), organisational psychology developed when psychologists, from a humanistic perspective, began focusing on what individuals need in order to be satisfied with their workplace. The question that then arose was “how can organisations be managed to achieve the best results at an individual, group and macro-organisational level?”. Phenomena of interest in organisational psychology include motivation, organisational climate and change, leadership, organisational health and organisational development (Van Vuuren, 2010). Understanding the demands experienced by female employees regarding their work-life balance requirements across career life stages, will assist organisations in developing and implementing change programmes and initiatives that can improve motivation, productivity and employee satisfaction on an individual, group and, ultimately, organisational level.

1.5.2 The psychological paradigm

In terms of psychological paradigms to understand human behaviour, the following three paradigms are considered relevant for this study:

1.5.2.1 Systems theory

Systems theory can be defined as “the human as a complex, dynamical, non-linear, unique, emergent, purposeful open system existing and interacting with an environment comprising systems with similar characteristics” (Coetzee & Roythorne-Jacobs, 2012, p. 162). Within systems theory, the socio-cultural (sociological) perspective de-

finer humans as social beings “embedded in cultural-social forces, including norms, values, social interactions and group processes in one’s culture and social environment that influence one’s career behaviour” (Coetzee & Roythorne, 2012, p. 162).

Systems theories can be used to understand both work-life balance and the career life stages of women. Kossek, Lewis and Hammer (2010) and Kossek et al. (2011) state that work-life balance requires a systems perspective, because individuals socially construct their lives and choices as a function of their organisational and social context. While the actual decision to manage work and family boundaries is to some extent (and within situational constraints) the individual’s own choice (Peng, Illies & Dimotakis, 2011), systems theorists argue that one must understand the context within which work-life balance operates, particularly cultural workplace and societal beliefs and norms (Kossek et al., 2010; Herman & Lewis, 2012).

In terms of the career development of women, Lewis et al. (2015) confirm that careers are multi-layered and multi-dimensional and cannot be conceptualised without consideration of the interrelationships between the domains of work, home and leisure. O’Neil and Billimoria (2005) state that there are a number of contextual factors that need to be considered when examining women’s careers. They identify the following three important systems that affect the careers of women: *Organisational context* refers to policies, structures and culture that impact on a women’s career; *Societal context* refers to the impact that society has on women’s choices or decisions: these could include examples such as society’s expectations of women, discrimination and economic conditions; *Relational context* refers to the impact of both personal (spouse, children and parents) and professional (managers, peers and clients) aspects of a woman’s career and life choices.

1.5.2.2 *Humanistic theory*

According to Buhler (1971), the common denominator of all humanistic psychology thinking is the concept of the healthy person’s end goal of life, which can be seen as using your life to accomplish something you believe in, be it self-development or any other values. Coetzee and Roythorne-Jacobs (2012, p. 162) see the humanistic development perspective as a person’s desire for control over the life course, seeking self-actualisation and searching for personal meaning of existence. The struggle to achieve work-life balance is nothing more than a woman’s attempt to exercise control

over her own life and make choices and decisions that ultimately would be in the best interests of the individual and her family. The study of women's career life stages also highlights the different values, expectations and desires that are important for individuals at different stages of life. This highlights the changing nature of people's search for meaning in life and their ultimate desire for self-actualisation.

1.5.2.3 *Positive psychology*

According to Seligman and Csikszentmihalyi (2000), much of psychology in the past has focused on "pathology" and abnormal psychology; however, limited research has been conducted on the positive aspects of human behaviour that make life worth living, such as well-being, optimism, self-determination, flow and happiness. Greenhaus and Powell (2006) state that most of the literature on work-life balance focuses on work-family conflict and the stress that is created when attempting to manage these domains. The authors encourage a more balanced approach that recognises the positive effects of combining work and family roles and also states that the increase in positive interdependencies between work and family is consistent with the emerging focus on positive psychology which focuses on strengths, rather than weaknesses, and health, rather than illness, when understanding the potential of individuals and social systems. This study will view work-life balance as neither positive nor negative, but rather as a subjective experience that is based on an individual's personal assessment of their interface between work and family (Bobat, Mshololo & Reuben, 2012; Grawitch, Barber & Justice, 2010).

1.5.3 **Meta-theoretical concepts**

The following **conceptual definitions** were used for the concepts that are explored or discussed in this research:

- *Work-life balance for individuals*: "The extent to which one's perceived allocation of finite resources (physical, mental and emotional) matches one's progress towards or achievement of meaningful goals or expectations across all life domains" (Barber, Grawitch & Maloney, 2016, p. 113).
- *Work-life balance for organisations*: Organisational initiatives aimed at enhancing employee experience of work and non-work domains (Darcy et al., 2012).

- *Career life stages*: Stages in employees' careers, usually denoted by age, which result in different needs and expectations (both personally and professionally) that affect both attitudes towards work and behaviours in the workplace (Darcy et al., 2012).
- *Career*: The pattern of work-related experiences that span the course of a person's life (Greenhaus, Callanan & Godshalk, 2000).
- *Career development*: An ongoing process by which individuals progress through a series of stages, each of which is characterised by a relatively unique set of issues, themes and tasks (Greenhaus et al., 2000).
- *Work-family conflict*: A form of inter-role conflict, in which the demands of work and family roles are incompatible in some respects, so that participation in one role is more difficult because of participation in another role (Greenhaus & Beutell, 1985).
- *Work-family enrichment*: The extent to which experiences in one role improve the quality of life in the other role (Greenhaus & Powell, 2006).
- *Career pattern*: According to O'Neil and Bilimoria (2005), a career pattern can be defined as the path of work-related experiences over the life course. This can be divided into an "*ordered*" career pattern, which is "characterised by stable, predictable movement through organisational hierarchies, is strategically planned and executed, reflective of purposeful learning opportunities and may involve long-term planning to accommodate other life roles" (O'Neil & Bilimoria, 2005, p. 173). An "*emergent*" career pattern reflects a more reactive than proactive series of job/career moves, unexpected twists and turns and may be designed to accommodate aspects of one's life other than traditional work (O'Neil & Bilimoria, 2005, p. 173).
- *Career locus*: Defined as the focal point from which career orientation, motivation and success emanate, and may be either internal (belief that an individual is responsible for her own career success) or external (belief that individual's career opportunities are due to external interventions outside of the individual's control) (O'Neil & Bilimoria, 2005).

1.5.4 Meta-theoretical models

The following three career life stage models for women will be consolidated and integrated under the umbrella terms of **early, mid- and late career life stages**.

- The Double Helix Model, illustrating the lifespan development of successful women, as developed by White (1995).
- The career life stages as developed by O'Neil and Bilimoria (2005), namely idealist achievement (ages 24–35 years), pragmatic endurance (ages 36–45) and re-inventive contribution (ages 46–60).
- The Kaleidoscope Career Model, as developed by Mainiero and Sullivan (2005), highlighting three predominant career needs for women, namely challenge, balance and authenticity.

In conclusion, this empirical study is based on the assumption that women in different career life stages have different expectations and needs with regard to career development (career patterns, career locus, career beliefs and career contexts) and could therefore have different work-life balance experiences and challenges that impact their overall functioning and well-being.

1.5.5 Research paradigm

A research paradigm is an all-encompassing system of interrelated practice and thinking that defines, for the researcher, the nature of their enquiry, along three dimensions: ontology, epistemology and methodology (Terre Blanche & Durrheim, 1999).

Positivist frameworks hold the ontological assumptions that the world (or reality) is structured by law-like generalities which can be predicted, identified and manipulated to provide universal statements of science (Marais, 2013). In contrast to this belief, my approach for this research is based on the assumption that individuals seek understanding of the world in which they live and work. They develop subjective meaning of their experiences, which are varied and multiple, leading the researcher to look for complexity of views rather than narrowing meaning into a few categories or ideas (Creswell, 2003). I did not want to measure or define work-life balance, but rather gain a deeper understanding of the phenomenon through the lived and subjective experiences of women through different career life stages.

I therefore hold ontological assumptions underlying an interpretive-constructivist orientation which seeks to explore people's lived experiences and their views or perspectives of these experiences (Gray, 2014). For this study, I reject the notion that there is only one reality (positivist), but rather choose the ontological assumption that there are multiple realities that are constructed by the subjective internal reality of individuals, based on their unique social and cultural experiences (Nel, 2007; Ponterotto, 2005).

If ontology defines the research framework or target of study, epistemology describes the nature of the relationship between the knower and what can be known (Terre Blanche & Durrheim, 1999). An interpretive or constructivist research paradigm seeks meaning from individual experiences and views individuals and their unique interpretations, meanings and understanding as a primary source of data (Marais, 2013). Aligned to the epistemological notions underlying the interpretive paradigm, I believe that, by interacting with my participants, I am able to gain a deeper and richer understanding of their experiences with regard to achieving work-life balance.

Another epistemological assumption in an interpretive-constructivist orientation is that the researcher and participants jointly create (co-construct) findings from their interactive dialogue and interpretation (Ponterotto, 2005). In the positivist tradition, researchers are seen as able to obtain a viewpoint devoid of personal values and biases, attempting to assume a stance of a disinterested scientist (Marais, 2013). According to Ponterotto (2005), however, the interpretative-constructivist position advocates a transactional and subjectivist stance which maintains that reality is socially constructed and, therefore, the dynamic interaction between researcher and participant is central to capturing and describing the lived experiences of the participant.

My aim with this study was to understand the lived experiences of women through various career life stages as they manage work-life balance. To achieve this goal, I view myself not as a detached scientist, but as a passionate participant co-constructing meaning together with other participants in this study. I definitely empathised and identified with the participants, in some way, through my subjective involvement in their lives.

According to Terre Blanche and Durrheim (1999), **methodology** specifies how the researcher may go about practically studying whatever they believe can be known.

Ponterotto (2005) states that positivist research attempts to simulate, as closely as possible, strict scientific methods and procedures where variables are carefully controlled or manipulated and where the researcher's emotional or expectant stance on the problem under study is irrelevant. By marked contrast, an interpretive-constructivist approach embraces naturalistic designs in which the researcher is ensconced in the community and day-to-day life of her research participants. This naturalistic inquiry leads itself to qualitative research methods such as in-depth, face-to-face interviewing, focus groups, or participant observations (Ponterotto, 2005). The methodology employed needs to follow from, as well as reflect, the philosophy (positivist, interpretive or constructionist), as it carries on throughout the research project (Marais, 2013). Following on from my ontological and epistemological perspectives, as outlined above, I focused on a qualitative methodological approach for this study, that relied on a subjective and interactional relationship between researcher and subject to provide deep insight and understanding of the concealed meaning of everyday life experiences (De Witt & Ploeg, 2006; Ponterotto, 2005; Terre Blanche & Durrheim, 1999). The specific methods employed in this study align with methodological assumptions relevant to an interpretive-constructivist approach and will be discussed below.

1.6 RESEARCH DESIGN

According to Marais (2013), a research design is a strategy or plan that flows from the underlying philosophical assumptions, to indicate the selection of participants, data-gathering techniques to be used, as well as the data analysis to be conducted. Research designs are plans that guide the arrangements for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Terre Blanche & Durrheim, 1999). According to the authors, qualitative research is an iterative process that requires a flexible, non-sequential approach that is more open, fluid, changeable and not defined purely in technical terms. According to Koekemoer and Mostert (2010), most work-family studies conducted in South Africa have been quantitative studies focusing on the prevalence of work-family interaction, demographic differences, and possible antecedents and well-being outcomes of work-family conflict. Similarly, Potgieter and Barnard (2010) and Wattis et al. (2013) state that much research into work-life balance has attempted to operationalise the concept using quantitative research methodology. This approach, how-

ever, does not get to the subjective nature of these experiences and the variable reactions and coping strategies of different individuals. Wattis et al. (2013) emphasise that work-life balance is not a fixed state, but a complex and contradictory set of processes, captured most effectively through qualitative research by exploring the lived experiences of women as they manage work and family life on a daily basis. Koekemoer and Mostert (2010) support this statement by concluding that a qualitative study is very beneficial in understanding phenomena such as work-life balance, since participants are allowed to describe what is meaningful and important to them, without being restricted to predetermined categories.

This research design section will discuss the specific qualitative research approach I followed, as well my research strategy and research methods used, with the aim of ensuring a “golden thread” between my research question, research paradigm and research design, to ensure the rigour and trustworthiness of my findings.

1.6.1 Research approach

Within the interpretive-constructivist paradigm mentioned above, I chose to employ a **hermeneutic phenomenological approach** to my study. The phenomenological movement was initiated by Edmund Husserl (1859–1938) as a radically new way of doing philosophy (Kafle, 2011). Later theorists, such as Martin Heidegger (1889–1976), have recast the phenomenological project, moving away from a philosophical discipline which focuses on consciousness and essences of phenomena, towards elaborating existential and hermeneutic (interpretive) dimensions (Kafle, 2011).

According to Finlay (2008), phenomenology is the study of phenomena: their nature and meaning. The focus is on the way things appear to us through experience or in our consciousness, where the phenomenological researcher aims to provide a rich, textured description of lived experience. Hermeneutics is the “science of interpretation” (De Witt & Ploeg, 2006). Lavery (2003) states that, like phenomenology, hermeneutic phenomenology is concerned with the life world or human experiences as they are lived, with a focus on illuminating details and seemingly trivial aspects within experience that may be taken for granted in our lives, with the goal of creating meaning and achieving a sense of understanding.

Ajjawi and Higgs (2007, p. 616) describe hermeneutic phenomenology as “a research methodology aimed at producing rich textual descriptions of the experiencing of

selected phenomena in the life world of individuals that are able to connect with the experience of all of us collectively". From identification of the experience of phenomena, a deeper understanding of the meaning of that experience is sought through increasingly deeper and layered reflection by the use of rich descriptive language (Ajjawi & Higgs, 2007).

The way this exploration of lived experiences proceeds is where phenomenology and hermeneutic phenomenology differ. While phenomenology provides a description of an individual's lived experiences, hermeneutic phenomenology attempts to unveil and interpret the world as experienced by the participant through their life-world stories, and acknowledges that a researcher's history or background influences the way in which they understand and interpret this world (Kafle, 2011; Lavery, 2003). Meaning is found as we are constructed by the world, while, at the same time, we are constructing this world from our own background and experiences (Lavery, 2003).

According to Finlay (2008), the hermeneutic variant of phenomenology highlights the researcher's role and horizons of interpretation. Hermeneutic phenomenology not only describes meaning within life worlds as they appear, but interprets this existence as it is embedded in different contexts (Strong, Pyle, De Vries, Johnston & Foskett, 2008). According to Strong et al. (2008), the researcher would be attentive and descriptive (i.e. phenomenological) to how things appear in the participants' life worlds, while at the same time be interpretative (i.e. hermeneutical), since most phenomena are interpretable within a specific context.

Kafle (2011) states that, to understand the life world, we need to explore the stories people tell us of their experiences, with the help of some specific hermeneutic lens or method of interpretation. For this study, the lived experiences of women were interpreted through the lens of their specific career life stages, to give us a deeper understanding of how women in these different career life stages manage and achieve work-life balance. Applying a specific interpretive lens to the data had implications for how I handled existing theory in this study and, in the next section, my hermeneutic phenomenological approach lays the foundation for understanding my orientation to theory in this study.

1.6.2 A hermeneutic phenomenological approach to theory

To obtain deeper levels of interpretation and reflection, Kafle (2011) in the tradition of hermeneutic phenomenology suggests the use of a hermeneutic circle that involves a continuous cycle of reading, reflective writing and interpretation. Reading includes the narrative accounts from the participants, as well as continuous reading of theory and literature pertaining to the research. In my research, each narrative account was read and interpreted in the context of my theoretical understanding at that point in time, which continued to evolve to a deeper level as I continued to read and interpret more literature and relevant theory. Similarly, according to Boeli and Cecez-Kecmanovic (2010), understanding of the relevant literature is influenced by each new article read and subsequently interpreted. Reflective writing includes continuously documenting subjective thoughts and experiences of the research, to provide a deeper understanding of the researcher's own preconceptions from their hermeneutic phenomenological perspective. Victor and Barnard (2016) state that meaning is co-constructed through a critical interpretation of the participants' narrative experiences and the integration of the researcher's theoretical and experiential preconceptions into the research findings. Existing theory was therefore used throughout all the phases in this study. Firstly, it was used in the planning of the study; secondly, it was used throughout the study, in an iterative manner, going back and forth between the data and theory; and finally, specifically during analysis, to inform a critical interpretation of the data. This movement back and forth between the parts and the whole, in the process of understanding, is described as the hermeneutic circle (Boeli & Cecez-Kecmanovic, 2010).

While pure phenomenology encourages the importance of bracketing, where the researcher "brackets" out the outer world and suspends their judgement of particular beliefs about the phenomena in order to see and describe it clearly, hermeneutic phenomenology accepts the difficulty of bracketing and rather attempts to acknowledge its implicit assumptions and make them transparent and explicit during the research process (Kafle, 2011; Lavery, 2003). The reason that bracketing is seen as almost impossible in hermeneutic phenomenology is because interpretation is critical to the process of understanding, and every encounter that involves an interpretation is influenced by an individual's background of historicity; thus, a definitive interpretation is likely never possible (Lavery, 2003). According to De Witt and Ploeg

(2006), the researcher is considered inseparable from assumptions and preconceptions about the phenomenon of study and, instead of bracketing and setting aside such biases, they are explicated and integrated into the research findings.

For this study, I explored the lived experiences of women through various career life stages, in their attempts to manage work-life balance; however, I believe that these experiences are based on their life history and cannot be separated from the world in which they live and the way in which they construct meaning. I also acknowledge that my interpretation is based on my own life story and my understanding of the theoretical framework relevant to this phenomenon, thus influencing how I constructed meaning in this study. To ensure transparency, the theoretical framework that guided me in this study is presented as background information in this chapter and expanded fully in Chapter 2 as the literature review. I therefore believe that bracketing will be almost impossible, but I have attempted to be as transparent and explicit as possible during this study, by explaining all the actions taken and decisions made throughout the study.

1.6.3 Research strategy

This qualitative study employed a multiple case study approach, using hermeneutic phenomenology to understand and interpret the lived experiences of female engineers across various career life stages, in their attempt to achieve work-life balance. Semi-structured, in-depth interviews were used to collect the data from nine information-rich cases (women engineers) and interpreted using interpretative phenomenological analysis (IPA).

1.6.4 Research method

According to Marais (2013), the research method employed has to do with the setting of the research, the entrée and establishment of researcher roles, sampling, data collection, the recording and analysis of data, as well as strategies to ensure quality, ethics and reporting.

1.6.4.1 Research setting

This study was not conducted within any particular organisational setting. It was, however, context specific with regard to the engineering profession and all the par-

ticipants were chemical engineers working in Gauteng. Selection of participants and the criteria used to include them are discussed in the sampling section below.

1.6.4.2 Entrée and establishing researcher roles

As mentioned previously, I worked with many female engineers at my previous place of employment and still kept in contact with a number of women who fit the criteria for this study. I had a positive working relationship with many of these women in the past and felt comfortable to approach them informally outside of their working hours and not at their place of employment, as the organisation where they were employed was not particularly relevant to the research context. I sent an email to all the potential participants, requesting their participation in the study and explaining my role as researcher and Master's student, as well as what they could expect in their role as a participant in the study. Once they had confirmed their willingness to participate, arrangements were made to conduct the semi-structured interviews at a date and time that was convenient for them. These participants also acted as first-line gatekeepers and referred me to other participants whom I was able to contact and request for participation in the study. A consent form was sent to each participant ahead of time and the signed form was obtained at the semi-structured interview.

1.6.4.3 Sampling

Most research designs (specifically positivist) are concerned with representation and therefore use random probability sampling. In qualitative research, however, this approach is rejected by researchers on epistemological grounds, in favour of purposive non-probability sampling that seeks to identify information-rich cases which can be studied in depth (Gray, 2014).

According to Laverly (2003), the aim in participant selection in phenomenological and hermeneutic phenomenological research is to select participants who have lived experiences that meet the aim of the study, who are willing to talk about their experiences, and who are diverse enough from one another to enhance possibilities of rich and unique stories of the particular experience. In order to obtain the richest possible sources of information to answer my research question, I used a **purposive sampling strategy**.

According to Nieuwenhuis (2010, p. 79), purposive sampling is defined as “selecting participants according to pre-selected criteria relevant to a particular research question”. I personally identified female engineers whom I knew would provide me with rich information regarding work-life balance in the three career life stages. I used the following age categories, based on an integration of career models from O’Neil and Bilimoria (2005) and White (1995), to classify the participants into the three career life stages, namely early career, from 24–35 years of age, mid-career, from 36–45 years of age and late career, from 46–60 years of age. The only other criteria used for selection were that the participants needed to have a degree in engineering and be currently permanently employed.

When I didn’t have any additional participants, using my purposive sampling strategy, I employed a **snowball sampling strategy** and asked current participants about additional individuals that I could contact. This strategy was only used in the late career life stage, as I knew only one engineer in that age category, due to the limited number of female engineers still working by that stage. She was able to provide me with two extra names that I could contact and who were willing to participate. According to Gray (2014), snowball sampling occurs when the researcher identifies a small number of subjects who, in turn, identify others in the population.

According to Gray (2014), the sample sizes in qualitative research should not be so large that it is difficult to extract thick, rich data, but, at the same time, not be so small that it becomes difficult to achieve data saturation, theoretical saturation or information redundancy. Theoretical saturation is reached when “the data no longer brings additional insights to the research question” (Nieuwenhuis, 2010, p. 79). Given the limited scope of this research as well as the complexity arising from three separate sampling sets as outlined in terms of the different career life stages, data saturation was reached to the extent that clear and consistent themes emerged across all case studies in each career life stage. To avoid a large sample size that could compromise the quality of the study, it was decided to limit the sample to nine female engineers, with three in each career life stage. Table 1.1 below presents the biographical demographics of all the participants in the study.

Table 1.1

Biographical demographics of the participants

Career life stage	Alias	Age	Race	Highest qualification	Engineering discipline	Company type	Environment
Early	EB	30	White	PhD	Chemical	Petrochemical	Research
Early	CN	30	Indian	Masters	Chemical	Petrochemical	Leadership programme
Early	PT	33	Black	Degree	Chemical	Consulting	Global graduate programme
Mid	PG	36	White	Masters	Chemical	Petrochemical	Research
Mid	KmG	40	White	Degree	Chemical	Petrochemical	Projects
Mid	SM	43	White	Degree	Chemical	Petrochemical	Operations
Late	MF	46	White	Degree	Chemical	Petrochemical	Graduate development
Late	PdW	52	White	Degree	Chemical	Petrochemical	Strategy and market research
Late	SD	46	White	Degree	Chemical	Petrochemical	Operations

1.6.4.4 Data collection

The primary concern of hermeneutic phenomenology is to elicit rich, detailed and first-person accounts of experiences and phenomena under study (Pietkiewicz & Smith, 2014). Semi-structured interviews are considered as one of the best ways to achieve this goal, as it allows the participant to engage in a dialogue in real time, with enough space and flexibility for original and unexpected issues to arise, which the researcher may investigate in more detail with further questions (Pietkiewicz & Smith, 2014; Smith & Osborn, 2007).

Smith, Flowers and Larkin (2012) describe semi-structured interviews as “conversations with purpose”. The conversation allows the participants to tell their own stories in their own words while still achieving the purpose of the research as informed by the research questions (Smith et al., 2012). According to Smith and Osborn (2007), the semi-structured interview facilitates rapport/empathy, allows a greater flexibility of coverage by allowing the interview to go into novel areas and produces richer data.

Pietkiewicz and Smith (2014) and Smith et al. (2012) encourage researchers using semi-structured interviews to draw up an interview plan in advance as a guide to facilitate a natural flow of conversation and with key questions or areas the research-

er wants to discuss. Smith et al. (2012) argue that having an interview plan ensures that the researcher knows explicitly what needs to be covered in the interview to ensure that the research questions are answered, and enables the researcher to plan for any difficulties that might be encountered. These include the phrasing of complex questions, the introduction of sensitive topics and the management of more reserved participants who might be less forthcoming and prefer a slightly more structured approach.

For my interviews, I drew up an interview plan that included two main questions which I felt would facilitate the discussion and allow me to gather the rich data that I required. These two questions allowed me to enter the participants' life world and understand their current reality. I was able to ask many follow-up questions stemming from these main questions, that helped answer the research questions. I also had a list of additional backup questions that I only used when I felt as if I had not gathered enough information from the two main questions.

The first main question I asked the participants was to tell me about their careers in detail, highlighting any major career transitions and changes they made and the reasons for these changes. This question took a considerable amount of time, as participants delved into great detail, reliving their careers and sharing many interesting stories that highlighted their unique career journeys and the decisions that shaped their lives.

For the second question, I took a slightly different approach after stumbling across an article on the concept of a six-word memoir. The inspiration for six-word memoirs came courtesy of a legend about the author, Ernest Hemingway. As the story goes, Hemingway was once challenged to tell a story in six words. He came up with this: **"For sale: Baby shoes, never worn"** (Saunders & Smith, 2014). The six-word memoir is considered an informal storytelling vehicle to encourage individuals to critically and reflectively consider their lives (Simmons & Chen, 2014). Before the interview, I asked the participants to think about their lives at this point in time and to write their thoughts down using no more than six words. During the interview, I asked the participants to share their six-word memoir which we then discussed in great detail, providing a wealth of rich and interesting data. For example, one participant shared her six-word memoir as follows: "Juggling through life; embracing the journey" (EB, 30). During her interview, we used her metaphor of 'juggling' in great detail, to discuss her

lived experiences of work-life balance as a mom, daughter, wife and employee in the early career life stage. While the six-word memoir is not critical to the actual analysis of the data, it was simply used as a very effective vehicle to facilitate discussion and allow the participants the opportunity to tell their life story in a simple yet reflective and thought-provoking manner. Not only did it provide me with the opportunity to ask many follow-up questions that answered the research questions, but it was also a very positive experience for the participants who enjoyed the opportunity to critically think about their lives as reflected by EB, 30: “It was very introspective to do something like this – there is little time where you can calm down and think about how you would summarise your life. I found it interesting and good.”

In the beginning, I found the interviewing process particularly daunting, as I realised the quality of information gathered would depend greatly on my ability to effectively handle the interview. Pietkiewicz and Smith (2014) emphasise the importance of the interviewing skills of the researcher and state that, apart from mastering active listening and the ability to ask open-ended questions free from hidden presumptions, the interviewer should know how to build rapport and gain the trust of the participant. I found that my first few interviews were the hardest, as I struggled to think of appropriate follow-up questions that would yield the data I required. In the beginning I found that I was relying more on the additional questions that I had planned for back-up purposes to supplement what had been said.

After each interview, I debriefed and asked myself, “What did I do well, what did I do wrong and what can I do going forward?” With each interview I gained new insight into my own approach and used these insights to ‘tweak’ my interview plan and improve the process. By the time I completed my last interview, I found myself considerably more comfortable in my ability to build trust and rapport, as well as ask the appropriate follow-up questions. The more comfortable I became with the process, the less I relied on my backup questions and the deeper I found myself delving into the life stories of participants, simply using the two main questions I had developed. This process truly highlighted the iterative and flexible approach unique to qualitative research. In conclusion, I believe that the data collection method used met my epistemological assumptions, as well as my research approach of hermeneutic phenomenology.

Firstly, in my interviews I viewed the participants as the experts of their own life story, with my role being simply to guide the discussion to ensure I achieved the research goals. Reid, Flowers and Larkin (2005) state that participants are the experts of their own experiences and can offer researchers an understanding of their thoughts, commitments and feelings through telling their stories in their own words and in as much detail as possible. Secondly, Ponterotto (2005) states that the researcher and participant jointly co-construct findings from their dialogue and that the interaction is central to capturing and describing the lived experiences. By asking certain follow-up questions and guiding the interview in a particular direction, I truly felt that both the participant and I were constructing meaning through our dialogue and interaction. Lastly, while both main questions (career progression and six-word memoir) did not explicitly investigate work-life balance, the theme emerged in multiple ways throughout the interviews, providing unique and interesting data responding to the research question. This illustrates the principle of hermeneutic phenomenology, where the researcher takes details and seemingly trivial aspects within experiences that may be taken for granted, to create meaning and achieve understanding (Laverly, 2003).

1.6.4.5 Data management

I obtained informed consent from each respondent – not only to take part in the interviews, but also to give me permission to make field notes and audio recordings during the interviews. The interviews were recorded and then transcribed using professional transcription services. The reliability of the transcription was ensured by reading through each transcription while listening to the recording (Terre Blanche & Durrheim, 1999). My field notes, together with the transcribed interviews, were used in the analysis phase of my research. The audio recordings, field notes and electronically transcribed interviews were kept safely on my computer, to which only I have access and were password protected. These items will be stored on my computer for a maximum period of three years and access will be limited to myself. The transcribed interviews, together with my field notes, were kept as hard copies for easy reference, in separate files per participant, at my home, in a safe and secure location. I was the only person who had access to the data for the duration of this research process.

1.6.4.6 Data analysis

The data collected for this study was analysed using Interpretative Phenomenological Analysis (IPA), which is a qualitative approach that aims to provide detailed examinations of personal lived experiences (Smith & Osborn, 2007). Hermeneutic phenomenology can be considered a key conceptual and theoretical underpinning of IPA, because the analysis of data goes beyond mere description, to involve interpretation (Larkin & Thompson, 2012; Larkin, Watts & Clifton, 2006; Smith et al., 2012).

Firstly, Smith et al. (2012) and Smith and Osborn (2007) state that IPA involves a “double hermeneutic”, where the participants are trying to make sense of their world by sharing their life stories, and the researcher is trying to make sense of the participants trying to make sense of their world. Secondly, IPA also employs a hermeneutics of “questioning”, where the IPA researcher adopts an insider perspective to see the world from the participants’ view – a ‘walking in their shoes’ mentality, while at the same time also standing alongside them from an outsider’s perspective, to take a look at them from a different angle, ask questions and puzzle over things they are saying, in a way that answers a particular research question (Reid et al., 2005; Smith, et al., 2012). Lastly, IPA employs a hermeneutic circle in which the researcher’s perspective and understanding initially shapes their interpretation of the given phenomenon, and yet, that interpretation is continually revised and changed as the researcher continues to interact with the phenomenon and where their own perspective and understanding, including their own biases and blind spots, are revealed and evaluated (Larkin et al., 2006).

Larkin et al. (2006) explain these hermeneutic principles by stating that an IPA researcher must approach their data with two aims in mind. The first aim is to try and understand the participant’s world and to “*give voice*” to what it is like. The second aim is to “*make sense*” of this world and to develop a more overtly interpretive analysis which positions the description in relation to a wider social, cultural and theoretical context (Larkin & Thompson, 2012; Larkin et al., 2006). I attempted to “*give voice*” to the lived experiences of female engineers in their attempts to manage work-life balance. This description of their world was then interpreted in relation to my theoretical framework of work-life balance and the career life stages of women, to “*make sense*” of the experiences within this context.

Using the analytic process for IPA as described by Larkin and Thompson (2012), Smith et al. (2012) and Smith and Osborn (2007), the following steps were followed in the analysis: Firstly, I identified themes in the first case. I began the process by reading the transcript together with the audio recording, to become familiar with the account (Smith & Osborn, 2007). The second and subsequent readings involved free textual analysis, which involved initial coding by noting down anything of interest, interpretations and summaries of ideas (Arroll & Senior, 2008; Smith et al., 2012; Smith & Osborn, 2007). In the next few readings, I went back to both the text and my initial codes, to identify emergent themes with key words or phrases that captured the essence of the content (Arroll & Senior, 2008).

To develop the themes, I needed to analyse my coded data in light of my theoretical knowledge and hermeneutic “lens”, to understand what it means for my participants to have these concerns in this context and thus take my analysis to a deeper interpretive account imperative to hermeneutic phenomenology (Larkin & Thompson, 2012; Smith et al., 2012). I used the theoretical framework of work-life balance and the career life stages of women as a theoretical or hermeneutic “lens” to interpret the data. In this process, I continuously made use of the hermeneutic circle, as I used my theoretical knowledge and understanding of the phenomenon studied to interpret or make sense of what the person was saying, but, at the same time, constantly checked my own sense-making against what the person actually said (Smith & Osborn, 2007). At this point, I realised the importance of my theoretical knowledge to ensure that I was able to make sense of and interpret my participants’ life-world in a particular context and in a way that would ultimately answer my research question. I also realised that as my theoretical knowledge continued to increase through reading of relevant literature, so my interpretation moved to a deeper level, once again illustrating the hermeneutic circle. The final sub-step in this process involved looking for connections between all the themes and clustering them into superordinate themes that consisted of a number of subordinate themes (Smith et al., 2012).

Secondly, I followed the exact same process with the other cases in each career life stage. Smith et al. (2012) state that it is very important to treat the next case on its own terms and to do justice to its individuality while still understanding that it is impossible to completely bracket the ideas emerging from the previous case, and acknowledging that your interpretations will be influenced by what you have already found, once

again illustrating the use of the hermeneutic circle. I experienced this iterative process as I found myself continuously identifying repeated patterns emerging in the subsequent transcripts, while still trying to allow additional themes to emerge (Arroll & Senior, 2008). Lastly, I looked for patterns across each case within each career life stage, to develop super- and subordinate themes for each career life stage. This was once again done using a hermeneutic circle as I moved back and forth between parts of the interviews to the whole interviews, with the aim of increasing my understanding and interpretation of the data (Smith et al., 2012). My overall understanding of the text was therefore influenced by interpretation of the separate parts, while my understanding of the separate parts was influenced by my knowledge of the overall meaning and interpretation (Smith et al., 2012).

As a new researcher, I found the data analysis process extremely difficult and time consuming. I found myself feeling deeply honoured that my participants were so honest and open in sharing their life stories with me, but also overcome with the sheer responsibility of making sure I did justice to what they said and that I interpreted the data in a way that truly reflected their thoughts and feelings. At first, I found myself analysing the data in multiple ways and becoming very confused in the process. It was only when I came to the realisation that while the data could be interpreted in many different ways, I wasn't using my theoretical or hermeneutic lens to interpret the text in a way that would answer my research question. I found myself going back to the data repeatedly and forcing myself to look at the text through my hermeneutic lens. It was only when I started to feel more comfortable with this process and able to reign in my thoughts to what was important to the research question, that I was able to interpret the data in a way that would be congruent with my research aims. While the process was extremely challenging, it was also immensely rewarding and I realised that I have a passion for qualitative research and love understanding and interpreting the life-world of individuals in a particular context.

1.6.4.7 Strategies employed to ensure quality

According to Marais (2013), a qualitative study aims to understand people's meaning-making; therefore, the emphasis falls on the internal validity of the research, which refers to findings that accurately reflect the participant's life-world. Ajjawi and Higgs (2007) state that, in qualitative research, rigour and credibility go hand in hand. For the product of research to be credible, the process must be rigorous. 'Rigour' refers

to the thoroughness of the study – for example, in terms of the appropriateness of the sample to the research question, the quality of the interview and the completeness of the analysis undertaken (Smith et al., 2012). Ensuring quality in any research requires the rigorous use of systematic methods and consistency in operating within the philosophical assumptions and traditions of the research paradigm and approach (Ajjawi & Higgs, 2007). There are a number of criteria that can be employed to evaluate the rigour within qualitative research, namely credibility, dependability, transferability and authenticity.

Credibility refers to the vividness and faithfulness of the descriptions to the phenomena (Ajjawi & Higgs, 2007). According to Gray (2014), the internal validity can be improved by engaging others, including the participants, in checking the data and interpretation for accuracy. To achieve credibility, I arranged a meeting with my supervisor to test my understanding and interpretation of the data. Through collaboration, we discussed my understanding of the data within each career life stage, resulting in my supervisor confirming many of my interpretations, but also providing some new insights and suggestions that I had not considered, which led to a deeper level of understanding. I also ensured that I collected data until data saturation had been achieved and no new themes or information emerged.

Dependability has to do with convincing the reader that the findings did occur as reported in the results (Marais, 2013). To achieve dependability, I described all my decisions taken regarding my research philosophy and the subsequent research design and methodology that support my philosophy in this chapter, to allow the reader a transparent understanding of all the decisions made and the reasons for them. To further enhance the dependability of this study, I made use of field notes during the interviews and kept a personal reflective journal throughout the research process (Marais, 2013).

Field notes are taken during the interviews to make it possible to understand the interview text in relation to its context field and include notes regarding observations about participations, arrangements and interruptions (Marais, 2013). I used my field notes, together with my transcriptions, in the analysis of the data. I found that my field notes brought back very specific memories of the interviews that weren't captured in the transcriptions. They also helped me remember certain non-verbal cues and ob-

servations about my participants that really added a deeper understanding to my interpretations (Marais, 2013).

According to Ajjawi and Higgs (2007), an important tool that can be used in this regard is hermeneutic alertness, which occurs in situations where the researcher steps back to reflect on the meaning of situations, rather than accepting their preconceptions and interpretations at face value. This can be done through the use of a reflective journal which assists with the process of reflection and interpretation (Marais, 2013). After each interview, I made notes in my reflective journal, as a tool to “debrief” and reflect on my feelings, thoughts and understanding of the process.

According to Ajjawi and Higgs (2007), authenticity is demonstrated if researchers show a range of different realities in a fair and balanced manner (fairness). This was achieved by ensuring that I reported on all ethical considerations taken, such as how consent was obtained and how anonymity was maintained. I also ensured that the voices of my participants were evident in the text, by making use of the participants’ words, in certain circumstances, to allow them to speak for themselves (Ajjawi & Higgs, 2007). My own voice and the preconceived notions I hold that may have influenced me in this study was also addressed through consistent reflexive writing throughout the dissertation and as noted initially in section 1.4 of this chapter.

Transferability has to do with whether understanding from one research context can be transferred to another context, to provide a framework that can be used to reflect and make comparisons with findings in the next context (Marais, 2013). This was achieved through a detailed description of the research context, congruence between the research paradigm and research methods chosen, a demographic profile of the participants, as well as a detailed discussion on the theory relevant to the study, to ensure theoretical saturation (Marais, 2013).

1.6.4.8 Research procedure and ethical considerations

Ethical approval (Ref # 2015_CEMS/IOP_042) for this research was obtained from the relevant UNISA research ethics committee in December 2015 and formal research only commenced in January 2016. Other ethical considerations for this research included obtaining informed consent, voluntary withdrawal, maintaining participant confidentiality and ensuring no harm to participants. Informed consent is defined as

the “voluntary and revocable agreement of a competent individual to participate in a therapeutic or research procedure, based on an adequate understanding of the nature, purpose and implications” (Ajjawi & Higgs, 2007, p. 620). To ensure that informed consent was obtained, all participants completed a written consent form before each interview, that clearly outlined the purpose of the research, as well as the contractual terms of the research, such as confidentiality rights, right of withdrawal and duration of the research process. All this information was also repeated verbally and recorded before the interviews began, to ensure understanding and clarification of any questions or concerns. The research was not company specific and therefore did not require consent from any particular organisation. Kafle (2011) proposes the use of aliases to protect the rights of participants, should names be mentioned in the research. To ensure confidentiality, no names were used in any research reports and each participant was assigned an alias to protect their identity. According to Gray (2014), interviews require a high degree of trust between the researcher and the participants. This imposes a special responsibility on researchers to avoid renegeing on commitments, acting deceitfully, or producing explanations that in some way cause harm to the interest of those participants. In accordance with the Ethical Rules of Conduct (Health Professions Act No. 56 of 1974, 2008), I endeavoured to ensure that I treated all participants with respect, dignity and avoidance of undue harm. I was aware that participants might experience some emotional pain and discomfort as they discussed issues that concerned them regarding work-life balance, since it is an emotional topic for many women – especially women who are struggling in this regard. I explained to each participant that debriefing could be arranged after the interviews, to assist any participants who might still have some concerns and negative feelings regarding information that was shared; however, no participants expressed a need in this regard.

1.6.4.9 Reporting

Based on my ontological and epistemological assumptions, I employed a first-person qualitative reporting style to discuss the findings of this research. According to Kafle (2011), what is most important is to pay attention to the rhetoric – which refers to the writing or reporting style of the research work. Hermeneutic phenomenology is aimed at extracting the core essences as experienced by the participants and demands a typical rhetoric that best elicits the true intention of the research participant. For this

reason, a language mode with an informal tone, with idiographic expressions full of adages and maxims, was considered suitable for reporting this type of research (Kafle, 2011).

1.7 CHAPTER LAYOUT

The chapter layout to report the findings in this Master's dissertation research is as follows:

- Chapter 1: Scientific orientation to the research
- Chapter 2: Literature review
- Chapter 3: Research article
- Chapter 4: Conclusions, limitations and recommendations

1.8 CHAPTER SUMMARY

In this chapter, I discussed my scientific orientation to the study. I presented a comprehensive background outlining why I believe this research is important within industrial psychology. I then discussed the research paradigms, design and methods which I chose because I believed they were appropriate to answer my research question. Lastly, I discussed my strategies employed to ensure quality and my ethical considerations. I truly hope this chapter has conveyed my passion for the topic, as well as presented a congruent research approach that will achieve the research aims and objectives. In the chapter that follows, my theoretical background and framework is provided through an extensive review of the literature I deemed relevant to this study.

CHAPTER 2

LITERATURE REVIEW

WORK-LIFE BALANCE AS A CONSTRUCT; THE CAREER LIFE STAGES OF WOMEN AND WOMEN IN MALE-DOMINATED OCCUPATIONS

Chapter 2 comprises the literature review and proposes to answer the specific literature aims of the study. Firstly, the theoretical background of work-life balance as a construct is discussed and integrated. Secondly, the career life stages of women are identified and analysed, to provide an understanding of the unique career needs of women. Finally, the issues of women in male-dominated occupations such as engineering are explored and discussed in detail. A chapter summary concludes this chapter.

2.1 WORK-LIFE BALANCE AS A CONSTRUCT

Attempts to understand the impact of work on other life roles has been of interest to researchers for many years, gaining considerable attention when women entered the workforce and challenged the tradition of family and work as two separate and independent systems with different sets of norms and functions, and, instead, highlighting that work and family could be closely interconnected domains of human life (Barber et al., 2016; Chow & Berheide, 1988; Edwards & Rothbard, 2000; Lewis, Gamble & Rapoport, 2007). Technological advancement, globalised economies and the changing nature of employment has made work an ever-increasingly demanding and stressful experience that has often created blurred lines between work and family (Wattis et al., 2013). Studies on the work-family interface have crossed multiple disciplines such as sociology, industrial psychology, organisational behaviour and occupational health (Voydanoff, 2008).

According to Chow and Berheide (1988) and Barnett (1999), the increase in the number of women employed in the workforce during their child-rearing years, has resulted in a critical issue with regard to the connection between employment conditions and family life. According to Barnett (1999), the massive movement of women into the labour force has been described as “one of the most significant social and economic trends in modern history” (p. 145). Subsequently, family structures repre-

sented in the workforce have become diverse, and include many different variations such as dual-earner couples, single parents, blended families and employees with responsibilities for elder care, which has heightened the importance of understanding work and family roles for both men and women in the workforce (Edwards & Rothbard, 2000; Parasuraman & Greenhaus, 2002). This shift from the work-family interface, with its previous narrowly defined focus on women, specifically working mothers, to the more recent work-life discourse that reflects a broader way of including men and women with or without children or other family obligations, has led to the use of the term 'life' to represent the broad understanding of all non-work roles that could include personal time and space (time spent doing activities that provide personal fulfilment such as community involvement, hobbies and religious activities) and care time (time spent with family members) (Lewis et al., 2007; Lyness & Judiesch, 2014; Wattis et al., 2013).

Kossek et al. (2011) argue, however, that researchers should continue measuring the family caregiving role separately from other non-work roles, due to the inherent importance and commitment required towards this role. They argue that it would be much easier to give up going to the gym (non-work activity) to complete urgent work, than dealing with a sick child who needs to go to the doctor (family role).

The term 'work-life balance' has gained popularity over the years to represent the often elusive quest of individuals to gain stability across all life domains (Barber et al., 2016; Bataille, 2015). According to Barber et al. (2016) and McMillan, Morris and Atchley (2011), the use of the term 'work-life balance' is so prevalent among both scholarly and non-scholarly authors, that the phrase has become a popular metaphor used to explain many similar constructs such as work-family conflict, work-family interface or role balance. The concept of work-life balance has, however, been subject to much controversy and criticism, despite its popularity over the years (Kalliath & Brough, 2008; Toffoletti & Starr, 2016).

Firstly, there are continuous struggles to provide a **comprehensive definition** of the term 'work-life balance' that clearly distinguishes it from other similar concepts within the work-family literature (Greenhaus, Collins & Shaw, 2003; Kalliath & Brough, 2008; McMillan et al., 2011). According to Kalliath and Brough (2008) and McMillan et al. (2011), the inability to clearly distinguish work-life balance from other constructs has led to inconsistent definitions throughout research, which has resulted in further con-

ceptual and measurement problems. Furthermore, the concept of balance and imbalance differs among individuals at different points in their lives, making the idea of a single definition of work-life balance too simplistic and unrealistic (Soni, 2013). Gatrell et al. (2013) state that the work-life balance literature is continuously troubled with problems and discourses that are a direct result of superficial and biased definitions.

Secondly, from a **conceptual perspective**, Fleetwood (2007a) states that the term 'work-life balance' still views work as bad and life as good, and is based on the assumption that the two spheres are distinct concepts and mutually exclusive to one another, rather than observing work as a dimension of life. Achieving balance is therefore seen as simply trading time in one domain for time in the other, or by allocating equal resources (e.g. time, money and energy) to both domains (Barber et al., 2016; Fleetwood, 2007a; Gregory & Milner, 2009). According to Potgieter and Barnard (2010) and Wattis et al. (2013), past research has tended to focus on work-life balance as an objective concept, implying a fixed state fulfilled by specific criteria and measured quantitatively; however, recent qualitative research has revealed work-life balance as a subjective, fluctuating and intangible process. A number of scholars have offered alternative conceptualisations that challenge the assumptions of mutual exclusivity, with the belief that the domains of work and life can be mutually reinforcing and integrated, and have proposed terms such as 'work-life fit', 'work-life harmony'; 'work-life integration' or 'work-life interface' (Barber et al., 2016; Gregory & Milner, 2009; McMillan et al., 2011; Toffoletti & Starr, 2016). Despite these attempts to propose new conceptualisations for the interface of work and life, the term 'work-life balance' still remains popular in its application by both academic and non-academic scholars (Gregory & Milner, 2009).

Lastly, from a **discourse perspective**, another major criticism regarding work-life balance and the message it sends to individuals, is that they are solely responsible for managing work-life balance within their lives and are often pressurised by the assumption that they personally need to 'get the balance right' (Gregory & Milner, 2009; Lewis et al., 2007). According to Lewis et al. (2007), this focus on personal time management, with the responsibility placed solely on the employee's shoulders, results in a narrow focus at the individual (or family) level, rather than on the need for organisational or wider socio-economic change that includes structural, cultural and practical constraints.

Gregory and Milner (2009) argue that while work-life balance preferences are shaped by individual values and expectations, they are also affected by current reality and objective factors within each individual's life (such as the availability of childcare and support structures), as well as by organisational culture, gender norms and economic conditions. Thus, preferences take account of perceived constraints, and are usually "compromises between what is desirable and what is feasible" (Gregory & Milner, 2009, p. 3). Fleetwood (2007b) suggests that work-life balance discourses are classic examples of neoliberal capitalism within societies that continue to ignore broader cultural problems with work by framing the discourse into an individual issue of how well employees are able to manage their own work and life balance.

Gatrell et al. (2013) further argue that work-life balance has been endorsed as a concern predominately affecting middle-class, heterosexual, dual-earner parents, while excluding other minority groups, resulting in oversimplified policies and initiatives as potential solutions for the problem. Discourses around work-life balance also create unrealistic and idealised expectations of the perfect individual as someone who is expected to be the "perfect employee, the perfect partner or spouse, the perfect parent and the super-fit enthusiast who enjoys a fulfilling life outside of work" (Ford & Collinson 2011, p. 268; Tajlili, 2013). The researchers emphasise that the drive to achieve this balanced, ideal individual creates additional anxieties and dissatisfaction as individuals struggle to uphold and maintain these idealised, multiple and balanced identities (Ford & Collinson, 2011).

Bloom (2016) argues that contemporary discourses of work-life balance actually create a fantasy or longing for the idea of achieving "balance". This author bases his research on a psychoanalytic perspective and argues that individuals organise their identity or selfhood around the unobtainable and vague aspiration of "balance", while its actual attraction lies not in its realisation, but rather in its existence as a repeatable fantasy for organising and achieving selfhood. According to Bloom (2016), this identity is equally dependent on the presence of a non-preferred "unbalanced" self, whereby identity is stabilised through the repetitive but always unobtainable efforts to lead a balanced life. Bloom (2016) argues that "individuals are maintained as subjects through their identification with, and paradoxical enjoyment, or jouissance from, being 'imbalanced'" (p. 588).

Finally, from an **implementation** point of view, despite the large volumes of research and literature on work-life balance, there still remains a huge gap between theory and practical implementation within organisations (Gatrell et al., 2013; Kossek et al., 2011). Kossek et al. (2011) state that the improvement of work-life balance for most employees' remains very disappointing, despite the wealth of research on the topic and the vast amount of money spent by organisations to implement various work-life balance initiatives. According to Kossek et al. (2010) work-life initiatives within most organisations often send contradictory messages to individuals. While they may enable employees to practically manage work and family, they can also overemphasise the work role, and reinforce stereotypes of ideal workers (Kossek et al., 2010).

In conclusion, Fleetwood (2007a, p. 352) sums up the issues with regard to work-life balance with the following statement:

It is unclear whether work-life balance refers to an objective state of affairs, a subjective experience, perception or feeling; an actuality or aspiration; a discourse or a practice; a metaphor for the gendered division of labour; or a metaphor for some other political agenda.

There have been two prominent theories that have dominated literature and research regarding the work-family (life) interface over the last few decades, namely **work-family conflict** (Greenhaus & Beutell, 1985), alternatively called role scarcity, negative spillover or work-home interference (De Klerk & Mostert, 2010; Marks, 1977; Rothmann & Baumann, 2014) and **work-family enrichment** (Greenhaus & Powell, 2006), alternatively called role enhancement, positive spillover or work-family integration (Barber et al., 2016; Haar, 2013; Peng et al., 2011; Van Aarde & Mostert, 2008). The following section will examine these two theories in detail, as well as conceptualise a new way forward to approach work-life balance beyond conflict and enrichment.

2.1.1 The era of work-family conflict

Research into the work/non-work interface began based on the principle of role theory, which states that individuals adopt multiple roles within society, each with their own unique set of behaviours, norms and expectations (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964). Theory regarding work-family conflict is based on the principle of

role-scarcity, which states that people hold a fixed amount of resources in terms of time and energy and that different roles draw from the same pool of resources, which can result in role overload or role conflict (Jain & Nair, 2013; Marks, 1977; Van Aarde & Mostert, 2008).

The work and family domains are considered mutually incompatible with one another, and the pressure that is experienced in attempting to manage these mutually exclusive demands results in work-family conflict (Greenhaus & Beutell, 1985). Greenhaus and Beutell (1985) identified three forms of work-family conflict, namely *time-based conflict*, which is pressure that arises when demands from one domain make it physically impossible to meet the demands from another domain, *strain-based conflict*, which refers to the strain such as tension, fatigue, depression and anxiety that can develop in one domain and make it difficult to meet the demands from another domain, and *behaviour-based conflict*, which results from behaviour that is in contrast with behaviour in another role. Research by Frone, Russell and Cooper (1992) highlights work-family conflict as a bidirectional construct representing two specific types of conflict, namely work-family conflict, where pressure at work negatively affects family life, and family-work conflict, where pressure at home can negatively affect work performance.

Edwards and Rothbard (2000) identified a number of linking mechanisms that can be used to explain the interface and relationship between work and family, based on the assumption that these domains are conceptually distinct and separate from each other. These include the following: *spillover*, where a positive/negative experience in one domain results in a similar experience in the other domain; *compensation*, where dissatisfaction in one domain encourages a person to increase involvement and seek reward in another domain; *segmentation*, which refers to an individual's attempt to separate work and family so that the domains do not impact one another; *resource drain*, which occurs when resources spent in one domain are subsequently unavailable for other domains; and *congruence*, where a positive relationship between domains is due to an objective third factor that influences both (Barber et al., 2016).

Many researchers have acknowledged that work-family conflict and family-work conflict negatively affect mental and physical health, which, in turn, affect the job- and life satisfaction of individuals (Amstad et al., 2011; Charkhabi et al., 2016; Mostert, 2009; Opie & Henn, 2013; Tasdelen-Karckay & Bakalim, 2017). Research by Charkhabi et

al. (2016) and Steyl and Koekemoer (2011) highlights that work/non-work conflict was more evident than non-work/work conflict, and that work-family conflict had a much greater effect on health outcomes than family-work conflict. This could be due to the necessitating nature of work; forcing workers to over-emphasise the work role while neglecting time spent in other life domains (Steyl & Koekemoer, 2011).

2.1.2 The era of work-family enrichment

Up to this point in research, work and family were seen as two separate entities that were conceptually distinct, and were mostly perceived as negatively influencing each other. The growing interest in positive psychology encouraged a shift in focus from the negative to the positive benefits that occur when employees integrate various roles (Jaga, Bagraim & Williams, 2013). Research by Barnett (1999), Chow and Berheide (1988) and Parasuraman and Greenhaus (2002) argue that the demands of the twenty-first century workplace require an integration of the work and family domains based on the assumption that multiple roles could potentially result in positive benefits for the individual. These researchers pioneered the way forward for a new hypothesis regarding work and life roles, by criticising work and family research as conflicting role responsibilities, but rather viewing the domains as mutually beneficial to one another through the positive exchange of energy and resources (Werbel & Walter, 2002). While work-family conflict is based on the principle of role stress theory and scarcity hypothesis, the positive work-family enrichment perspective relies on role accumulation theory and the enhancement hypothesis which highlights the positive outcomes that can occur through the accumulation and participation in multiple roles (Jaga et al., 2013; Marks, 1977; Sieber, 1974).

There are a number of terms that have been used interchangeably to explain the positive side of the work-family (life) interface, namely *positive spillover*, which refers to the transfer of positive experiences from one life role to the other (Jaga et al., 2013), *enhancement*, which occurs when one role increases energy and attitudes while contributing to the development of skills in the other role (Graves, Ohlott & Ruderman, 2007), *integration*, which is the complete opposite of segmentation theory and refers to the positive spillover that can be achieved through the integration of work, home and self (Grady & McCarthy, 2008), and *facilitation*, which refers to the extent to which gains from engagement in the work domain results in improved functioning in the family domain (Wayne, Grzywacz, Carlson & Kacmar, 2007).

Work-life enrichment is defined as “the extent to which experiences in one role improve the quality of life in the other role” (Greenhaus & Powell, 2006, p. 73). The construct of enrichment is based on the theory of positive spillover and enhancement, but is considerably more complex because it is dependent on the transferability of resource gains from one role to another resulting in observable improved performance in the receiving domain (Jaga et al., 2013). According to research by Carlson, Kacmar, Wayne and Grzywacz (2006), work-family enrichment is comprised of four types of gains, namely developmental (the acquisition of knowledge, skills, perspectives and values), affective (changes in behaviour and/or attitudes), capital (acquisition of assets) and efficiency (development of an increased focus level).

Research by Jaga et al. (2013) highlights the bilateral direction of work-family enrichment, namely work-to-family and family-to-work enrichment. Their research confirms previous research that work family enrichment has a positive effect on psychological health, with an increase in subjective well-being (individuals’ appraisal of their lives across multiple life domains) and a decrease in depression and emotional exhaustion (Jaga et al., 2013). According to Chan et al. (2016), self-efficacy (an individual’s belief in their ability to implement a particular course of action that will result in the attainment of a desired goal) is positively related to work-family enrichment, which, in turn, has a positive impact on job and family satisfaction. The findings highlight the dynamic interplay among environmental, personal and cognitive factors that influence an individual’s ability to make sense and interpret work and non-work issues (Chan et al., 2016).

Although some authors have emphasised the positive aspects of the work-life interface, the overwhelming majority of research has continued to focus on the presence of conflict, using a preventative approach aimed at minimising the conflict that exists between work and non-work life (Grawitch et al., 2010). Stemming from the idea that work undermines family life, the fundamental assumption behind most work-life balance research (including many modern conceptualisations) is that work is a necessary evil to support non-work activities (Fleetwood, 2007a; Grawitch et al., 2010). Werbel and Walter (2002) go as far as to liken the work and family roles from a parasitic perspective, where the emphasis on work and family role conflict assumes that work, as a parasite, largely interferes with the family system, which can be viewed as the host. In this context, work drains the energy of the host (family), and therefore decreases the energy necessary to sustain the family domain.

According to Potgieter and Barnard (2010) these negative assumptions about work and their impact on the family role often lead to simplistic organisational efforts such as generic flexible working arrangements aimed at decreasing the negative effects on non-work demands. These initiatives often do not necessarily provide a direct benefit to the organisation and fail to incorporate different employee attitudes and engagement to work (Grawitch et al., 2010; Potgieter & Barnard, 2010).

2.1.3 Beyond conflict and enrichment: towards a new approach of work-life balance

Based on the number of issues regarding work-life balance, as highlighted above, many researchers have called for a new approach to understanding work-life balance that moves beyond the work-family conflict and work-family enrichment paradigms to consider work-life balance as a theoretically distinct construct (Barber et al., 2016; Bataille, 2015; Carlson, Grzywacz & Zivnuska, 2009; Kossek et al., 2011).

According to Kalliath and Brough (2008), previous attempts to define work-life balance focused merely on the absence of conflict and the presence of enrichment or facilitation. According to Frone (2003, p. 145), “low levels of inter-role conflict and a high level of inter-role facilitation represents work-family balance”. Greenhaus et al. (2003) proposed that work-life balance be defined as (i) the extent to which an individual is equally engaged in, and equally satisfied with, his or her work and family roles, and where balance is a matter of degree; and (ii) a continuum anchored at one end by extensive imbalance in favour of a particular role (e.g. work) and extensive imbalance of the other role (e.g. family) as the other anchor point. These authors proposed that balance is not dependent on an individual's personal desires and needs and that an individual who purposefully chooses to invest more time in one role over another is still considered ‘imbalanced’, even if that uneven distribution of time and energy is based on the individual's intrinsic needs and personal goals at that point in time (Greenhaus et al., 2003). This objective view of work-life balance has been questioned by a number of researchers, who argue that work-life balance should not be simply conceptualised as merely equality in time, engagement and satisfaction, but rather as a **personal assessment** of how employees balance multiple roles (i.e. employees who work less to meet their parenting needs, or employees who work more due to a love of their jobs, are not necessarily considered ‘imbalanced’,

but rather in an satisfactory state based on their own perceptions, needs and expectations) (Haar, 2013).

Using an appraisal-centred approach, Grawitch, Maloney, Barber and Mooshegian (2013) confirm that satisfaction with work-life is concerned with global perceptions of how an individual is personally allocating their resources among domains, based on their needs, rather than how those domains are conflicting with, or facilitating, each other. Grawitch et al. (2010) and Grawitch, Maloney, Barber and Yost (2011) argue that different people can experience similar levels of conflict, but experience varied levels of satisfaction with their overall work and non-work interface, based on their unique goals and expectations. This supports the idea that it is one's perception of the interface rather than the actual objective experience of conflict or facilitation that really matters, and that there is no "right" way to maintain work-life balance (Grawitch et al., 2013).

Research by Bobat et al. (2012) and De Villiers and Kotze (2003) confirm that work-life balance is perceived as a subjective, continuous process which changes over time. Wattis et al. (2013) state that the attainment of work-life balance should not be viewed as an objective, fixed experience, but rather as a subjective, continued negotiation between multiple domains that will fluctuate, due to employees' changing needs and circumstances. This focus on the subjective view of work-life balance is very well suited to a qualitative research methodology that emphasises the richness of people's life-worlds and their intensely personal perspectives on what constitutes careers, families and balance (Ezzedeen & Ritchley, 2009; Potgieter & Barnard, 2010; Wattis et al., 2013). Wattis et al. (2013) argue that work-life balance should not be seen as a fixed state, but rather an intricate and often opposing set of practices that is captured most effectively through the use of qualitative research.

Barber et al. (2016, p. 113) emphasise the importance of including an individual's varied needs and expectations regarding the personal meaning of their work and non-work roles by defining work-life balance as follows:

The extent to which one's perceived allocation of finite resources (physical, mental and emotional) matches one's progress towards or achievement of meaningful goals or expectations across all life domains (both work and nonwork) at a given point in time.

This definition is based on the following four assumptions: (i) work-life balance is a psychological state driven by personal preferences; (ii) work-life balance is dependent on successfully managing limited resources; (iii) work-life balance requires achievement of, or progress towards, meaningful goals; and (iv) work-life balance is a dynamic state that changes over the lifespan, and that is influenced by various situational and personal factors (Barber et al., 2016).

Ford and Collinson (2011) show how this desire for balance changes constantly throughout the lifespan of managers. They note how life experiences (i.e. the birth of a child, chronic illness of relatives, breakdown in relationships at work or home, emotional exhaustion and stress-related illnesses) all contribute and challenge their view of the ideal or perfect manager which, in turn, affects their view and expectation of work-life balance. Recent research by Raastrup Kristensen and Pedersen (2017) confirms that work-life balance is a highly individualised process where work and home can no longer be considered as two distinct forms of employees' subjectivity and identities, but have rather become "metastable" states that are continuously modulated, based on the unique needs of the individual.

Some researchers have highlighted the importance of **person-environment fit theory** that suggests that individual characteristics (preferences, personality, meanings assigned to roles) and environmental factors (role contexts) influence one's choices of role transition strategies (spillover, compensation, and segmentation-integration) which ultimately influences their well-being (Barber et al., 2016; Haar, 2013; LePine, LePine & Saul, 2007). While person-environment fit theory highlights the fact that individual differences and environmental factors can influence an individual's perception and achievement of work-life balance, it does not fully consider broader societal and gender norms and their influence on work-life balance. Grawitch and Barber (2010), Kossek et al. (2010) and Kossek et al. (2011) state that work-life balance requires a **systems perspective**, because individuals construct their lives and choices as a function of their organisational and social context, and that a focus on the individual is insufficient to promote organisational change and enhance further research understanding.

Peng et al. (2011) and Voydanoff (2008) suggest a multi-level framework that combines various factors from a number of levels of analysis ranging from societal (macro) and external factors to individual factors (micro). According to MacDermid-Wadsworth

and Hibel (2013), general systems theory highlights the openness and interconnections within systems, whereby these systems are able to acquire new properties through their interaction with one another and the surrounding environment. The degree to which these subsystems are able to interact and interfere with one another depends upon the segmentation or integration of system boundaries – which refers to the borders that separate the time, space, individuals, affects and activities housed by subsystems (MacDermid-Wadsworth & Hibel, 2013). Subsystems that are particularly segmented exhibit low *permeability* (the degree to which elements from one domain enter into another domain), and lack *flexibility* (the extent to which temporal and spatial boundaries allow roles to be enacted in various settings and at various times), whereas integrated subsystems have boundaries that are highly permeable and flexible (MacDermid-Wadsworth & Hibel, 2013).

According to Kossek et al. (2010), systems theorists also argue that to truly understand the underlying causes of a problem or situation, one must understand the context in which it occurs. Herman and Lewis (2012) argue that research on work and family should be continually criticised and challenged for the lack of context, particularly within the cultural workplace and societal beliefs and norms. Based on systems theory, the following section will discuss work-life balance in terms of individual (micro) factors, external factors and societal (macro) factors.

2.1.3.1 *Individual factors*

According to Peng et al. (2011), individual choice, within certain situational constraints, does have a strong influence on the actual decision of how to manage work and family boundaries. Grawitch et al. (2010) document how socio-economic status, age, sex, number of children, educational level, type of work, health status – and even distance from work, can all influence various individual outcomes regarding work-life balance. **Demographic differences** (age, race, gender) and **role salience** are two individual factors that will be discussed in more detail.

In terms of **age**, Steyl and Koekemoer (2011) state that different age groups experience different levels of work-life balance, which they attribute to the saliency of roles within specific age groups. According to Codrington and Grant-Marshall (2004), generational theory states that Generation Xers (born 1960s to 1980s) and Millennials or Generation Ys (born 1980s to 2000s) watched how their parents worked so hard to

achieve success, and rather desire more balance in their lives: “They want to be with their kids, to bathe them at night, watch them at ballet, play the drums and kick a soccer ball with them on the weekends” (Codrington & Grant Marshall, 2004, p. 158). Marais (2013) states that work-life balance is of paramount importance to this generation, and that flexibility would be considered an important motivational factor. Oldfield and Mostert (2007) found that older people (those between the ages of 50 and 69) experienced statistically significant lower levels of work-family conflict than their younger counterparts (those between the ages of 22 and 39).

According to Hanna (2010) and Potgieter and Barnard (2010), relatively little focus on the unique work-life balance experiences of employees in different **race groups** is evident. Kossek et al. (2011) observe how studies on work-life balance fail to recognise how non-work related responsibilities differ along racial/ethnic lines, with black and Asian women often bearing heavy responsibilities for child and elder care, in comparison with white women.

Qualitative research by Potgieter and Barnard (2010) on the work-life balance of black South African employees in a call centre environment, found that work-life balance is conceptualised as a continuous, subjective and holistic evaluation of satisfaction of multiple roles, in relation to the importance assigned to those roles at a given point in time. This is consistent with research by Barber et al. (2016), Grawitch et al. (2011, 2013) and Haar (2013). Quantitative research by Steyl and Koekemoer (2011) showed that participants who spoke African languages experienced higher levels of private work conflict compared to Afrikaans- and English-speaking participants. This could be due to differing socio-economic positions, where securing sufficient income may be a more pressing concern than balancing work and home life (Emslie & Hunt, 2009).

Research into the differences between different **genders** has dominated much of the work-life balance literature over the years (Adame, Caplliure & Miquel, 2016). Quantitative research by Higgins, Duxbury and Lyons (2010) and Van Veldhoven and Beijer (2012) report that women in dual-earner families report higher levels of work-family conflict than men. According to Adame et al. (2016), Ruppner and Huffman (2014) and Wattis et al. (2013), men and women experience the demands of work and family differently, with women experiencing more work-family conflict as it is generally the women who manage multiple roles and assume greater responsibility for domestic and childcare while still participating in paid work.

Millward (2006) argues that women vary in their preference for work, and that this preference drives their decisions regarding work-life balance. In terms of their commitment to work and family, women can be classified as work-centred, home-centred or adaptive, and will continually make decisions to manage these domains, based on their preferred life choices (Millward, 2006). Adame et al. (2016) state that women continue to retain a disproportionate responsibility for domestic work and childcare, even when both partners are working, and that the role of mother and employee are often viewed as incompatible and conflicting, with organisations failing to understand the reality of most working women's lives. Research by Toffoletti and Starr (2016) finds that women construct their view of work-life balance as something they are expected to personally manage – an impossible task that is detrimental to their careers, and a topic that remains unmentionable at work.

A discourse analysis by Sullivan (2015) on the depiction of work-life balance in UK women's magazines revealed that multiple roles are constructed as a problematic choice often leading to stress and guilt, and that managing these multiple roles is always depicted as the responsibility of women, resulting in the continual perpetuation of traditional gender norms and assumptions. Research by Wattis et al. (2013) highlights the fact that, for most women, work-life balance is an ongoing process which is shaped by their changing circumstances. Internal conflict relating to work-family negotiation was especially evident among women who demonstrated strong caring preferences and wanted to work less, in order to spend more time at home caring for children or, in fact, didn't want to work at all (Wattis et al., 2013). These women were in the minority though, since most women wanted to work, and reported positive spillover from meaningful work; however, this desire to work was often accompanied by feelings of guilt (Wattis et al., 2013).

Research by Maher (2013) highlights that career changes such as employment breaks, part-time and casual work are predominantly used by women as they attempt to manage and integrate family care responsibilities with employment opportunities. These shifts of family and career are not necessarily signs of frayed careers or fracturing family lives, but can rather be viewed as adaptive and resilient responses by women to the everyday nature of disruption and the consistency of family change (Maher, 2013). Ezzedeen and Ritchley (2009) highlight a number of strategies executive women employ to manage work-life balance. These include professional support

and mentoring as well as life-course strategies such as the “ordering” of career and family and negotiating spousal support.

In the past, most research on work-family interaction has been focused on women in the workplace; however, changes in societal and workforce structures have influenced the role of men and their need for better work-life balance (Damaske, Ecklund, Lincoln & White, 2014; Halrynjo, 2009; Raiden & Raisanen, 2013; Simon, 2011). There is evidence to support the fact that more and more men are experiencing conflict in their ability to manage work and non-work roles (De Klerk & Mostert, 2010; Evans, Carney & Wilkenson, 2013; Higgins et al., 2010). A report published by the Families and Work Institute in 2011 highlights that many men now experience more work-family conflict than women do, especially those men who work long hours, who work in demanding jobs, are work-centric (prioritise work over their family or personal lives), or are fathers in dual-earner couples (Aumann, Galinsky & Matos, 2011).

According to De Klerk and Mostert (2010), men find it difficult to separate their work life from their personal life, due to the traditional roles that men once held evolving into more flexible ones that include assisting with household chores and raising children. Men might find it difficult to deal with such demands, thus leading to the tension caused by conflicting interests of work and family (De Klerk & Mostert, 2010). According to Evans et al. (2013), men who reported making a higher investment in family roles, as part of this balance, also reported higher quality of life. Consequently, Tasdelen-Karckay and Bakalim (2017) emphasise that it is important to examine the work-life balance of both genders.

Another important individual aspect to consider affecting work-life balance is **role salience** or **role priority** (De Villiers & Kotze, 2003; Grawitch et al., 2010; Peng et al., 2011; Steyl, 2009). Role salience is based on **role identity theory** which states that the self-concept consists of a collection of identities, each of which is based on occupying a particular role (Steyl, 2009). According to Edwards and Rothbard (1999), roles or demands possess greater degrees of importance or salience for individuals, which ultimately have a direct impact on how they manage these demands. For example, employees who place higher importance on their work roles might be more motivated to perform work-related tasks at home, whereas employees who place higher importance on their family roles might be more likely to perform family-related activities while at work (Peng et al., 2011).

De Villiers and Kotze (2003) and Steyl (2009) confirm that work-life conflict can occur when an individual struggles to prioritise one role over another, or when an individual is faced with a choice between roles of similar salience and commitment. Van Steenbergen, Ellemers and Mooijaart (2007) differentiate between “self-chosen” roles (voluntary) and “obligatory” roles, where self-chosen roles are emotionally and instrumentally easier to exit than obligatory roles. Assuming that women psychologically experience more of a choice, the authors propose that women who are engaged in paid work are, on average, more likely to have deliberately acquired the work role because of the anticipated benefits that are attached to this role and will, more often than men, consciously evaluate their experiences to decide whether or not to continue to combine these different roles (Van Steenbergen et al., 2007).

Research conducted by Buse and Bilimoria (2014) highlights how women engineers who strongly identified with their profession displayed higher levels of engagement and commitment, compared to women who did not identify so strongly with their engineering profession. Their study suggested that individuals who have a **strong career identity** are able to find appropriate balance of multiple demands/roles through work-life enrichment, due to the challenge, novelty and meaningfulness they find in their work. Research conducted by Grawitch, Barber and Kruger (2009) found that police officers who viewed their job as a calling reported greater organisational commitment and lower emotional exhaustion and turnover intention than those who classified their role as a job. Therefore, identifying with a particular role may play an important part in determining how much of their personal resources an individual wants to expend in that role (Grawitch et al., 2010).

Research by Wise and Millward (2005) on the voluntary career changes of 30-some-things highlighted that expectations regarding exactly what constitutes balance between professional and domestic lives, and the relative priority placed on them, varied according to the individual and their circumstances, as well as the importance of work to their core identity. Research by Mazerolle and Eason (2015) highlights **preference theory** which suggests that an individual’s lifestyle preferences will navigate their decisions in terms of work-life balance, career planning and job selection.

2.1.3.2 External factors

According to Grawitch et al. (2010), external factors refer to any resources or systems which exert direct influence on the person and that person’s resource allocation

process. Two such factors include spousal support and organisational culture, and will be discussed in this section.

Research has shown that **spousal support** constitutes an important support source, and can have a significant impact on women's career decision and choices (Ezzedeen & Ritchley, 2008; O'Neil & Bilimoria, 2005; Välimäki, Lämsä & Hiillo, 2009). Research by Ezzedeen and Ritchley (2008) on the spousal support received and valued by executive women indicates that women generally value (in descending order) emotional and self-esteem support, help with family members, career support, and help with the household, from their spouses. Their results also indicate that not all spousal behaviours are considered supportive. Participants highlighted frustration with inadequate domestic help, whether in the form of insufficient help or lack of initiative (Ezzedeen & Ritchley, 2008). The participants also noted that even when their husbands did help, they acted as if they were helping the wife do her job, rather than viewing household work as a joint responsibility (Ezzedeen & Ritchley, 2008). According to Ezzedeen and Ritchley (2008), some participants felt as if their husbands failed to understand their work demands, and believed that their careers took precedence, thereby forcing these women to make career changes in order to manage the multiple demands in their lives.

Välimäki et al. (2009) identify a typology distinguishing five different types of spouses and their role and influence in women's careers. These include the following: (i) the *determining spouse* is constructed as having a determining influence on the women's career, by implying that his career sets the boundaries for, and implicitly directs and takes priority over, the woman's career choices; (ii) the *supporting spouse* is described as a husband who helps and encourages the woman in her career, as well as discusses her work issues and challenges with her, backing her at various stages of her career and in difficult work situations. This spouse also provides practical support with childcare and domestic duties – which is highly relevant in achieving a work-life balance and creates an egalitarian relationship between spouses; (iii) the *instrumental spouse* is constructed as a partner who can be utilised by the woman to achieve goals that are important to her; (iv) the *flexible spouse* is presented as one who is willing to put the woman's career before his own, and adapt to the demands of her job. Here, the husband is the one mainly in charge of domestic duties, such as taking care of the household and family, to allow the woman to fully invest in her career.

This kind of choice is made by conscious mutual decision between spouses, and not based on reasons such as a lower salary or lower career status; and (v) the *counter-productive spouse* is constructed as having a negative and dismissive attitude to the woman's career and has difficulty in accepting the woman's higher status, income and career success. This research by Välimäki et al. (2009) challenges traditional gender roles between spouses as one of the main reasons why women have more difficulty in attaining managerial positions. Their research suggests that flexibility in gender roles between spouses is associated with a higher sense of success and satisfaction in their careers among female managers, compared with more conventional gender role construction.

In terms of **organisational factors**, research by Adame et al. (2016) confirms the relevance of organisational culture as a driver or barrier affecting work-life balance. Organisational culture affects work-life balance in a number of ways, such as the extent of manager and co-worker support, the career consequences of taking a work-life balance measure, organisational time expectations, and gendered perceptions of policy use (Gregory & Milner, 2009). According to Ford and Collinson (2011) and Peng et al. (2011), the pressure of long working hours and high performance expectations can reinforce traditional masculine cultures in management, which clearly separate work from non-work activities and make it incredibly hard for women to manage the multiple roles in their lives.

Most women today continue to battle the ideology of an "ideal worker" as one who is single-mindedly devoted to the good of the employer and not subject to personal distractions from family or other responsibilities (Davis & Frink, 2014; Kelly, Ammons, Chermack & Moen, 2010). Emerging from the industrial revolution, the perception of the ideal worker developed from a distinct separation of the work and family domains and the prevailing cultural and gender norms that deemed tasks performed by men as work and tasks performed by women as not (Davis & Frink, 2014). The ideal worker was therefore embodied and represented as a white, middle-class family man with a stay-at-home wife who is completely dedicated to the job (Ward & Wolf-Wendel, 2016). Current Ideal worker norms expect women to work as though they do not have children while intensive mothering norms expect women to parent as if they do not have careers (Ward & Wolf-Wendel, 2016). Despite the influx of women into the workforce since the 1950's with strong evidence arguing that this ideal does not match the reali-

ties of our current workforce, the concept of an ideal worker norm remains persuasive and unchallenged within most organisations today (Kelly, Ammons, Chermack & Moen, 2010; Sallee, Ward & Wolf-Wendel, 2016).

Walsh, Fleming and Enz (2016) state that work satisfaction increases and work-family conflict decreases when employees view their organisations as supportive of their many life roles. To address work-life balance issues, many organisations have implemented work-family-friendly policies and practices such as flexible working hours; however, the effectiveness of these policies has been questioned (Adame et al., 2016; Gregory & Milner, 2009; Lewis et al., 2007; Peng et al., 2011). Research by Adame et al. (2016) highlights that in the absence of women in positions with the power to decide whether to implement work-life balance policies (i.e. management positions), there is an increase in the likelihood of these organisations not implementing these policies – which confirms that gender bias still exists within organisations with regard to work-life balance.

According to Lewis et al. (2007), work-life balance discourses encourage HR solutions that include changes to policies and procedures, but which rarely lead to changes in the workplace structures, cultures and practices, because underlying and outdated assumptions about ideal workers, gendered assumptions, and the way that paid work should be carried out, have not been challenged. There is widespread belief across different national and organisational contexts that the work-family struggle is actually a personal responsibility, rather than a structural problem caused by the demands of competitive organisations that drive productivity and high performance at all costs (Charlesworth, Baines & Cunningham, 2015). Todd and Binns (2013) state that this widespread assumption that individuals freely make choices and negotiate their preferred working arrangements, allows managers to ignore the need to transform workplace structures, cultures and practices to improve work-life balance for employees. Research on the work-life balance of managers by Ford and Collinson (2011) highlights that the heightened work pressures and the significant erosion of work-home boundaries has resulted in work-life balance discourses that are fundamentally at odds with the increasing expectations to work even longer hours.

According to Charlesworth et al. (2016), work-life balance policies have shown some signs of better enabling dual-earner parents to manage their commitments to employers and children in this tough economic climate. However, they have not resulted in

well-balanced families per se, but, rather, a climate in which ad hoc flexible working practices are employed, where available, and, more often than not, by the mother, for the purpose of maintaining the family – and even the father’s – career (Charlesworth et al., 2016). Gatrell et al. (2013) and Gregory and Milner (2009) state that organisational structures and cultures can negate the benefits of formal work-life balance policies, leaving those who choose to make use of such policies feeling undervalued, marginalised, and fearful of possible career limitations.

According to Ford and Collinson (2011), most work-life balance initiatives do not challenge the underlying culture of the organisation (for example long working hours and face-time at the office) that sustain work-life imbalances in the first place. Todd and Binns (2013) confirm that most work-life balance initiatives revolve around providing individuals with flexible working arrangements but ignore powerful organisational drivers such as a culture of work overload and long hours, adverse career consequences and gendered role stereotypes that may operate to undermine these policies. According to Hari (2017), the reason for this is that flexible working policies, although presented as gender-neutral, still draw on the heteronormative, male-breadwinner-female-caregiver model. Pumroy (2016) states that most work-life balance programmes in many organisations only give token regard to women’s career development, and that to truly support the career development of women, organisational norms and culture would need to change through the acceptance of a “new ideal worker” as someone who is committed to both work and non-work responsibilities while pursuing their career.

According to Rudman and Mescher (2013), men are also often reluctant to request work flexibility for fear of gender-related stigmatisation. Their research suggests that men seeking work-life balance by taking advantage of flexible working arrangements such as family leave are at risk of poor worker stigma, femininity stigma and organisational penalties. Work-life balance policies have not resulted in well-balanced or gender-neutral work and family practices. Instead, work-life balance policies are still gendered, with more mothers than fathers working flexible hours because organisational expectations continually fail to acknowledge social change around the paternal parenting role (Burnett, Gatrell, Cooper & Sparrow, 2016).

Adame et al. (2016) report that creating an organisational culture whereby both men and women can utilise work-life balance policies without fear of negative conse-

quences to their career progression, could significantly benefit both men and women at all hierarchical levels within the organisation. Pumroy (2016) states that to understand how women's careers evolve and how these are guided by organisational and societal norms may enable organisations to make career development practices more effective for women.

2.1.3.3 Societal factors

According to Emslie and Hunt (2009), gender norms can be seen as the final frontier in the quest for greater equality in the work-life balance linkages. A gender role is usually understood as the behavioural norms associated with males and females within a particular social context (Välimäki et al., 2009). Lyness and Judiesch (2014) state that gender, gender differences and gender role beliefs have long been considered important for understanding work-life issues. Societies also differ in the types of roles that are prescribed for men and women, referred to as **gender egalitarianism**, which is defined as the "beliefs about whether members' biological sex should determine the roles they play in their homes, organizations and communities" (Lyness & Judiesch, 2014, p. 97). Men and women tend to occupy different social roles and therefore become psychologically different as they adopt and adjust to these roles (Eagly & Koenig, 2014; Eagly & Wood, 1999).

According to Lyness and Judiesch (2014), low gender egalitarian cultures are characterised by beliefs in the traditional gendered division of labour where men are viewed as the breadwinners and women the caretakers, whereas in high gender egalitarian cultures there is less adherence to these traditional gender roles and more similarity in both men and women's involvement in work and non-work domains. According to the researchers, women in low egalitarian cultures (traditional gendered division of labour with men as breadwinners and women as home-makers) experienced less work-life balance than those in higher egalitarian cultures (Lyness & Judiesch, 2014). According to Todd and Binns (2013), in terms of social systems, households continue to be gendered, as the degree of change in the role of men has not matched the level of increase in women's labour market participation.

Research by Seierstad and Kirton (2015) on the work-life balance of Norwegian women in high-commitment careers, found that participants' narratives did not call for more organisational work-life balance policies, but rather for more progressive soci-

etal gender norms that they felt would change the organisational culture to acknowledge both women's and men's domestic responsibilities. Research by Ruppanner and Huffman (2014) highlights how country-level gender empowerment would reduce the odds of reporting individual-level non-work/work interference for women and, in particular, mothers. On the other hand, fathers in the most gender-empowered countries reported more non-work/work interference, indicating that gender empowerment increases men's vulnerability to non-work interfering with work (Ruppanner & Huffman, 2014). This suggests that gender equality in labour force participation creates gender equality in interference (Ruppanner & Huffman, 2014).

Gatrell et al. (2013) argue that the stereotypical "*work-life balancer*" has been defined as female, white, white collar, heterosexual and a parent of young children. Gatrell et al. (2013) and Kossek et al. (2011) argue that this focus on women, or dual-income professional parents, as central to the work-life balance debate, has created inequalities through exclusion of other minority groups on the basis of gender, class and income. Women in the lower incomes appeared to enjoy the economic and social aspects of their work, but they were not economically independent and were limited in career and work-life balance choices. This highlights how the relationship between a myriad of internal and external factors determines women's attachment and attitudes toward paid work in a much more complex manner than simply individual and voluntaristic choices (Wattis et al., 2013).

Leslie and Manchester (2011) argue that work-life balance is not only a women's issue which restricts work-life balance to a low status in organisations and society, but should be regarded as a broad social issue that affects both genders, and should be addressed by questioning prevailing gender societal norms. Ollier-Malaterre (2011) also argues that change shouldn't happen only at an organisational level, but at a societal level, where citizens are encouraged to live balanced lives by having more choice in how they articulate and negotiate their various life roles. Las Heras and Grau (2011) encourage researchers to partner with businesses, associations, unions and government, to contribute positive ideas on how to develop solutions to improve work-life relationships.

2.2 THE CAREER LIFE STAGES OF WOMEN

Historically, models of career development emerged from the Industrial Age, where men worked for organisations designed as a structured pyramid, and career success

was based on the upward movement within one or two companies over their lifespan (Sullivan & Mainiero, 2007). At this point, tradition still dictated that men were seen as the breadwinners and women as the home-makers (Rehman & Roomi, 2012). Changes in the nature of work and the increasingly diverse workforce inevitably lead to the evolution of different more appropriate career development models; specifically also for women. This section provides an overview of how career development models evolved from the traditional to contemporary models to models specifically related to women in the work context.

2.2.1 Traditional models of career development

Super (1957) developed one of the most recognised and understood models of traditional career development. According to Super (1957), individuals express their self-concept through four career stages by striving to complete certain tasks in order to develop, mature and successfully move on to the next stage. If an individual is unsuccessful in completing any developmental task for that stage, they may experience anxiety and stress which could impact their career progression (Super, 1957). The four stages of Super's (1957) model are (i) *exploration* (involves exploring different career options and crystallising self-concept); (ii) *establishment* (becoming employed and building a career); (iii) *maintenance* (maintaining career and developing further knowledge and skills); and (iv) *disengagement* (preparing for and entering a period of retirement).

These traditional career development models failed to take into account two important major societal changes, namely the unique career development of women, and the changing nature of work, in the 21st century. Environmental changes, such as increased globalisation, rapid technological advancements, increased workplace diversity and the expanding use of outsourcing, part-time and temporary employees, has altered traditional organisational structures, employee-employer relationships, as well as the work context, creating changes in how individuals view their careers (Sullivan & Baruch, 2009).

The old psychological contract between employer and employee was characterised by an exchange of organisational loyalty for job security, and has been replaced by a new contract whereby individuals are no longer bound by a single organisation, and career success is no longer defined by upward mobility or extrinsic rewards (Sullivan

& Mainiero, 2007). Many individuals are now creating work for themselves; they are changing their career attitudes and behaviours in response to many factors such as changing family structures and increasing lifespans, and are making dramatic career changes by choosing lateral or even downward job moves in response to personal reflection and evaluation and to fulfil personal needs and expectations (Sullivan & Baruch, 2009).

2.2.2 Protean and boundaryless career models

The evolving self-directed focus on careers has led to the development of non-traditional career models such as the protean or boundaryless careers. While protean careers allow individuals to reshape their careers in response to life circumstances by taking a proactive role in managing their own careers (Cabrera, 2009), boundaryless careers are not tied to a single organisation, not presented by an ordered path, and exhibit less vertical coordination and stability (Zimmerman & Clark, 2016).

Protean careers are characterised by two important elements, namely self-directedness and personal value congruence – both of which are important in the careers of women (Cabrera, 2009). According to Cabrera (2009), the self-directed nature of a protean career results in multiple career cycles, which can help women accommodate family responsibilities, and the emphasis on personal value congruence is based on the fulfilment of one's own personal values – also important for working women. Conversely, many scholars have criticised the new career discourses for overemphasising individual action, and ignoring the historical, cultural and social boundaries of careers (LaPointe, 2013).

Mainiero and Sullivan (2005) state that although the concept of the boundaryless career has become the focus of much career research in the past decade, this model has been unofficially used by women for decades, out of necessity, in their attempts to manage both personal and work demands. Societal norms that still see men as the primary financial provider, with expectations that women will devote less time to work in order to accommodate family responsibilities, allow men to have greater freedom in their pursuit of traditional linear career progressions, while women face complex choices and constraints stemming from personal, organisational and societal expectations that manifest in career trajectories which differ from the traditional career tra-

jectory, resulting in discontinuous, interrupted and even “side-ways” careers (Maineiro & Sullivan, 2005; Zimmerman & Clark, 2016).

2.2.3 Characteristics unique to women’s careers

O’Neil et al. (2008) conducted an extensive literature review on women’s careers, and identified four career patterns that contribute to the understanding of women’s careers and the associated contradictions that emerge from these patterns. The first pattern identified highlights the fact that *women’s careers are comprised of more than just work and are embedded in their larger life contexts*. On the other hand, organisational realities still demand the separation of career and life. According to Cabrera (2009), most work structures and organisational cultures are still based on the premise of the “ideal worker” who does not let outside responsibilities interfere with commitment to the job. Secondly, *families and careers are central to women’s lives*; however, families continue to be seen as liabilities to the career development of women in organisations, often forcing women to choose between two very important roles in their lives. Thirdly, *women’s career paths reflect a wide range and variety of patterns* that continuously change across the life course. Most organisations, however, still expect continuous upward mobility, and frown upon career changes that deviate from the norm. Herman (2015) makes use of the terms “**frayed career**” to imply the rhythmic view of careers across the life course, which encompasses a range of non-typical career patterns including multiple career changes and career identities, as well as “**careerscape**”, to characterise women’s movement in and out of work over the life course. Lastly, human capital and social capital are critical factors for women’s career development; however, many women report a lack of developmental opportunities, with few role models and mentors available for development purposes, and ultimately affecting their career advancement (Doubell & Struwig, 2014; O’Neil et al., 2008).

2.2.4 Career life stage models for women

Lewis et al. (2015) emphasise the importance of understanding the distinctiveness and uniqueness of the “female career” as the pattern of women’s careers change, relative to the ways they reconcile their roles, relationships and domain participation at a particular point in time. In this section, the various models that have been developed to address the unique career development needs of women will be discussed.

2.2.4.1 The double helix model

White (1995) was one of the first researchers to emphasise the importance of understanding that the careers of women should be accommodated around the reality of women's lives, allowing them to make meaningful contributions in both work and family roles. According to the researcher, women's careers consist of two interwoven strands, namely career and family, which are both linked to the identity of the individual, and create a double helix model, illustrated as follows:

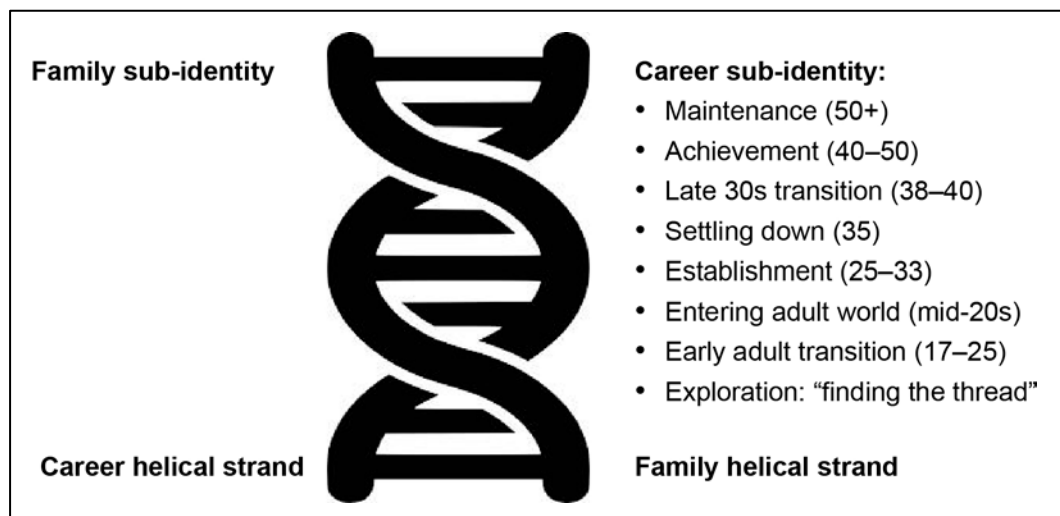


Figure 2.1. A double helix model illustrating the lifespan development of successful women (Source: White, 1995)

According to White (1995), career centrality is very important in understanding the priorities of working women. **Career centrality** is defined as the extent to which the individual sees their career as a central and very important component of their lives. White's (1995) research postulated that successful women usually have high career centrality, and feel that work is an integral part of their lives, and a strong source from which they derive their identity. The double helix strand represents the family and career sub-identities, and the thickness of the strands may be related to the size and importance of the sub-identity (family or career) at that particular point in time (White, 1995). According to White (1995), women experience periods of stability at certain points in their lives where they are able to maintain a satisfactory balance between their work and family life. These periods of stability are followed by periods of questioning, change, and a heightened awareness of the impact of career and family on each other. These periods of transition represent the main point of departure from the careers of men, and could potentially be the catalyst for various career changes (White, 1995).

White's (1995) research highlighted the relatively simplistic intersection of family and work, and the potential impact that these two priorities could have on the career development of women. Later research by O'Neil and Bilimoria (2005) and Sullivan and Mainiero (2007) expanded on the family context to include the concept of **relationalism** which posits that women do not make career decisions in isolation from others around them, but will consciously evaluate decisions in terms of the potential cost, level of stress and impact associated with the decision for both the individual and for their relationships (O'Neil & Bilimoria, 2005; Sullivan & Mainiero, 2007; Van Steenbergen et al., 2007). Sullivan and Mainiero (2007) suggest that, for women, "family" needs to be broadly defined as non-work and relational issues that not only include the typical definition of family (i.e. husband, children, parents and siblings), but also considers a woman's own physical and psychological well-being, her friends – especially if she is single and has no children – as well as her volunteer activities, hobbies and spirituality.

2.2.4.2 Kaleidoscope career model

Mainiero and Sullivan (2005) developed the Kaleidoscope Career Model as a framework for examining women's careers across the lifespan. Their research included both quantitative and qualitative methodologies that highlighted the fact that women's career decisions were part of a larger and complex web of interconnected issues, people and expectations. The authors explain the Kaleidoscope model as follows:

As with a kaleidoscope that produces changing patterns when the tube is rotated and its glass chips fall into new arrangements, women shift the pattern of their careers by rotating different aspects of their lives to arrange their roles and relationships in new ways, in order to find the mosaic that best fits their life circumstances and their own wants and needs – even if those choices defy typical definitions of career success (Mainiero & Sullivan, 2005, p. 111).

These authors identified three career issues that women face, namely **authenticity**, **balance** and **challenge**. Each of these issues dominate at different points in the lifespan, acting as the pivotal parameter that causes a shift in the woman's decision-making about her career, with the other parameters remaining active, but taking a secondary role at that particular point in time (Mainiero & Sullivan, 2005). Their research identified that most women in their **early careers** make decisions based on

their need for challenging and meaningful work. In **mid-career**, women were predominantly concerned about this issue of balance. This transcended the assumption of only married women with children, and included single women who also desired more of a balanced life, in order to look after ageing parents, pursue hobbies, or increase community involvement. In this stage, women made adjustments to their career ambitions to allow for more flexible schedules (Mainiero & Sullivan, 2005). In **late career**, the need for **authenticity** and being true to themselves became more predominant, with many women seeking careers that allowed them freedom of expression in accordance with their inner selves (Mainiero & Sullivan, 2005).

Sullivan and Mainiero (2007) investigated the effect of stress across the lifespan of women, using the Kaleidoscope Career Model. Their results indicated that when the three parameters (challenge, balance or authenticity) are in equilibrium, then little or no stress is experienced; however, conversely, when the interaction between the parameters is not in equilibrium, stress will be experienced. Disequilibrium occurs when one or more of the parameters are out of sync (Sullivan & Mainiero, 2007). This may account for the reason why a young woman would leave her unfulfilling corporate job in order to start her own business and create an environment that supports her need for challenge, or, why a young mother might decide to leave mid-career to take care of her family and gain equilibrium, or, why a mature woman would give up her career to pursue a long-forgotten dream, so that her need for authenticity may be met (Mainiero & Sullivan, 2007).

Mainiero and Sullivan (2006) also found that men and women follow different patterns throughout the lifespan. According to their research, men (84%) predominantly followed the ALPHA Kaleidoscope career pattern, which is characterised by a dominant need for challenge in the beginning of their careers, followed by the need to pursue authenticity and, finally, the need for balance, in the later part of their careers. Most women (83%) on the other hand follow the BETA career pattern, which is characterised by the pursuit of challenge, balance and, finally, authenticity, as outlined above. Their research highlighted, however, that some women did follow the ALPHA Kaleidoscope career pattern, and in these cases, those women mostly had BETA Kaleidoscope career spouses who chose to follow the BETA career pattern, thereby giving them the support needed to pursue an ALPHA career pattern (Mainiero & Sullivan, 2006).

Sullivan, Forret, Carraher and Mainiero (2009) investigated generational differences in the need for authenticity, balance and challenge. Their research found that Generation Xers (born 1965–1983) had a higher need for authenticity and balance than Baby Boomers (born 1946–1964). Most of the Generation Xers grew up with limited involvement from their parents due to high divorce rates and dual income families, so their desire is for a lifestyle of flexibility that provides a life outside of work (Aprianingsih, 2012). There was no significant difference between the two generations in their need for challenge; however, their perception regarding challenging work was different (Sullivan et al., 2009). According to these authors, for Baby Boomers challenge was translated into career advancement within organisations, whereas Generation Xers viewed challenge as the need for stimulating and meaningful work. In summary, according to Sullivan and Baruch (2009), the Kaleidoscope Career Model highlights the potential gender differences in career paths, illustrating that non-traditional models should be used when looking through a gender lens of career development. Similar to the protean and boundaryless concepts, the Kaleidoscope Career Model also highlights the importance of “relationism” in career decisions for women, as well as the influence of contextual factors on their careers (Sullivan & Baruch, 2009).

2.2.4.3 The unique career life stages of women developed by O’Neil and Bilimoria

O’Neil and Bilimoria (2005) conducted extensive research into the unique career needs of women, and advocated that women’s careers should be studied separately from men’s careers. Their research involved studying women’s career development progression by examining the path careers followed over the life course (**career patterns**), the personal and professional factors impacting those paths (**career contexts**), and the internal beliefs held by women undermining those work experiences (**career locus** and **career beliefs**).

In terms of **career patterns**, O’Neil and Bilimoria (2005) distinguished between orderly careers, which are viewed as career patterns that are strategically planned and executed to reflect purposive development opportunities and follow a stable, predictable and linear upward path throughout organisational hierarchies versus emergent career patterns which reflect more unpredictable career moves with multiple changes made to accommodate the various aspects of life. In terms of **career locus**, an external career locus is based on the belief that career opportunities or career successes are

due to chance, and caused predominantly by external or organisational factors outside of the individual's influence or control. An internal career locus is reflected in the belief that career success is achieved based on determination and personal effort, and that an individual is ultimately in charge of creating and managing their own career (O'Neil & Bilimoria, 2005). Career contexts consist of any organisational, societal and relational influences that impact on women's career choices (O'Neil & Bilimoria, 2005). According to O'Neil and Bilimoria (2005), these factors, namely career locus, career pattern, career context and career beliefs, manifest in different ways across three career life stages for women, and can be summarised as follows:

- *Career phase 1: Idealistic achievement (ages 24–35):* Women in this career life stage are motivated to succeed and will make career decisions based on their need for career satisfaction, recognition and achievement. They have a strong internal locus of control, and believe that their career success is dependent on their hard work and personal determination. They believe that their career is the primary source of personal happiness and fulfilment in their lives, and will make the necessary career and family decisions to ensure the attainment of their career goals (O'Neil & Bilimoria, 2005).
- *Career phase 2: Pragmatic endurance (ages 36–45):* Women in this career life stage find themselves managing multiple responsibilities in both the work and life domains. They find themselves struggling to manage these multiple demands, and begin to consider emergent or non-linear career paths in their attempts to find balance for their lives. They begin to make career decisions based on relationships, and will consciously evaluate choices to determine what is best for them and the people in their lives. They begin questioning the centrality of their career in their lives and experience intense conflict between the various roles in their lives. They feel increasingly unhappy and dissatisfied with their workplace for a number of reasons, including negative organisational cultures and gender discrimination and often find their careers coming to a halt or slowing down at middle management. Meaningful work still remains important to them, but they begin seeking fulfilment, satisfaction and self-worth from other areas in their lives. Women in this phase experience role conflict and stress due to the numerous transitions and decisions that need to be made with regard to parenthood and career commitment (O'Neil & Bilimoria, 2005).

- *Career phase 3: Reinventive contribution (ages 46–60)*: Women in this phase have a strong need to make a difference in the lives of others by positively contributing to their families, organisations and communities. While work dominated for a long period of time, many women experienced a life-changing event, such as a divorce, or death of a loved one, which changed their perspective on life and the importance of the work role. Success is now defined as living integrated lives with the opportunity to contribute meaningfully in their own lives and the lives of others. Work is no longer about recognition and achievement but rather an opportunity to learn new things and to give back to others by sharing knowledge and mentoring younger colleagues (O’Neil & Bilimoria, 2005).

This study by O’Neil and Bilimoria (2005) emphasises the importance of understanding and supporting women’s career and relationship priorities, in order to retain talented professional women. It also highlights the fact that women’s needs and priorities change as they progress through the various career life stages, and that if organisations want to retain their female employees, they need to provide a climate of acceptance and support for the many responsibilities women have, and the many choices they face throughout the various career life stages.

There are a number of similarities between the career life stages of Mainiero and Sullivan (2005), O’Neil and Bilimoria (2005) and White (1995), as discussed above. All three highlight the importance of family and non-work activities in the context of women’s careers, as well as the constant flux between stability and change, as women attempt to achieve balance throughout their career development. The three phases of O’Neil and Bilimoria (2005), namely idealistic achievement, pragmatic endurance and reinventive contribution, complement and support the career needs of each stage within the Kaleidoscope Career Model, namely challenge, balance and authenticity (BETA) which is predominantly used by women.

All three career models, by White (1995), Mainiero and Sullivan (2005) and O’Neil and Bilimoria (2005) are integrated and summarised into three career phases, namely early, mid- and late career, and discussed in Table 2.1 below.

Table 2.1

Integrative summary of career life stages for women

Career phase	Age	Career phase	Career need/issue	Description of career life stages
Early career	24–35 years , consisting of the following sub-stages: <ul style="list-style-type: none"> - Establishment (24–33) - Early 30s transition (33–35) - Settling down (35) 	Idealistic achievement	Challenge	<ul style="list-style-type: none"> - Period of rapid learning and development - Establishing reputation as a high achiever - Phase is about adjustment and one of orientation to the demands of work - Career decisions based on desire for career satisfaction and achievement - Women see themselves as in charge of their careers and are planning how to achieve success. - Raised awareness of biological clock – decisions regarding motherhood - Primary focus on finding a career that offers challenging work which involves greater autonomy and responsibility
Mid-career	36–45 years , consisting of the following sub-stages: <ul style="list-style-type: none"> - Late 30s transition (38–40) - Achievement/rebalancing (40–45) 	Pragmatic endurance	Balance	<ul style="list-style-type: none"> - Priority on balancing their family and work needs by adjusting career desires to pursue work that provides a flexible schedule - Women doing what it takes to get both their career and personal responsibilities done resulting in work-family conflict - Emergent career patterns that are influenced by external contexts (external career locus) - Questioning of career identity and the centrality of careers in their lives - Two alternative stylised outcomes at this stage (Ling-Lu, Sexton, Abbott & Jones, 2007): - Women find their careers stalling at the middle management stage, and they no longer seek promotion - They enter a period of early career success and self-affirmation - The differing outcomes are governed by opportunities to prove one's capability and by the timetabling of key organisational career age-stage rites of passage

cont'd/...

Career phase	Age	Career phase	Career need/issue	Description of career life stages
Late career	46–60 years , consisting of the following sub-stages: <ul style="list-style-type: none"> - Achievement/rebalancing (46–50) - Maintenance (50 onwards) 	Reinventive contribution	Authenticity	<ul style="list-style-type: none"> - Involves seeking meaning in their work. Alignment with inner self is more important than recognition - Individuals need to behave and demonstrate their attitudes in accordance with their inner selves, which may be in contrast with how things work in their surroundings - Success relates to recognition, respect and living integrated lives. This process is influenced much more by non-work factors (marriage, family, life ambitions, work ambitions) - Resolution of career-family conflict - Rationalisation not to have children - Realisation of personal goals - Develop greater stability and consolidate achievements to date - Continued growth and success

(Source: Mainiero & Sullivan, 2005; O’Neil & Bilimoria, 2005; White, 1995)

In conclusion, from a discourse perspective, Pumroy (2016) argues that even though many women have chosen or would like to choose nonlinear career paths, words such as “off-ramp” and “opt out” still have negative connotations and reflect that the only way to truly succeed is through upward organisational progression. Current discourses highlight that women are negatively impacting their career development by following nonlinear career paths, and that women’s career choices are still seen as deviating from organisational norms that still demand full-time, non-stop and continuous employment (Pumroy, 2016).

2.2.5 Work-life balance and women’s career stages

In terms of empirical research, there have been a few studies that have investigated work-life balance within a particular career life stage, but there seems to be limited research across all three stages in one study. Research by Bozzon, Murgia, Poggio and Rapetti (2017) on the work-life interference in the **early career stages** of academics in Italy, highlights that many participants experienced great difficulty in maintaining boundaries and achieving satisfactory balance among the various aspects of life, due to a culture that requires complete devotion and commitment from young researchers (Bozzon et al., 2017).

Women, in particular, noted an organisational culture that stigmatised motherhood, resulting in many women considering motherhood to be a major obstacle (and often incompatible) with an academic career. A major consideration for many women during the early career stage would be the decision regarding the right time to have children (Bozzon et al., 2017; Lee, Reissing & Dobson, 2009). Lee et al. (2009) also highlight a number of strategies to achieve work-life balance in the early career life stage of Canadian psychologists that include setting boundaries early on in their careers and prioritising personal goals for their lives.

A study by Love, Hagberg and Dellve (2011) on stress and recovery among highly educated working young women highlights that the combination of extensively ambitious young women and a context overflowing with opportunities and demands results in the women constantly striving to find balance in daily life. Clarke (2015) has researched how Generation Y professionals (early career life stage), in dual career couples, are managing the challenges of demanding jobs, caring for families and negotiating competing career goals. According to Clark (2015), Generation Y professional couples are making career decisions early on in their careers, designed to accommodate future phases of life. A number of strategies are identified, namely (i) *choosing a beta career preference* which is shaped largely by their desire for balance between work and non-work activities, (ii) *taking a “back seat”* which involves prioritising one career over the other, based on career motivation and earning potential, and (iii) *taking turns in prioritising their careers* (Clarke, 2015).

It would seem that most of the current research has been conducted within the **mid-career** life stage. This could be due to the fact that the majority of women in this stage experience difficulty managing multiple responsibilities and roles, and often make career changes or transitions to meet their unique needs and life circumstances (Cabrera, 2009; McFadden & Swan, 2012; O’Neil & Bilimoria, 2005; Wise & Milward, 2005). Hartsel (2017) has recently conducted research into the reasons why teachers leave the profession during mid-career, identifying lack of work-life balance as a reason for the high attrition rates during this career life stage. Grady and McCarthy (2008) and Zauner (2013) have also researched the work-life balance of professional working mothers at the mid-career stage. Both sets of findings support the intense conflict experienced by working mothers as they struggle to provide the best care possible to their children, while still seeking stimulation, challenge and achievement

in their work. According to Zauner (2013), role conflict and role enhancement is influenced by role salience and work-family boundaries.

August (2011) conducted qualitative research into the career development of women in **later life** through the lens of the Kaleidoscope Career Model. Her research has highlighted a number of important considerations regarding the work-life balance of women. The ongoing connections between work and non-work and the desire for balance were still part of the participants' lives; however, most of them felt that achieving a reasonable balance was easier and finally within reach, compared to when they were younger (August, 2011). The research also highlighted the importance of positive spillover and enrichment, as well as the negative effects of work-family conflict. According to August (2011), many participants described positive spillover by stating that they were better professionals because of the things they had learnt over the years from their children and spouses – and even from leisure pursuits such as reading and other hobbies. On the other hand, participants highlighted work-family conflict due to bad bosses, poor relationships with colleagues, and work overload experienced, particularly in their earlier career (August, 2011).

Two studies were identified as focusing on work-life balance/work-family conflict across all career life stages. Firstly, Darcy et al. (2012) conducted research on the work-life balance of men and women across career life stages, using job involvement, perceived managerial support and perceived career consequences as mediating factors. Their results confirm that work-life balance is an important concern for all employees at different stages of their careers, although for different reasons, and that the importance of the mediating factors on work-life balance changed across the career life stages (Darcy et al., 2012). Aprianingsih (2012) conducted a study on work-family conflict across all career life stages, using the Kaleidoscope model. The results of the study showed that each career life stage had different outcomes with regard to work-family conflict, with authenticity and balance positively related to work-family interference, whereas challenge negatively correlated with work-family interference. Both studies confirmed the fact that work-life balance changes, due to the unique needs, expectations and priorities across various career life stages.

While limited research has been done on work-life balance across all three career life stages, there is much evidence to support the need for such research, due to the fact that women's professional and personal priorities, needs and expectations fluctuate

at different stages over the lifespan (Aprianingsih, 2012; Bataille, 2015; Darcy et al., 2012). Much of work-life balance policy and practice research examines work-life balance issues from a static and fixed perspective, with such a uniform and standard approach not only costly, but unlikely to be effective in meeting the real needs of different categories of employees within various career life stages (Darcy et al., 2012).

2.3 WOMEN IN MALE-DOMINATED OCCUPATIONS

Women in male-dominated occupations such as science, engineering and technology (SET) continue to face a number of unique and tough challenges that all stem from the gendered norms and assumptions of these organisations (Cervia & Biancheri, 2017; Herman, 2015; Herman & Lewis, 2012). Gendered organisational norms are defined as “rules governing behaviour that are based on stereotypes of male and female workers, and emerge, not in isolation, but from an organisation’s founding context, and are reinforced through repeated interpersonal interactions” (Mastracci & Arreola, 2016, p. 138).

According to Mastracci and Arreola (2016), gendered organisations are based on rules, procedures and rituals that favour typical masculine traits and either ignore or devalue more feminine traits such as the caregiving role. Herman (2015) and Herman and Lewis (2012) describe the normative assumptions or “ideal engineer” as being male, continuously available for full-time employment, and internationally mobile. Working long hours and presenteeism (being present in the office at all times) has always been associated with masculine competitive practices in most organisations (Cahusac & Kanji, 2014). Male dominance, in terms of sheer numbers and decision-making power, ensures the maintenance of masculinist practices in the workplace, which further restricts women’s opportunities in SET professions (Hari, 2017). Whitehead and Kotze (2003) use the term “male base of performance” to describe a culture where women are continuously compared to their male counterparts, forcing them to work harder and longer to prove their commitment to the organisation. Due to the underrepresentation of women in SET professions, their non-linear career needs continue to be depicted as deviating from the ideal worker norm prevalent within the SET professions (Herman, 2015).

Gregory and Milner (2009), Haas et al. (2016) and Watts (2009) highlight the types of strategies employed by women in response to a masculine organisational culture. On

the one hand, some women use a **similarity strategy** by pursuing a typical male career pattern that involves full assimilation of masculine norms in the SET professions. These women rely on extensive domestic support to help with their family responsibilities (Gregory & Milner, 2009). On other hand, some choose a **difference strategy** that involves choosing alternative career paths, resisting forced mobility, and constructing joint mobility strategies with their spouse that includes part-time working, self-employment and flexible working schedules (Gregory & Milner, 2009). Unfortunately, these individual strategies appear to be limited to those with exceptional leverage (extremely highly qualified individuals or couples), and cannot break the negative organisational patterns that exist, but instead leave the dominance of masculine norms in SET unchallenged (Gregory & Milner, 2009; Haas et al., 2016).

Central to the career of a female engineer is the concept of **professional identity** (Buse & Bilimoria, 2014; Buse, Bilimoria & Perelli, 2013; Haas et al., 2016; Herman & Lewis, 2012), which is formed through the accumulated individual experiences within a profession over time, and is strongly influenced by norms, attributes and motives for the profession (Haas et al., 2016). According to Haas et al. (2016), in SET, the pervasive professional norms such as analytical competence, objectivity and rationality have been revealed as a masculine idealisation of the science profession, and often place women in a dilemma between contradictory, yet intertwined, gender and professional identity components. Research by Herman (2015) and Herman and Lewis (2012) highlights the paradox between their identity as women as well as their professional identity as engineers, and argues that this paradox often becomes unmanageable once they become mothers.

Motherhood has been shown to be problematic, due to the perceived incompatibility with normative SET assumptions (Cahusac & Kanji, 2014; Herman, 2015; Herman & Lewis, 2012). According to research by Cahusac and Kanji (2014), women in masculine organisational cultures often feel as if they should hide their motherhood, and engage in strategies for secrecy, with some women stating that they pretended that their children's interests were of little importance to them. According to Cahusac and Kanji (2014), working professional mothers often face a "take it or leave it" situation. Either the mother commits to working practices that adhere to dominate masculine practices and include long hours in the office, with limited time and respect for per-

sonal commitments, or else they accept lower work status, and make career changes that often impact their long-term career success (Cahusac & Kanji, 2014).

Walsh et al. (2016) state that women with families are also subject to specific stereotypes about their commitment and competence, with mothers presumed to be less competent and committed than non-mothers. Cervia and Biancheri (2017) highlight how the gendered assumptions of male-dominated occupations reinforce the perceptions of mutual exclusivity between the role of mother and that of a SET professional. This mutual exclusivity determines women's choices in both their public and private lives. Sometimes, they reject one for the other, other times they modify their participation in favour of the other, and at other times they disrupt their participation in one because of the other (Cervia & Biancheri, 2017). According to Cahusac and Kanji (2014), unless mothers mimic successful men, they do not look the part for success within male-dominated professions. Herman and Lewis (2012) identify the importance of role models in providing social comparisons, and state that if there are few organisational role models of women who modify working patterns for family, and sustain career progression, then fewer mothers are likely to deviate from ideal career patterns without career disadvantages.

Buse and Bilimoria (2014) and Buse et al., (2013) conducted research into why some women persist in engineering careers, and why others choose to opt out. The research findings highlight the importance of **professional identity** in their ability to cope with the high demands of their profession, through adaptation, collaboration, and alignment of professional and personal aspirations (Buse et al., 2013).

According to Buse and Bilimoria (2014), when the ideal self, described as one's personal vision, specifically about who that person wants to be and what she would like to accomplish in life, is aligned with the *real self*, described as who the person is at the present time, there is motivation for maintaining the current state. For these women, the ideal self directly impacts work engagement, and work engagement directly impacts career commitment to engineering (Buse & Bilimoria, 2014). The women who persisted in engineering careers articulated high levels of self-efficacy, described themselves in terms of their identity as an engineer, and were motivated by the challenges and novelty of the profession (Buse et al., 2013). Women who opted out of the engineering profession had a low professional identity, and often felt as if they had been 'pushed' into engineering. They were frustrated with the male-dominated

culture of engineering, and felt increased pressure to balance work and family, as well as a lack of fulfilment within the engineering profession (Buse et al., 2013).

Buse et al. (2013) argue that because engineering is almost always associated with men, and engineering continues to be male-dominated, women may continue to have difficulty constructing and internalising their identity as an engineer. Women who persist in engineering were less likely to be married, and had fewer children than women who opted out of engineering, and many women discussed their decision to opt out of engineering in relation to family needs (Buse et al., 2013). This is supported by research by Du Plessis and Barkhuizen (2012) and Martin and Barnard (2013), who highlight gender discrimination and inadequate accommodation of women's unique physical, identity and work-life balance needs as career challenges that pose a barrier to the professional advancement of women in male-dominated occupations.

Herman (2015) has conducted research into the experiences of women who have attempted to return to SET professions after taking a career break for predominantly family reasons. Three distinct career narratives were identified, namely rebooting, re-routing and retreating. Women who choose to **reboot** their career with the SET profession after a career break, are characterised by a strong career identity and a strong desire to resume their careers within SET professions. **Rerouting** involves retraining and acquiring new qualifications in a similar profession, in order to improve their quality of life. **Retreating** means a decision to focus on a full-time caring role, where the logistics of combining family and work has been too difficult to maintain. The research findings highlight that prevailing cultural norms within SET professions mean that conventional career paths in these sectors are more difficult to come back into, and with fewer entry points (Herman, 2015).

The women's discourses also highlight their internal struggle with the desire for a non-linear career path that contradicts the normative assumptions in a SET profession where full-time, continuous employment is expected (Herman, 2015). Cech and Blair-Loy (2014) highlight that many women in SET professions experience "flexibility stigma" which refers to the negative sanctions towards employees who ask for, or are assumed to need, workplace arrangements to attend to family and personal obligations. Many women avoid using these formal policies, for fear of career setbacks with those who report this stigma, experiencing lower intentions to persist, work-life conflict and lower job satisfaction (Cech & Blair-Loy, 2014).

In conclusion, Mastracci and Arreola (2016) argue that while structural theory states that balancing work and family demands should improve as the proportion of women reach critical mass and they advocate for changes, most women within SET professions will continue to find work-life balance elusive to obtain, and difficult to manage. According to Mastracci and Arreola (2016), gendered organisations will continue with norms and practices based on stereotypical male practices, regardless of the workforce composition, until issues underlying the reasons why organisations are gendered in the first place are properly addressed. Watts (2009) states that despite an increase in number, the minority status of women in engineering will continue to challenge their professional identity – which is central to the conflict they face between the roles within their professional and personal lives. Organisations that recognise the importance of women’s families and the demands they face in managing multiple roles by changing gendered norms and assumptions, as well as promoting the skills needed to persist in a male-dominated work environment, are more likely to retain women in the future (Buse et al., 2013). According to Pumroy (2016), most of the existing research on women in engineering is specific to female engineers primarily working in academic environments, the male-dominated and gendered culture of these professions, as well as the identity development of these individuals, with very little focus on women working in the profession, and their career development. This study will meet the gap identified by Pumroy (2016), by focusing on the lived experiences of female engineers currently working in the profession as they attempt to manage work-life balance and the impact it has on their career development across the career life stages.

2.4 CHAPTER SUMMARY

This chapter comprised the literature review, and attempted to satisfy the specific literature aims of the study. The researcher acknowledges the broad scope of the topics discussed in this literature review, and has attempted to provide a thorough and integrated analysis of the theoretical and empirical research.

CHAPTER 3

RESEARCH ARTICLE

WORK-LIFE BALANCE IN THE CAREER LIFE STAGES OF FEMALE ENGINEERS: A HERMENEUTIC PHENOMENOLOGICAL PERSPECTIVE

Orientation: Research has demonstrated that women continue to experience difficulty in managing the multiple demands from both the work and non-work domains in their lives. Changing roles, expectations and needs across various career life stages potentially impact how women negotiate and perceive work-life balance.

Research purpose: The aim of this study was to gain a deeper understanding of the lived work-life balance experiences of female engineers in the early, mid- and late career life stages.

Motivation for the study: Very little research is evident on how work-life balance perceptions and needs change across the career life stages of women, particularly for women in male-dominated occupations, who continue to face a number of unique and tough challenges inherent to their profession.

Research approach, design and method: A qualitative study was employed using a hermeneutic phenomenology approach. Data was gathered using semi-structured interviews from nine female engineers (three per career life stage) and analysed using Interpretative Phenomenological Analysis.

Main findings: In the early career life stage, the notion of balance is sacrificed for work, as individuals strive to build their careers and achieve recognition and success. Work-life conflict is experienced as individuals struggle to manage their intense work preoccupation with the multiple life changes that occur in this career life stage. In the mid-career life stage, work-life balance is of utmost importance, and can be perceived as a satisfactory combination of meaningful work, with time devoted to the family domain, including time for personal care and development. The late career life stage is characterised by an integration of work into the broader life context, making balance much easier to obtain. Individuals experience a time of work-life harmony where work and life roles are seamlessly entwined into one larger life story. Role salience or career centrality is the biggest determining factor

of how work-life balance is negotiated throughout the career life stages of female engineers.

Practical/managerial implications: The findings of this study suggest that work-life balance requires a specific, personalised approach based on the unique needs and expectations of women in each career life stage, as well as specific changes in organisational culture, recognising and supporting individuals who have responsibilities in both work and family domains.

Contributions/value add: This research will assist in providing a deeper understanding of the unique work-life balance needs of female engineers across various career life stages which could ultimately help organisations attract and retain talented professionals in the workplace. This research will also contribute to the growing body of knowledge regarding women operating in male-dominated occupations, and will hopefully advocate the need for changing cultural and gender norms within the profession.

3.1 INTRODUCTION

“We are women who work” – Ivanka Trump

Research has shown that the challenge of balancing the demands of both work and family life has become increasingly difficult for women over the past few decades – particularly within the science, engineering and technology (SET) professions, where women continue to battle difficult working conditions and unsupportive organisational practices that promote and reinforce established gender norms and assumptions (Buse & Bilimoria, 2014; Du Plessis & Barkhuizen, 2012; Opie & Henn, 2013). Despite the rapid increase of women in the workforce, heavily entrenched societal norms still depict men as the primary breadwinner and women as the caretaker of the home and family in addition to their often intensive work roles (Sullivan, 2015; Toffoletti & Starr, 2016; Wattis, Standing & Yerkes, 2013).

The South African government recently issued the first ever report on the status of women in the South African economy, highlighting that working women spend considerably more time on unpaid or domestic household work than their male counterparts. This discrepancy is particularly large during childbearing and childrearing ages,

placing considerable strain and pressure on these individuals as they attempt to manage these multiple demands in this particular stage of life (South African Department of Women, 2015). Many women have compared the notion of achieving work-life balance to searching for the 'Holy Grail': impossible to find, fraught with complexities, and often leading to disappointment, stress and guilt (August, 2011; Sullivan, 2015). To assist with the demands of multiple roles and responsibilities, many women are opting for non-linear and alternative career paths, often resulting in fewer women in leadership positions and negative career consequences, especially for women in SET professions dominated by traditional career models that promote continuous, full-time employment (Herman, 2015; Herman & Lewis, 2012; Maher, 2013).

3.1.1 Research purpose and objectives

Research has consistently demonstrated that work-life balance fluctuates over time (Barber, Grawitch & Maloney, 2016; Darcy, McCarthy, Hill & Grady, 2012; Potgieter & Barnard, 2010, Wattis et al., 2013), and that women's career patterns are part of their larger life context whereby they continuously rearrange work and life roles based on their current life circumstances at that particular point in time (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005; Vinkenburg & Weber, 2012). However, very limited research has been done on work-life balance across all career life stages in one study. Since work-life balance remains a strong concern for women in SET professions (Cahusac & Kanji, 2014; Herman, 2015; Martin & Barnard, 2013), a study focusing on the lived experiences of these professionals would provide organisations with a better understanding of their unique work-life balance needs and expectations as they fluctuate across the lifespan and ultimately assist in the retention of women in industry. This study will meet a gap, as identified by Pumroy (2016), by focusing on female engineers who are currently working in the profession as they attempt to negotiate work-life balance and the impact it has on their career development across the career life stages.

The general aim of this study was therefore to gain a deeper understanding of the lived work-life balance experiences of female engineers in the early, mid- and late career life stages.

The next section provides a comprehensive discussion on the literature relevant to the study. This is followed by a description of the research approach and research

methods employed, followed by a presentation and discussion of the results. The final section includes practical implications, limitations, and recommendations for future research.

3.1.2 Literature review

The following literature review includes a discussion on the theoretical background of work-life balance as a construct, the career life stages of women, and women in male-dominated occupations such as engineering.

3.1.2.1 Work-life balance as a construct

The term 'work-life balance' has been used extensively over the years among both scholarly and non-scholarly authors to describe the often elusive pursuit of balance across all domains of life, and is often used as a metaphor to represent similar constructs such as work-family conflict or role balance (Barber et al., 2016; Bataille, 2015; Greenhaus & Beutell, 1985; McMillan, Morris & Atchley, 2011). Despite the popularity and pervasive use of the term 'work-life balance', this clichéd phrase has been cloaked in debate and criticism for a number of reasons, including the following: **definition and measurement inconsistencies** (Greenhaus, Collins & Shaw, 2003; Kalliath & Brough, 2008; McMillan et al., 2011), resulting in an inability to distinguish the construct from similar concepts; **conceptual understanding**, whereby work is framed as evil while life is seen as good, with these two spheres of life considered mutually exclusive, in opposition to one another, and completely distinct concepts (Fleetwood, 2007); **negative discourses**, framing work-life balance as a problem affecting predominantly middle-class, heterosexual and dual-earner parents, with the individual solely responsible for achieving balance in their own life while ultimately ignoring broader organisational and cultural constraints (Gregory & Milner, 2009; Lewis, Gambles & Rapoport, 2008); and, finally, **implementation concerns**, with most current work-life balance initiatives failing to meet the needs of the employees, and perpetuating the idea of a stereotypical 'ideal worker' resulting in additional anxiety and stress (Ford & Collinson, 2011; Gatrell, Burnett, Cooper & Sparrow, 2013; Kossek, Baltes & Matthews, 2011; Kossek, Lewis & Hammer, 2010).

There have been two prominent theories that have dominated literature regarding the work-family (life) interface over the past few years, namely **work-family conflict**

(Greenhaus & Beutell, 1985), alternatively called role scarcity, negative spillover or work-home interference (De Klerk & Mostert, 2010; Marks, 1977; Rothmann & Baumann, 2014), and **work-family enrichment** (Greenhaus & Powell, 2006), alternatively called role enhancement, positive spillover or work-family integration (Barber et al., 2016; Haar, 2013; Peng et al., 2011; Van Aarde & Mostert, 2008). Current research proposes a need to move beyond conflict and enrichment to conceptualise a new way forward to approach work-life balance as a theoretically distinct construct (Barber et al., 2016; Bataille, 2015; Carlson, Grzywacz & Zivnuska, 2009).

Work-family conflict is based on the principle of role-scarcity which states that people have only a fixed amount of resources, in terms of time and energy, to expend on the various roles in their lives, often resulting in role overload or role conflict in their attempt to manage the demands of these mutually exclusive, conceptually distinct and often irreconcilable domains (Greenhaus & Beutell, 1985; Jain & Nair, 2013; Marks, 1977; Van Aarde & Mostert, 2008). Together with the growing interest in positive psychology, many researchers began to question the principle that work and family were two separate entities, conceptually distinct and negatively influencing each other, and began to argue that there could be potential benefits when individuals combine multiple roles, and that the demands of the 21st century workplace required an integration of these two domains (Barnett, 1999; Chow & Berheide, 1988; Jaga, Bagraim & Williams, 2013; Parasuraman & Greenhaus, 2002).

According to Jaga et al. (2013), this emerging positive perspective draws on role accumulation theory and the enhancement hypothesis (Marks, 1977; Sieber, 1974), which implies that participation in multiple roles could produce rewards that potentially counteract the negative effect from the demands of several roles, and ultimately result in **work-family enrichment** – which can be defined as the extent to which positive involvement in one role improves satisfaction in the other role (Greenhaus & Powell, 2006). While work-family conflict has been linked to a number of negative personal and organisational consequences (Amstad, Meier, Fasel, Elfering & Semmer, 2011; Charkhabi, Sartori & Ceschi, 2016; Mostert, 2009; Opie & Henn, 2013; Steyl & Koekemoer, 2011; Tasdelen-Karckay & Bakalim, 2017), research has proved that work-family enrichment has the opposite effect and results in improved psychological health and job and family satisfaction (Chan, Kalliath, Brough, Siu, O'Driscoll & Timms, 2016; Jaga et al., 2013).

Rather than viewing work-life balance as an objective state defined as equality in time, engagement and satisfaction, current researchers argue that, conceptually, work-life balance satisfaction is ultimately distinct from conflict or enrichment and, rather, is concerned with an individual's **subjective assessment** of how they are balancing these multiple roles based on their own unique perceptions, needs and expectations which change over time (Bobat, Mshololo & Reuben, 2012; Grawitch, Maloney, Barber & Mooshegian, 2013; Haar, 2013; Potgieter & Barnard, 2010; Wattis et al., 2013). The work-life balance definition of Barber et al. (2016) is based on the assumption that work-life balance is a psychological state, driven by personal preferences and the achievement of meaningful goals that change over the lifespan and which are influenced by numerous situational and personal factors.

Another major criticism of work-life balance research is the narrow focus on the individual that does not fully consider organisational, societal and gender norms. Current researchers propose a systems perspective (individual, external and societal levels) based on the assumption that individuals construct their lives as a function of their broader cultural and societal beliefs or norms (Grawitch & Barber, 2010; Grawitch, Barber & Justice, 2010; Herman & Lewis, 2012; Kossek et al., 2010; Kossek et al., 2011). On an individual level, extensive research has been done on the effect of various demographic factors on work-life balance, including **age** (Codrington & Grant-Marshall, 2004; Marais, 2013; Oldfield & Mostert, 2007; Steyl & Koekemoer, 2011), **race** (Hanna, 2010; Potgieter & Barnard, 2010; Steyl & Koekemoer, 2011) and **gender** (Adame, Caplliure & Miquel, 2016). Research has proved that women predominantly experience more work-family conflict than men do as they struggle to manage multiple roles and live up to idealistic expectations created by current work-life balance discourses, and will be more likely to make career changes to better integrate work and family responsibilities (Adame et al., 2016; Maher, 2013; Ruppanner & Huffman, 2014; Sullivan, 2015; Toffoletti & Starr, 2016; Wattis et al., 2013).

Another important individual aspect to consider affecting work-life balance is role salience (Grawitch et al., 2010; Peng et al., 2011; Steyl, 2009) or career centrality (White, 1995). Roles possess different levels of importance for individuals, directly impacting how they prioritise and manage those roles (Edwards & Rothbard, 1999). A strong work role salience can increase work-life enrichment, due to the challenge and meaningfulness found in work (Buse & Bilimoria, 2014; Grawitch, Barber & Kruger, 2009).

Similarly, individuals with high career centrality believe that work is a significant component of their lives, from which they derive a sense of identity and self-worth (White, 1995).

Spousal support and **organisational culture** are two external factors which can exert direct influence on an individual's work-life balance satisfaction. Research by Ezzedeen and Ritchley (2008), O'Neil and Bilimoria (2005) and Välimäki, Lämsä and Hillo (2009) confirms that spousal support can have a significant impact on the career decisions and work-life balance choices of many women. Most organisations have attempted to address work-life balance issues at a very superficial level by implementing various work-life balance initiatives and policies, but have failed to address the underlying powerful assumptions that drive a culture of long hours, adverse career consequences and gendered stereotypes that operate within the organisation and undermine these policies and practices (Ford & Collinson, 2011; Gatrell et al., 2013; Gregory & Milner, 2009; Todd & Binns, 2013). The prevailing ideal worker norm perpetuates the belief that an employee should be someone completely devoted to the good of the employer and never subjected to personal distractions from family or other responsibilities (Davis & Frink, 2014; Ward & Wolf-Wendel, 2016). Work-life balance will, however, continue to remain an issue until organisations change their culture and embrace the validity of the 'new ideal worker' as someone who is involved in both work and non-work responsibilities without fear of negative consequences on their career progression (Adame et al., 2016; Pumroy, 2016).

On a societal level, Leslie and Manchester (2011) and Ollier-Malaterre (2011) argue that work-life balance is a social issue that affects both genders, and can only be fully addressed by questioning prevailing gender societal norms and encouraging citizens to live balanced lives by providing choice as to how they manage their own life roles.

3.1.2.2 The career life stages of women

Models of career development have shifted from the traditional models based on the assumption of a male breadwinner focused on upward movement within one or two organisations over their lifespan (Sullivan & Mainiero, 2007) to more non-traditional career models such as the boundaryless career, where individuals are not bound to a single organisation (Cabrera, 2009) and protean careers, where individuals take a proactive role in managing and reshaping their careers based on many factors such

as changing family structures and their personal life circumstances at that point in time (Cabrera, 2009; Sullivan & Baruch, 2009). Mainiero and Sullivan (2005) argue that women have unofficially made use of these non-traditional career models for many years as a matter of necessity in their quest to manage work and family demands. These non-linear career paths are still, however, seen as a deviation from the norm, and often result in negative career consequences (Cabrera, 2009; Doubell & Struwig, 2014; O'Neil, Hopkins & Bilimoria, 2008).

There have been a number of researchers advocating the development of unique career models for women, based on the importance of family and non-work activities in the context of women's careers, as well as the fluctuations of these expectations and priorities throughout the various career life stages (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005; White, 1995; Zimmerman & Clark, 2016).

According to White (1995), the needs of women shift according to different life stages and are characterised by a period of stability, where a satisfactory balance between work and family is maintained and periods of transition, where women question the impact of career and family on each other. It is during these times of transition and questioning that women are most vulnerable to various career changes (White, 1995). Mainiero and Sullivan (2005) developed the Kaleidoscope Career Model as a framework to explain women's careers across the lifespan, based on the principle that just as a kaleidoscope produces changing patterns, so women shift the patterns of their careers by rotating the different roles in their lives to achieve the best fit, based on their current life circumstances and personal needs and expectations.

Mainiero and Sullivan (2005) identify three broad career issues that women face at different points in the lifespan, namely **challenge** in the early career life stage, **balance** in the mid-career life stage and **authenticity** in the late career life stage. Stress is experienced when one or more of these parameters are out of sync in a particular career life stage (Sullivan & Mainiero, 2007). Taking into account changes in career patterns, career contexts, career locus and career beliefs over the life course, O'Neil and Bilimoria (2005) identified three phases representing the unique career development of women. The **idealistic achievement phase** (age 24–35) is characterised by a strong need for career satisfaction, achievement and success. Women are achievement-orientated and view their careers as the primary source of personal happiness and fulfilment (O'Neil & Bilimoria, 2005). The mid-career phase (age 36–45) is called

the **pragmatic endurance phase**, and consists of women who are struggling to manage the multiple roles in their lives, and are questioning the centrality of their careers. They are considering making changes to both their personal and professional lives, and begin looking for fulfilment and satisfaction in other areas of their lives (O'Neil & Bilimoria, 2005). The final career life stage, **reinventive contribution** (age 46–60), is characterised by women who focus less on career achievement and success and have a strong need to live fully integrated lives and contribute positively to their families, communities and organisations (O'Neil & Bilimoria, 2005).

Combining work-life balance with career life stages highlighted a few empirical studies that investigate work-life balance within a particular career life stage, but with very limited research across all three stages. Research has proved that women in the early career life stage experience difficulty in maintaining boundaries and balance among the various aspects of their lives (Bozzon, Murgia, Poggio & Rapetti, 2017; Love, Hagberg & Dellve, 2011). Women in this career life stage also start making decisions regarding future life roles, such as deciding on the right time to have children, considering non-linear career paths, and potentially prioritising one career over another (Clark, 2015; Lee, Reissing & Dobson, 2009).

In the mid-career life stage, research suggests that work-life balance is a major reason for the high attrition rate in this phase, with many women making career changes and transitions to help improve the difficulty in managing multiple responsibilities and roles (Cabrera, 2009; Hartsel, 2017; McFadden & Swan, 2012; Wise & Milward, 2005). Role conflict is also experienced as mothers strive to give the best of themselves to their children while still seeking stimulation, achievement and satisfaction in their careers (Grady & McCarthy, 2008; Zauner, 2013). According to August (2011), in the late career life stage balance seems easier to obtain, with many women making a conscious decision to focus on both work and non-work activities. Women also experience positive spillover across all domains of their lives as they successfully integrate both work and other life roles (August, 2011).

Only two studies were identified focusing on work-life balance/work-family conflict across all career life stages. Research by Darcy et al. (2012) confirms that work-life balance is a concern for most employees at different stages of their lives, and for different reasons, due to various mediating factors such as job involvement, managerial support and perceived career consequences which also change over time. Aprianingsih

(2012) conducted research on work-family conduct, using the Kaleidoscope model, and results suggest that each career life stage has different outcomes with regard to work-life conflict, confirming that work-life balance issues change over the lifespan.

3.1.2.3 *Women in male-dominated occupations*

Research suggests that women in male-dominated occupations such as science, engineering and technology (SET), face unique and difficult challenges, due to the gendered norms and assumptions of the organisations in which they function (Cervia & Biancheri, 2017; Herman, 2015; Herman & Lewis, 2012). Mastracci and Arreola (2016) define gendered organisational norms as rules dictating organisational behaviour based on male and female stereotypes that developed over time from the organisation's founding philosophies, and which are continuously reinforced through repeated social interactions.

Female engineers continue to operate in organisations with procedures, rules and expectations that reinforce typical masculine traits and are based on the normative assumptions of an 'ideal worker' who is male, continuously available to work long hours and willing to be present in the office at all times (Cahusac & Kanji, 2014; Herman, 2015; Herman & Lewis, 2012; Mastracci & Arreola, 2016). This means that women who choose non-linear career paths to accommodate the multiple roles in their lives are often ostracised and depicted as deviating from the ideal worker norm prevalent in SET professions (Herman, 2015).

To operate within this difficult and demanding environment, women have two strategies that they employ in response to the masculine culture within gendered organisations, namely a **similarity strategy** that includes following a typical male career pattern and full assimilation of masculine norms, versus a **difference strategy** that involves resisting forced mobility, choosing alternative career paths and constructing flexibility strategies that include part-time working, self-employment and flexible working schedules (Gregory & Milner, 2009; Haas, Koeszegi & Zedlacher, 2016; Watts, 2009). Research also suggests that female engineers experience intense **role conflict** between their professional identity and their identity as women, especially their role as mothers, due to the perceived incompatibility of these roles with normative SET assumptions (Cahusac & Kanji, 2014; Herman, 2015; Herman & Lewis, 2012).

Female engineers with families also battle continued stigmatisation regarding their commitment and competence to the profession, with mothers assumed to be less competent and committed than women without children (Walsh, Fleming & Enz, 2016). Research conducted by Buse and Bilimoria (2014) suggests that **professional identity** is central in the ability of female engineers to cope with the high demands of their profession. Female engineers who have a strong professional identity have high levels of self-efficacy and are motivated by the challenges and novelty of the profession, whereas female engineers with a low professional identity are often frustrated with the male-dominated culture, struggle to maintain balance, and report a lack of personal fulfilment from the profession (Buse, Bilimoria & Perelli, 2013).

Herman (2015) conducted research into the experiences of women in SET professions who decided to take various career breaks to accommodate family responsibilities. The results of the study highlight that established gender and cultural norms within SET professions make re-entry into the profession very difficult, with fewer on-and-off ramps available to women. Discourses also suggest that women experience conflict between their desire for non-linear career paths and the normative assumptions of SET professions promoting linear career paths and continuous, full-time employment (Herman, 2015). Even though most organisations promote and encourage the use of flexible working arrangements, most women in SET professions still experience 'flexibility stigma', which refers to the negative consequences experienced by individuals who express a desire to use such arrangements for family obligations, and often avoid these formal policies for fear of career limitations (Cech & Blair-Joy, 2014). Mastracci and Arreola (2016) argue that unless organisations address their gendered nature and culture by changing established norms and practices, no amount of policies and initiatives will effectively address the work-life balance concerns of most female engineers.

3.2 RESEARCH DESIGN

The following section on research design discusses the research approach selected, as well as the research strategy and methods employed – which includes the research setting, establishment of researcher roles, sampling methods chosen, data collection methods, data analysis and strategies to ensure data quality and integrity.

3.2.1 Research approach

While previous work-life balance research predominantly applied quantitative methods, qualitative research has strongly emerged to support the subjective nature of work-life balance and capture the intensely personal life stories of individuals in their quest to achieve balance across multiple and complex life domains (Ezzedeen & Ritchley, 2009; Potgieter & Barnard, 2010; Wattis et al., 2013).

This study applied a **hermeneutic phenomenological approach** based on the ontological assumption of multiple and subjective realities, influenced by unique social and cultural experiences (Nel, 2007; Ponterotto, 2005). The hermeneutic phenomenological approach is furthermore congruent to the epistemological notion that individuals and their subjective reality are the primary source of data, and that meaning is co-constructed through interactive dialogue and interpretation between the researcher and the researched (Marais, 2013; Ponterotto, 2005). Hermeneutic phenomenology attempts to uncover and interpret the world as experienced by the participant through their life world stories, while acknowledging that the researcher's own history and background influences the way they understand and interpret this world (Kafle, 2011; Laverty, 2003). For this study, the lived experiences of female engineers will be interpreted through the hermeneutic lens of their specific career stage to provide a deeper understanding and interpretation of how women in different career life stages negotiate and manage the phenomenon of work-life balance.

3.2.2 Research strategy

This study employed a multiple case study approach, using hermeneutic phenomenology to understand and interpret the lived experiences of female engineers across various career life stages in their attempt to achieve work-life balance. Data was collected through semi-structured in-depth interviews, and interpreted using interpretative phenomenological analysis (IPA).

3.2.3 Research method

Following is a discussion on the research setting, the entrée and establishment of researcher roles, sampling, data collection methods, the recording of data, strategies to ensure data quality and Integrity, data analysis, and reporting style.

3.2.3.1 Research setting

This research study did not have a particular organisational setting, but was context specific with regard to the engineering profession. All the participants were chemical engineers employed in the petrochemical and consulting industries within the Gauteng area, and working in either a technical or managerial role.

3.2.3.2 Entrée and establishing researcher role

Formal research only commenced once ethical approval (Reference number: 2015_CEMS/IOP_042) was obtained from the relevant university research ethics committee. I have worked with many female engineers at my previous place of employment, and still keep in contact with a number of women who fit the criteria for this study. I approached these women informally, outside working hours, at a venue convenient to them and myself. I made email contact with them, explaining the research objective, requesting their participation, and outlining my researcher role. Upon confirmation of their willingness to participate, arrangements were made to conduct the semi-structured interview at a date and time convenient for them. A consent form was sent to each participant ahead of time, and the signed form was obtained at the interview.

3.2.3.3 Research participants and sampling methods

I made use of both purposive and snowball sampling in my study. I started with a purposive sampling strategy which involves “selecting participants according to pre-selected criteria relevant to a particular research question” (Nieuwenhuis, 2010, p. 79). Lavery (2003) encourages the selection of participants who have lived experiences that meet the aim of the study, who are willing to share their life stories, and who are diverse enough from one another to enhance opportunities for rich and unique data. I categorised all the female engineers I knew according to the following age categories, based on an integration of career models from O’Neil and Bilimoria (2005) and White (1995), namely early career from 24–35 years of age; mid-career from 36–45 years of age, and late career from 46–60 years of age. I then selected a small group of women from each category who I felt would provide me with the most interesting and rich data regarding work-life balance, based on my experiences with them in the past. The only other criteria used for selection was that the participants needed to have a degree in engineering and be currently employed.

I only knew of one female engineer in the late career life stage (46–60 years of age), and therefore employed a snowball sampling strategy (Gray, 2014) to gather additional participants for this career life stage. Given the limited scope of the research as well as the complexity arising from three separate sampling sets, it was decided to limit the sample to nine female engineers, with three in each career life stage. Data saturation was reached to the extent that clear and consistent themes emerged across all case studies in each career life stage. Table 3.1 highlights the final sample, which included nine female engineers, with three in each career life stage.

Table 3.1

Biographical demographics of the participants

Career life stage	Alias	Age	Race	Highest qualification	Engineering discipline	Company type	Environment
Early	EB	30	White	PhD	Chemical	Petrochemical	Research
Early	CN	30	Indian	Masters	Chemical	Petrochemical	Leadership programme
Early	PT	33	Black	Degree	Chemical	Consulting	Global graduate programme
Mid	PG	36	White	Masters	Chemical	Petrochemical	Research
Mid	KmG	40	White	Degree	Chemical	Petrochemical	Projects
Mid	SM	43	White	Degree	Chemical	Petrochemical	Operations
Late	MF	46	White	Degree	Chemical	Petrochemical	Graduate development
Late	PdW	52	White	Degree	Chemical	Petrochemical	Strategy and market research
Late	SD	46	White	Degree	Chemical	Petrochemical	Operations

3.2.3.4 *Data collection methods*

Semi-structured interviews were used for this study, which allowed participants to share their life stories in their own words while still achieving the purpose of the research as informed by the research question (Smith, Flowers & Larkin, 2012). According to Pietkiewicz and Smith (2014) and Smith and Osborn (2007), semi-structured interviews are considered one of the best ways to achieve the goal of hermeneutic phenomenology, which is to elicit rich and detailed first-person accounts of the experiences and phenomena under study, by allowing the researcher to guide the discussion in a direction that will achieve the research objective while still providing enough space and flexibility for original and unexpected issues to arise.

For the semi-structured interviews, two main questions were used to facilitate the discussion, while allowing the uniqueness of each participant's life story to move the interview into different directions. These two main questions were supported by a list of additional back-up questions that were only used when necessary to prompt further information. The first main question asked the participants to describe their career progression in detail, highlighting any career transitions and the reasons for these changes. For the second main question, the six-word memoir, an informal storytelling vehicle used to encourage individuals to critically reflect on their lives (Simmons & Chen, 2014), was used. While both these main questions did not explicitly investigate work-life balance, the interviews provided very rich and interesting data that could be analysed from a hermeneutic perspective.

3.2.3.5 *Data recording*

Participants gave informed consent for the discussions to be digitally recorded and for field notes to be taken during the interview process. The interviews were recorded and then transcribed using professional transcription services. Reliability of the transcriptions was ensured by carefully reading through each transcription while listening to the recording (Terre Blanche & Durrheim, 1999). The field notes were used to capture non-verbal cues as well as any additional information of interest observed during the interviews and were then used to supplement and support the transcriptions during the analysis of the data.

3.2.3.6 *Data analysis*

Data collected for this study was interpreted using IPA, which can be considered a suitable analysis method for hermeneutic phenomenology, because the analysis of data goes beyond mere description to include a detailed level of interpretation and understanding (Larkin & Thompson, 2012; Smith et al., 2012). According to Larkin and Thompson (2012), the aim of IPA is firstly to '*give voice*' to the participant's world, and then '*make sense*' of this world by developing an interpretative analysis which positions the description in relation to a specific context. I attempted to '*give voice*' to lived experiences of female engineers in their attempts to manage work-life balance. This description was then interpreted in relation to my theoretical understanding of work-life balance, using the hermeneutic lens of career life stages to '*make sense*' of these experiences within this context.

Using the analytic process for IPA as outlined by Larkin and Thompson (2012) and Smith et al. (2012), the following steps were followed: IPA uses an idiographic process (Smith et al., 2012), and therefore focuses first on an individual case before drawing comparisons across multiple cases. I began in one career life stage and with one case study. Firstly, I read the transcription together with the audio recording, to become familiar with the account (Smith & Osborn, 2007). The second and subsequent readings involved free textual analysis and initial coding by noting anything of interest, interpretations and ideas (Smith et al., 2012; Smith & Osborn, 2007). The next step involved identifying themes by analysing my coded data in light of my theoretical knowledge of work-life balance and my hermeneutic lens of career life stages, to understand what it means for my participants to have these concerns in this context, and thus taking my analysis to a deeper interpretive account (Larkin & Thompson, 2012; Smith et al., 2012).

Once I had identified themes in the first case, I repeated the process across cases within each career life stage. I then looked for patterns across cases within each career life stage to develop super- and subordinate themes for each career life stage. This was done by using a hermeneutic circle as I moved back and forth between the parts (individual interviews) and the whole (combined interviews in each career life stage), with the aim of increasing my understanding of the data (Smith et al., 2012). The findings are also presented in a way congruent with IPA. Firstly, I 'give voice' to the lived experiences of my participants by providing detailed accounts and quotes of their life world within each theme. I then attempt to 'make sense' of their experiences by providing a detailed interpretation of the themes, and drawing conclusions within each career life stage.

3.2.3.7 Strategies employed to ensure data quality and integrity

According to Ajjawi and Higgs (2007), qualitative research is concerned with ensuring both credibility and rigour which refer to the thoroughness of the study and includes, for example, the appropriateness of the sample to the research question, the quality of the interviews and the completeness of the analysis (Smith et al., 2012). There are a number of strategies that can be employed to ensure rigour within qualitative research, namely credibility, dependability, transferability and authenticity.

To ensure credibility, the data was peer reviewed, providing some new insights and suggestions that led to a deeper level of understanding. Dependability is concerned with reassuring the reader that the findings did occur as documented in the reports (Marais, 2013). To ensure dependability, I described all my decisions regarding my research philosophy, design and methodology in detail to ensure transparency and understanding. Field notes were used, and they brought back very specific memories of the interviews that weren't captured by the transcriptions, which added a deeper level to the interpretations.

A reflective journal was also used to allow me the opportunity to reflect on my feelings, thoughts and understanding of the process. I used the reflective journal as suggested by Ajjawi and Higgs (2007) to facilitate hermeneutic alertness, which allows the researcher to step back and reflect on the meaning of a particular situation, rather than accepting pre-conceptions and interpretations at face value. Authenticity is demonstrated when the researcher shows a range of different realities in a fair manner (Ajjawi & Higgs, 2007). I ensured authenticity by providing multiple verbatim extracts for each theme identified, and using the participants' exact words in certain circumstances to allow them to speak for themselves. Attempts to ensure transferability, which is the ability to transfer findings to another context, was done by providing a detailed description of the research context, a demographic profile of the participants, as well as a detailed discussion on theory, to ensure theoretical saturation (Marais, 2013).

3.2.3.8 Reporting style

I employ a first-person qualitative reporting style to discuss the findings of this research, consistent with hermeneutic phenomenology, which is concerned with extracting the core essences as experienced by participants using a language mode with an informal tone, full of idiographic expressions (Kafle, 2011).

3.3 FINDINGS

The following section highlights the superordinate and subordinate themes that were identified during the data analysis process, using IPA. The theoretical frameworks of work-life balance and the career life stages of women were used as hermeneutic lenses to interpret the data. To ensure integrity in the reporting of the findings, and to

ensure explanations and conclusions that are grounded in data, the super- and subordinate themes discussed below are substantiated by verbatim extracts from the data, and included in table format where applicable.

3.3.1 Early career life stage

Superordinate Theme 1: Prioritisation of the work role

In the early career life stage, work takes the central role in the lives of participants, as a primary source of their core identity and self-worth. They are continuously striving to achieve idealistic expectations for recognition and success, and have a strong need to prove their capabilities and expertise in terms of their age and gender in the male-dominated profession of engineering.

Table 3.2 below provides the subthemes identified, highlighting the reasons why work can be considered the central life role in this career life stage.

Table 3.2

Subordinate themes for superordinate theme 1: Prioritisation of the work role

Subordinate themes	Quoted text as evidence
Work as a core component of identity and self-worth	<p>“Maybe it is because it is the only thing that I am good at. So then I thought, well I am really good at work so I can’t drop this, other areas of my life – yes, but not my work because this is what I am good at. If I am not good at this, what am I good at?” (PT, 33)</p> <p>“I like that feeling of acknowledgment for my work. It makes me feel wanted and valued and that defines success for me – success has always been when I get to be the go-to person and when others see the value in me. For me, just knowing that people value my work is more important than the money that comes with. I want people to know, this is CN, and she is working on this project and she is really doing a good job and here is the impact her work has.” (CN, 30)</p> <p>“I do like my job. I mean anybody likes doing things right and then getting acknowledgement for it – at work you get that. I mean, I love figuring things out, it is an amazing feeling. It does make me feel good and it is nice and that is why I am scared that when I decide not to work I will miss that because what is going to give me the satisfaction of getting things right and working things out.” (EB, 30)</p>
The need to prove their capabilities and expertise	<p>“When I got there (Nigeria) I was still very young compared to the team that was there...these guys were like all in their mid-50s and here I am in my mid-20s, an engineer coming to start up a plant who had never opened a valve before – it was difficult for people to take me seriously in the beginning because I was the only female engineer and knew nothing about operation plants because I was from Research & Development. I threw myself into the work and it got me</p>

	<p>to a point where people were saying you know enough and we don't have to question her age anymore." (CN, 30)</p> <p>"I think a lot of women I know try to prove themselves too much, especially in a male environment. I don't think it is necessary for women to put in more than men to prove themselves. I don't think it is fair but men see you as more emotional and sensitive, so in order to prove we are not, we need to work harder. Women should just accept the fact that we are different and not try and prove that we are as tough as men." (EB, 30)</p> <p>I also felt like I had a lot to prove on the MBA because I had group work and I needed to show my group members that I am capable and I have pulled my weight so that I can go on maternity leave – I took three months off when the baby was born – so that by then, even though I asked them for a favour, it wasn't really a favour. I needed them to realise I had done enough." (PT, 33)</p>
<p>Idealistic strivings for recognition and achievement</p>	<p>"I want to be like Marco Pier White on Masterchef. When he walks into the room, everyone knows who he is and respects him for his knowledge and expertise. I want them to know that I am not just the average person – she is good at what she does, she is one of our high performance people and we really value her. I want to be the Marco Pier White of Engineering." (CN, 30)</p> <p>I felt like with everything in me, I am going to do this. I don't care... I need to do this for me and once I set my mind to something, I do it. So even though I was pregnant, I would work until 2am in the morning and then wake up early to study for my MBA. It was really rough but I wanted it and enjoyed it." (PT, 33)</p>

All three participants acknowledged that work played a central role in their core identity and that they derived a sense of self-worth from their achievements, and the recognition of others. They also seem to be driven by idealistic expectations for recognition and success at work, and are willing to work hard and sacrifice their personal lives to achieve these idealistic goals. CN (30) made the decision to go on rotation to Nigeria and work under very tough and stressful conditions so that she could be recognised as an expert on a project that received much attention and recognition from the organisation: "All the guys that went to XXX made such a big name for themselves – everyone knew them as the guys who started XXX – and I wanted to be that person for the Nigeria project."

All three participants expressed a strong drive to prove their capabilities as engineers to themselves as well as to their colleagues. They all acknowledged that their age and gender forced them to work longer hours to prove their commitment and ability to do the job. This intense preoccupation with, and focus on, work has a strong impact on their perception and management of work-life balance. CN (30) continually spoke about her need to work harder and longer and the sacrifices that needed to be made in order to build her career according to her definition of success. From a work-life

balance perspective, her narrative continuously emphasised her strong work focus, and she described work-life balance as a nuisance and something being imposed on her by her husband. She seemed almost to resent her husband for forcing her to focus on other things besides her career:

“I am just the type of person who prioritises work a lot. My husband and I have lots of fights about it. He says that work needs to realise that I have a life outside of work. He is the one that balances work and personal life, I am really bad at it – I only really maintain balance because he forces me to do it. If it wasn't for him, I would be sitting at work until 6 pm every day because that is what we were doing before we started dating and I was fine and comfortable with that.”

This need to constantly prove their capabilities resulted in the drive to work harder and deliver more, forcing participants to neglect other areas of their lives. They acknowledged that the only way to gain respect and approval from people was to throw themselves into their work and become indispensable to the team. They felt a sense of guilt over their preoccupation with work and felt as if they had sacrificed other areas of their lives for work: “I feel like I am failing my family, failing my husband, even at work I think I am not doing enough – constantly PROVING, PROVING, PROVING.” (PT, 33)

Superordinate Theme 2: A time of rapid growth and change

The early career life stage is characterised by rapid growth and change, both professionally and personally. Participants highlighted multiple career changes that included overseas rotations and international assignments, all aimed at building their careers according to their idealistic expectations and professional goals. From a personal point of view, during this time of their lives, all the participants experienced numerous changes such as getting married, completing additional qualifications and starting families. These multiple changes in their personal lives, together with the intense pressure and focus on their careers, resulted in periods of intense work-family conflict and stress. CN (30) describes a time where she has just returned from an overseas rotation, was studying for a masters in engineering management, planning a wedding and renovating her house, all at the same time: “It was absolute mayhem, for the last year and a half I feel like I don't know who I really am and what I like to do for fun because there was just so much going on in my life.”

PT (33) describes a time when she was working sixteen hours a day on a very stressful project. Her family had just moved up from the Cape to be with her, and she was struggling to meet the demands of her work while helping her family settle into their new life in Gauteng:

“It was a crazy time in my life with work, teaching my brother to drive so that he could drive my mom around... I just remember feeling exhausted during that period of my life. I also feel like I have sacrificed my passions; like reading – I don’t read anymore and have no hobbies. It feels like I have lived such a work-focused life and then of course, there is family time, my husband and son as well as my extended family that I have sacrificed for work.”

EB (30) also describes how she strives to be the best mom, wife, sibling and employee, but finds it incredibly hard to manage these multiple roles in her life. Her work-life balance narrative continuously refers to her idealist dream of being in control and calm (like her dad) versus her current reality of chaos and stress as she juggles the demands of her hectic life:

“My dad is a big role model in my life. He was really good at balancing his work and life. He worked hard but always helped us with our homework and was very involved in our lives. My dad is always calm and collected and looks like he has everything under control. I want to be more like my dad but I am more like my mom, running around frantic to get things done, always late and rushing around like crazy to get things done.”

Superordinate Theme 3: Contemplation of work-life balance decisions based on intrinsic needs and personal goals

In this early career life stage, participants begin contemplating work-life balance decisions that would allow them to achieve their current life goals. For CN (30), her desire to be an expert in her field has already impacted her decisions regarding starting a family in the future. She has just been selected for an accelerated leadership programme, and feels as if her focus for the next few years should be on her career. She struggles to reconcile how she would manage both a family and her demanding career in the future, and seems quite afraid of the demands that motherhood would place on her career progression:

“So our days are really chaotic with just the two of us – I can’t picture it if there was more than just the two of us. I also know that I am not going to be happy putting my career aside when we have kids – it might change when I have a child – but right now in my head, work is very important.”

CN (30) is also currently deciding whether to prioritise her career over that of her husband. They both hold to an internal belief that you “can’t have 2 high-powered individuals in a marriage – it has to be one or the other”. She is grappling with this life-changing decision, and has expressed guilt over the fact that her career seems to be the one flourishing at the moment, and that they might jointly decide that her career would be the one that takes preference going forward.

On the other hand, EB (30) is currently struggling to manage her roles as employee, mother and wife, and is considering working half-day to help her better manage the multiple demands in her life. Work still remains very important to her and she still feels very hesitant to make this big decision, as she feels like it will have huge implications for her career in the future. She sees work and family as separate and mutually exclusive roles within her life that are in conflict with one another:

“So recently I was thinking about maybe just working half day – which sounds wonderful – but I also understand that by doing that – I don’t want to say that you give up your career because you can still work hard – but I feel like it could be a career limiting move. It’s like when you decide to work half day you have made the decision that being a wife or mom is your more important role. Right now, I do feel like my role as a mom is the important and I want to make that decision but at the same time, I am scared I will regret it later, because I don’t know if there is going ‘back’ from that.”

3.3.2 Mid-career life stage

Superordinate theme 1: Career changes to integrate life roles and improve balance

In the mid-career life stage, all the participants have attempted to achieve more integration between work and life roles by making specific career changes in order to accommodate the multiple demands in their lives. KmG (40) gave up a very challenging and stressful role as a lead engineer on a big international project, in order to

move into a line management position so that she could start a family. PG (36) decided, together with her husband, that his career would take precedence, and that she would effectively place her career “on hold” by working half-day for a time period while her children were small and in school. She stated that she “didn’t have children to have them raised by someone else” and felt strongly about being there for her children while they were still small.

SM (43) gave up the opportunity to work on a big project in Canada, and also chose a functional managerial role so that she could stay home and care for her aging parents and support her sister who was going through a difficult time in her life. She had also come off the back end of a very stressful project with lots of travel, and felt the need to make a move into something more stable and not so stressful. These work-life balance decisions changed the career trajectory of the participants, and they now found themselves in a time of crisis and intense dissatisfaction.

Superordinate theme 2: A time of crisis and dissatisfaction

The narratives of all three participants in this career life stage focused on their dissatisfaction with their career progression, as well as the conflict they were experiencing between work and life roles. KmG (40) found herself bogged down by the bureaucracy of line management having lost sight of her reasons for becoming an engineer in the first place. She describes her idealist dreams of solving the world’s environmental problems as her reason for becoming a chemical engineer in the first place, and yet finds herself grappling with her career identity as a line manager. SM (43) also found herself in a toxic organisational culture, dealing predominantly with paperwork and administration issues. She felt as if she had lost touch with what was really happening in the business and missed doing work that she perceived as having a direct impact on the organisation. She describes herself as facing a “mid-life crisis” where she questioned her career and life goals.

PG (36) decided to work half-day to support her family, and found herself very frustrated with the lack of career progression resulting from her decision. She also constantly referred to the need for “letting go” of her strong work focus. She acknowledges that working half-day has implications for her career, and that she needs to make peace with the fact that her career progression will be slower than that of her colleagues. She yearns for the ‘good old days’ when she was working on challenging

and exciting projects, and finds herself disillusioned with her career progression. She is even more stressed working half-day, because she feels as if she is continuously battling the stigma associated with working half-day, and actually needs to work even harder to prove her commitment to the organisation.

Table 3.3 highlights the subordinate themes identified for a time of crisis and dissatisfaction, namely dissatisfaction with career progression and questioning of important life roles.

Table 3.3
Subordinate themes for theme 2: A time of crisis and dissatisfaction

Subtheme	Quoted text as evidence
Dissatisfaction with career progression	<p>“And for me, my definition of a real engineer was someone who built something and saw it through. So I spent seven years of my first ten years of my career as a lead on a project just going from the beginning to the end and I learnt a huge amount during it. And then I stepped into line management...I did not have a clear vision of where I was going as a manager. It was driven more by my personal choices than my dreams. So from a career perspective I did not really define a very new clear goal for myself and I think that is part of what I have been grappling with the last couple of years.” (KmG, 40)</p> <p>“At that stage I got quite tired of this dysfunctional type of work, because I find I am a very practical person at the end of the day and really wanted to get back, closer to the plant. The functional job was not the job I really wanted and I really got sick of doing paper study after paper study and fighting HR problems. I found myself having a mid-life crisis and needed to make some changes.” (SM, 43)</p> <p>“His career is the one that we boost. And if there is a sick kid, I am the one that stays at home. I am the one who does reviews over the phone and who has to jump through all these hoops to get everything done in the day. And yet, we both decided that his career is the one we boost. It is hard because at one stage our careers were equal and now they are not. A lot of people that were junior to me are now senior.” (PG, 36)</p>
Questioning the importance of work-life roles	<p>“My dad, he passed away at 49 you know, so young. And you just realise that I am nine younger than that and it is like I have got these two young kids and I do not have forever necessarily... and he was extremely career orientated, to the point where quite honestly, I do not think we had a lot of connectivity with him as children and I think it pained him greatly, but I do not want to make those same mistakes.” (KmG, 40).</p> <p>“For me, it was life-shattering when I had my son because it was very difficult, while I was on maternity leave, I was still getting work-related questions and was still very involved and stuff. So, it was very challenging, because I mean I had invested six years of my life getting that project to work but then I had him and now it is so difficult to decide you know, what is more important. And so I mean, from an emotional perspective, both were important but I didn’t have children for them not to have a mom. So for me, although I really wanted to see the project through to the end, I needed to let it go. It was so difficult to let it go though.” (PG, 36)</p>

From a work perspective, all the participants acknowledged that meaningful work was still important to them, but that they were no longer striving for recognition and achievement. They had made career decisions to give them more balance, and now needed to redefine their career goals going forward. The need for recognition and validation through their work seems to have been replaced by the desire for meaningful work and to invest in the lives of their families and lead more balanced lives:

“I must be honest; the drive to prove myself isn’t as strong as it was. I came to the realisation that I am good enough, you are fine. You are not perfect, no one is perfect. I think with work I really believe, I kind of feel, I **AM** good enough. I have done enough, I have proven to myself. I am not trying to prove anything to anyone else anymore. I feel like I still have a way to go to realise this in my personal life though.” (KmG, 40)

The need to perform successfully at work while still devoting time and energy to their family, often resulted in internal conflict and stress for the participants. All the participants began to question the importance of work in their lives and the sacrifices they had made in other life roles for their careers:

“I think I am very much at a crossroads. I think I am keen to make a radical change in my life from a life and career perspective. So it is very much clear that this is maybe not the path I want to be on, but – and it is a path that started a long time ago and I think it was great initially but now it has narrowed in and is getting to a point where I am wondering, **WHERE ON EARTH IS THIS GOING.**” (KmG, 40)

SM (43) made repeated reference to the fact that she had put work first, and that it had a huge impact on her children and her husband – who ultimately carried most of the family responsibilities. Her work-life balance narrative was one of regret and guilt over the decisions she had made in the past: “I have made bad decisions. My husband has told me he spends more time with the kids than I do. I use avoidance as a good way of dealing with it. I think if you ask my son, he will probably give you many examples of when I wasn’t there... he has felt the brunt of it.”

Interestingly, not once did any participant talk about work-life conflict in terms of struggling to manage time across multiple demands. The two participants who worked full-day and who had very demanding careers seemed to have strong support struc-

tures – specifically, their spouses, who had more flexible careers and who managed the day-to-day demands of their families. Instead, their work-life balance narratives constantly referred to the internal conflict that they experienced between their identity as a mother and their identity as an engineer. The participants spoke with regret and guilt over the limited time spent with their children, and the fact that they often handed over their care to their husbands.

KmG (40) highlighted, with embarrassment, the fact that her children’s doctors do not know who she is, since she never takes her kids to the doctor when they are sick, but instead relies on her husband’s support. She has begun to question whether the sacrifices made for her career have in fact been worth it, in terms of the impact on her family:

“I have always over prioritised trying to resolve issues at work – which are honestly unresolvable by me if I am rational about it and then you realise, hang on, I am neglecting the people who are genuinely invested in me – my children. And making sure they get the benefit of that same kind of attention and effort that I am pouring into these other individuals.”

Superordinate theme 3: Attempts to redirect energy and construct a new definition of success

This crisis within the lives of the participants led them to start redirecting their energy to other life roles they felt would give them better personal satisfaction. While achievement and recognition at work was their definition of success in the past, all the participants highlighted that balance, and the opportunity to invest in the lives of their children and family, was now much more important to them. KmG (40) describes happy children who are emotionally well-balanced, as her new definition of success. SM (43) used the company restructuring process to make a career change and leave the functional managerial role she was unhappy in, for a position that allowed her to get back to the plant and do engineering work once again. The position would be considered by others as a “demotion” in terms of career progression, but she sees it as an opportunity to live a more balanced life:

“It is really nice to have a life for a change actually, to be able to spend time with the kids and not have to sit in yet another HR meeting... I think as you get older,

you realise that there is more to life you know, than just climbing the corporate ladder.”

Not only did the participants start redirecting their energy to spend more time with their family, but they also expressed a strong need to focus on themselves and discover personal goals that bring them joy. KmG (40) describes how she has started exercising for the first time in years and recently completed a writing course. She describes her dream of completing a spiritual hike in Spain as something on her bucket list that she wants to do soon. Participants also highlighted that that they started planning for the future and focusing on personal skills acquisition, so that they can make career changes that would give them more balance when the time is right. For example, PG (36) and her husband have bought a farm together, and are planning ways in the future where she could be at home permanently with the children and run the farm as a profitable business.

While each participant described personal dreams and goals that they would still like to achieve, it would seem that, in this career life stage, they are still struggling to make these changes a reality. Their need to perform well at work, while focusing on their own as well as the needs of their family, often continues to be a source of internal conflict. They describe their attempts to focus on other life roles, besides work, as a conscious decision that they need to make on a regular basis. They seem stuck; they want to change and set boundaries, but find themselves unable to break from their old habits of putting work first:

“It is kind of where I am and I think it is a struggle though, because I feel like my habits are hard ingrained, so undoing them is extremely difficult and I have got to keep trying to be conscious and go okay, draw the line, stop, this is enough, any more you give here is a point of diminishing returns, you need to direct that energy and focus to yourself.” (KmG, 40)

3.3.3 Late career life stage

Superordinate theme 1: Integration of work-life roles

All the participants in the late-career life stage described how they worked incredibly hard throughout their lives but got to a place where they realised that work was no longer the driving force in their lives and that they had a strong desire to focus on

others and contribute to something greater than themselves. MF (46) describes work as “just one part of your life story”. They still expressed a strong desire for work that was meaningful and challenging, but were no longer driven by the need for recognition and achievement. They had reached a point in their lives where they were comfortable with their career progression and were no longer striving to achieve, but re-focusing on a different purpose in life, as is reflected in the following excerpts:

“I once had a conversation with a colleague and we were saying when you are in your 40’s you start to realise okay, I have got the house, I have got the car, if you have a family, you have a family, you have kids but NOW WHAT? At some stage, you feel like you need to start to give something back. And I think I am pretty much starting to scratch on that one now.” (SD, 46)

“If I had to tell my daughter one thing, I would tell her that ambition is not everything. I mean, if work is the only thing that makes you happy, you will definitely not be happy if you only get satisfaction from being promoted or getting increases. You must be happy with what you are doing. Work must not be the only thing in your life. You must have other interests.” (MF, 46)

PdW (53), married with no children, achieved great success in her career, and was one of only a few female engineers (if not the only one) to occupy a very senior technical position within her organisation by the age of 40. She had the following to say about her career:

“So why I worked so hard and set such high expectations for myself, I do not know. Now if someone says there is a similar job available again, I am definitely not interested. I have just decided that there are other things that are more important. Because I do not have the energy to go back to that kind of work. If I think about it, I am just so tired.”

The work role was now integrated into their broader life context and based on their need for authenticity. MF (46) says she adopted the motto “we don’t live to work but rather work to live” from her husband, which sums up her definition of work within her current life context. Work was also seen as an opportunity to fulfil long-lost opportunities or dreams. PdW (53), who once described work as a drug in her life, took a step back in terms of career progression, and moved out of her demanding technical engineering role and into a business role that allowed her much more flexibility. She

says she has always wanted to learn more about the business side of the organisation and she is happy to stay in this position until she retires at 55 or 65, depending on her financial status.

MF (46) found a renewed interest in her career after working half-day for the majority of her working life to have flexibility in raising her two children. She found that working half-day limited her opportunities for career progression, and avoided new opportunities for fear of affecting her work-life balance. She was forced to move back onto full-day, due to company restructuring, but felt comfortable with the decision because her children were older and more independent. She was excited about her career being back on full-day, and looked forward to the opportunities that were opened to her once again. Her new career in graduate training has allowed her to explore teaching and people development, an area that she has always been interested in, but never experienced.

In this career life stage, most participants had discovered activities in their personal lives that brought them much joy and personal fulfilment. MF (46) was busy preparing to ride a tandem bike with her husband in the 94.7 cycle challenge. She says that they are always planning a new adventure and love travelling and camping. SD (46) has also shifted her focus to making a difference in her community. She taught her domestic worker to drive, and spends her weekends mentoring women in maths and science. She believes that “As you get older you are more comfortable in yourself and your career so you can “pull back” a bit more. There is always someone who will do the job.” She still enjoys the challenge of her career, and is very proud of her achievements as a senior manager in a very tough production environment, but believes that as you get older and more mature you have the confidence to “pull back” a bit in terms of your career, and enjoy other aspects of your life. PdW (52) has always loved animals, but discovered a newfound passion for horse-riding late in life, after her husband prompted her to stop working so hard and find a hobby:

“So I spent a lot of time on work stuff and when I moved back into this engineering management role, my husband was like, I think you should get a hobby. A friend of mine had horses and I decided; I am going to buy a horse. That was not what my husband was expecting but it was the best thing I could have ever done.”

Superordinate theme 2: Regret over missed opportunities and decisions made

Most of the participants alluded to a sense of regret over time “wasted” working, instead of exploring other areas of interest in their lives: “There is always someone going to do the job but you can never make it up to your parents for the time that is lost” (SD, 40). They acknowledged that work would always be there, but that a missed opportunity with their family was something they could never get back:

“Sometimes, I am like, SHUCKS, I should have realised this earlier and one of my beliefs now is that you should live while you are alive because I tend to, I tend to say, okay, one day I want to do this and one day, I would like to do that, but now is the time.” (PdW, 52).

Superordinate theme 3: Positive spillover from life roles

All the participants’ work-life balance narrative highlighted the positive spillover they experienced due to the integration of their work and life roles, and, particularly, the positive energy they experienced from engaging in personal activities that brought them joy. PdW (52) describes for the first time in her life how she feels comfortable enough to take time off to pursue her passion for horse-riding. She doesn’t feel guilty about leaving early every Tuesday afternoon to go for horse-riding lessons, and experiences immense positive spillover in her work-life through renewed productivity and increased energy levels:

“Doing something I love actually makes me more productive and I have more energy to do my job. My husband always says when I get back from the horses, I am so energised. He is just worried, like do I drink something there, do I smoke something, what am I doing (laughs)? It is just that when you do something you love, it gives you energy.”

3.4 DISCUSSION

The discussion section interprets and explains the findings that flowed from the IPA as reported above, and consists of an outline of the results, practical implications of the research, limitations and recommendations as well as conclusions.

3.4.1 Outline of the findings

Due to the number of conceptual and implementation problems in the work-life balance literature as well as the need for qualitative research in this field, the general aim of this study was to gain a **deeper understanding of the lived work-life balance experiences of female engineers in the early, mid and late career life stages.** Figure 3.1 below provides a summary of the findings highlighting work-life balance within each career life stage.

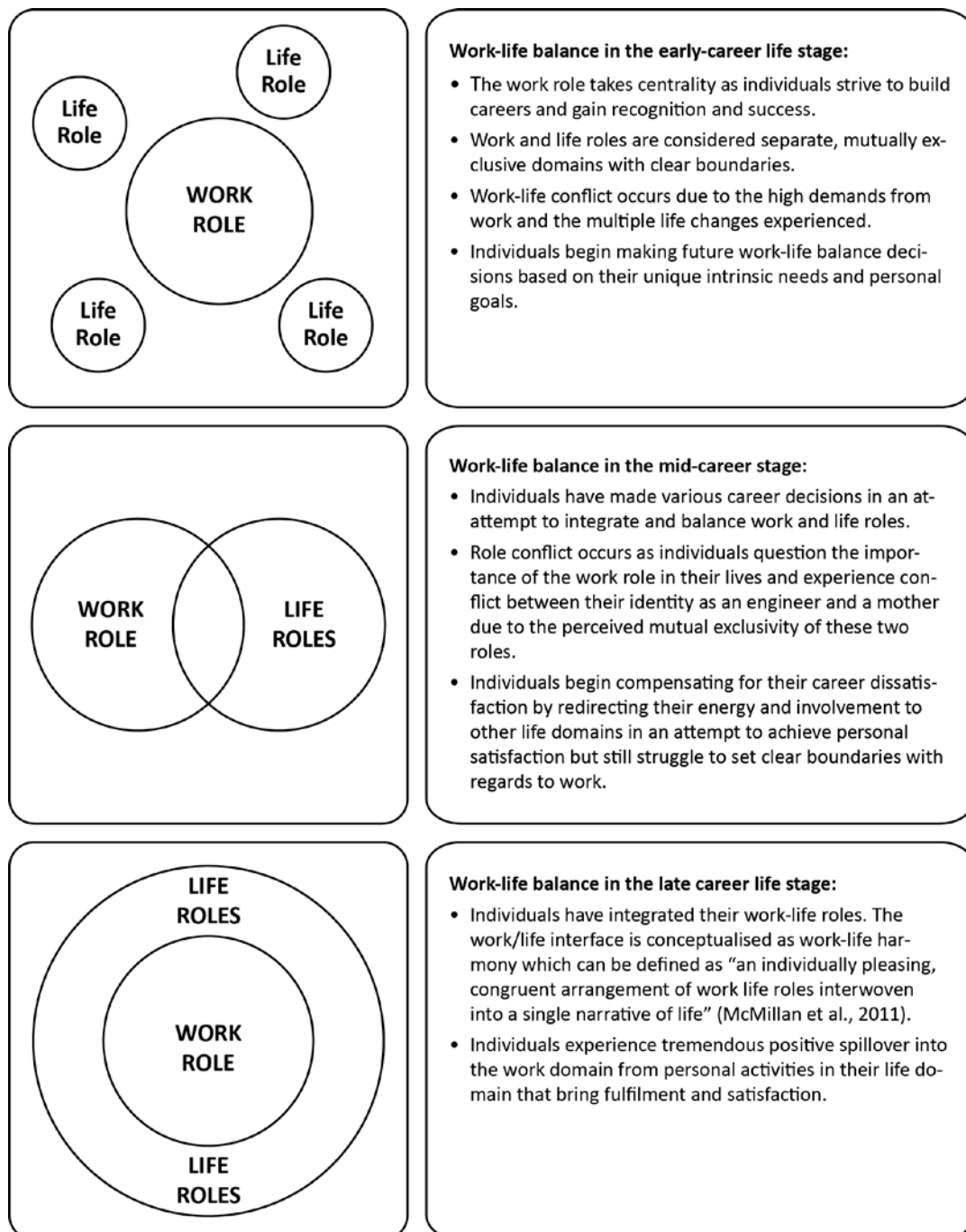


Figure 3.1. Summary of the findings highlighting the work-life balance of female engineers in the various career life stages

Overall, the findings of this research support recent theories that work-life balance is perceived as a subjective, continuous, dynamic process that fluctuates over time (Barber et al., 2016; Bobat et al., 2012; Ford & Collinson, 2011; Potgieter & Barnard, 2010; Wattis et al., 2013). There is clear evidence, from the findings, that female engineers have different work-life balance needs and expectations at different career life stages. It would seem from the findings that the biggest factor affecting female engineers is **role salience** or **role priorities**, which definitely shift across the lifespan of female engineers and which has a direct impact on how work-life balance is negotiated. All the participants in the study had a strong professional identity, and displayed high levels of commitment to their career development; however, the role salience of work fluctuated throughout their careers. Potgieter and Barnard (2010) confirm that balance is subjectively judged by each individual, based on the importance of various life roles in relation to one another in a particular career life stage. Barber et al. (2016) confirm that as with other self-regulatory processes, work-life balance is a dynamic state, given that role demands, goals and intrinsic needs change over time. Work-life conflict occurred when they were unable to prioritise one role over another, or when they needed to make a decision between role identities of similar salience and commitment (Steyl, 2009).

In the **early career life stage**, women are motivated by their desire for challenge, achievement and success (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). Participants in this study were clearly striving to build their careers and establish their reputation as high achievers. Work and family (life) are seen as separate, mutually exclusive entities in their lives competing for their time and energy. It is interesting to note that while most researchers highlight the perception that work is 'bad' and life is 'good' (Fleetwood, 2007), and that work is a necessary evil to support life domains (Grawitch et al., 2010), it would seem that female engineers in this career stage find work as 'good' and life as more of a 'nuisance' intruding in their quest to achieve career success. Work takes preference in the lives of the participants as they derive a strong sense of identity and self-worth from the role. Participants see work as the fulfilment of their idealistic expectations for recognition and achievement, while believing that their age and gender forces them to work harder to prove their expertise and capabilities in a male-dominated occupation. These drivers resulted in an intense preoccupation with the work role, and a clear distinction between work and other life roles. Simultaneously, participants acquired a number of important life roles such as

that of wife and mother, placing intense demands on their ability to manage and maintain work-life balance.

Examples of work-life conflict were evident in the lives of participants as they struggled to manage these multiple demands while still striving to build their careers. These findings support research by Bozzon et al. (2017) and Love et al. (2011), highlighting that ambitious women, entirely focused on their careers, often find it very difficult to maintain boundaries and achieve satisfactory balance in their lives. The participants have a strong desire to create boundaries between work and life, and have begun considering various work-life balance decisions based on their unique intrinsic needs and personal goals at this point in time. These include decisions to delay motherhood, prioritisation of one career over another, and whether or not to work flexible hours.

Clark (2015) and Lee et al. (2009) state that young professionals employ a number of strategies to prioritise life goals, and are continuously making career and personal decisions designed to accommodate future phases of life. EB's (30) hesitancy to make the decision to work half-day is consistent with previous research by Gatrell et al. (2013) and Gregory and Milner (2009), which states that organisational cultures, particularly those in male-dominated occupations, often leave women who chose alternative career paths feeling undervalued, stigmatised, and fearful of potential career limitations. Herman (2015) concludes that women who made the decision to retreat from full-time work within SET professions often found re-entry back into the profession very difficult, with limited entry points.

In the mid-career life stage, women have a strong need for balance (Mainiero & Sullivan, 2005) as they manage multiple responsibilities in their lives (O'Neil & Bilimoria, 2005). Findings from this study highlighted that the mid-career life stage is characterised by a time of personal crisis and dissatisfaction. Participants have made various career changes to help integrate the multiple demands in their lives, but ultimately find themselves dissatisfied with these career choices that were made out of necessity rather than preference. The study highlights the participants' struggle to still engage in work that they consider challenging and meaningful, with their desire for more flexibility and balance. According to Herman and Lewis (2012), the problem in male-dominated occupations is the limited number of women role models who

have successfully managed their family domain without sacrificing their desired career progression.

Role conflict is very evident as participants begin questioning the importance of work in their lives, and have a strong desire to invest more time in their family domain. This dissatisfaction evident in the mid-career life stage is supported by O'Neil & Bilimoria (2005) and White (1995), who state that women begin questioning the centrality of their careers, due to the effects of negative organisational cultures and gender discrimination, as well as an increased awareness of the impact their intense career preoccupation has had on their family. Most of the participants in this career life stage expressed guilt and regret over time lost with family, particularly their children, which resulted in role conflict between their identity as an engineer and that of a mother.

This dichotomy is well documented in literature, with multiple researchers concluding that the gendered assumptions of male-dominated occupations reinforce the perceptions of mutual exclusivity between these two roles, and often force women to make difficult choices that have a profound impact on their careers as well as personal lives (Cahusac & Kanji, 2014; Cervia & Biancheri, 2017; Herman, 2015; Herman & Lewis, 2012). Most participants in this career life stage expressed a desire for some sort of flexibility allowing them to step back slightly from the intense demands of their work. This highlights the internal struggle they experience with the desire for a non-linear career path that contradicts normative assumptions in male-dominated occupations (Herman, 2015).

To obtain improved balance, participants have begun to consciously redirect their energy away from work to other areas in their lives, with a strong focus on their children and their own needs for personal care and development; however, they still struggle to set boundaries and the pull back to work still remains strong in their lives, and something that they continually need to manage. These findings are consistent with research by Grady and McCarthy (2008), O'Neil and Bilimoria (2005) and Zauner (2013). This redirection of energy could be an example of work-life compensation, whereby dissatisfaction in a particular area of life prompts an individual to increase involvement and seek reward in another life domain (Edwards & Rothbard, 2000).

The late career life stage is characterised by an integration of the work-life roles, with most participants experiencing work as a subsystem within their broader life context.

As one participant stated, “I no longer live to work but work to live”. O’Neil and Bilimoria (2005) allude to a tipping point or life-changing experience that changes an individual’s outlook on their work-life roles. All the participants in the study highlighted how hard they had worked in their careers, but how they eventually came to the realisation that other things might be more important to them. They therefore made various career changes that allowed them to be more authentic to their inner self, and be of service to others while still maintaining balance in their lives.

Participants pursued personal activities that gave them a strong sense of satisfaction and resulted in tremendous positive spillover and enrichment into the work domain through increased productivity and improved energy levels. According to August (2011), in this career life stage, achieving balance finally seems within reach for these individuals, and they no longer feel as if they are continually searching for the elusive ‘Holy Grail’ of balance. This could be due to the changing role of work in their lives, where success is no longer defined in terms of recognition and achievement, but rather in living integrated lives that allows them to contribute positively to the lives of others (O’Neil & Bilimoria, 2005).

It was interesting to note that two of the three participants in this career life stage did not have children and one was still single – which confirms research by Buse et al. (2013), highlighting that women who persisted in the engineering profession were less likely to be married and to have fewer children. It would seem, however, that they still followed the same developmental path across the lifespan, and experienced the same questions and concerns regarding work-life roles as did their counterparts who had children. This finding supports the assumption that the quest to achieve work-life balance is not limited to working mothers, but should include all groups of individuals, each with their own set of unique circumstances influencing their work-life balance expectations and needs (Lewis et al., 2007; Mainiero & Sullivan, 2005; Wattis et al., 2013).

Based on the findings, the term ‘work-life balance’, and its implied mutual exclusivity, does not truly reflect the synergistic relationship between work and life roles in this particular career life stage. For this reason, the recent conceptualisation of the term ‘work-life harmony’ provides a more appropriate understanding of the work/life interface in the late career life stage. McMillian et al. (2011, p. 15) define work-life harmony as “an individually pleasing, congruent arrangement of work and life roles that is

interwoven into a single narrative of life". For the participants in this study, it would seem that after a long, hard and arduous search, they not only find the elusive and often mythical notion of balance, but even achieve a level of work-life harmony that provides a deep level of satisfaction and meaning in this late stage of their lives. This is congruent with research from August (2011), stating that while balance was still a concern for women in the late career life stage, finding it was much less of a struggle than in earlier years, and that achieving balance becomes easier over time.

In conclusion, while the findings truly support the notion that work-life balance needs and expectations are different in each career life stage (Barber et al., 2013; Wattis et al., 2013), it would seem as if it follows a relatively predictable pattern for female engineers across the career life stages. In the early career life stage, the notion of balance is sacrificed for the need to build a career and achieve recognition and success (Mainiero & Sullivan, 2005). This is consistent with the Kaleidoscope Career Model, which states that certain factors predominate at different points in the lifespan, with the other factors remaining active but taking on a secondary role at that time (Sullivan & Mainiero, 2005). Professional identity is so strong, that all other life roles fade into the background; however, work-life conflict can still occur as individuals struggle to manage their intense preoccupation with work and the multiple demands in their life roles.

In the mid-career life stage, work-life balance becomes the 'Holy Grail' that all individuals are striving to achieve, but never seem to find (Mainiero & Sullivan, 2005). Role conflict occurs as individuals begin questioning work-life roles, and struggle to reconcile their role as a mother with their identity as an engineer (Herman, 2015; Herman & Lewis, 2012). They attempt to find balance by directing their energy to other areas in their lives (O'Neil & Bilimoria, 2005), but still struggle to set boundaries with regard to work and find complete fulfilment in these pursuits. This could be because work is still very important, and they still desire meaningful and challenging work – for different reasons, however, compared to the early career life stage (Zauner, 2013). Balance would therefore be perceived as the opportunity for meaningful and challenging work with perceived satisfactory time for non-work activities, including personal care and development.

In the late career stage, balance becomes easier to find because the work role is now integrated into their broader life context, and individuals begin to experience work-life

harmony as a seamless integration of all life roles into one single life story (August, 2011; McMillian et al., 2011). Work continues to remain important, but individuals are no longer motivated by recognition and success, but rather by the need to make a difference in the lives of others and find careers that allow them to be true to themselves and live authentic lives (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). The findings would also suggest that the most influential factor in the work-life balance of female engineers would be **work-role salience** and **career centrality**. As the nature of the work role begins to change, for whatever reason, especially in the mid-career life stage, so the focus begins to shift to other life roles, and perceived balance begins to be achieved.

3.4.2 Practical implications

While current literature advocates the changing and subjective nature of work-life balance, very few studies have actually investigated these changes, in order to give a clear understanding of how work-life balance truly fluctuates across the lifespan. Recent research has also highlighted the unique challenges experienced by female engineers as they navigate work-life roles within gendered organisations. The findings of this study, however, provide a unique insight into the perceptions of female engineers regarding work-life balance at different career life stages and can give managers practical support in managing their female engineers.

Organisations should adopt a more specific and personalised approach to work-life balance, that considers the unique needs and expectations of female engineers in each career life stage. In the early career life stage, female engineers are concerned about building their careers and achieving recognition and success (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). While managers are enjoying the productivity of women who are engaged and committed to their work, they need to be aware that the potential for work-life conflict does exist in this career life stage as they strive for achievement at work while managing changes in the life-domain. Women in this career life stage need to observe role models adopting positive work-life balance behaviours, and be encouraged to make work-life balance decisions without fear of negative career consequences (Herman & Lewis, 2012).

In the mid-career life stage, organisations need to be aware of the intense dissatisfaction and role conflict experienced by most female engineers. This is the phase

where many women begin seeking alternative career plans that would give them the balance they so desperately seek (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). If organisations are truly committed to retaining female engineers, they would ensure that they not only provide a wide-range of flexible working options for female engineers, but also that they change their organisational culture to reflect an 'ideal worker' as someone who is proudly and successfully committed to both work and non-work responsibilities (Herman, 2015; Herman & Lewis, 2012; Pumroy, 2016). This would also include promoting females who choose to follow non-linear career paths into leadership positions, giving them the chance to prove their ability to successfully integrate work and life domains. Organisations need to recognise the wisdom and expertise of female engineers in the late career stage, as well as their desire to make a difference in the lives of others, by channelling this positive energy derived from work-life integration back into the organisation through the mentorship and coaching of younger female engineers. In conclusion, Hammer, Kossek, Yragui, Bodner and Hanson (2009) suggest a multilevel framework that addresses organizational culture and practices through the development of family supportive behaviours that provide emotional support, role-modeling of acceptable behaviours and creative work-family management strategies.

3.4.3 Limitations and recommendations

The limitations of this study are predominantly related to its transferability to other contexts. The findings of this study cannot necessarily be transferred to other working contexts within the engineering profession, for a number of reasons. Firstly, due to convenience and availability, the sample consisted of only chemical engineers and excluded engineers from other disciplines such as mechanical, electrical or civil engineering. A snowballing sample strategy was also employed in the late career life stage which could potentially affect the quality of data due to selection bias (Atkinson & Flint, 2001). This could have implications when transferring findings to other engineering contexts. Secondly, the study was also largely homogeneous in terms of race, and would not necessarily reflect the diverse backgrounds prevalent within the South African labour force. The findings of this research study do answer the research aims and can therefore be considered relevant and appropriate to the research purpose.

In terms of recommendations for future research, there are a number of suggestions that could add value to existing literature and empirical research into the work-life of female engineers. Firstly, a longitudinal study, focusing on how the work-life balance perceptions of the same participants fluctuate throughout the career life stages, would add unique value in studying this phenomenon. Secondly, retaining previously disadvantaged female engineers within the South African context remains a challenge, and would be considered a major concern for most engineering organisations. A study focusing on the unique work-life balance perceptions of these individuals would be of great significance for both academic and industry purposes. Thirdly, similar research in other male-dominated occupations would be beneficial, in order to continue strengthening and advocating the need for male-dominated occupations to understand the work-life balance needs and expectations of female engineers, and to facilitate organisational and societal change. Finally, this study highlighted the importance of work-role salience or career centrality for female engineers in work-life balance negotiation, and further research in this regard should definitely be considered.

3.4.4 Conclusion

Work-life balance continues to be a huge challenge for women in male-dominated occupations (Cahusac & Kanji, 2014; Herman, 2015; Martin & Barnard, 2010). While literature has confirmed that work-life balance changes over time (Grawitch et al., 2016; Wattis et al., 2013), very limited research has been done to investigate these changes across the career life stages of women, based on how they shift, relative to the way they reconcile roles and relationships (Darcy et al., 2012; Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). Based on this need, the main objective of this study was to gain a deeper understanding of the lived work-life balance experiences of female engineers in the early, mid- and late career life stages. To achieve the research objective, a hermeneutic phenomenological research approach was used, employing semi-structured interviews, and analysing the data using IPA.

The findings of the research highlighted that in the early career life stage, female engineers sacrifice the notion of work-life balance in favour of building their careers and achieving recognition and success. They experience work-life conflict due to their intense preoccupation with their careers and the multiple changes in their life roles and circumstances. They begin making work-life balance decisions to accommodate

future work-life roles based on their unique needs and expectations. In the mid-career life stage, female engineers begin questioning work-life roles and can experience a time of role conflict and intense dissatisfaction in their quest to achieve balance. They perceive work-life balance as meaningful and challenging work with satisfactory time available for their family domain, including their own personal needs and skills development. In the late career life stage, female engineers have integrated work into the larger life domain, and achieve a level of work-life harmony that provides fulfilment and significance in this late stage of their lives. Work-role salience or career centrality was determined to be a major factor in how work-life balance is negotiated and perceived by female engineers. The findings highlight the importance of an individualised approach to work-life balance, and understanding the unique needs of individuals and how these needs and expectations fluctuate across the various career stages.

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CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter consists of conclusions based on the extensive literature review, as well as the empirical study, in accordance with the research question. The limitations of this study are discussed, followed by recommendations for practical implications and future research.

4.1 CONCLUSIONS

The general aim of this study was to gain a deeper understanding of the lived work-life balance experiences of female engineers in the early, mid- and late career life stages. The following section provides conclusions to the research based on both the literature review and the empirical research conducted in the study.

4.1.1 Conclusions drawn from the literature review

The aims of the literature review were to discuss the work-life balance construct, the career life stages of women, as well as issues facing women in male-dominated occupations. The conclusions drawn from the literature review are discussed below.

Literature continues to confirm that female engineers experience unique and tough challenges in their attempt to manage work and life domains within a profession that favours masculine norms, and devalues or ignores the caregiver role (Herman, 2015; Herman & Lewis, 2012; Mastracci & Arreola, 2016). Work-life balance will continue to remain elusive and impossible to achieve for most women within SET professions, until organisations address the underlying cultural issues that continue to perpetuate gendered organisations (Mastracci & Arreola, 2016).

Professional identity or career centrality plays a key role in the ability of female engineers to cope with the intense pressure they face in the workplace (Buse & Bilimoria, 2014; Buse et al., 2013); however, women will eventually experience difficulty internalising and maintaining a professional identity that is based on male norms and directly conflicts with other important life roles (Buse et al., 2013). Many female engineers have a strong desire for non-linear career paths that enable them to achieve better balance and integration of work/life roles, but are, however, often too afraid of

career setbacks to make these changes, and instead continue to experience persistent work-life conflict and lower job satisfaction (Cech & Blair-Loy, 2014; Herman, 2015). This need for non-linear career paths is in direct conflict with, and depicted as deviating from, the traditional career development model of upward movement and full-time continuous employment – as expected in male-dominated and gendered organisations (Herman, 2015).

The need for alternative and non-linear career paths for women is well-documented and proven in literature (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005; O'Neil et al., 2008; White, 1995). Women's career patterns are based on more than just their desire to work, but are part of a larger life context that includes their relationships, family responsibilities and personal goals (O'Neil et al., 2008). Women's needs and expectations regarding their work and life roles, and how they negotiate work-life balance, changes throughout the various career life stages, based on role salience and the centrality of their careers at that particular point in time (Mainiero & Sullivan, 2005; White, 1995). Women in the early-career life stage have a strong need for achievement and challenge (Mainiero & Sullivan, 2005). They can experience work-life conflict as they struggle to maintain boundaries and achieve balance as they simultaneously build their careers while managing multiple demands in their life roles (Bozzon et al., 2017; Love et al., 2011).

Women in the mid-career life stage have a strong need for balance, due to the difficulty in managing multiple demands, and often make career changes to meet their unique needs and life circumstances (Cabrera, 2009; Mainiero & Sullivan, 2005; McFadden & Swan, 2012; O'Neil & Bilimoria, 2005; Wise & Milward, 2005). Conflict occurs for professional working mothers as they struggle to manage the demands of motherhood with the need for a meaningful career (Grady & McCarthy, 2008; Zauner, 2013). In the late career life stage, balance is easier to obtain, with many opportunities for positive spillover and enrichment, due to the pursuit of fulfilment and satisfaction from leisure and creative activities (August, 2011). Darcy et al. (2012) conclude that work-life balance is important to all employees for different reasons at various stages of their careers and that the importance of mediating factors on work-life balance fluctuates across the career life stages, and, in turn, will affect the way in which balance is negotiated and perceived.

Changes in the conceptual understanding of work-life balance has seen the construct move from an objective and fixed concept, where work and life are seen as separate and mutually exclusive domains, to a subjective, intangible process that fluctuates over time, based on the unique needs and expectations of the individual (Bobat et al., 2012; Potgieter & Barnard, 2010; Wattis et al., 2013). Satisfaction with work-life balance is also not objectively perceived as the absence of conflict or the presence of enrichment, but rather concluded based on an individual's personal assessment of how their work-life domains are being managed across the lifespan (Grawitch et al., 2013; Haar, 2013).

Recent literature has also confirmed that studies in work-life balance should move from a focus on the individual and include issues focused on organisational and societal levels (Grawitch et al., 2010; Kossek et al., 2010; Kossek et al., 2011). Moving the focus from the individual to organisational and societal levels will perhaps help to understand why work-life balance still remains a huge problem for most employees and organisations, despite the wealth of research and vast amount of money spent on the problem (Gatrell et al., 2013; Kossek et al., 2011).

4.1.2 Conclusions drawn from the empirical study

The aim of the empirical study was to describe and interpret the lived work-life balance experiences of female engineers through the lens of their specific career life stages. The findings of this study confirm and support the conclusions drawn from literature, as outlined above, and are discussed below.

In terms of the work-life balance construct, this study supports the recent literature advocating the subjective, continuous and fluctuating nature of work-life balance (Bobat et al., 2013; Potgieter & Barnard, 2010; Wattis et al., 2013). The findings of this study clearly highlight that work-life balance is based on a set of internal goals, expectations and roles unique to each individual that continues to change based on their needs at that point in the lifespan (Barber et al., 2016). While the importance of role salience and career centrality has been well-documented in literature (Buse & Bilimoria, 2014; White, 1995), this study suggests career centrality or work-role salience as one of the most important factors in how female engineers negotiate work-life balance. This study highlighted that the salience of the work role definitely fluctuated over time and ultimately changed how work-life balance was perceived by the

participants in the study. As the nature of work role begins to change, especially in the mid-career life stage, so the focus begins to shift to other life roles, which ultimately affects how work-life balance is negotiated and perceived.

In the early career life stage, the findings of this study suggest that individuals sacrifice the need for balance for the intense drive to build their careers and achieve recognition and success. The work role is of utmost importance in the lives of female engineers in this career life stage, as it represents a strong source of their identity and self-worth. This finding is consistent with Mainiero and Sullivan (2005), who state that challenging work is a driving force in the lives of women in the early career life stage and that other issues that are considered important, such as balance, remain active but take a secondary role at this particular point in time. While much of the literature has highlighted the career focus of this career life stage (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005), this study also noted that while individuals are preoccupied with their career success in this career life stage, they experience the numerous life changes which impact on their well-being and stress levels. Individuals potentially adopt a number of additional life roles, such as mother and wife, and experience a number of personal life changes which can create work-life conflict as they struggle to manage their intense preoccupation with work and the multiple demands in their life roles.

Work-life conflict in the early career life stage has been documented by Bozzon et al. (2017) and Love et al. (2011), and highlights that career-centric women in this career life stage find it difficult to maintain boundaries and achieve satisfactory work-life balance. In this study, work and life roles were seen as separate, mutually exclusive entities in the lives of female engineers, competing for their time and energy. While research highlights work-life balance perceptions as work being a necessary 'evil' to support pleasurable life roles (Fleetwood, 2007a; Grawitch et al., 2010), it would seem that, in this career life stage, female engineers find work as 'good' and life a potential nuisance intruding on their desire to achieve career recognition and success. While work takes predominance in this career life stage, the study also noted that female engineers do begin considering various work-life balance decisions such as delays in motherhood, flexible working arrangements and career prioritisation, based on their unique needs and expectations.

This study concludes that, in the mid-career life stage, balance is perceived by female engineers as the continued opportunity for meaningful and challenging work, with perceived satisfactory time for non-work activities, including personal care time and skills development. The findings highlight that the mid-career life stage is a time of intense personal crisis and dissatisfaction as female engineers begin to question the importance of the various work-life roles in their lives. This is consistent with findings by O'Neil and Bilimoria (2005) and White (1995), who state that individuals begin questioning the centrality of their careers in this career life stage. Role conflict is also experienced as female engineers struggle to reconcile their identity as female engineer, which is still very important to them, with their identity and role as a mother (Herman, 2015; Herman & Lewis, 2012). Due to changes in work-role salience and the importance of balance in this career life stage, female engineers begin consciously diverting their energy from the work role to other life roles, with a strong emphasis on their children and their own needs for self-care. This is consistent with findings from O'Neil and Bilimoria (2005) and Zauner (2013).

In the late career life stage, the findings of this study suggest that the role of work changes even further in the lives of participants, and becomes completely integrated into their broader life context. Positive spillover into the work domain in the form of renewed productivity and energy occurs as individuals pursue activities in the life domain that bring a sense of personal satisfaction and fulfilment. This change in the work role and positive spillover from various life domains make balance much easier to obtain and no longer something elusive that individuals are continually searching for and struggle to find.

This is supported by findings from August (2011) and O'Neil and Bilimoria (2005), who state that work is now about contributing positively to the lives of others, and no longer about success and recognition, thereby making the notion of balance easier to obtain. The study concludes that work-life balance does not adequately represent the complete integration of work into the life context, and should rather be conceptualised as work-life harmony – which can be described as “an individually pleasing, congruent arrangement of work and life roles that is woven into a single narrative of life” (McMillan et al., 2011, p. 15).

This study also highlights that female engineers follow the same developmental path across the lifespan and experience the same questions and concerns regarding work-

life roles, irrespective of marital status and motherhood. It would suggest that while these factors certainly contribute to perceptions regarding work-life balance, they are not the driving force behind the need to manage work and life domains. This is consistent with findings from Mainiero and Sullivan (2005) and Wattis et al. (2013), who encourage an inclusive approach to work-life balance that includes all groups of individuals, acknowledging their unique work-life balance needs and expectations across the lifespan.

4.2 LIMITATIONS

The findings of this study should be interpreted within the context of the proposed limitations, which would impact transferability to other contexts. Firstly, due to convenience, all the engineers interviewed in this study were chemical engineers – which could affect transferability to other engineering disciplines. Secondly, a snowballing sample strategy was employed in the late career life stage which could potentially affect the quality of data due to selection bias (Atkinson & Flint, 2001). Thirdly, the study was also largely homogeneous in terms of race, and would not be necessarily transferable to other race groups, without further research to validate the findings. The findings of this study do answer the research question and aim, and can be considered meaningful and appropriate to the research purpose.

4.3 RECOMMENDATIONS

4.3.1 Recommendations for industry

This study highlighted the challenges experienced by female engineers as they negotiate work-life roles and attempt to achieve work-life balance across the lifespan. The findings of this research study highlight the unique, subjective and continuous nature of work-life balance, and challenge the current assumptions of most organisations that rely on a ‘one-size fits all’ approach to work-life balance (Darcy et al., 2012). Organisations are encouraged to realise that work-life balance is not just a concern for working mothers, but an issue for all women across all career life stages (Lewis et al., 2007; Wattis et al., 2013).

Organisations need to adopt a more specific, personalised approach aimed at the unique needs of each employee, with an understanding of how those needs and

expectations differ across various career life stages. While most organisations would see this recommendation as a call to develop and implement a plethora of new work-life balance initiatives that employees could pick and choose from, the real challenge issued would be to encourage male-dominated occupations to take a long, hard and objective look at their organisational culture and the barriers that are preventing female engineers from the balance they are so desperately struggling to achieve. Pumroy (2016) states that most work-life programmes only give perfunctory attention to women's career development, and that to truly address the needs of female employees, organisational culture needs to change by redefining an 'ideal worker' from a male who is completely devoted to work, and content to spend all his time in the office, to individuals, both male and female, who are equally devoted to both work and non-work roles, and who choose to follow traditional as well as non-linear career paths (Herman, 2015; Herman & Lewis, 2012).

According to Cahusac and Kanji (2014) and Mastracci and Arreola (2016), most women need to adopt typical masculine traits, and mimic these behaviours to be considered successful within male-dominated occupations. Organisations need to focus on promoting more females into leadership positions, who are visibly portraying the new 'ideal worker' as someone who is actively pursuing their career whilst still successfully managing their life domain. Herman and Lewis (2012) argue that if there are not enough role models of women in leadership positions modifying their working patterns to incorporate their family, then fewer women will feel confident enough to deviate from the current career patterns without fear of career limitations and disadvantages.

In order to retain talented professional women, organisations need to understand, acknowledge and support women's career development, including their relationship priorities and the demands of their multiple life roles, by advocating various career paths and options and providing a culture of acceptance and support (O'Neil & Bilimoria, 2005). Walsh et al. (2016) state that organisations need to both redesign how work is organised and assessed, and reconsider the types of support needed by female engineers at various phases throughout their careers. The findings of this study provide unique insight into the perceptions regarding work-life balance at different career life stages, and can give managers a better idea of the support needed at each stage. Hammer, Kossek, Yragui, Bodner and Hanson (2009) encourage or-

organisations to develop and implement a multilevel framework that changes organisational culture and practices through family supportive behaviours that provide emotional support, role-modeling of acceptable behaviours and create work-family management strategies.

In the early career life stage it would be easy for managers to ignore the issue of work-life balance and to simply enjoy the fruits of employees who are working incredibly hard and who seem totally focused on career growth, delivery and achievement. Employees in this career life stage are very impressionable, and are continually assimilating information on the organisational culture which they internalise and either adopt as their own or begin to reject (Gregory & Milner, 2009). Managers need to be aware that the potential for intense work-life conflict exists as they struggle to build their reputation and achieve success at work, while still experiencing numerous life-changing events in the life domain. It is important for women in this career life stage to see similar role models adopting positive work-life balance behaviours, and be encouraged to make career decisions that promote a healthy balance between work and life domains (Herman & Lewis, 2012).

The mid-career life stage is a particularly vulnerable stage, with many women considering drastic decisions to help them achieve the balance they so desperately seek. It is often at this stage that most women will decide whether to remain in the profession or leave for 'greener pastures' offering them the tantalising promise of balance and work-life integration (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). Organisations need to be aware of this time of intense dissatisfaction and role conflict, and ensure that female engineers are well-supported throughout this difficult time. While this would definitely include ensuring that women have a range of flexible working options to choose from, it would also mean digging deeper and creating an organisational culture where women feel empowered to manage the multiple roles in their lives in the unique way that suits them best, while still ensuring that they are not negatively affected in terms of career progression.

In the late career life stage, most women have weathered the storms of the mid-career life stage, and find themselves in a time of relative balance and stability. They have a strong desire for authenticity and living integrated lives, and are motivated by the desire to plough their knowledge and expertise back into the organisation (Mainiero & Sullivan, 2005; O'Neil & Bilimoria, 2005). Women experience tremendous positive

spillover from their pursuit of pleasurable activities outside of work. Organisations need to harness this renewed energy and productivity and channel it back into the workplace where the women are able to add extensive value, based on their years of experience, and desire to transfer their learning and expertise into the profession. This could include using female engineers in the late career stage as mentors and coaches for younger employees.

4.3.2 Recommendations for future research

Since this study investigated work-life balance across the life-span, a longitudinal study, focusing on the same participants as they progressed through the various career life stages, would be immensely beneficial to the understanding of work-life balance and how it changes across various career life stages. There is also limited research on work-life balance among previously disadvantaged race groups in South Africa (Potgieter & Barnard, 2010). Since retaining previously disadvantaged female engineers is considered a major focus area for most engineering organisations, understanding their unique work-life balance needs and perceptions would be greatly advantageous for both the research community and the engineering profession. Similar research in other male-dominated occupations would also strengthen the literature in support of the work-life balance challenges faced by most women in gendered organisations and occupations and, in turn, hopefully have an impact in creating positive organisational and societal change. Since role salience or career centrality seems to be a large determining factor in how work-life balance is negotiated among female engineers, further research in this regard should be considered.

4.5 MY REFLECTION OF THE STUDY

To ensure continued transparency in my research process, I feel it would be prudent to end this chapter with my overall reflections on the study. It is impossible to complete this research study without being much changed in the process. Not only was this a journey to discover the lived experiences of female engineers as they manage work-life balance, but also an intense journey of self-discovery and reflection regarding my own views on work-life balance and my competence as a researcher. As mentioned previously, work-life balance is something very close to my heart as I struggle to manage my desire for a career with the needs of my family. What became so clear to me during this research process is that everyone simply wants to do the

best they can on this journey of life, and that there is no right or wrong way to manage work-life balance, but rather multiple variations, based on the unique life stories of each individual. This process has truly deepened my understanding of qualitative research, and has given me such a humble appreciation for the complexity of the process. I have discovered a love for qualitative research, and I truly hope that this study reflects my intense passion for both the topic explored and the research methodology. I look forward to many more opportunities to explore and develop my skills in this regard.

4.6 CHAPTER SUMMARY

This chapter discussed the conclusions drawn from both the literature review and the empirical research. Limitations were also highlighted, with recommendations made for industry as well as for future research endeavours. This chapter concluded with a personal reflection on the study conducted.

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APPENDIX 1

LANGUAGE EDITING CERTIFICATION

16 November 2017

I, Marlette van der Merwe, hereby certify that the text and list of references of the master's dissertation, "Work-life balance in the career life stages of female engineers: a hermeneutic phenomenological perspective", by Tainith Doreen Loudon, have been edited by me, according to the APA referencing method (6th edition).

A handwritten signature in black ink that reads "Marlette van der Merwe". The signature is written in a cursive style with a large initial 'M'.

Marlette van der Merwe

BA, HDipLib (UCT)