

**Framing the Work-Life Relationship – Understanding the  
Role of Boundaries, Context and Fit**

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I confirm that the data analysed for chapters 4, 5, and 6 was collected jointly with Dr. Alexandra Beauregard and Esther Canonico, both of the London School of Economics and Political Science, as part of a larger research project on homeworking. The writing and analysis presented in the chapters is solely my own work.

**Abstract:**

This dissertation presents four papers that seek to make theoretical and practical contributions to the literature on work-life boundary management. Specifically, this research explores new relationships between boundary antecedents, moderators and outcomes, tests the impact of different working arrangements, and uses multiple research methods in order to add to our understanding of how we can manage work-life boundaries in such a way that better work-life outcomes are recognized. The research makes contributions to three areas of work-life literature. First, this research contributes to literature on work-life boundary management by redefining the role of permeability as an essential mechanism by which boundaries can influence work-life outcomes. Using survey and daily diary data with homeworkers in the UK, this research suggests that permeability is a moderator that influences the impact of segmenting and integrating employment practices on work-life outcomes. Further, this dissertation also provides evidence to support the idea that the employment context is an important consideration when considering boundary management. Using qualitative and quantitative research conducted in both highly segmented and highly integrated work environments this research has underscored the importance of considering that boundary strategies are not 'one size fits all'.

This dissertation also contributes to the growing body of literature that examines the relationship between individual preferences for integration or segmentation and the resources provided by their work environment. Drawing on Person-Environment Fit (Edwards, 1996, Rothbard, 2005) the research uses polynomial regression and response surface analysis to examine boundary management among employees working off-shore versus those in traditional office-based roles. 'Fit', as well as

'misfit' between segmentation-preference and segmentation-supply and the resulting impact on work-life outcomes is examined.

Last, this research also makes a contribution to the literature that connects the Job Demands-Resources Model to the work-life interface (Demerouti et al., 2001). Drawing on Boundary and Border Theories (Zerubavel, 1991, Clark, 2000), this research uses data from a daily diary study of homeworkers to examine daily predictors and outcomes of boundary strength. In addition, the data demonstrate that boundary permeability acts a moderator that regulates the impact of job demands and resources, apart from just segmenting and integrating working practices, on work-life outcomes and well-being. Together, these papers reflect the importance of examining work/non-work boundaries through the lens of individual and organisational difference and allow us to better understand the mechanisms which can be used to better manage these boundaries.

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*“It is good to have an end to journey toward; but it is the journey that matters, in the end.” (Ursula LeGuin, The Left Hand of Darkness)*

My PhD has been an incredible process of learning and development. I had no idea when I started how much the process of completing my PhD would make a greater contribution to my learning than the final product. I learned not only about the challenges associated with academic research and writing, but I also learned a lot about myself as a person, as well as new ways of collaborating with others to make meaningful contributions.

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## **Table of Contents:**

<b>Chapter 1: Introduction .....</b>	<b>13</b>
1.1 Introduction .....	14
1.2 Goals of the Research .....	20
1.3 Structure of this Dissertation .....	23
1.3.1 Occupational context and Person-Environment Fit .....	24
1.3.2 Boundary Strategies and Person-Environment Fit .....	27
1.3.3 The Role of Permeability in the Work-Life Interface .....	30
1.3.4 Boundary Permeability and Job Demands-Resources .....	32
1.4 Overall Research Design .....	35
1.5 Fieldwork Overview and Timings .....	37
1.6 Summary and Conclusion .....	41
<b>Chapter 2: Review of the Literature .....</b>	<b>43</b>
2.1 Introduction .....	44
2.2 Core Work-Life Concepts .....	45
2.2.1 Roles, Domains and Transitions .....	46
2.2.2 Role Identification and Role Salience .....	50
2.3 Relationships between Work and Life .....	53
2.3.1 Conflict Perspective .....	53
2.3.2 Enrichment Perspective .....	56
2.3.3 Spillover and Crossover .....	59
2.3.4 Compensation .....	61
2.4 Theory and Research Specific to Boundary Management .....	62
2.4.1 Boundary and Border Theories .....	62
2.4.2 The Integration-Segmentation Continuum .....	64
2.4.3 Boundary Strength .....	67
2.4.3.1 Flexibility .....	67
2.4.3.2 Permeability .....	70
2.4.4 Organisational Boundary Supply .....	74
2.4.4.1 Organisational Context .....	75
2.4.4.2 Job Demands and Resources .....	77
2.4.4.3 Person-Environment Fit .....	79

2.4.5 Boundary Work and Boundary Management Strategies .....	81
2.5 Areas of Research Opportunity in the Boundary Management Literature .....	84
2.6 Summary and Conclusion .....	86
<b>Chapter 3: Boundary Management and the Highly Segmented Worker .....</b>	<b>87</b>
3.1 Introduction .....	88
3.2 Highly Segmented Work Environments .....	92
3.2.1 Offshore Work .....	92
3.2.2 Shift / Rotational Work .....	94
3.2.3 Military / Expatriate Work .....	95
3.3 Boundary Preferences, Demands and Resources .....	97
3.3.1 Integration-Segmentation Continuum for Individuals and Workplaces ...	97
3.3.2 Fit between Work Segmentation Preferences and Supply .....	99
3.3.3 The Role of Social and Occupational Supports .....	103
3.4 Method .....	108
3.4.1 Research Design .....	108
3.4.2 Measures .....	112
3.5 Analysis and Findings .....	119
3.6 Discussion .....	131
3.7 Limitations .....	137
3.8 Conclusion .....	138
Figure 3.1: Model of Relationships Leading to Work-Life Conflict .....	107
Figure 3.2: Model of Relationships Leading to Work-Life Enrichment .....	108
Figure 3.3: Model of Relationships Leading to Organisational Commitment ...	108
Table 3.1: Descriptive statistics and correlations among study variables .....	121
Table 3.2: Polynomial regression analysis predicting work-life conflict .....	125
Figure 3.4: Response Surface Analysis: Segmentation Preference, Supply and Work-Life Conflict .....	127
Table 3.3: Polynomial regression analysis predicting work-life enrichment .....	128
Figure 3.5: Response Surface Analysis: Segmentation Preference, Supply and Work-Life Enrichment .....	129
Table 3.3: Polynomial regression analysis predicting organisational commitment .....	130



Figure 3.6: Response Surface Analysis: Segmentation Preference, Supply and Organisational Commitment .....	131
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**Chapter 4: Mind the Gap: Negotiating Boundaries between Work and Home** ..... **140**

4.1 Introduction .....	141
4.2 Homeworking .....	143
4.2.1 Overview of Homeworking in the UK .....	143
4.2.2 Outcomes of Homeworking .....	144
4.2.3 Defining Homeworking .....	148
4.2 Literature on Boundary Management .....	151
4.2.1 Boundary Work .....	151
4.2.2 Boundary Management Strategy .....	155
4.2.3 Boundary Strategies and Homeworking .....	158
4.3 Method .....	161
4.4 Findings .....	169
4.4.1 What are the boundary strategies and tactics used by individuals who work from their home environment? .....	169
4.4.2 Do homeworker boundary strategies match their preferences for integration or segmentation?.....	173
4.4.3 How do boundary management strategies differ among employees at different levels of homeworking?.....	175
4.4.4 What happens when boundary management strategies are unsuccessful and boundary violations occur?.....	181
4.5 Discussion .....	184
4.6 Limitations .....	191
4.7 Conclusion .....	193

Table 4.1 Demographic breakdown of research participants .....	164
--	-----

Table 4.2: Final Coding Framework .....	168
---	-----

**Chapter 5: Boundary Management and the Highly Integrated Worker** ..... **195**

5.1 Introduction .....	196
5.2 Homeworking, Boundary Flexibility and Permeability .....	197
5.3 Boundary Preferences, Demands and Resources .....	209

5.4 Person-Environment Fit .....	206
5.5 Method .....	207
5.5.1 Research Design .....	207
5.5.2 Quantitative Measures .....	209
5.6 Analysis and Findings .....	215
5.7 Discussion .....	227
5.8 Limitations .....	230
5.9 Conclusion .....	233
Table 5.1: Descriptive statistics and correlations among study variables .....	217
Table 5.2: Hierarchical regression predicting non-work boundary permeability	219
Figure 5.1: Curvilinear Relationship between Extent of Homeworking and Non- Work Boundary Permeability .....	219
Table 5.3 Hierarchical regression predicting work-life conflict .....	220
Table 5.4 Hierarchical regression analysis work-life conflict .....	221
Table 5.5 Hierarchical regression analysis work-life conflict .....	222
Figure 5.2 Moderating Effects of Boundary Permeability .....	223
Table 5.6 Hierarchical regression analysis predicting work-life conflict .....	224
<b>Chapter 6: Boundary Management over Time .....</b>	<b>235</b>
6.1 Introduction .....	236
6.2 Literature Review .....	238
6.2.1 Antecedents to Non-Work Boundary Permeability among Homeworkers .....	241
6.2.2 Boundary Permeability as a Moderator between Job Demands and Negative Work-Life Outcomes .....	245
6.2.3 Boundary Permeability as a Moderator between Job Resources and Positive Work-Life Outcomes .....	249
6.3 Method .....	254
6.3.1 Research Design .....	254
6.3.2 Measures .....	257
6.3.3 Analyses .....	261
6.4 Findings .....	262
6.5 Discussion .....	271

6.6 Limitations .....	276
6.7 Conclusion .....	279
Figure 6.1: Model of Antecedents to Non-work Boundary Permeability among Homeworkers .....	245
Figure 6.2: Model of Boundary Permeability as a Moderator between Job Demands and Negative Work-Life Outcomes .....	249
Figure 6.3: Model of Boundary Permeability as a Moderator between Job Resources and Positive Work-Life Outcomes .....	253
Table 6.1 Analysis of Variance (ANOVA) of diary / non-diary sample characteristics .....	257
Table 6.2 Descriptive statistics and correlations among study variables .....	263
Table 6.3 Estimates of Parameter Variance for Null Hypotheses .....	266
Table 6.4 HLM Parameter Estimates for Within-Person Model - Antecedents to Non-Work Boundary Permeability .....	267
Table 6.5 HLM Parameter Estimates for Within-Person Model – Job Demands / Outcomes .....	268
Figure 6.4 Moderating Effects of Boundary Permeability on Work-Life Conflict .....	269
Table 6.6 HLM Parameter Estimates for Within-Person Model – Job Resources / Outcomes .....	270
Figure 6.5 Moderating Effects of Boundary Permeability on Work-to-Life Facilitation .....	271
<b>Chapter 7: Conclusions .....</b>	<b>281</b>
7.1 Introduction .....	282
7.2 Overall Contributions of this Dissertation to the Literature .....	282
7.3 Contributions and Implications from Core Research Questions .....	286
7.3.1 What impact does occupational context have on Person-Environment Fit and the work-life boundary interface? .....	286
7.3.1.1 Contributions to the Literature .....	286
7.3.1.2 Implications for Practice .....	291
7.3.2 How can boundary strategies be implemented in order to establish or re-establish person-environment fit, when there is mismatch between organisational supply of segmenting-integrating practices and worker preference? .....	293

7.3.2.1 Contributions to the Literature .....	294
7.3.2.2 Implications for Practice .....	297
7.3.3 What is the role of boundary permeability in the work-life interface?....	299
7.3.3.1 Contributions to the Literature .....	299
7.3.3.2 Implications for Practice .....	301
7.3.4 How does boundary permeability impact the relationship between other job demands and resources, beyond flexible working practices, and positive and negative and work-life outcomes? .....	303
7.3.4.1 Contributions to the Literature .....	303
7.3.4.2 Implications for Practice .....	305
7.4 Limitations .....	307
7.4.1 Selection / Number of Employees .....	307
7.4.2 Types of Employees .....	308
7.4.3 Common Method Bias .....	309
7.4.4 Scale Revision .....	309
7.5 Areas for Future Research .....	310
7.6 Conclusion .....	312
<b>References .....</b>	<b>314</b>
<b>Appendices .....</b>	<b>353</b>
Appendix 1 - Survey Instrument (Chapter 3) .....	353
Appendix 2 – In-Depth Interview Guide (Chapter 4) .....	363
Appendix 3 – Survey Instrument (Chapter 5) .....	370
Appendix 4 – Dairy Survey Instrument (Chapter 6) .....	401

## **Chapter 1: Introduction**

- 1.1 Introduction
- 1.2 Goals of the Research
- 1.3 Structure of this Dissertation
  - 1.3.1 Occupational Context and Person-Environment Fit
  - 1.3.2 Boundary Strategies and Person-Environment Fit
  - 1.3.3 The Role of Boundary Permeability in the Work-Life Interface
  - 1.3.4 Boundary Permeability and Job Demands-Resources
- 1.4 Overall Research Design
- 1.5 Fieldwork Overview and Timings
- 1.6 Summary and Conclusion

## 1.1 Introduction

*"'Boundary work' consists of the strategies, principles and practices that we use to create, maintain and modify cultural categories. It is the never-ending, hands-on, largely visible process through which classificatory boundaries are negotiated by individuals. Boundary work is what allows categories and classification systems to exist, to be meaningful, and to change over time. It is boundary work, therefore, that allows culture or society to do the same."* (Nippert-Eng, 1996a, p.564)

In the quote above, Nippert-Eng (1996a) identifies a central issue relating to the management of the work-life interface – individual differences in how we establish, maintain and refine our boundaries between home and work. The work-life interface represents a system by which conflict and enrichment caused by bi-directional (work to non-work and non-work to work) interactions between work and non-work domains impact work role outcomes, non-work role outcomes and individual well-being (Allen, Herst, Bruck and Sutton, 2000, Bedeian, Burke and Moffat, 1988, Frone et al., 1992, 1997). At times, the interface between work and non-work roles can be enriching, in the sense that involvement in a particular role, such as being a team mate in a sports league, can have a positive impact on a role in an alternate domain, such as being a good team member in a work-related team (Greenhaus and Powell, 2006). At other times, the participation in both work and non-work roles can lead to conflict such that the demands of one role take away the ability to manage the demands of an alternate role. For example, the time-based demands of a tenure-track academic position may make it difficult for a young academic to manage childcare demands at home. While research has increased substantially on this topic over the last few decades, we are still left with few organisational interventions that seem to

either alleviate the conflict that can often be caused by attempting to balance work and non-work demands for many workers (Kreiner, 2006, Kossek, Ruderman, Braddy and Hannum, 2012) or facilitate the enrichment that can be experienced by engaging in multiple roles (Greenhaus and Powell, 2006, Kirchmeyer, 1992, Ruderman et al., 2002, Seiber, 1974). Central to this issue are the differences we find between work environments, non-work environments and among the preferences for different types of environments of individual workers. Much of the work in this dissertation draws on Person-Environment Fit theory or the idea that the best outcomes are achieved when individuals perceive that there is a sense of fit between their needs and preferences and what is supplied by their environment (Edwards, Caplan and Van Harrison, 1998, Edwards and Rothbard, 1999). As research has suggested, solutions that lead to a healthy work-life interface are not 'one size fits all' (Desrochers, Hilton and Larwood, 2005, Kossek, Noe and DeMarr, 1999, Nippert-Eng, 1996a).

In addition to the resources provided by the environment and the preferences of the individual workers, the ability of employees to enact strategies to manage the 'fit' or 'misfit' that they experience must be considered. While the development of theory on work-life boundaries (Ashforth et al., 2000, Nippert-Eng, 1996a, Zerubavel, 1991) and borders (Clark, 2000) has done a great deal in terms of offering a framework for understanding the way in which employees separate or combine work and non-work roles, there is still a great deal of room for this body of literature to grow in order to better understand the processes and mechanisms involved in boundary construction and maintenance. With a better understanding of these

processes and mechanisms, interventions that seek to help employees manage their multiple roles may become more effective.

These interventions that seek to improve the work-life interface must be flexible enough in nature to accommodate these differences and make use of the mechanisms available to both individuals and organisations. One way to achieve this is to develop a solution that is two-fold. First, we must find some way for employees and organisations to understand what they each bring to the table. For organisations, this may be the existing culture or the types of work-life benefits they offer with an understanding as to how this culture and these benefits may impact different types of workers. For individuals, this involves recognizing their own preferences for the way their work and non-work roles intersect as well as the demands of each of the roles in which they engage. Once these baseline factors are understood and organisations and employees have a way to 'self-assess' their own preferences, resources and demands, the second step is to find strategies to manage the intersection of these roles that allow for greater congruence between preferences, resources and demands (Chen, Powell and Greenhaus, 2009, Edwards, 2008, Kristof-Brown, Zimmerman and Johnson, 2005). The broad purpose of the research in this dissertation is first, to extend current theory on work-life boundaries in order to better understand how contextual and individual differences impact the work-life interface. Then, this research aims to provide a better understanding of the mechanisms by which individuals manage their role boundaries in order to identify ways that boundary management strategies can be adjusted by individuals and organisations to create an interface that best matches employee needs and preferences.



Contextual differences across work environments play an important role in shaping the boundaries around the work-life interface. For example, in some work environments, there are very clear physical and / or temporal demarcations or 'boundaries' around work and non-work activities. These work contexts are characterised in the literature as having high levels of work-life segmentation, such that work and non-work activities are kept quite separate (Nippert-Eng, 1996a).

Shift work is one example of a working pattern that often offers a clear demarcation of work-life boundaries, due to the physical (location) and temporal constraints of the work activity. The Office for National Statistics data from the 2009 Labour Force Survey (LFS) shows that 14% of UK workers are engaged in some kind of shift-based working arrangement (Steel, 2011). Other work environments may lack these traditional boundaries whereby work may take place in the home environment or at times of the day that are typically associated with non-work activities. These work environments are characterised in the literature as having high levels of work-life integration, such that work and non-work activities are often intermingled and there can be a blurring of the distinction between work and non-work activities.

Homeworking is one example of a working arrangement that lacks traditional boundaries, which may lead to the integration of work and non-work activities. Office for National Statistics data from the 2007 LFS found that the percentage of the workforce using a telephone and computer to carry out their work from home increased from 4% in 1997 to 8.9% in 2007 (Ruiz and Walling, 2005). Given the prevalence of both these highly segmented and highly integrated working arrangements in the UK, further research is needed on the impact of different employment contexts. This dissertation contributes to literature relating to these organisational contexts by presenting a clearer picture of the challenges associated

with managing boundaries within these contexts and by identifying mechanisms and strategies that can be used to improve work life outcomes associated with these employment contexts.

Central to the question as to how environments offering high levels of work-life segmentation or high levels of work-life integration can improve work-life outcomes is the way in which employees manage the boundaries or “mental fences” between their work and non-work roles (Zerubavel, 1991). Boundaries serve to “creat(e) slices of reality – domains that have particular meaning for the individuals creating the boundaries” (Ashforth et al., 2000, p.4). The creation of boundaries between work and non-work domains enables individuals to enact roles in each of those domains that are often bounded by time, effort and specific behaviours (Ashforth et al., 2000). The management of boundaries allows individuals to manage competing pressures from multiple roles or domains. For example, an employee may use a temporal boundary of a firm stopping time for work in order to meet the demands placed on him by his role in a family domain. Similarly, an employee may elect to ignore personal phone calls and email during the workday in order to preserve her boundary around her work domain.

Several constructs from work life literature contribute to an employee’s ability to manage work and non-work boundaries such that they result in a positive work-life interface. First, as noted above, organisational supplies of segmenting and /or integrating work-life practices are an important input to an individual’s boundary management strategy. Closely tied to this is the level of control an individual perceives that they have over their decisions related to boundary permeability and

flexibility. Boundary permeability will be discussed in greater depth later in this dissertation, but can be briefly defined here as the degree to which activities in one domain are interrupted by the activities of another (Ashforth et al., 2000, Clark, 2000, Hall and Richter, 1988). Boundary flexibility, on the other hand, can be defined as “the extent to which the physical time and location markers, such as working hours and workplace, may be changed” (Hall and Richter, 1988, p.213). In addition, an employee’s actual preference for integration or segmentation as well as the strategies they employ to enact boundaries that match these preferences must be considered. Using boundary management strategies, employees can attempt to enact boundaries that ‘fit’ with their preferences for integration or segmentation of work and non-work roles. In this dissertation, the focus is primarily on how to shape the boundaries surrounding work environments to best support employees’ non-work demands. While beyond the scope of this dissertation, another important area for investigation is how we can shape our non-work environments to best fit our work-related demands.

When looking at the actual processes by which boundaries are created and managed, boundary strength is an important characteristic in determining the role that boundaries play in managing the interface between work and non-work roles. Weaker boundaries result in more frequent transitions between work and non-work roles, while stronger boundaries provides for greater segmentation between roles. Prior research has identified that boundary strength is influenced by levels of flexibility and permeability, however these constructs and the relationships between them have been treated somewhat inconsistently in the literature (Ashforth et al. 2000, Bulger et al., 2007, Clark 2000, Hall and Richter, 1988, Matthews et al.,

2010a). For example, definitions of permeability in the literature are inconsistent in terms of whether boundaries can be considered to be permeable if interruptions from an alternate domain are possible, versus whether these interruptions actually occur (Matthews et al., 2010a). In addition, prior research has questioned the relationship between flexibility and permeability. For example, Bulger et al. (2007) question whether flexibility and permeability are in fact co-determinants of boundary strength or whether flexibility is actually a predictor of permeability. The research contained in this dissertation seeks to extend theory on work-life boundaries by clarifying these inconsistencies and redefining the role of boundary permeability in the work-life interface. Further, by applying the Job Demands-Resources Model (Demerouti et al., 2001) to the above examination of boundary permeability, this research intends to contribute to the literature that links Job-Demands and Resources to work-life outcomes by suggesting that this new understanding of permeability can also influence the way other types of role demands and resources impact the work-life interface (Demerouti et al., 2001).

## **1.2 Goals of the Research**

As noted above, the primary goal of this dissertation is to make a contribution to theory on work-life boundaries and identify how this contribution can improve work-life outcomes when applied to practice. Specifically, this dissertation makes a contribution to three areas of work-life literature. First, this research makes a significant contribution to literature on work-life boundary management by redefining the role of permeability as an essential mechanism which moderates the relationship between segmenting and integrating HR practices and work-life

outcomes. In addition, this dissertation will also contribute to the literature which relates Person-Environment Fit theory to research on work-life boundary management by highlighting the importance of considering the employment context when examining work-life boundaries (Edwards, 1996, Rothbard et al., 2005, Voydanoff, 2005a). This research will demonstrate that employment contexts offering extreme levels of integration or segmentation may make employees more at risk for ‘misfit’ between their preferred means of managing boundaries and organisational resources to support these preferences, and that this misfit can lead to negative work-life outcomes. Third, this dissertation also attempts to contribute to literature that connects the Job Demands-Resources Model to the work-life interface (Demerouti et al., 2001) by extending the findings relating to the role of boundary permeability to a broader range of work role demands and resources.

In their article on what constitutes a theoretical contribution, Corley and Gioia (2011) synthesized existing literature on theory building and identified two core dimensions for contributions: originality and utility. They further identify that originality can be either “incremental”, such that it advances or alters the understanding that current theory offers or it can be “revelatory”, such that it “reveals what we otherwise had not seen, known or conceived” (Corley and Gioia, 2011, p.15). For example, Zerubavel’s (1991) theory of cognitive social classification may be perceived as “revelatory” such that it offered a brand new conception of the way one classifies different life roles, while Border Theory and Boundary Theory made significant “incremental” contributions to theory by further specifying how social classification applies to home and work roles and by specifying the nature and types of boundaries that exist (Ashforth et al., 2000, Clark, 2000, Desrochers and Sargent, 2004).

The second aspect of a theoretical contribution according to Corely and Gioia (2011, p.15) is its “utility”, or the ability to use and apply the advances in theory. Again, utility is further broken down into two dimensions: “scientific utility” is defined as an advance that improves conceptual rigor or the specificity of an idea and / or enhances its potential to be operationalized and tested, while “practical utility” can occur when “theory can be directly applied to the problems practicing managers and other organizational practitioners face” (Corley and Gioia, 2011, pp.17-18). In sum:

*“Good theory is practical precisely because it advances knowledge in a scientific discipline, guides research toward crucial questions, and enlightens the profession of management. (Van de Ven, 1989, p.486)”*

The overall goal of this dissertation is to make a contribution to work-life literature that extends theory on work-life boundaries in a way that is useful and relevant to organisations and their employees. This dissertation was designed as a progressive research exercise in which the multiple studies build on each other in order to make a contribution to the literature on work-life boundary management from multiple perspectives. In each of the paper-based chapters of this thesis, specific hypotheses and research questions are identified and commented upon in the subsequent findings and discussion sections. However, it is important to view this thesis in its entirety and identify the core contributions that this overall programme of research seeks to accomplish.

### **1.3 Structure of the Dissertation**

This dissertation aims to make contributions to theory on work-life boundaries that are both original and useful by attempting to answer four core research questions.

These questions are listed below, and will be reviewed in greater detail in the next four sub-sections (1.3.1-1.3.4) of this introduction:

- 1.) What impact does occupational context have on Person-Environment Fit and the work-life boundary interface?
- 2.) How can boundary strategies be implemented in order to establish or re-establish person-environment fit, when there is mismatch between organisational supply of segmenting-integrating practices and worker preference?
- 3.) What is the role of boundary permeability in the work-life interface?
- 4.) How does boundary permeability impact the relationship between other job demands and resources, beyond flexible working practices, and positive and negative and work-life outcomes?

This dissertation was written using a multi-paper format and each of the papers contained in this dissertation focuses on one of these four questions. However, it is important to note that the findings in each chapter build on the others such that multiple chapters contribute to the response to each question. While the four paper-based chapters are intended for stand-alone publication, this dissertation highlights additive linkages among them that help to contribute to our knowledge on work-life boundaries. Subsequent to this introduction, this dissertation contains a preliminary literature review, followed by the four paper-based chapters. Each of these paper chapters contains some additional literature review related to the specific theoretical

frameworks, methods and/or independent and dependent constructs relevant to the chapter. Last, the concluding chapter provides a summary of the key findings of this dissertation and presents a discussion of how these findings may be used in practice to help employers and employees across a range of working arrangements develop individual and organisational strategies that foster positive work-life outcomes. This concluding chapter will also discuss how future research might contribute additional knowledge on the topic of work-life boundary management.

### **1.3.1 Occupational Context and Person-Environment Fit**

As will be further discussed in the literature review in Chapter 2, the role of occupational context in the work-life boundary interface has received limited attention in the literature on work-life boundaries (Kossek and Lautsch, 2012). However, prior research has demonstrated that in certain environments, employees may feel that their employing organization's practices encourage a more integrating or segmenting approach to work-life boundaries. Current theory does not fully account for the structural differences that are provided by some working environments. For example, Piszczek and Berg (2014, p.2) critique boundary theory as having "evolved too narrowly" and suggest that there are gaps in the research relating to societal level factors such as the regulatory environment. Similarly, Clark (2002, p.45) calls for more research that focuses on "contexts that are characterized by high levels of integration such as telecommuting, home entrepreneurship, family business, and two or more family members working for the same employer". This research seeks to further define the relationship between occupational context and work-life boundary management by addressing the research question:



*What impact does occupational context have on Person-Environment Fit and the work-life boundary interface?*

In order to address this question, Chapter 3 examines work-life boundary relationships in the context of an organisation where the work environment for half the workforce is, by nature, highly segmented. These highly segmented workers are offshore employees working primarily on ocean platforms and vessels providing geotechnical survey support. These employees work rotational schedules, consisting of six weeks offshore followed by a home leave of up to three weeks. The remainder of the workforce works traditional schedules in an office setting in the Netherlands.

The research first attempts to clarify whether, based on the Schneider's (1987) attraction-selection-attrition framework, workers in extreme environments self-select into these types of roles because they are aligned with their own boundary preferences. Similar to the way that workers self-select into roles that may meet social, intellectual and other types of preferences, boundary preferences may be a consideration in the selection of jobs in extreme environments. If employees self-select into roles that match their boundary preferences, then there is likely to be a reduced 'misfit' between preferences and organisational resources. If, however, employees do not self-select into environment that match their boundary preferences, they may experience negative work-life consequences due to a misalignment between their preferences for integration or segmentation and organisational supplies of these resources. Drawing on the theoretical framework of Person-Environment Fit (Edwards, 1996, Kristof, 1996, Rothbard et al., 2005), the research in this chapter uses polynomial regression and response surface analysis to examine the relationship

between the 'fit' of organisational boundary supplies and employee preferences and outcomes including work to non-work conflict, work to non-work enrichment and organisational commitment. Further, moderation analysis is used to consider the role of family, social and employer supports.

The results from this chapter contribute new information to the literature on highly segmented employment patterns as well as the literature on person-environment fit and work-life boundaries. The data suggests that offshore employees have not necessarily self-selected into highly segmented work-life roles, however they do perceive their work environment to be more segmented than those working in the home office. The implications of this are that, for this group of employees, there is a greater risk of misfit between preference and supply. The data also showed that the level of 'misfit', not 'fit' had a more significant impact on employee perceptions of work-life conflict and organisational commitment such that at higher levels of misfit between segmentation preference and organisational supply of segmentation, employees perceived higher work-life conflict and reported lower organisational commitment. This suggests that it is the existence of misfit that should be most closely attended. This has important implications for organisational practice particularly in more extreme work environments, such as offshore work, where misfit may be more likely to occur.

### **1.3.2 Boundary Strategies and Person-Environment Fit**

Following on from the research in Chapter 3 which highlights the importance of looking for ‘misfit’ between organisational supply of integrating and segmenting practices and individual preference, particularly in unique organisational contexts, Chapter 4 will explore how work-life boundaries, and the strategies used by individuals to manage them, can assist with establishing or re-establishing fit between worker boundary preferences and their environment. Specifically, this research attempts to answer the core question:

*How can boundary strategies be implemented in order to establish or re-establish person-environment fit, when there is mismatch between organisational supply of segmenting-integrating practices and worker preference?*

In direct contrast to Chapter 3, this chapter examines the work-life interface and boundary management in the context of a highly integrated work environment – that of homeworkers. In this chapter, boundary management strategies will be examined from a qualitative perspective in order to contribute resources of ‘practical utility’ to individuals and HRM practitioners regarding ways that employees can manage their boundaries to protect fit. In addition, this research will extend current literature on homeworking by introducing findings relating to differences in boundary strategy according to the extent of homeworking that individuals engage in. This is a previously unexplored area in homeworking research and which can add significant value to individuals and HR practitioners involved in the design of homeworking roles. Using thematic analysis of qualitative interviews with 40 employees in a variety of working arrangements within a large, public sector organisation, the

purpose of this chapter is to identify how individuals at varying levels of homeworking use boundary management strategies to bring the organisational supply of integrating work-life practices in line with their individual preferences.

First, this chapter explores the types of boundary management strategies employed by homeworkers and how their preferences for integration versus segmentation of work-life roles influence these strategies. Consistent with prior literature on boundary management strategies, this chapter finds evidence of four different types of boundary management strategies employed by homeworkers, including physical, temporal, behavioural and communicative tactics (Kreiner, 2006). Managing technology emerged as a key theme relating to boundary management, revealing that technology can create work to non-work interference, but is also frequently used as an aid to boundary management.

Next, this chapter sought to examine differences in boundary management among individuals engaging in varying degrees of homeworking. The findings suggest that boundary strategies supporting high levels of role segmentation were applied among infrequent homeworkers and homeworkers who work from home most of the time. The interviews suggest that employees engaged in extensive homeworking may recreate boundaries in their own homes that are similar to the traditional boundaries that one might find in office-based environments. However, those engaged in moderate levels of homeworking and those who tend to work in a more mobile way (i.e. using home as a base for work although not actually working from home) demonstrate higher levels of flexibility and permeability in their boundary strategies. Further exploration of the data suggests that employees engaged in these moderate

levels of homeworking may perceive greater flexibility from the organisation and that this perception of flexibility may lead to a more exchange-based relationship with the organisation such that they are more willing to be flexible in return and allow for more work interruptions during non-work time or activities (Blau, 1964, Lambert 2000).

Last, this chapter examines the outcomes associated with a failure of boundaries to support permeability preference. Although the evidence of failed boundaries was limited within this sample, homeworkers described more frequent incidences of non-work factors, primarily children and partners, interfering with work than work interfering with non-work activities.

This chapter adds value to the literature by providing practical examples of boundary strategies that can serve as a guide to homeworkers and their employers who are looking for ways to support successful homeworking. In addition, to the best of the author's knowledge, there have been no other studies that have explored boundary management among homeworkers at varying levels of intensity. The findings which suggest that moderate levels of homeworking may be the key to generating more positive, reciprocal relationships between homeworkers and the organisations that employ them makes a significant contribution to homeworking literature. This chapter thus offers new insight into how boundary management can be a key driver for successful homeworking arrangements.

### **1.3.3 The Role of Boundary Permeability in the Work-Life Interface**

Having looked at the impact of organisational context on Person-Environment Fit and how boundary management strategies can be used to re-align organisational supplies with segmentation-integration preferences, the third core research question that this dissertation seeks to address relates to the role of permeability in work-life boundary theory. As noted earlier in this chapter, the role of boundary permeability has been treated inconsistently in prior work life literature and its role in the work-life interface is unclear (Ashforth et al. 2000, Bulger et al., 2007, Clark 2000, Hall and Richter, 1988, Matthews et al., 2010a). The present research seeks to expand current boundary theory by clarifying the role of boundary permeability in the relationship between organizational supply of integrating / segmenting working practices and work-life outcomes. To do so, the following research question will be addressed:

*What is the role of boundary permeability in the work-life interface?*

Specifically, this study seeks to make an ‘incremental’ extension to existing theory on work-life boundaries by identifying boundary permeability as the key lever which moderates the relationship between organizational boundary supply and work-life outcomes.

Chapter 5 draws on quantitative research with a sample of employees of a single, public sector organisation who are engaged in a wide variety of homeworking practices. Again, using the concept of Person-Environment Fit (Edwards, 1996, Kreiner, 2006, Rothbard et al., 2005) as a guiding theoretical framework, this chapter

examines the relationships between extent of homeworking, work-life conflict, non-work boundary permeability and preferences for a flexible work boundary. Using a moderated regression analysis, this chapter finds that the relationship between extent of homeworking and non-work boundary permeability is curvilinear in nature such that permeability is highest at moderate levels of homeworking and is lower at high levels of office-based working and high levels of homeworking. This new contribution to the literature on boundaries and homeworking suggests that homeworkers who work extensively in the home environment may have developed strong boundary management strategies, allowing them to create segmentation between their work and non-work activities (Kossek et al., 1999). It also provides empirical support for the qualitative findings in Chapter 4.

This chapter then examines the relationship between boundary permeability and work to life conflict. Consistent with prior literature that finds a positive association between non-work boundary permeability and work-life conflict, the data support the contention that high levels of boundary permeability are positively related to work-life conflict (Ashforth et al., 2000, Beauregard and Henry, 2009, Bulger, Matthews and Hoffman, 2007, Hecht and Allen, 2009, Kossek, Lautsch and Eaton, 2006 and Olson-Buchanan and Boswell, 2006). In addition, when looking at the impact of boundary permeability on the relationship between extent of homeworking and work-life conflict, the data support a moderation effect of non-work boundary permeability, such that at higher levels of permeability the relationship between extent of homeworking and work to non-work conflict is stronger. This finding makes a new contribution to the literature on work-life boundaries and clarifies the

role of permeability in the relationship between environmental characteristics and work-life outcomes.

Last, this chapter examines the relationships between preferences for flexible non-work boundaries, extent of homeworking, work to non-work conflict and non-work boundary permeability. Although the findings in this chapter did not support the hypothesised moderating influence of flexibility preference on the relationship between extent of homeworking or permeability and work-life conflict, the relationships between the variables in the regression equation were significant, indicating that the extent of fit between preferences and the environment can influence the likelihood of positive outcomes for homeworkers.

#### **1.3.4 Boundary Permeability and Job Demands-Resources**

Last, the research contained in the fourth paper seeks to further extend the contributions made by Chapter 5 on the role of permeability by examining how permeability influences the ways in which other job demands and resources (i.e. workload and job satisfaction) impact work-life and well-being outcomes for the individual. The primary research question addressed in this chapter is:

*How does boundary permeability impact the relationship between other job demands and resources, beyond flexible working practices, and positive and negative and work-life outcomes?*

Chapter 6 further builds on the ideas developed in Chapter 5 with the analysis of a daily diary completed by homeworkers. In this research, homeworkers completed a



daily diary for a 14-day period, which measured a variety of antecedents and outcomes associated with the work-life interface. First, a model of the antecedents to work-life boundary strength was tested to better understand the relationship between homeworking, job control, boundary permeability and flexibility preference. The data supported the hypothesized idea that homeworkers perceive higher levels of job control on days when they work from home. Next, the impact of the increased control on boundary strength was examined and the data showed that boundary permeability was lower on days when higher levels of control were perceived. Last, the construct of flexibility preference was examined to determine if it has a moderating effect on the relationship between level of control and boundary permeability, but the data did not show a significant relationship.

Next, using the framework of the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner and Schaufeli, 2001), the relationship between job demands (in this case, workload), boundary permeability and work-life conflict was examined. While much of the prior literature on work-life boundaries envisages permeability as a boundary characteristic that influences work-life outcomes, this chapter offers a new perspective by investigating whether boundary permeability has a moderating influence on the relationship between job demands and work-life conflict. In conjunction with Chapter 5, this model makes a new contribution to the literature as it is the first time that boundary permeability has been tested as a moderating mechanism on antecedents to work-life conflict. The diary data supported the model, showing that boundary permeability does moderate the relationship between the job demands of perceived workload and work-life conflict, such that at higher levels of boundary permeability, higher workload led to greater work-life conflict and lower

levels of well-being. Combined with the prior model which identifies antecedents to boundary permeability, this finding has important practical implications for individuals and organizations, such that employing work-life practices and engaging in working arrangements that allow employees to manage the level of permeability between work and home domains can result in reduced work-life conflict and improved employee well-being.

Similarly, the third model in this chapter examined whether boundary permeability would also moderate the relationship between job resources, in this case job satisfaction, and work-life facilitation (Demerouti et al., 2001). The data also supported this relationship, such that at higher levels of boundary permeability, job satisfaction had a stronger, positive link with work-life facilitation and higher levels of well-being. Prior literature has demonstrated that well-being is associated with many positive outcomes for the organisation including job performance, reduced absenteeism and an increase in discretionary behaviour (Warr, 1999).

In summary, the findings related to these three models make a contribution to academic and practitioner literature by identifying boundary permeability as a mechanism which can control some of the impact of job demands and resources on the work-life interface and well-being. The practical implications are that by learning to monitor and control boundary permeability, employees and organisations can gain some control over how job demands and resources impact work-life outcomes.

#### **1.4 Overall Research Design**

As described in the last section, this dissertation applies a mixed methods approach as a means of addressing the above research questions. A mixed methods approach was selected as the most appropriate research design to address these questions because of the pragmatic nature of the goals of the research (Creswell, 2003). A pragmatic approach to research attempts to combine the pure quantitative research tradition which encompasses a “post-positivist” (Creswell, 2003, p.6) perspective that tends to focus on discrete antecedents and their outcomes, with the pure qualitative tradition, which views research questions from a social constructionist approach that focuses on the inter-relatedness of individuals and their social environment (Feilzer, 2010, Johnson, Onwuegbuzie and Turner 2007, Teddlie and Tashakkori, 2009). “Pragmatism, when regarded as an alternative paradigm, sidesteps the contentious issues of truth and reality, accepts, philosophically, that there are singular and multiple realities that are open to empirical inquiry and orients itself toward solving practical problems in the ‘real world’” (Feilzer, 2010, p.8). A pragmatic perspective allows the mixed methods researcher to adopt “an approach to knowledge (theory and practice) that attempts to consider multiple viewpoints, perspectives, positions and standpoints (always including the standpoints of qualitative and quantitative research” (Johnson et al., p.113).

This research in this dissertation assumes that outcomes associated with work-life boundary management are not static in nature and instead evolve through repeated interactions in work and non-work environments (Bolger et al, 2003, Butler et al, 2005, Dumas, 2003, Tenbrunsel et al., 1995, Williams and Alliger, 1994).

Therefore, knowledge is gained through these interactions with the environment, in

addition to individual and institutional antecedents, leading to the necessity of examining research questions from multiple perspectives (Creswell, 2003). A mixed method approach allows the researcher to “triangulat(e)” the research problems in order to build knowledge that is reliable and applicable across a variety of contexts (Jick, 1979, p.602). “Mixed method designs incorporate techniques from both quantitative and qualitative research traditions yet combine them in unique ways to answer research questions that can not be answered in any other way” (Teddlie and Tashakkori, 2003, p. x).

After a considerable review of the literature to date on mixed methods, Johnson et al. (2007) developed the following definition for the mixed method research paradigm:

*“A mixed method study would involve mixing within a single study; a mixed method program would involve mixing within a program of research and the mixing might occur across a closely related set of studies (p.123)”*

The core research questions noted above require a mixed method approach due to their focus on both individual and environmental antecedents, as well as the impact of interactions in the work and home environments. For example, while the research hypothesis addressed in Chapter 3 relating to the impact of fit between work context and boundary preferences is tested using a “scientific method” (Cresswell, 2003, p.6) which attempts to measure the “objective reality” (p.7) within the organizational environment, the analyses in Chapters 5 and 6 build on these findings by using a “constructionist” approach that addresses how the realities of work-life boundary interactions differ among individuals. In this author’s opinion, a mixed method

approach for this dissertation was necessary in order to fully explore boundary management in a way that accounts for the evolving nature of this process.

### **1.5 Fieldwork Overview and Timings**

The fieldwork contained in this dissertation was conducted in multiple organisations. The use of multiple organisations was intentional as the research questions seek to investigate the impact of boundary strength and methods of boundary management on work-life outcomes at varying levels of organizational supply of integrating / segmenting working practices. This method of selecting organisations based on their supply of integrating and segmenting practices stems from a case study approach to selecting sample organisations, such that they are reflective of aspects of the theory that the research questions intend to test or develop. “A case study, therefore, can not be defined through its research methods. Rather, it has to be defined in terms of its theoretical orientation. This places emphasis on understanding processes alongside their (organizational and other) contexts” (Cassell and Symon, p.324). For the purposes of this dissertation, in order to fully explore the role of organizational context on the relationship between boundary strength, boundary management strategy and work-life outcomes, the selection of two organisations that offer a differing supply of working practices along the segmentation-integration continuum was necessary (Kreiner, 2006, Nippert-Eng, 1996a).

The first organization presented in this dissertation was a single operating group within a large geoscience firm. The operating group was headquartered in the Netherlands, however approximately one-half of the employees were off-shore workers who spent virtually all of their working time in branch offices and on vessels or platforms off the western coast of Africa. This organisation afforded the author

the opportunity to conduct research with a population of employees who were faced with a high level of segmentation between their work and non-work roles.

Rotational, off-shore work presents high levels of segmentation between work and non-work roles due to the reduced frequency of transitions that individuals make between their home and work environments (Collinson, 1998). This phase of fieldwork was conducted in 2009/2010. The initial phases of the research involved meetings with senior management, document review and some exploratory qualitative interviews with employees in a variety of office-based and off-shore roles. The purpose of this initial work was to gain a better understanding of the organization, their working practices and the relevant work-life issues facing its employees. The online quantitative survey that provided the data analysed in Chapter 3 was conducted in June and July of 2010.

Due to the small size of the operating group and the reluctance of other operating groups to participate in research on work-life concerns, it was decided not to pursue further research studies within this organization in order to avoid any bias associated with repeated surveys among the same group of employees. In addition, due to the nature of the research questions being addressed by this dissertation, additional research with a larger organization with a different set of working practices was necessary.

The second organization in which fieldwork was conducted was a medium-sized public sector body that provides a range of advisory and other services to businesses in Great Britain. The organisation has offices across England, Scotland and Wales and employees in all locations were eligible to participate in this research. This organisation was selected because of the extensive homeworking practices utilized

by the organisation's employees. In direct contrast to the segmented work environment offered by the first organisation, homeworking has been considered by work-life scholars to supply a more integrated work-life environment (Standen et al., 1999).

Further, the author had access to all employees of this organisation, representing a much larger sample size among which to conduct the research than in the geoscience firm. Therefore, it was possible to conduct three phases of research within this organisation including in-depth interviews, an online survey and a diary study. The first phase of the research was the conduct of 40 in-depth interviews with a purposive (Marshall, 1996) sample of employees representing the range of roles, grade levels and regional distribution of the organisation. This phase of the research allowed the author to investigate the third core research question above relating to the use of boundary strategy at varying levels of work-non-work boundary integration. Details of these interviews can be found in Chapter 4 of this dissertation. This phase of the research was conducted between February and April 2012.

The second phase of the research was the conduct of an online survey open to all employees of the organisation. The conduct of a large-scale cross-sectional survey allowed the author to establish the relationships between homeworking, boundary permeability and perceived job control in addition to addressing the second core research question above which seeks to define the role of boundary permeability in the relationship between organizational segmentation-integration supply and work-life outcomes. Details on this survey and the research findings can be found in Chapter 5 of this dissertation. The survey was conducted in May and June of 2012.

The third phase of research with this organisation was a quantitative diary study among homeworkers. Participants for the diary study were recruited from the online survey, whereby respondents who were qualified to participate, based on indicating that they worked 20% or more of their time at home, were invited to register for the diary research. A diary study with homeworkers working at home between 20% and 100% of their working time at home allowed the author to investigate the fourth core research question above relating extending the role of boundary permeability from acting as a moderator between work demands and negative consequences to also acting as a moderator between organizational resources and positive work-life outcomes. In addition, due to the more rigorous nature of a diary method and the ability to isolate within-person differences over time, this phase of the research also sought to provide further support for the third core research question relating to the role of boundary permeability. Details on the diary study and the research findings can be found in Chapter 6. The diary research was conducted in June and July of 2012. All data was collected as part of a larger study on homeworking at the organisation.

Of note, it was decided in collaboration with the organisation to conduct the qualitative interviews ahead of the quantitative survey. There are many options open to researchers in terms of the way that they might sequence mixed qualitative and quantitative methods for a study. As noted in his paper combining qualitative and quantitative methods, Morgan (1998) identifies that there are two key decisions that must be made upon the implementation of a study using both qualitative and quantitative methods. First, the researchers must decide which method is the “priority”, meaning that this will serve as the “principal means of data collection” (p. 366), thereby assigning the alternate method the role of providing assistance to the



research being conducted by the primary method. The second decision that must be made in terms of mixed methods is the “sequence” in which they will occur (Morgan, 1998, p.367). This decision leads the researcher to decide whether the non-primary study will serve as a “preliminary input” to the primary method or a “follow-up” (p.367).

The research conducted for this dissertation with the second, UK-based organization was faced with these decisions. Collectively with the organisation, the author decided that the quantitative research was to be the ‘primary’ focus. The quantitative research was critical to the author’s research goal of testing the roles of context and permeability in the work-life boundary interface and, from a practical perspective, was also the primary means to provide the organization with data that supported their homeworking evaluation. The qualitative data was collected as a preliminary input to the quantitative studies and served to provide information on how employees of the organization managed their work-life boundaries, as well as provide an opportunity to explore potential constructs to be used in the quantitative research.

## **1.6 Summary and Conclusion**

In summary, the findings from this dissertation identify the importance of paying attention to the misfit between boundary preferences and organisational demands and resources. Misfit impacts the way that individuals experience and maintain the boundaries between work and non-work roles. However, the research in this dissertation also demonstrates how boundary management tactics that address boundary permeability can be used to realign work-life boundaries with individual preferences, reducing the negative effects of misfit on the work-life interface. This

research also makes a unique contribution to the literature by identifying boundary permeability as a moderating mechanism through which job demands and job resources influence work life outcomes. Again, given that individuals can control, to some degree, the levels of boundary permeability using physical, temporal, behavioural and communicative boundary tactics, this research offers practical guidance to individuals and organisations on how to help workers develop boundary management strategies that bring the level of permeability of the work-life boundary more in line with their individual preferences. Together, using multiple samples and multiple methods, these papers make a theoretical and practical contribution to the literature by establishing new relationships between boundary preferences, boundary permeability, job context and the work-life interface.

## **Chapter 2: Review of the Literature**

- 2.1 Introduction
  
- 2.2 Core Work-Life Concepts
  - 2.2.1 Roles, Domains and Transitions
  - 2.2.2 Role Identification and Role Salience
  
- 2.3 Relationships between Work and Life
  - 2.3.1 Conflict Perspective
  - 2.3.2 Enrichment Perspective
  - 2.3.3 Spillover and Crossover
  - 2.3.4 Compensation
  
- 2.4 Theory and Research Specific to Work-Life Boundaries
  - 2.4.1 Boundary and Border Theories
  - 2.4.2 The Integration-Segmentation Continuum
  - 2.4.3 Boundary Strength
    - 2.4.3.1 Flexibility
    - 2.4.3.2 Permeability
  - 2.4.4 Organisational Boundary Supply
    - 2.4.4.1 Organisational Context
    - 2.4.4.2 Job Demands and Resources
    - 2.4.4.3 Person-Environment Fit
  - 2.4.5 Boundary Work and Boundary Management Strategies
  
- 2.5 Areas of Research Opportunity in the Boundary Management Literature
  
- 2.6 Summary and Conclusion

## **2.1 Introduction**

This chapter presents a review of the literature on the work-life interface with a particular focus on literature that relates to boundaries, context and individual difference. The purpose of this chapter is to demonstrate what we currently know from the literature on work-life boundaries and what gaps are left to fill by future research. The review contained in this chapter will support the studies detailed in the subsequent chapters, such that this chapter provides a review of the core literature relevant to the focus of the dissertation overall, while shorter reviews of additional literature relevant to each particular study and set of hypotheses will be provided in subsequent chapters. This chapter will begin with a review of the core work-life theory and research that has led to the niche of research relating to work-life boundaries. This section will demonstrate the importance of considering boundaries between home and work when researching the work-life interface. Next, this chapter will review the theory that has been developed relating to work life boundaries and discuss how this theory has been used in the research to contribute to our knowledge of issues relating to the work-life interface. This section will summarize what we know to date relating to the way work-life boundaries impact employee experiences at home and work. The final section of this chapter will build on these first two sections in order to identify gaps in the literature where additional contributions could be made. This section will focus specifically on individual difference, organisational context and P-E fit as factors impacting the work-life interface that call for further attention in the literature and which are addressed in this dissertation.

One important consideration to address at the outset of this dissertation is the distinction between work-family vs. work-life conflict and enrichment. For the purposes of this research I have chosen to focus on the term ‘life’ to represent the non-work domain, rather than ‘home’ or ‘family’, for several reasons. First, the term family has multiple definitions and in today’s society there are a wide variety of household constructs that this term can represent. Similarly, the term ‘home’ connotes the boundary of activities that only occur in the physical location of the home, while employees’ lives are often much more complex than that. Instead, the term ‘life’ defines a broader range of activities and responsibilities that may impact upon an individual, including family, community interests, religion, social obligations and other commitments associated with an individual’s non-work time (Greenhaus and Beutell, 1985, Staines and O’Connor, 1980). However, when reporting on the work of other authors, this dissertation will refer to the actual terms used in their research.

## **2.2 Core Work-Life Concepts**

As noted above, this review of the literature will begin with an examination of core theory and research on the work life interface that has led to the need to look at work life boundaries and boundary management. First, this section will look at the work-life interface from the perspective of roles, domains and transitions between these roles and domains. Next, the impact of role salience and role identity will be discussed in order to frame their impact on the interaction between work and non-work roles. Last, core theory and research on work-life relationships will be reviewed, including work generated from both the conflict and enrichment perspectives.

### **2.2.1 Roles, Domains and Transitions**

The basis for most theory examining the work-life interface relates to the identification of the multiple roles individuals occupy within their work and personal lives and the different domains that these roles fall into. For example, an individual may have the roles of manager, colleague and subordinate within their work domain, and then may be a wife and mother in the home domain. Each of the different domains in which a person operates, as well as the different roles that they play in each of these domains, has an impact on the others. Prior research has clearly demonstrated a level of interdependence between work and non-work roles (Greenhaus and Beutell, 1985, Gutek, Nakamura and Nieva, 1981, Rothbard, 2001, Voydanoff, 2005b). In their seminal article on the sources of work-life conflict, Greenhaus and Beutell (1985) identified that both work and home roles must share resources relating to time, energy and behaviours. Similarly, Rothbard's (2001, p.655) research with employees of a US public university found that work and non-work roles impact each other in both "enriching" and "depleting" ways.

In order to contribute new knowledge to the study of work and life roles, we need to begin with an exegesis of what the term 'roles' truly means. Within each of the above-mentioned domains, individuals play particular roles with respect to the environment in which they are operating. Role identity is defined by Ashforth et al. (2000, p.475) as when "a role cues or connotes a certain persona – replete with specific goals, values, beliefs, norms, interaction styles, and time horizons". To add to this definition, Sieber (1974, p.569) further clarifies the relationship between the individual and their role with the definition of role as "a pattern of expectations

which apply to a particular social position which normally persist independently of the personalities occupying the position”.

One important consideration is the number of roles a person has. There are several theories related to the idea of role accumulation. A great deal of research has focused on how the accumulation of multiple roles leads to greater work-life conflict (Greenhaus and Beutell, 1985, Williams and Alliger, 1994). Greenhaus and Beutell (1985) suggest that multiple roles can lead to work-life conflict due to competing demands from home and work roles on employee’s time, energy and behavioural expectations. The Conservation of Resources Model (COR) (Hobfall, 1989) is commonly used as a framework for examining the distribution of resources across work and non-work roles. According to the COR Model, “people strive to retain, protect and build resources and ... what is threatening to them is the potential or actual loss of these valued resources” (Hobfall, 1989, p. 519). Applied to the context of the work-life interface, we can infer that when the demands of one domain deplete the available resources of an individual, often resources from an alternate domain are called upon to supplement the loss. In the work-life context, this can occur when the demands of work become so great that they draw from the resources in the non-work environment, causing some form of work-life conflict (Grandey and Cropanzano, 1999). As will be reviewed later in this chapter, work-life conflict can be the result of varying types of resources being drained. For example, an employee may experience time-based work-life conflict when the hours they are required to work draw away from time spent with their family at home. The model suggests that ultimately individuals will act to minimize the stress and conserve resources by reducing or opting out of the role generating the most stress (Hobfoll, 1989). In their

study of university professors in the U.S., Grandey and Cropanzano (1999) found support for the COR model such that as stress at work and at home depleted the resources available to the alternative environment, research participants experienced negative consequences in each competing domain and ultimately showed indications of attempting to conserve resources as demonstrated by increased turnover intentions.

However, Greenhaus and Powell (2006) identify three ways that “role accumulation” can result in positive outcomes for individuals. The first of these relates to the “additive effects” that are gained when a person is happy or successful in more than one role. Combined or ‘added’, these roles lead to greater happiness or success (Greenhaus and Powell, 2006). If each role is perceived to bring with it a unique set of rights that are afforded to the person taking on the role, the more roles a person takes on, the greater the number of rights in society they are afforded (Sieber, 1974). Next, an individual may experience a “buffering” effect when their happiness or success in one role protects them from difficulty or unhappiness in another role (Greenhaus and Powell, 2006, p.73). For example, an individual who is belittled by their supervisor at work may show resiliency in this role due to a supportive partner in their home environment. Lastly, there is the idea that the “experiences” from one role can actually add value to another (Greenhaus and Powell 2006, Voydanoff, 2001). For example, an individual who has learned some new technique for dealing with their petulant teenager may find that they can employ similar techniques with difficult employees to achieve positive work-related outcomes.



Another important consideration to understanding how work and non-work roles impact each other is the actual transitions that individuals make between work and non-work roles. In their research on the daily transitions that employees make between home and work domains, Hall and Richter (1998, p.215) identify two types of transitions: “planned transitions”, which are a physical movement from one domain to another at the beginning or end of a day, and “interposed transitions”, which are mental engagements with one domain when situated physically in another. When making “planned transitions”, such as leaving work at the end of the day, individuals often engage in rituals that assist with these role transitions (Hall and Richter, 1998, p.215). For example, employees may turn off a work mobile phone or change out of work clothes upon arrival at home in order to signify the transition from their work role to a non-work role. As will be discussed further in the following section relating to integration and segmentation, the more separate an individual chooses to keep their home and work roles, the more difficult these role transitions can be (Ashforth et al., 2000).

Hall and Richter (1988) also identify three transition styles that individuals use to move between domains; anticipatory, discrete and lagged. For example, morning home to work transitions tend to be anticipatory in the sense that they are planned and individuals often think about work prior to actually arriving at their workplace (Hall and Richter, 1988). Meanwhile, evening work to home transitions tend to be discrete, in the sense that an individual is often still engaged with work until they actually walk through their front door and tend to be impermeable in the sense that individuals don't think about home until they actually leave work (Hall and Richter, 1988). Lagged transitions occur when there is a delay in actual engagement once an

individual physically enters a new domain. For example, an employee, having recently arrived at work, may be still emotionally focused on an early morning discussion they had with their child until some type of stimulus helps to transition them to emotional engagement with their work role. Research also indicates gender differences relating to transitions; women experience more conflict upon home re-entry and their transition from work to home tends to need to be made faster with fewer rituals (Hall and Richter, 1998).

The understanding of roles and transitions is an important stepping stone to creating a greater understanding of work-life boundaries and boundary management. Research has demonstrated that the manner in which employees manage their transitions between home and work have an important impact on work-life outcomes. For example, Williams and Alliger (1994) used an experience sampling methodology to study the impact of role interruptions and transitions in a U.S. sample of employed parents. Their findings support the idea that frequent transitions or “juggling” between work and home roles led to increased feelings of distress and decreased feelings of calmness (Williams and Alliger, 1994, p.82). In addition, their findings suggest that unpleasant mood states are more likely to carry over during transitions from one domain to the other versus pleasant mood states (Williams and Alliger, 1994).

### **2.2.2 Role Identification and Role Saliency**

Two important considerations in looking at the way in which an individual’s different roles may impact each other are role identity and role saliency (Aryee, Srinivas and Tan, 2005, Clark, 2000, Lobel, 1991, Noor, 2004). Role identities are

defined by Ashforth et al. (2000, p.475) as “socially constructed definitions of self-in-role (this is who a role occupant is) consisting of core or central features and peripheral features”. Role identities make an important contribution to employees’ perceptions of their work and home domains such that these “identities provide meaning for self, not only because they refer to concrete role-specification, but also because they distinguish roles from relevant complementary or counter-roles” (Hogg, Terry and White, 1995, p.256). Depending on how much the core values associated with each role identity differs from a person’s core values, individuals may find that they have a stronger identification with one role versus another (Ashforth et al., 2000). The level of role identification also has an impact on role transition as the more strongly individuals identify with a particular role, the easier it will be for them to move into or ‘enter’ that role (Ashforth et al., 2000). For example, if a working mother identifies more strongly with the nurturing values she associates with her role in caring for her young children versus the competitive values she associates with her role as an investment banker, she may find that transitions from work to home are easier than those from home to work due to her strong identification with her home role. However, there are often additional influences that can make these types of transitions equally, if not more, difficult such as role pressures and obligations (Ashforth et al., 2000, Wayne et al., 2006). For example, Clark (2002, p.759) analyses the actions of “border-crossers”, or those individuals who move back and forth between home and work domains. She proposes that the level of influence and identification a border-crosser has within a domain impacts the level of control over the borders of that domain and therefore the individual’s work-life balance. However, an important consideration that will be addressed in this dissertation is that modern day organizational practices such as telecommuting may have made role

identities harder to identify and distinguish between. Desrochers et al. (2005) define their concept of work-family role blurring as “the perception of uncertainty or difficulty in distinguishing one’s work role from one’s family role that occurs when roles are seen to be highly integrated”.

Role salience has been defined in work-life literature as “the extent to which a given role is of importance to one’s total self-image” (Carlson and Kacmar, 2000, p.1036) and as “the likelihood that it will be switched on in a given situation” (Lobel, 1991, p.511). Role salience has an important impact on the way work and non-work roles intersect such that greater investment in the more salient role may lead to conflict in the alternate role. Lobel (1991, p.512) suggests that role conflict occurs when “the values associated with the identities are so distinct that the identities can be enacted only in situations that are sharply separated by time and place”. For example, a working father may find that the values that are associated with his more salient work role, such as aggressiveness and a sense of authority, are so distinct from those values associated with his family role that transitions between the two roles become difficult leading to conflict. Recent research has identified important links between role salience and boundary management activities. For example, in their study of employees in a variety of industries and organisations across the U.S., Winkel and Clayton (2010) found that role salience was a moderating factor in the relationship between employees’ willingness to be flexible with their work-role boundaries and the likelihood that they would make transitions between work and family roles, such that the relationship was more strongly positive when employees reported high levels of salience relating to their family identity.

## **2.3 Relationships between Work and Life**

This next section draws on the prior section and discusses theory that addresses the intersection between work and non-work roles. The intersection between work and non-work roles is a complex system and decades of research have been dedicated to investigating the mechanisms and processes by which different work-life outcomes are generated. Early research by Pleck (1977) describes this intersection as the “work-family role system”, which he defines as being “composed of the male work role, the female work role, the female family role and the male family role” (p.418). Edwards and Rothbard (2000) discuss “linking mechanisms” between work and family roles, defined as “as a relationship between a work construct and a family construct. Linking mechanisms can exist only when work and family are conceptually distinct”. The following section summarizes the core theory related to these relationships between work and non-work roles.

### **2.3.1 Conflict Perspective**

Several models for work to non-work conflict exist. Greenhaus and Beutell (1985) hypothesize that conflict between work and non-work roles occurs due to issues related to three dimensions; time, strain and specific behaviours (Greenhaus and Beutell, 1985). Empirical evidence supports the idea that one source for work-life conflict relates to time-based pressures between home and work, such as managing schedules and / or coordinating working hours with those of a spouse or other caregiver (Greenhaus and Beutell, 1985). Strain-based conflict theory relates to the idea that the greater the role accumulation, the fewer resources there are available for an individual to allocate to each individual role, making it more difficult for individuals to meet the expectations of each role. This difficulty in meeting the

multiple expectations of each role leads to conflict (Voydanoff, 2001, Rothbard et al., 2005). Lastly, conflict that can be attributed to specific behaviours can occur when the behaviours in which an individual might have to engage in order to ensure success in their career are not compatible with the behaviours in which they elect to engage at home (Greenhaus and Beutell, 1985). For example, an individual may need to be non-compassionate and driven in their role managing corporate lawyers and may have difficulties switching gears to engage in their more compassionate and accepting role when they return home to their children.

Work-life conflict is bi-directional in nature, such that work can influence non-work domains and non-work domains can have an impact on work (Greenhaus and Beutell, 1985). For example, an employee may experience strain-based family to work conflict due to exhaustion caused by caring for an infant at home and time-based work to family conflict when asked to stay late to finish up an important project. An important 'call to action' identified by Greenhaus and Beutell (1985, p.82) is the idea of studying the "joint effects" of pressures related to both the home and work environments.

Empirical research has demonstrated that work-life conflict can lead to negative individual and organisational outcomes (Allen et al, 2000, Anderson et al., 2002). In their review of the consequences related to work-family conflict, Allen et al. (2000) identified a number of work-related outcomes associated with work-to-family conflict, including job satisfaction, organisational commitment, turnover intentions, absenteeism, job performance and career satisfaction. These outcomes have been supported by multiple studies in varying types of organisations worldwide (Allen et

al., 2000, Boyar, Maertz, Pearson and Keough, 2003, Frone, Yardley and Markel, 1997, Goff, Mount and Jamison, 1990, Kossek and Ozeki, 1998, Martins, Eddleston and Veiga, 2002, Netermeyer et al., 1996). For example, in their meta-analysis of the relationship between work-life conflict and job and life satisfaction, Kossek and Ozeki (1998) found that work-family conflict was consistently associated with decreased job satisfaction with an overall correlation of  $-.31$ . Similarly in their research to validate work-family and family-work conflict measures, Netemeyer et al. (1996) found an inverse relationship between organisational commitment and work-life conflict such that as work-life conflict increased, organisational commitment declined. In their model predicting turnover intentions, Boyar et al. (2003) found both work-to-family conflict and family-to-work conflict to be significantly related to turnover intentions. In their study examining the impact of on-site childcare on work-family conflict and absenteeism, Goff et al. (2000) found that while the presence of on-site child-care was not related to levels of work-family conflict and absenteeism, reduced work-family conflict was associated with lower levels of employee absenteeism. In their structural equation model of the work-family interface, Frone et al. (1997) found that family-to-work conflict was a significant negative predictor of work performance and that work-to-family conflict was a significant negative predictor of performance in the family domain. Last, in their study of U.S. managers, Martins et al. (2002) provide empirical support for the negative relationship between work-family conflict and career satisfaction. In addition, their research identified gender and age as moderating factors in the relationship between work-family conflict and career satisfaction, such that women were more likely to report a negative relationship between work-family conflict and career satisfaction throughout their career and both men and women at older ages

were more likely to report a relationship between work-family conflict and career satisfaction (Martins et al., 2002).

Research has also identified several non-work or individual level consequences associated with work-life conflict. In their 2011 meta-analysis of outcomes relating to work-family conflict, Amstad, Meier, Elfering and Semmer identified a range of individual level outcomes in both the work and non-work domains. These outcomes include family-related consequences such as marital and family satisfaction, family strain and family-related performance as well as individual outcomes, non-specific to either work or family domains, such as general life satisfaction, psychological strain and health problems such as somatic and physical complaints, depression and substance abuse (Amstad et al., 2011). Their research found that both work interference with family and family interference with work were significantly tied to individual outcomes unspecific to work or family domains, such as general life satisfaction and health concerns; however, domain specific outcomes such as marital and family satisfaction were more closely linked to conflict originating in that domain, i.e. family to work conflict (Amstad et al., 2001). Similarly, Allen et al. (2000, p.280) identify “non-work related outcomes”; including life, marital, family and leisure satisfaction and family performance, as well as “stress-related outcomes” including strain, health and physical symptoms.

### **2.3.2 Enrichment Perspective**

Importantly, much of the research related to work-life conflict provides significant direction for studying work-life enrichment effects. For example, in their review of the literature to support the component of their model that identifies strain as a



source of work-family conflict, Greenhaus and Beutell (1985) posit that certain workplace and family life factors may not only reduce work-family conflict but also may help to foster work-family enrichment. They cite an early study by Jones and Butler (1980) in which task challenge, task importance, task variety and worker autonomy were negatively related to work-family conflict. Similarly, Greenhaus and Beutell (1985, p.81) identified that support in the home by the husband, described as “profeminist attitudes”, assisted wives when dealing with conflict from a non-family role. Findings such as these have led to the more recent research related to work-life enrichment.

Theories of work-life enrichment are derived from the movement in the field of psychology to positive psychology, where researchers have begun to explore issues related to “wellness” versus “illness” (Bakker & Schaufeli, 2008). Luthans (2002, p.698) defines Positive Organizational Behaviour (POB) as “the study and application of positively oriented human resources strengths and psychological capabilities that can be measured, developed and effectively managed for performance improvement in today’s workplace”. The early general criteria which defined POB were “state-like” constructs such as confidence, happiness, hope, optimism and resiliency, among others (Luthans, 2002, p.698). Similarly, the Job Demands-Resources Model identifies both positive and negative outcome conditions associated with an individual’s interactions with work. “Basically, job demands require effort and are therefore related with physiological and psychological costs, such as fatigue, whereas job resources foster personal growth, learning and development, and have motivational qualities” (Bakker & Schaufeli, 2008, p.150).

Greenhouse and Powell (2006, p.72) developed the theory of work-family enrichment, which they define as “the extent to which experiences in one role improve the quality of life in another”. Similar to most conflict research, their theory of work-life enrichment is bi-directional; “work-to-family enrichment occurs when work experiences improve the quality of family life, and family-to-work enrichment occurs when family experiences improve the quality of work life” (Greenhaus and Powell, 2006, p.73). Their model identifies five types of resources that a particular role can generate, including “skills and perspectives, psychological and physical resources, social-capital resources, flexibility and material resources” (p.83). In addition, their model demonstrates how these resources can follow a direct or ‘instrumental’ path from one role to another to add value or can follow an ‘affective’ path which relates to “positive moods and positive emotions derived from role experiences” (p.82) (Greenhaus and Powell, 2006). This affective path can be direct in the sense that a positive mood generated from one role will transfer to a second role as the individual moves through the role transition to that role, or it can be more indirect in the sense that the positive mood leads to improved performance in the second role (Greenhaus and Powell, 2006). Important moderators to the path to enrichment include the salience and relevance of each role and the consistency of the needs and requirements of each role (Greenhaus and Powell, 2006).

With their development of the construct of work-family facilitation, Wayne, Grzywacz, Carlson and Kacmar (2007) focus on how multiple roles can contribute to the functioning of alternate domains. They define work-family facilitation as “the extent to which an individual’s engagement in one life domain (i.e., work/family) provides gains (i.e., developmental, affective, capital, or efficiency) which contribute

to the functioning of another life domain (i.e., family/work)” (Wayne et al., 2007, p.64). This differs from work-life enrichment in that the outcome is focused on “system-level functioning”, such that facilitation is experienced “when individual gains acquired through engagement in a ‘sending’ domain introduce and ultimately lead to change in the ‘receiving’ domain, whether it be for a dyad, subgroup, or the entire system” (Wayne et al., p.65). An example of developmental gains might be acquiring skills at work that can be applied to improve parenting activities, for the parent-child dyad, at home. Affective gains might be gaining confidence from success in a social activity that allows you to perform with greater confidence in the work environment. Capital and efficiency gains might include having access to resources at or from work that can be applied to the home environment. Research has shown that antecedents to work-family facilitation include job autonomy and control (Butler, Gryzwacz, Bass and Linney, 2005, Voydanoff, 2004) and skill level (Butler et al., 2005, Grzywacz and Butler, 2005).

### **2.3.3 Spillover and Crossover**

Beyond the conflict and enrichment perspectives there are also other relationships between work and non-work domains that have significant implications for work-life boundaries. One of these is the idea of spillover between domains. Often, despite the boundaries that are established between an individual’s home and work domains, spillover occurs such that one domain impacts another domain in some way.

Spillover can be defined as the “effects of work and family on one another that generate similarities between the two domains” (Edwards and Rothbard, 2000, p.180). Researchers have identified both affective and instrumental types of spillover (Ilies, Wilson and Wagner, 2009). Ilies et al. (2009, p. 87) define affective

spillover as “work-related moods or attitudes are carried home, or ... family-related moods or attitudes are carried to work”. Instrumental spillover refers to specific skills and behaviours that are carried from one domain to the next and that may result in positive or negative consequences (Edwards and Rothbard, 2000, Kirchmeyer, 1992, Greenhaus and Beutell, 1985). Spillover can occur in both directions. Prior research indicates that the “direction of the spillover of interference has been found to be dependent on the salience of each role to the focal person, as well as the negative sanctions associated with non-compliance with each role pressure” (Greenhaus and Beutell, 1985, p.77).

A similar construct to spillover is the idea of ‘crossover’ which can be applied to the study of boundaries between individuals. Westman (2001, p. 717) defines crossover as “the reaction of individuals to the job stress experienced by those with whom they interact regularly”. Maertz and Boyer (2010, p. 589) describe cross-over as “a bi-directional transmission of positive and negative emotions, mood and dispositions between intimately connected individuals such as spouses or organizational team members”. Literature suggests that there are three pathways by which crossover can occur. The first path is when the stress experienced by one partner creates an empathic reaction in the other partner, thereby increasing their own stress (Westman, 2001). A second pathway is when heavy demands on one partner decrease the leisure time they have as a couple, leading to negative feelings such as stress or emotional exhaustion (Demerouti et al., 2005). A final pathway is through the process of social undermining, whereby stress and time pressure leads a partner to engage in negative behaviour toward the other partner such as criticism or negative affect, thereby increasing the other partner’s stress (Bakker et al., 2008).

### **2.3.4 Compensation**

A fourth type of relationship within the work-life literature is compensation. Similar to the “buffering effect” (Greenhaus and Powell, p.73) attributable to work-life enrichment described earlier, compensation occurs when the resources from one domain are used to fill a need in another domain (Edwards and Rothbard, 2000, Lambert, 1990, Staines, 1980). Edwards and Rothbard (2000, p.178), in their paper on “linking mechanisms” between home and work domains, discuss the idea of compensation as a mechanism by which one role can support the other, and which is “prompted by insufficient positive experiences” (p.181). Edwards and Rothbard (2000) identify two forms of compensation: supplemental and reactive.

Supplemental compensation is something that occurs when an individual does not receive the rewards they need from one domain and seeks them from another (Edwards and Rothbard, 2000). For example, if an employee does not receive praise for his efforts as work, he may become overly dependent on praise from his family. Reactive compensation is “when undesirable experiences in one domain are redressed by an individual's seeking contrasting experiences in the other domain” (Edwards and Rothbard, 2000, p.181). For instance, after a difficult day at work, a father might seek out quality time with his children.

As noted earlier, the intention of this section of this chapter was to review core literature relating to the relationships between work and non-work roles in order to justify the importance of looking at work-life boundaries as a potential explanatory mechanism which links these relationships and outcomes. In each of the relationships between work and non-work roles discussed above, it can be argued that the boundaries between roles could influence the individual and organisational

outcomes. For example, if you consider negative spillover from work to home, it could be argued that the stronger the boundary between the two domains, the less spillover will occur. By better understanding these mechanisms and processes which lead to positive and negative relationships between work and non-work roles, individuals and organisations become better informed to develop strategies that allow them to better manage multiple roles. In the next section of this chapter, current literature and research relating to work-life boundaries will be explored.

## **2.4 Theory and Research Specific to Work-Life Boundaries**

This section will present a review of the literature that focuses specifically on core theory and research relating to boundaries between work and non-work roles. It is this area of the literature that provides the groundwork for the original research contained in the subsequent chapters of this dissertation and where the author aims to make a contribution to academic literature. When studying the work-life interface, the boundaries around each domain are an important consideration in understanding how multiple roles can lead to conflict and / or enrichment. While recent literature has significantly expanded the body of knowledge relating to work-life boundaries, there are still gaps to fill relating to the processes by which boundaries influence work-life outcomes as well as the use of boundaries across varying organisational contexts. To begin, core theory relating to work-life boundaries will be explored and a critique of the literature related to these theories will be presented.

### **2.4.1 Boundary and Border Theories**

Boundary Theory (Ashforth et al., 2000, Nippert-Eng, 1996a, Zerubavel, 1991) provides a strong starting point for the exploration of the literature relating to work-life boundaries and makes an important theoretical contribution. Boundary Theory

in its most basic form differentiates blocks of space and time, each of which is bordered by frames, which can be attributed to differing roles in one's life environment (Zerubavel, 1991). Ashforth et al. (2000, p.474) define Boundary Theory as the way in which "individuals create and maintain boundaries as a means of simplifying and ordering the environment". Clark's (2000) conception of Border Theory further refines theory on role boundaries by focusing on the types of boundaries surrounding work and non-work domains. Her work identifies three types of borders that individuals can maintain between their home and work lives; physical, temporal and psychological borders (Clark, 2000). Physical boundaries can be characterized as the actual locations in which work and personal activities take place. This may be the office versus the home or for individuals who work at home, this may be a study or separate area in which a person performs their work role. Temporal boundaries are the actual times within which personal versus work activities take place (Clark, 2000). For example, a worker may have set a time-based boundary of 5:00 p.m. to end their working day because they need to leave the office to collect their children at day care. Psychological boundaries relate to our perceptions of the activities associated with work and non-work roles (Ashforth et al., 2000, Clark, 2000, Hall and Richter, 1988, Lewin, 1939). An example of a psychological boundary might be an employee's interpretation of attending evening lectures on a work-related topic with friends from work as a social activity.

Both Boundary and Border Theory assert that the more separately an individual manages work and non-work roles, the less conflict will be experienced; however, the more these roles are integrated, the easier the transitions between roles will be (Ashforth et al., 2000, Clark, 2000 and Desrochers and Sargent, 2004). In addition,

Boundary Theory and Border Theory both suggest that both segmentation and integration of work and non-work roles can lead to positive outcomes depending on characteristics unique to the individual and the environment that they are in; such as their role identification and salience, their preferences for integration or segmentation and contextual factors such as the work environment that allow working conditions that match or fail to match employee preferences (Ashforth et al., 2000, Clark, 2000 and Desrochers and Sargent, 2004). Research has supported this contention that these unique characteristics can influence work-life outcomes. For example, in their study of managerial-level employees in the U.S., Chen et al. (2009) found that congruence between employee preference for segmentation or integration of work and non-work roles was negatively related to time and strain-based work-family conflict and positively related to instrumental work-family spillover. Similarly, Kossek et al. (1999, p.116) provide support for the idea that organisational context, in terms of “formal policies, job design, social support for work-family strategy choices and prevailing cultural expectations” impacts the ability of employees to successfully manage their work and non-work boundary. Their framework suggests that “policy research might be enriched by greater reliance on theories of work-family integration (i.e. direct spillover, indirect spillover, segmentation) to classify effects of policies on managing work and family roles” (Kossek et al., 1999, p. 117).

#### **2.4.2 The Segmentation-Integration Continuum**

The section above makes reference to the idea that work and non-work boundaries can be managed in either a segmented or integrative manner. Research has demonstrated that individuals have varying preferences for the ways they build and maintain their boundaries between work and non-work domains (Bulger et al., 2007,



Kreiner, 2009, Nippert-Eng, 1996a, Rau and Hyland, 2002). Some individuals maintain highly separate or segmented work and home lives with little spillover between the two domains (Nippert-Eng, 1996a). Others operate in an integrated way between the two domains, where the experiences and events of one domain may frequently impact or disrupt the other (Nippert-Eng, 1996a). An employee's method for managing the interface between work and non-work roles via segmentation or integration is dependent on a variety of personal and environmental factors as well as the fit between these factors (Desrochers et al. 2005, Kossek et al. 1999). Nippert-Eng (1996a) describes this integrating-segmenting behaviour as spanning a continuum, with few individuals maintaining fully integrated or fully segmented lifestyles. Research has supported the idea that individuals vary in their preferences along this continuum and most often these preferences are conscious (Nippert-Eng 1996a, Edwards and Rothbard, 1999, Ashforth, 2000, Kreiner 2006).

Ashforth et al (2000) argue that high levels of segmentation and high levels of integration "have costs and benefits associated with the creation, maintenance and crossing of role boundaries". Some research makes a case for the benefits of work-life integration. Ilies et al. (2009) looked at the impact of job satisfaction on positive and negative home affect and marital satisfaction. Their findings demonstrated that the greater the level of work-life integration, the greater the impact of job satisfaction on home affect and marital satisfaction (Ilies et al, 2009). In addition, Stanko (2009) tested the relationship between compartmentalization of roles as a coping mechanism and family to work / school to work role facilitation. Her study of working MBA students supported the idea that compartmentalisation can inhibit the enriching flow of resources, skills and experiences from one role to another (Stanko, 2009).

Similarly, Bailyn and Harrington (2004) use case examples to make an argument that work-life integration would be helpful if achieved through 'work redesign' that accounted for non-work needs and responsibilities.

However, research has demonstrated that the converse can also be true and that high levels of work-life integration can have negative consequences. For example, when levels of integration are high, individuals often experience blurring between domains (Desrochers et al., 2005). In their study of business professors in two-parent families with children, Desrochers et al. (2005) found evidence that increased working hours and increased transitions between home and work led to higher levels of work-life conflict. Similarly, Glavin and Schieman's (2012) study on antecedents of role blurring found that role blurring is also associated with higher levels of work-to-family conflict, particularly among workers who report high levels of role pressure. However, they also found that when workers were given a greater ability to control their schedule or latitude in making decisions, the association between role blurring and work-to-family conflict weakened (Glavin and Schieman, 2012). Olson-Buchanan and Boswell (2006) found that roles with which individuals were highly identified are more likely to be integrated into other domains. While this high role integration is associated with less negative reactions to inter-domain interruptions, employees with a high level of integration between work and non-work roles set fewer limits on the use of communications technology in non-work domains and indicate more work-life conflict (Olson-Buchanan and Boswell, 2006). The data support their hypothesis that "work to non-work permeability relate(s) positively to work-to-life conflict" (Olson-Buchanan and Boswell, 2006, p.437).

### **2.4.3 Boundary Strength**

Closely linked to the concepts of role segmentation and role integration is the measure of the strength of the boundaries and borders that surround the work and non-work domains. Research has identified that boundary strength is determined by levels of permeability and flexibility and that levels of flexibility and permeability can lead to differing outcomes (Ashforth et al. 2000, Clark 2000, Hall and Richter, 1988). “On the one hand, the flexibility and permeability of a role boundary might ameliorate inter-role conflict by enabling the individual to undertake a role transition when necessary. For example, an employee may be able to leave work early to deal with a problem at her church. On the other hand, the very looseness of the boundary might exacerbate conflict by creating confusion among the individual and members of his or her role sets as to which role is or should be most salient” (Ashforth et al., 2000, pp.474-5). In order to demonstrate the influence of these two characteristics of work and non-work boundaries, a review of methods of measuring these characteristics will now be presented.

#### **2.4.3.1 Flexibility**

According to Hall and Richter (1988), flexibility can be defined as “the extent to which the physical time and location markers, such as working hours and workplace, may be changed”. For example, an employee who is able to adjust their working hours to suit their non-work needs can be thought of as having temporal boundary flexibility. Similarly, an employee who can elect to work from home to avoid a lengthy commute can be thought of as having locational boundary flexibility. An important consideration when thinking about boundary flexibility is whether the flexibility is driven by organisational needs and demands or whether it is driven by

an employee's needs and preferences. For example, does an organisation expect an employee to work on a Saturday to meet increased business demand or does the employee elect to work on a Saturday to allow them more time with their children during the week? This suggests that two important considerations in the role of boundaries are the level of employee control over boundary flexibility, and employee preferences for flexibility. Based on these considerations, recent research has called for a closer examination of the concept of flexibility. In their study of teleworkers, Kossek et al. (2006, p.347) call for future research that distinguishes between "descriptive use and psychological experiences of flexibility". Their study found that work-life outcomes relating to work-life integration varied based on perceived job control as well as personal factors such as gender and presence of young children in the home.

Matthews, Barnes-Farrell and Bulger (2010, p.447) further expand on the construct of flexibility by differentiating between "flexibility-ability" and "flexibility-willingness". According to Matthews et al. (2010), flexibility-ability refers to the extent that one is able to change the boundaries of one domain to meet the needs of another. An example of flexibility-ability in the work domain might be that an employee's workplace offers flexible scheduling such that they are able to leave the office at 3:00 p.m. to collect their children at school. An example of flexibility-ability in the home domain might be that a worker has flexible childcare resources, such that if the needs arises for them to stay late in the office, their childcare can easily accommodate this.

Closely tied to the idea of flexibility-ability is perceived control over time and location for work activities. For example, research has demonstrated that employees who are offered flexible working arrangements such as homeworking perceive higher levels of autonomy and job control (Fonner and Roloff, 2010, Kelliher and Anderson, 2008). In their study of flexible workers at a U.K. software company, Kelliher and Anderson (2008) found that employees reported that flexible working allowed them greater control over the management of their work and non-work duties. Kossek et al. (2006) also highlight the importance of perceived ability to be flexible on individual outcomes. In their study of teleworkers at two information technology and financial services firms, Kossek et al. (p.361) found that “the psychological experience of flexibility—whether individuals perceive they have job control over when, where and how they work, and can choose to separate boundaries between work and family—predicts individual well-being”.

Flexibility-willingness refers to the willingness of an individual to alter the boundaries of one domain in order to meet the needs of another (Matthews et al., 2010). For example, within the work domain, an employee may decide that she is unwilling to use the flexible scheduling option that her company offers because she is concerned that it will hold her back from her next promotion. An example of flexibility-willingness in the non-work domain would be that an employee is willing to cancel personal plans should the demands at work necessitate him or her to stay later than planned. Important determinants of an individual’s flexibility-willingness for work and non-work boundaries are the perceived salience of a role and the level of identification with a role. As noted earlier, individuals differ in their perceptions of which roles are more important and which roles they identify with the most. This

can lead to differences in the level of flexibility-willingness an individual has for the work or non-work boundaries. For example, a working father who strongly identifies with his professional role may allow interruptions from work during his time at home, whereas at work, he may elect to block any interruptions from home.

Another aspect of flexibility to be considered comes from recent research from Greenhaus and Powell (2012, p.246) introducing a model for the “family-relatedness of work-decisions”. They define family-relatedness of work decisions (FRWD) as the “extent to which an individual’s decision-making process and choice of a course of action in the work domain are influenced by a family situation in order to foster a positive outcome for the family” (Greenhaus and Powell, 2012, p.247). This model suggests that, similar to Matthews et al.’s (2010) concept of flexibility-willingness, individuals’ non-work demands and preferences may influence willingness to be flexible and / or accommodate work-related demands. According to Greenhaus and Powell (2012), FRWD impacts three types of family-related work decisions: role entry, role participation and role exit. In linking FRWD to boundary strength, it could be argued that FRWD may play a role in the number of transitions an individual makes between work and non-work roles. For example, a working parent with young children at home may make the decision not to work outside of their assigned hours to compete for a promotion due to the demands of their role at home. This decision to not increase participation in a work role is directly related to the demands of the home environment.

### **2.4.3.2 Permeability**

The concept of permeability has been treated inconsistently throughout the work-life literature (Matthews et al, 2010a). Hall and Richter (1988, p.215) define permeability as “the degree to which a person physically located in one domain may be psychologically concerned with the other”. A psychological interruption from the home domain to the work domain might be when a worker has difficulty concentrating on work activities because they are preoccupied by an argument they had with their spouse that morning. Ashforth et al. (2000, p.474) present a slightly broader definition such that permeable boundaries “allow one to be physically located in the role’s domain but psychologically and / or behaviourally involved in another role”. For example, a physical interruption from the work domain to the home domain might be a phone call received from a work colleague during a family dinner. Clark (2000, p. 756) similarly identifies permeability as “the degree to which elements from other domains may enter”.

Mathews et al. (2010a, p.448) note that problems with the treatment of permeability in the literature results from “the inherent disconnect within these definitions between whether elements from other domains can enter and the frequency with which they do enter”. They have redefined the concept as “inter-domain transitions” with a focus on the frequency with which there are physical and psychological transitions between domains. Similarly, Bulger et al. (2007, p. 373) cite the need for more research on the relationship between flexibility and permeability; “this suggests a need to further investigate the interrelationships between flexibility–ability, flexibility–willingness, and permeability. Although we conceive of these as three

measures of boundary strength, it is possible that the two flexibility measures predict permeability. Future research should further investigate these relationships”.

The research contained in this dissertation builds on this debate relating to the role of boundary permeability. Similar to Matthews et al. (2010a), this research takes the perspective that boundary permeability is a reflection of the frequency of transitions between work and non-work roles. However, this research does not seek to redefine the concept, as the author feels that existing measures for permeability are reflective of these properties. For example, Clark’s (2002) measures for domain permeability ask research participants to characterise how often certain interruptions occur within the home and work domains on a scale from one meaning ‘never’ to five meaning ‘always’. This research also builds on the preliminary findings from Bulger et al. (2007) by envisaging boundary permeability as a measure of boundary strength, with flexibility-ability and flexibility-willingness as antecedents to this measure. If, as noted by Matthews et al. (2010a), boundary strength can be reflected by frequency of transitions, then measures of ability and willingness must be considered precursors to these transitions.

Several researchers have noted that home and work boundaries are asymmetrically permeable (Eagle et al 1997, Hall and Richter 1988). Eagle et al. found that the boundaries surrounding the home domain are more permeable in terms of allowing interference from work, than the boundaries surrounding the work domain in terms of allowing interference from family (Eagle, Miles and Icenogle, 1997). While Eagle et al. (1997) found no differences in the nature of the asymmetry based on gender, Hall and Richter (1988) note that men and women may differ in the way they



experience transitions. They found that women's home boundaries are more "cognitively" permeable than men's, while men's home boundaries are physically more flexible in that they are more likely to alter their home schedule or limit time at home for work commitments (Hall and Richter, 1998). Clark (2000, p.758) notes that "borders will be stronger in the direction of the more powerful domain and weaker in the direction of the less powerful domain".

As permeability is an indication of the level of integration between role domains, outcomes associated with boundary permeability in the literature are similar to those noted earlier in the discussion on the segmentation-integration continuum. Most literature suggests that permeability leads to role blurring which then results in increased inter-role conflict (Ashforth et al., 2000, Bulger et al., 2007, Hall and Richter, 1988, Olson-Buchanan and Boswell, 2006). In their research of employees in the U.S. Northeast, Bulger et al. (2007) found that participants who reported high non-work boundary permeability and limited work flexibility-ability experienced high levels of work-to-life interference. Similarly, participants reporting high levels of non-work boundary permeability, contrasted with low levels of non-work flexibility-willingness and flexibility-ability, also experienced high levels of work-to-life interference (Bulger et al., 2007). Olson-Buchanan and Boswell (2006), in their study of non-academic employees at a Western U.S. university, also found that work to non-work boundary permeability was predictive of work-to-life conflict. The research in this dissertation seeks to clarify the role of permeability in the work-life interface by defining it as a moderating mechanism by which regulates the impact of organisational context, job demands and resources on work-life outcomes.

#### **2.4.4 Organisational Boundary Supply**

While individuals have preferences for the integration or segmentation of their work and home domains, organisations also supply resources or make demands that contribute to the strength of employees' work-life boundaries. From an organizational perspective, there are a variety of informal and formal mechanisms that organizations might use to create control systems over the boundaries their employees select (Clark, 2000). Formally, organizations can create a variety of policies which impact the ways that their employees manage their work-life boundaries. For example, in more structured settings these mechanisms may include things like flexible working hours or teleworking policies which may lead to greater integration for the individual employee, or general policies regarding taking personal phone calls and time off for personal reasons, which may lead to greater levels of segmentation. Other settings, which seem to offer more autonomous working environments, may have alternative forms of boundary control (Perlow, 1998). For example, in her study of a software development firm, Perlow (1998, p.328) identifies the use of three techniques used by this organization to exert boundary control over its "knowledge workers". These techniques include creating "demands" of the employee that necessitate a certain level of prioritization of work over home, employee monitoring, and "modelling" the type of behaviour and working habits that make up an organization's culture (Perlow, 1998, p.328).

In addition to these formal and informal mechanisms, organisational cultures can develop norms relating to work-life boundaries. For example, employees of an organisation who consistently receive emails from their supervisors after 8:00PM may begin to feel an obligation to check and reply to emails after hours. The more

employees that engage in this process, the more this integrating behaviour can become a cultural norm for the organisation. As these boundary norms gather strength and are “socially shared, they can become institutionalized to the point that they are very difficult to change or erase” (Kreiner et al., 2009, p.706, Zerubavel, 1991).

#### **2.4.4.1 Organisational Context**

Organisational context is an important contributor to organisational supply of segmenting and integrating practices. As noted earlier, organisations vary in their supply of practices that support integrating versus segmenting approaches to work-life boundary management. Certain organisational contexts can present unique challenges to employees attempting to manage their work-life boundaries (Beers, 2000, Greenhaus and Beutell, 1985, Kreiner, 2006, Staines and Pleck, 1984, Tausig and Fenwick, 2001, Thomas and Ganster, 1995). For example, in early research on outcomes relating to shift-based working patterns, Staines and Pleck (1984) found that working non-standard days and hours was associated with reduced quality of family life. In addition, their analysis found that working non-standard hours, such as evening shifts, may be associated with greater time spent with family was also associated with greater work-to-family conflict (Staines and Pleck, 1984).

More recent research has built on Staines and Pleck’s early findings to support the idea that non-standard and shift-based work can lead to negative individual and organisational outcomes. For example, in their study of call centre and software development workers, Hyman et al. (2003) the pressures associated with these types of work environments, such as non-standard and inconsistent working hours among

call centre employees and the ability to work from the home environment and being asked to be 'on-call' outside of normal working hours led to increased work-to-family strain and conflict. Similarly, Beutell (2010), in his analysis of the 2002 National Study of the Changing Workforce found that employees working night and rotational schedules experienced the highest levels of conflict. His research also found that different patterns of work scheduling, such as day shifts, evening or night shifts, rotating or split shifts and flexible shifts had moderating effects on the relationships between work interference with family and job satisfaction and work-family synergy and life satisfaction (Beutell, 2010).

Fenwick and Tausig (2001) present an alternate perspective in their research which analysed U.S. labour force data from the National Study of the Changing Workforce, in order to better understand how the interaction between personal characteristics, work schedules, control over work schedules and work context (sector) impacted perceptions of work-life balance and conflict. Their findings suggest that based on personal characteristics, individuals perceive imbalance related to work context differently. Importantly, perceived control over work scheduling had a stronger impact on family and health outcomes than type of working patterns, including shift and rotational work (Fenwick and Tausig, 2001). These studies provide further support for the need to consider the role of occupational context in the work-life boundary interface.

New research by Piszczek and Berg (2014) examines context from a multi-level institutional perspective, making the argument that the influence of regulatory institutions on organisational context has important implications for how

organisations and employees manage work-life boundaries. They make the case that “while previous boundary management literature has largely focused on what Nippert-Eng (1996a) calls ‘personal practices with situational constraints,’ we focus on what she calls ‘social-structural constraints on home and work’ and their implications for such personal practices (Piszczek and Berg, 2013, p.13). This research suggests that not only might it be important to consider occupational context in work-life boundary research, but further consideration of factors that contribute to that context, such as institutional and regulatory constraints, might be warranted.

In this dissertation, Chapter 3 will analyse how employees negotiate the work-life interface within the context of a highly segmented work environment, given differences in their personal preferences for integration or segmentation. Chapters 4, 5 and 6 will analyse how homeworking, a highly integrated way of working, presents other types of challenges for individual boundary management. An important step in being able to offer practical guidance to employees and employers within these settings is to better understand the constraints and resources offered by these non-traditional work environments. Kossek and Lautsch. (2012, p.166) suggest that future research must investigate “the interaction of the individual with the constraints of the context s/he faces ... to truly understand how to implement and gain benefits from flexible work arrangements”.

#### **2.4.4.2 Job Demands and Resources**

Also linked to the way in which organisations contribute to an employee’s ability to have flexible work or non-work boundaries is the idea that organisations make demands and provide resources that influence an employee’s ability to manage work

and non-work boundaries. The Job Demands-Resources model provides theoretical support for this assumption (Demerouti et al., 2001). The Job Demands-Resources Model purports that “burnout develops irrespective of the type of occupation when job demands are high and when job resources are limited because such negative working conditions lead to energy depletion and undermine employees’ motivation, respectively” (Demerouti et al., 2001). While Demerouti et al.’s original model focuses on the impact of job resources and demands on employee burnout, other research has linked this model to the work-life interface (Glavin and Schieman, 2012, Grotto and Lyness, 2010). For example, in their analysis of U.S. data from the 2002 National Study of the Changing Workforce, Grotto and Lyness (2010) linked job demands to higher negative work-life spillover and found negative relationships between job resources and organisational supports and negative spillover. Similarly, Glavin and Schieman (2012) used the Job Demands-Resources Theory in their examination of the antecedents and outcomes of work-family role blurring. The findings from their analysis of data from the 2005 Work, Health and Stress survey suggest that “the JD-R Model (Baker and Demerouti, 2007, p.93) offers one way in which to examine how work conditions represent positive or negative contexts that infuse role blurring with desirable or deleterious outcomes”. For example, they found that job demands such as work pressures strengthened the relationship between role blurring and work-to-family conflict, while the provision of a job resource, such as decision-making latitude, weakened the relationship between role blurring and work-to-family conflict (Glavin and Schieman, 2012).

Voydanoff (2005b) further provides a conceptual link between the Job Demands-Resources perspective and work-life boundaries in her model for work-family fit and

balance. Her model suggests that the balance of cross-domain demands and resources (i.e., work demands and family resources or work resources and family demands) leads to “boundary-spanning demands” such as having to take work home or being interrupted by family in the work environment and “boundary-spanning resources” such as flexible scheduling and spousal support (Voydanoff, 2005b, p. 826). Her model suggests that the balance of boundary-spanning resources can lead to ‘fit’ between an employee’s needs and their environment.

#### **2.4.4.3 Person-Environment Fit**

Building on Voydanoff’s (2005b, p.826) idea that “boundary-spanning” resources can lead to better fit between an employee’s needs and their environment, a great deal of research has linked the concept of Person-Environment Fit to the work-life interface (Edwards, 1996, Rothbard, 2005, Voydanoff, 2005b). Rothbard et al. (2005, p. 246) define Person-Organization Fit as “congruence between the individual and the environment”. While initially applied to the study of workers and organisations from a generalised work stress perspective, Edwards and Rothbard’s (1999) research broadened the application of Person-Environment Fit to look at stress associated with the intersection of work and family roles. Their research found strong associations between the fit of values and experiences and well-being in each domain (Edwards and Rothbard, 1999).

Within the work-life literature, two types of Person-Environment Fit are found: fit between demands and abilities, and fit between needs and supplies (Edwards, 1996). Demands-abilities fit relates to whether an individual has the ability to meet the physical, environmental and emotional demands, norms and expectations of a role

(Edwards, 1996, Voydanoff, 2005b). Supplies-values fit occurs when an organization supplies employees with an environment that is congruent with their goals and values (Edwards, 1996). Both forms of fit are considered to be ‘cognitive comparisons’ in the sense that the idea of fit is based on an individual’s subjective perception of how well their environment matches their needs (Edwards, 1996, Voydanoff, 2005a).

In relating this concept to the idea of individual preferences for integration versus segmentation, research has looked at how organizational policies aid in creating work environments that subtly or not so subtly promote cultures of integration or segmentation (Hall and Richter, 1988, Kirchmeyer, 1995, Perlow, 1998). It is the fit between the environments created by these policies and the individual preferences of their workers that recent research has examined. This research suggests that it is the goodness of the fit between integration-segmentation preferences and actual experiences that often leads to the best outcomes (Kreiner, 2006, Rau and Hyland 2002, Rothbard et al. 2005).

For example, Kreiner’s (2006) research with alumni in a variety of professions assessed employees’ preferences for segmentation and the supply of segmenting practices their organization provides using the Person-Environment Fit approach. This research demonstrated that higher levels of fit or “congruence” between an individual’s integration-segmentation preferences and the supply of organizational practices that support integration-segmentation led to lower levels of work-life conflict, reduced stress and higher job satisfaction (Kreiner, 2006, p.706).



Similarly, in a study of U.S. public university employees, Rothbard et al. (2005) found that individuals who identified a preference for greater work-life segmentation reported lower levels of job satisfaction and organizational commitment when their companies introduced work-life practices that were integrating in nature, such as on-site childcare. In addition, the converse was also found to be true; people who desired more integration reported higher levels of organizational commitment when policies that support segmentation, like flex-time, were introduced (Rothbard et al., 2005). Chapter 3 of this dissertation will examine the relationship between Person-Environment Fit and occupational context.

#### **2.4.5 Boundary Work and Boundary Management Strategies**

Boundaries over which individuals have some level of control can be considered socially constructed (Zerubavel, 1991, Kreiner et al, 2009), whereby “the individual is an active agent in the ‘co-construction’ of boundaries in negotiated interaction with others” (Kreiner et al, 2009, p.705). The ongoing process of developing, maintaining and renegotiating boundaries through the alignment of these preferences and supplies occurs through boundary work. As will be discussed further in Chapters 4, 5 and 6 of this dissertation, boundary work is defined by Nippert-Eng (1996a, p. xiii) as “the never-ending, hands-on, largely visible process through which boundaries are negotiated, placed, maintained, and transformed by individuals over time”.

Boundary work takes into account the ability of a person’s boundary to be flexible (Matthews and Barnes-Farrell, 2004), their willingness to allow that boundary to be flexible (Matthews and Barnes-Farrell, 2004), and organisational and personal constraints as well as preferences for integration and segmentation between work and

non-work roles. For example, in their exploratory research on boundary management profiles, Bulger et al. (2007) used cluster analysis to identify four different profiles of workers relating to their work and home boundary flexibility willingness and ability and permeability (Bulger et al., 2007). These profiles ranged from those with high levels of flexibility and permeability in both home and work environments, to those with more flexibility and permeability for the work domain versus home (Bulger et al., 2007). As noted in the prior section, Kreiner's (2006) research emphasizes the idea that it is not necessarily the case that either segmentation or integration is better, but that it is the fit between an employee's preferences for integration-segmentation and their organization's supply of integrating-segmenting policies and practices, which has the greatest impact on work-life conflict, stress and job satisfaction. Given that both preferences and constraints can change over time, boundary work is an ongoing, interactive process between the individual and their environment.

Boundary work has emerged in the literature in recent years as a valuable process by which individuals adopt boundary tactics that lead to more positive outcomes relating to the work-home interface (Felstead, Jewson, Phizacklea and Walters, 2002, Kreiner et al., 2009). As noted earlier, Nippert-Eng's (1996a) early research on boundaries suggests that an individual's own actions and rituals can support the boundary definition of work and non-work domains. More recent research has built on these ideas and identified a range of tactics and strategies that might be applied to boundary management. For example, Kreiner et al. (2009), in their study of Episcopalian priests, identified physical, behavioural, temporal and communicative strategies that the priests used to strengthen the boundaries between work and non-

work activities. For instance, the priests interviewed for this research describe physical tactics, such as deciding to live further away from the church, as one way of creating a strong boundary between their church work and their personal life (Kreiner et al., 2009). In addition, priests used temporal tactics, such as setting aside certain hours of the day that were not busy with church activities for family time, behavioural tactics, such as asking their parish administrator to hold calls during personal hours, and communicative tactics, such as providing parishioners with clear messages about time that is reserved for personal activities (Kreiner et al., 2009).

Similarly, Kossek, Ruderman, Braddy and Hannum (2012, p.112) used a “person-centered” approach to develop profiles of boundary management strategies that accounted for individual differences in “cross-role interruption behaviours”, “identity centrality of work and family roles” and “perceived control of boundaries”. Their research identified six profiles for boundary management among managers characterized by varying levels of perceived control over boundaries, symmetry / asymmetry of allowing cross role interruptions (work to home and home to work) and the identity centrality of work and family roles. Their research found that the profiles for which perceived control over boundaries was lower were more likely to result in negative work and family outcomes (Kossek et al., 2012).

Further research has investigated ways that individuals manage “boundary crossing” and how they engage in rituals that ease role transitions (Ashforth et al, 2000, p.472). For example, Nippert-Eng (1996a) studied workers’ use of calendars and clocks as both symbolic and behavioural means to aid role transition. Her work identified rituals such as using separate key rings for work and personal keys and separate

calendars for work and home events as constituting “boundary work” (Nippert-Eng, 1996b, p.563). The greater the worker’s preference for work-life segmentation, the more separately these objects were managed (Nippert-Eng, 1996b). Similarly, those who manage their multiple roles in an integrated manner are more likely to adopt a single calendar for all events and use a single set of keys (Nippert-Eng, 1996b). These symbolic indicators of segmentation and integration preferences assist employees as they move through role transitions. Similarly, recent research related to boundary management and PDAs found that these technological devices are used as a means of control over the temporal boundaries between home and work lives (Golden and Geisler, 2007). Research participants reported using the devices for functions including “containing work” or setting boundaries around the time spent on work functions, as well as “integrating the self” such as using the device as a means to transition between home and work life (Golden and Geisler, 2007, pp. 533 and 535). The research contained in this dissertation seeks to contribute to the literature on boundary work by examining boundary management activities among employees who are engaged in varying levels of working at home, a working pattern that is typically identified with high levels of work and non-work integration (Mustafa and Gold, 2012, Raghuram and Wiesefeld, 2004, Standen, 1999).

## **2.5 Areas of Research Opportunity in the Boundary Management Literature**

Based on this review of the literature, four areas of opportunity for further research on boundary management have become evident. First is the need to better understand the role of occupational context in the ability of workers to find a fit between their needs and the demands and resources of their employer. Particularly with the increase in alternative working arrangements, many of which lead to highly

integrated work / non-work domains, a better understanding how these environments may impact the work-life interface for employees will provide important information for improving workers' ability to achieve positive work-life and well-being outcomes. This gap is explored in Chapter 3 of this dissertation, which examines the relationships between fit, misfit and work-life outcomes among workers in office versus offshore work environments.

Next, building on the idea of looking at the relationship between PE-Fit and occupational context, another area for opportunity in the research on work-life boundaries is to look at how boundary strategies can be implemented in order to establish or re-establish person-environment fit, when perhaps the organisational supply of segmenting-integrating practices does not match a worker's preferences. This gap is explored qualitatively in Chapter 4 of this dissertation, which examines work-life boundaries among individuals performing varying degrees of work at home.

A third area of opportunity to contribute to the literature on work-life boundaries is to clarify the concept of boundary permeability. As a central component of boundary strength, understanding the role of permeability as well as antecedents and outcomes associated with it will further inform us as to how boundaries can be shaped and strengthened, as well as provide insight on ways to develop and implement effective boundary management strategies. Chapter 5 of this dissertation provides empirical support for the moderating role of boundary permeability in the relationship between organizational supply of integrating / segmenting working practices and work-life outcomes.

In addition to clarifying the role of permeability in the relationship between work patterns and work-life outcomes, a fourth area of opportunity to contribute to the literature is to better understand how boundary permeability impacts other job demands and resources on inter- and intra-domain outcomes. Chapter 6 of this dissertation draws on daily diary data from a sample of homeworkers to look at how boundary permeability also moderates the relationships between other job resources and demands, beyond work context, and work-life and well-being outcomes.

## **2.6 Summary and Conclusion**

The literature discussed above sets the stage for a more in-depth exploration of work-life boundary management. The following chapters will build on this literature review and the research opportunities identified in the prior section. The focus of these chapters will be to build on the existing research by examining the interaction between work context, permeability and boundary management. Specifically, these chapters will examine: how fit between boundary preferences and segmentation supply impacts the work-life interface; how workers use boundary management strategies, given varied levels of organisational supply of integrating practices to re-establish fit; what is the role of permeability in the work-life interface; and last, what is the impact of permeability on the relationship between other job demands and resources and work-life and well-being outcomes. In addition to the contribution to the academic literature, these chapters will also offer practical implications as to how boundary strategies and the techniques that can influence boundary permeability can lead to more positive work-life outcomes.

## **Chapter 3: Boundary Management and the Highly Segmented Worker**

- 3.1 Introduction
  
- 3.2 Highly Segmented Work Environments
  - 3.2.1 Offshore Work
  - 3.2.2 Shift / Rotational Work
  - 3.2.3 Military / Expatriate Work
  
- 3.3 Boundary Preferences, Demands and Resources
  - 3.3.1 Integration-Segmentation Continuum for Individual and Workplaces
  - 3.3.2 Fit between Work Segmentation Preferences and Supply
  - 3.3.3 The Role of Social and Occupational Supports
  
- 3.4 Method
  - 3.4.1 Research Design
  - 3.4.2 Measures
  
- 3.5 Analysis and Findings
  
- 3.6 Discussion
  
- 3.7 Limitations
  
- 3.8 Conclusion

### **3.1 Introduction**

As noted in Chapter 2, much of the research relating to the work-life interface focuses on employees who work in traditional office environments with traditional weekday schedules. However, the idea of a traditional work schedule is diminishing with the introduction of new technology, flexible working and extended working hours (e.g., the notion of 24-7 jobs) (Perrucci, MacDermid, King, Tang, Brimeyer, Ramados, Kiser and Swanberg, 2007). As this trend becomes more prevalent in our society it becomes important to understand the impact that alternative schedules have on the work-life interface.

Work-life literature supports the idea that work-life experiences are different based on occupational differences such as working patterns, availability of resources and control over work hours (Greenhaus and Beutell, 1985, Kreiner, 2006, Tausig and Fenwick, 2001, Thomas and Ganster, 1995). While ‘traditional’ or office-based working patterns make certain demands on their employees, such as fixed schedules and a requirement to work from the office, the demands are often different for employees working non-traditional schedules (Beers, 2000). For example, employees working non-traditional schedules may be expected to be on call during evening and weekend hours or may have unpredictable work schedules.

In addition to varying demands, personal and occupational contexts can also add to the resources an individual has to apply to their home and work roles. One example of this is the different forms of support that work and non-work environments may offer. Research has demonstrated that family/ social and employer supports can positively impact home and work domains, reducing conflict or increasing the



enrichment between roles (King, Mattimore, King and Adams, 1995, McFadyen, Kerpelman and Adler-Baeder, 2005, Shaffer, Harrison, Gilley and Luk, 2001, Thomas and Ganster, 1995). For example, Thomas and Ganster (1995) in their study of health care professionals found that workers who were provided with family friendly practices from their employer reported higher levels of control over their work-family interactions which, in turn, was associated with reduced perceptions of work-family conflict. Similarly, Adams, King and King (1996), in their study of full-time workers in the United States, found that family emotional and instrumental support led to lower levels of family interference with work.

While there are many aspects of the work-life interface that are affected by differences in occupational context, this chapter focuses specifically on how these differences can affect the way workers manage the boundaries between their work and non-work activities. As reviewed in the previous chapter, Nipper-Eng's (1996a) research on work-home boundaries identified a continuum along which individuals prefer to either segment or integrate their work and non-work roles. Some individuals maintain highly separate or segmented work and home lives with little spillover between the two domains (Nippert-Eng, 1996a). Others operate in an integrated way whereby the experiences and events of one domain may frequently impact or disrupt the other (Nippert-Eng, 1996a). By nature, offshore employment provides workers with a highly segmented work environment. Workers tend to live on vessels or in housing near remote branch offices during their rotations, reducing the number of physical transitions between work and home. Similarly, in the home environment, employees are separated from work for extended periods of time, reducing the interference of work in the home environment. Typical rotations

involve up to six weeks in an offshore work location followed by three weeks at home. One consideration among these offshore workers is whether this segmented pattern of interaction between their work and non-work roles matches their preferences for integration or segmentation.

Comparing boundary experiences among a sample of office-based workers who work traditional schedules and their colleagues who work offshore, on three to six week rotations, this chapter makes a new contribution to the literature as it is the first study to investigate boundary management among those working in an offshore environment. In addition, by drawing on a sample of office-based and offshore workers from the same organisation, direct comparisons can be made between these groups, without the concern that managerial or organisational differences are influencing the results (Seawright and Gerring, 2008). In addition, this chapter will attempt to contribute to literature that relates the theory of Person-Environment Fit to segmentation supply and preferences by considering the consequences of ‘fit’ between preferences and segmented or integration patterns of working as well as the consequences of ‘misfit’ between preferences and working patterns (Demerouti et al., 2005, Edwards, 1996, Rothbard, 2005, Voydanoff, 2005a). Last, due to some similarities between offshore workers and other types of shift workers, such as unpredictability in scheduling and working non-traditional hours, this chapter will suggest how these findings might be extended to the larger population of shift workers (Beers, 2000). This chapter seeks to answer the first core research question posed in the introductory chapter:

*What impact does occupational context have on Person-Environment Fit and the work-life boundary interface?*

While the prevalence of shift work varies significantly by industry, data from the U.S. suggest that one in five workers engage in some type of shift work (Presser, 2000). Shift work spans a variety of industries and impacts both contingent and salaried workers. Beers (2000) reports that more than 16% of full-time, salaried workers work shifts that are considered to be on 'alternative schedules'. These types of workers can frequently be found in fields such as transport and public utilities, protective services, entertainment, hospitality and mining (Beers, 2000). In addition to these occupational categories, we see similar working patterns among military personnel and expatriates in multiple industries, often requiring extended leaves from home and non-traditional work schedules.

This chapter begins with a review of the literature on highly segmented work environments. Next, literature relating to person-environment fit in terms of boundary segmentation preferences and demands as well as the impact of family/social and occupational supports will be examined. Using polynomial regression analysis and response surface methodology on data collected from office-based and offshore workers, the impact of occupational context on segmentation preferences, supplies and person-environment fit will be examined. Next, the impact of level of fit on work-life conflict, work-life enrichment and organisational commitment will be examined. Last, the moderating role of family/social and organisational supports on the relationship between fit, work-life conflict and organisational commitment will be investigated. The chapter ends by providing a set

of practical implications for both shift workers and the organisations that employ them that can be derived from the findings.

## **3.2 Highly Segmented Work Environments**

### **3.2.1 Offshore Working**

There is a limited amount of recent research that looks at the effects of offshore work on work-life interface. Common themes found in research on the impact of offshore employment on work-life relationships include the extreme separation of individuals from home, social and office environments; difficulty for individuals making transitions between home and work; difficulty associated with unpredictable scheduling or timing of the next offshore rotation; and the lack of spousal support and understanding for offshore role requirements (Collinson, 1998, Hardill and Green, 2003, Sutherland and Flin, 1989, Thomas, Sampson and Zhao, 2003). For example, in one of the few studies actually administered offshore, Collinson (1998) conducted qualitative interviews and observations with workers and managers in the North Sea oil industry and found that there were positive and negative consequences associated with the extreme levels of work-home separation experienced by workers on the platform. Some workers reported that the separation fit with their preferences for keeping work and home segmented.

*“I quite like being on the platform. Sometimes you get to the stage when you think ‘I’ll go offshore and get away from all the hassle at home.’ It’s nice to switch off. I do find it a very simple, uncomplicated life out here. But then again, when you want to be at home, you can’t, can you? You can’t have it all.” (offshore worker, diver, in Collinson, 1998, p.308)*

*“It’s like having two separate lives. That’s a very good thing here, we never talk about our personal lives at all.”(offshore company operator, in Collinson, 1998, p. 308)*

However, many workers in the study also reported negative consequences associated with the infrequency of the transitions between home and work.

*“You’re just starting to fit in at home, then all of a sudden you’ve got to go away again. If you’ve got a family crisis, you can’t do anything about it. You’ve just got to go.”(offshore production operator, in Collinson, 1998, p. 314)*

*“She’s getting used to it now but it can still be difficult for her. I’ve been away for two weeks and she’s in her own routine, doing her own thing and then I arrive home and upset the kids. I spoil them because I’m away such a lot. She tends to be at a loose end and then all of a sudden I’m under her feet for two weeks. After the first week she settles down and we’re OK again.”  
(offshore scaffolder, in Collinson, 1998, p. 314)*

Another qualitative study gathered data from partners of seafarer workers (Thomas et al, 2003). This study identified worker separation from family as the most significant source of stress related to offshore working. The authors suggested that some negative impacts of seafaring employment can be offset by employment practices such as reducing the length of each term spent offshore, minimizing disruptions from employment during home time, continuous employment, ability to

plan for future rotations, maximising ability to communicate with spouse during long assignments, and establishing support networks for family through the company (Thomas et al, 2003).

### **3.2.2 Shift / Rotational Work**

Common to the offshore work environment are schedules that are shift-based and/or rotational in nature. There are many different forms of work that can be considered 'shift work'. With the increasing numbers of employees utilizing the option of flexible scheduling, more workers start and stop work at different times of the day and work longer or shorter days than those found in traditional working hours (Beers, 2000). However, similar to offshore workers, there is also a subset of workers for whom these types of schedules are not optional and the nature of their work requires them to work an "alternative shift" (Beers, 2000, p.33). There are many forms of shift work such as night shifts, casual work and on-call shifts; however, the most common forms of shift work are the rotating and irregular shifts, which are often found in offshore work (Williams, 2008). Data from the 2005 Canadian General Social Survey (GSS) identified that workers with the least control over their working hours, such as those on irregular or on-call shifts, were the most likely to report issues with work-life balance (Williams, 2008).

Consistent with those found in the offshore literature, themes that emerge from research on shift work and work-life balance include difficulty associated with planning non-work events such as holidays and parties around work schedules, difficulty finding time to spend with partners and children, difficulty managing

childcare and other household responsibilities, as well as other somatic and health related issues (Hertz and Charlton, 1989, Beers, 2000, Williams, 2008).

### **3.2.3 Military / Expatriates**

One occupational sector in which nonstandard working schedules are frequently found is the military. Often military work is characterised by lengthy shifts, irregular schedules, long periods of time spent away from home and unpredictable schedules. Several issues emerge for individuals engaged in military careers. First, separation and relocation can have negative work and non-work impacts. Prior research has found that the impact of separation from one's spouse among military personnel is one of the most important indicators of marital satisfaction as well as satisfaction with the army and psychological and physical well-being (Burrell, Adams, Durand and Castro, 2006). In addition, the unique nature of the type of work that is done (i.e., shift scheduling, risk, relocation and deployment) makes it difficult for non-military spouses to understand the requirements of the job (McFayden et al., 2005). Research suggests that work-life conflict is associated with the difficulty that non-military spouses have in understanding and/or coping with the demands of military employment (Faber, Willerton, Clymer, MacDermid and Weiss, 2008, McFayden et al., 2005). Another consideration among military workers is that the management of boundaries can be more difficult (Faber et al, 2008). Often, military personnel are literally 'living' in their jobs and are physically unable to make transitions between home and work domains for extended periods of time. Prior research has found that boundary management in roles that require extended periods of time 'on-duty' can make it difficult to transition between work and non-work roles (Adler, McGurk, Stetz and Bliese, 2003, Faber et al, 2008). A final link we draw between issues facing military personnel and those found in the offshore oil environment is the idea

of the unpredictability of work schedules (Adler et al, 2003). Research on U.S. military deployment in Bosnia found that uncertainty around actual departure date and length of deployment was one of the most significant stressors for soldiers on these missions (Adler et al, 2003). Offshore workers often face similar uncertainty relating to their assignments.

A final body of literature that can be informative for research with offshore populations is literature that explores the work-life interface among expatriates. Similar to workers in offshore rotational roles, expatriates, generally defined as “individuals living and working in a foreign environment” (Shaffer, Harrison and Gilley, 1999, p.563), often have work patterns that significantly impact and/or disrupt their family routines, making the relationship between work and home more complex. For example, accepting an international assignment as an expatriate may require that a spouse and children accompany the employee to the posting, potentially disrupting a spouse’s career as well as spousal and child social relationships (Hardill and MacDonald, 1998). In addition, an international assignment may also mean that the expatriate and their family are separated from their extended families. Interestingly, contrary to the greater levels of work-home segmentation found in other alternative work arrangements, Caligiuri and Lazarova (2005) suggest that, among expatriates, the boundaries between work and home are more permeable than other occupational situations in the sense that the expatriate’s family is often more dependent on the employer organisation and the organisation is involved in traditionally personal facets of a worker’s life such as housing, school and / or transport. Research has demonstrated that permeable boundaries can often result in higher levels of work life conflict (Olson-Buchanan and Boswell, 2006). In



addition, research on expatriate adjustment also identifies the importance of looking at the adjustment of expatriate spouses and families as well as non-work satisfaction (Shaffer and Harrison, 1998).

In summary, the research explored above identifies physical separation from family and social environments as an important factor associated with shift and offshore work.

### **3.3 Boundary Preferences, Demands and Resources**

#### **3.3.1 Integration-Segmentation Continuum for Individuals and Workplaces**

As reviewed in Chapter 2, much of the research on work to non-work boundaries acknowledges that individual preferences relating to the permeability and flexibility of these boundaries lie on a continuum from high levels of integration to high levels of segmentation (Nippert-Eng, 1996a). Individuals preferring high levels of integration might make frequent transitions between work and non-work roles throughout the course of the day, perform non-work duties in a work environment and work duties in a home environment and allow frequent interruptions from alternate domains. Individuals preferring high levels of segmentation are likely to only engage in work-related duties when in a work environment and at times of the day that are specified for work activity. In addition, they might limit the number of transitions that they make between domains and cross-domain interruptions (Ashforth et al., 2000, Edwards and Rothbard, 1999, Nippert Eng 1996a). Research has also identified that workplaces can offer more integrated or segmented experiences for the worker (Kossek et al., 1999, Kreiner, 2006). For example, in presenting their framework for work-family role synthesis, Kossek et al. (1999)

identify formal and informal aspects of the work environment with may impact the supply of segmentation and integration. For example, a company may offer a formal initiative such as on-site day care that supports a more integrated work-life experience (Kossek et al., 1999). Alternatively, the organisational culture may help to informally support integration or segmentation; for example if a supervisor overlooks company policy on working hours to allow an employee to take care of personal business during the work day. Based on the literature reviewed earlier in this chapter on offshore work environments, it is anticipated that these environments would be perceived as offering a more segmented work-home interface for employees than other types of working arrangements. This is due to the fact that offshore workers are physically separated from family and friends while on rotations, and then completely separated from work in between rotations. This level of separation results in fewer transitions between work and home, as well as fewer inter-domain interruptions. Based on this initial review of the literature related to highly segmented work environments, the first hypothesis for this chapter will be as follows:

*Hypothesis 1A: Offshore workers perceive a greater supply of workplace segmentation than their counterparts based in the home office.*

An additional consideration that will be looked at in the data is the relationship between segmentation preferences and participating in offshore work. Literature on recruitment and selection suggests that individuals may seek out environments that match their boundary preferences (Rau and Hyland, 2002). For example, in their study of employed, part-time MBA students in the Midwest United States, Rau and

Hyland (2002) found that participants with low levels of role conflict reacted more positively to recruitment brochures that promoted flexitime as an employment benefits than those with higher levels of role conflict. This suggests that those preferring higher integration between home and work were more attracted to a workplace that offered work-life practices promoting integration. This builds on Schneider's (1987, p.411) attraction-selection-attrition framework which suggests that individuals are attracted not only by the industry and career prospects offered by a job, but also by the "career environment" within the organisation. While the scope of this study does not allow us to fully examine the reasons that offshore workers entered into these types of work engagements, it is possible that offshore workers have a greater preference for segmentation between home and work roles and therefore this may be evidence that they have self-selected into working arrangements that match that their preference (Jansen and Kristoff-Brown, 2006, Rau and Hyland, 2002). Therefore the next hypothesis is as follows:

*Hypothesis 1B: Offshore workers will report higher levels of preference for segmentation than their counterparts based in the home office.*

### **3.3.2 Fit between Work Segmentation Preferences and Supply**

Person-Environment Fit is the guiding theoretical framework for this research, which seeks to explain the relationship between individual boundary preferences, organisational supplies and individual outcomes. As reviewed in the broader literature review in Chapter 2, person-organization fit is defined by Rothbard et al. (2005, p. 246) as "congruence between the individual and the environment". Fit is assessed via the perceptions of individuals and therefore represents a socially

constructed comparison, such that the measurement of fit is based on an individual's subjective perception of how well their environment matches their needs (Edwards, 1996, Voydanoff, 2005a). In this chapter, the goodness of fit relating to one specific aspect of the work-home interface will be examined; that of individual preferences for integration versus segmentation of work and non-work roles and the organisation's supply of integration or segmenting practices (Hall and Richter, 1988, Kirchmeyer, 1995, Perlow, 1998). As reviewed in earlier in this chapter, individuals have preferences for integrating versus segmenting their home and work roles (Bulger et al., 2007, Kreiner, 2009, Nippert-Eng, 1996a, Rau and Hyland, 2002). Given these preferences, individuals may enacted processes or routines which create role boundaries that match these preferences. For example, some workers prefer to keep their work and non-work roles segmented and draw clear boundaries between activities that are work-related and those that are not (Nippert-Eng 1996a, Edwards and Rothbard, 1999, Ashforth et al., 2000, Kreiner 2006). These individuals minimize interruptions from one role to the other and make clear transitions between roles (Ashforth et al., 2000, Hall and Richter, 1998). For example, a worker who prefers segmentation may refuse to use certain types of information technology, such as Blackberries or remote network access, that enable them to be connected to their work environment during non-working hours. Other individuals prefer a more integrated approach to work and non-work roles such that they make frequent transitions between work and non-work roles and tend to blur role boundaries (Ashforth et al., 2000, Hall and Richter, 1998). For example, a worker preferring higher levels of integration may frequently interrupt their work day by taking personal calls or managing non-work responsibilities, while at the same time respond

to emails or take work related calls in the evenings or outside of their prescribed working hours.

Similarly, organisations can adopt policies and practices which foster integrating or segmenting relationships between home and work roles (Kreiner, 2006, Rau and Hyland 2002, Rothbard et al. 2005). For example, an organisation can offer on-site day care which may blur the physical boundaries between home and work, thereby creating a more integrating environment for workers. Conversely, an organisation may decide against allowing employees to work from home, therefore creating greater segmentation between home and work roles. Research suggests that when the supply of integrating vs segmenting practices matches an individual's preferences for integration or segmentation the best outcomes in terms of the work-life interface are achieved (Kreiner, 2006, Rau and Hyland 2002, Rothbard et al. 2005).

Based on this prior research, the next set of hypotheses relate to the way in which fit influences individual outcomes. First, the relationship between fit and perceived work-life conflict will be examined. This research hypothesizes that fit will decrease work-life conflict, because the better the fit, the more the organisation is allowing an individual to manage their work-life boundary in their preferred manner. Prior research has supported the idea that fit reduces perceived work-life conflict (Kreiner, 2006, Chen et al., 2009). For example, in Kreiner's research with university alumni he found that "as workplace segmentation supplies more closely matched preferences, a person was better able to negotiate the work-home boundary to his or her liking, reducing [work-home conflict] and stress and increasing job satisfaction" (Kreiner, 2006, p.500). Therefore the first hypothesis is as follows:

*Hypothesis 2: Fit between segmentation preferences and segmentation supply will be negatively related to perceived work-life conflict.*

This research will also examine the relationship between the fit between segmentation preferences and supply and work-life enrichment. While the author found no prior research linking fit to work-life enrichment, Chen et al. (2009) found that fit was associated with higher levels of work-family instrumental spillover. Positive spillover is instrumental in achieving work-life enrichment as it allows for the transfer of beneficial resources from the work domain to the home domain (Carlson, Kacmar, Wayne and Grzywacz, 2006, Edwards and Rothbard, 2000, Greenhaus and Powell, 2006). Therefore, the next hypothesis is as follows:

*Hypothesis 3: Fit between segmentation preferences and segmentation supply will be positively related to perceived work-life enrichment.*

While the prior hypotheses consider the individual outcomes relating to the relationship between segmentation preferences and segmentation supplies, it is also important to consider the impact of these relationships from an organisational perspective. Employees' organisational commitment has been linked to outcomes including turnover / intention to remain, attendance at work, organisational adaptability (Angle and Perry, 1981, Mowday, 1979, Steers, 1977). In their meta-analysis of research on PE-Fit, Kristof-Brown, Zimmerman and Johnson (2005) found that organisational commitment was significantly related to person-job, person-organisation and person-group fit. Therefore, this research will examine whether organisational commitment is impacted by the level of fit between

segmentation preference and organisational supply of segmenting practices. In their research that examined the relationship between segmentation preference and access to integrating practices, Rothbard et al. (2005) found that individuals preferring segmentation were less committed to the organisation when offered integrating work-life benefits such as onsite childcare and more committed when offered what they perceived to be segmenting work-life practices, such as flexitime. Therefore, this study tests the following hypothesis:

*Hypothesis 4: Fit between segmentation preferences and segmentation supply will be positively related to organisational commitment.*

### **3.3.3 The Role of Social and Occupational Supports**

Given the unique pressures that extreme work environments place on the relationship between family and work, another factor to consider is family and social support. Prior research suggests that there is a significant relationship between family and social support and work-life conflict (Adams et al., 1996, Carlson and Perrewe, 1999, Greenhouse and Beutell, 1985). Adams et al. (1996) found that family emotional and instrumental support led to lower levels of family interference with work. In addition, their study showed that higher levels of work interference with family led to lower levels of family and social support (Adams et al, 1996). Carlson and Perrewe (1999) examined the relationship between work-family conflict and social support and found evidence for a model that incorporates family and social support as an indirect mechanism for reducing work-life conflict through the reduction of specific role stressors. This research seeks to examine the way that family and social support impacts the relationship between fit and work-life conflict. As prior research

has substantiated the idea that support can act as a mechanism to reduce work-life conflict caused by role stressors, this research hypothesizes that family and social support will moderate the relationship between fit and work-life conflict, such that when greater support is perceived, the relationship between low levels of fit and conflict will weaken (Adams et al., 1996, Carlson and Perrewe, 1999, Greenhouse and Beutell, 1985). In others words, family and social support will allow employees to cope better with environments that aren't as well matched to their needs. Therefore, the next hypothesis is as follows:

*Hypothesis 5: Family and social support will moderate the relationship between occupational context and work life conflict, such that at higher levels of support, the negative relationship between fit and work-life conflict will weaken.*

Similarly, it is anticipated that family and social support will impact the relationship between occupational context and work-life enrichment. Based on Greenhaus and Powell's model (2006), the level of family to work enrichment is impacted by the availability of resources within the family environment. The literature describes two types of support-based resources that workers can experience: emotional support, in terms of empathy and caring; and instrumental support, which assists the worker with task accomplishment (King et al., 1995). Prior research has suggested that family support has a positive relationship with family to work enrichment (Wayne et al., 2007). Therefore this research will examine how levels of support may impact the relationship between fit and work-life enrichment. This research hypothesizes that the more support an individual receives from their non-work environment, the more



likely they are to experience work-life enrichment, even at low levels of fit. In other words, similar to the prior hypothesis, support will help employees cope with environments that do not match their preferences such that they can still experience the benefits that may be transferred between work and non-work roles. Therefore, the next hypothesis is as follows:

*Hypothesis 6: Family and social support will moderate the relationship between occupational context and work life enrichment, such that at higher levels of support, the positive relationship between fit and work-life enrichment will strengthen.*

Support resources can also be derived from the workplace. There is a substantial amount of literature on the various types of support that can be offered by the workplace and how these supports can impact the experience of the employee. The Job Demands-Resources model identifies both positive and negative outcomes associated with an individual's interactions with work. "Basically, job demands require effort and are therefore related with physiological and psychological costs, such as fatigue, whereas job resources foster personal growth, learning and development, and have motivational qualities" (Bakker & Schaufeli, 2008, p.150). One construct that seeks to define the nature of support that can be provided by the workplace is Work-Family Culture. Thompson, Beauvais and Lyness (1999) define Work-Family Culture as a "set of shared assumptions, beliefs and values regarding the extent to which an organization supports and values the integration of employees' work and family lives" (Thompson et al, 1999, p.394). The authors identify three elements of Work-Family Culture which serve to benefit the employee. These are

the time demands that an organization places on the employees, the potential negative career consequences for making time for family concerns or taking advantage of work-life benefits, and managerial support for non-work responsibilities.

Prior research provides substantial support for a link between organisational support and organisational commitment. For example, in their study of managerial employees at a manufacturing facility, Eisenberger et al. (1990) found that perceived organisational support was positively related to affective attachment to the organisation. Similarly, using both cross-sectional and longitudinal analysis, Thompson, Jahn, Kopelman and Prottas, 2004 found that intangible aspects of perceived organizational family support (POFS), those which reflect “perceptions of emotional support” (p.547), are positively related to affective commitment to the organisation.

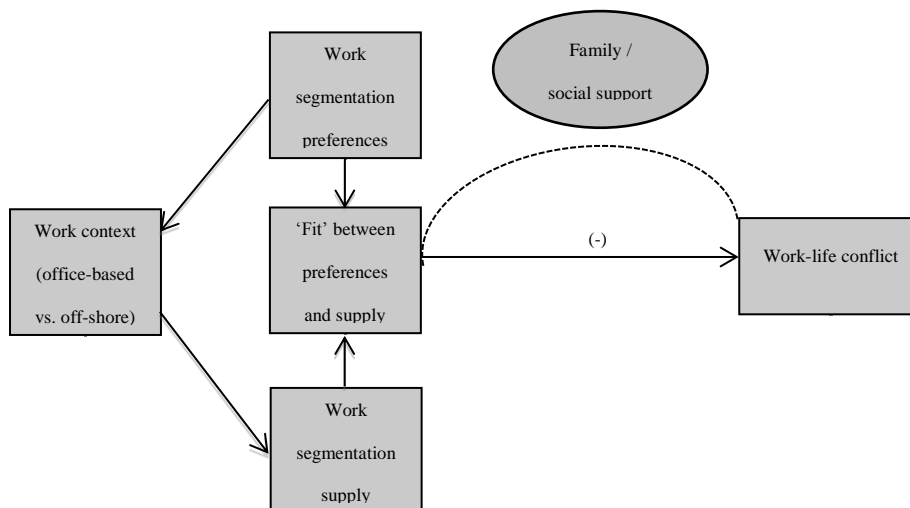
The current study uses the concept of work-family culture in an attempt to capture this broad spectrum of support that an organization can offer. Again, drawing on the Job Demands-Resources Model (Bakker & Schaufeli, 2008), this research envisages a supportive work-family culture as a resource that can “foster personal growth, learning, and development, and have motivational qualities” (Bakker & Schaufeli, 2008, p.150). When employee perceptions of the work-family culture are positive, the employee will gain support from this resource and when perceptions are negative, they will perceive a lack of resources. Based on the perception of positive work-family culture as a resource and the above literature linking organisational support to organisational commitment, this research hypothesizes that perceptions of work-

family culture will moderate the relationship between perceptions of fit and organisational commitment, such that the existence of a supportive work-family culture will strengthen the positive relationship between fit and commitment and help ameliorate negative associations between low levels of fit and lack of commitment. Therefore, the next hypothesis is as follows:

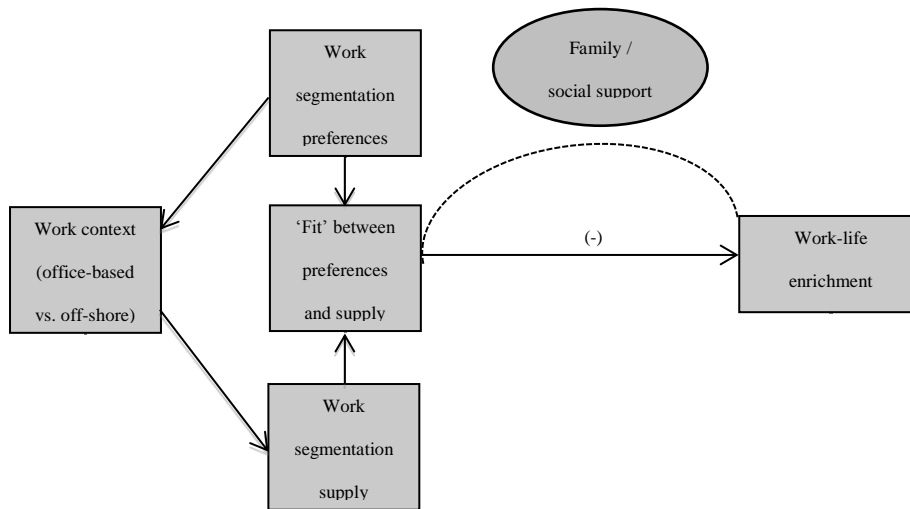
*Hypothesis 7: Organisational support will moderate the relationship between fit and organisational commitment, such that at higher levels of support, the positive relationship between fit and organisational commitment will strengthen.*

The following figures (3.1-3.3) illustrate the hypothesized relationships.

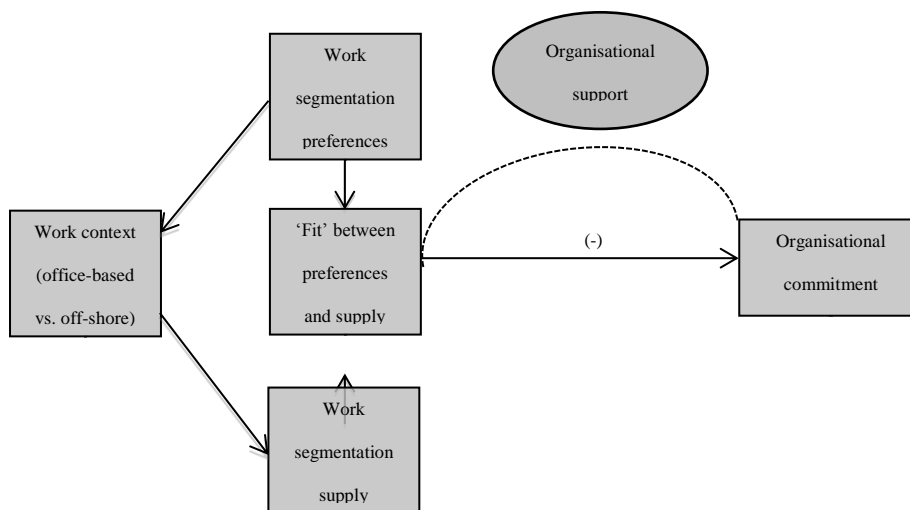
**Figure 3.1: Model of Relationships Leading to Work-Life Conflict**



**Figure 3.2: Model of Relationships Leading to Work-Life Enrichment**



**Figure 3.3: Model of Relationships Leading to Organisational Commitment**



### 3.4 Method

#### 3.4.1 Research Design

Data for this study were gathered at a leading multinational geo-science firm headquartered in the Netherlands. The company is comprised of multiple operating units providing a broad range of geotechnical services. The sample was drawn from one large operating group providing geotechnical survey support services in several offshore locations, primarily off the western coast of Africa. Approximately one-half

of the operating company's employees worked in the home office in the Netherlands, while the other half worked as offshore or branch office employees who mainly rotated on and off vessels, platforms or to branch offices for periods of up to 6 weeks at a time. Offshore employees work approximately 180 days a year offshore, typically spending 4 to 6 weeks offshore followed by a home leave for a period of time equal to at least half the length of their last offshore assignment. Some assignments are on a regular schedule, but most are varying and project-based. Schedules are not fixed, just estimated, so often employees are unsure of the exact day they will return to the field until the last moment.

Initial phases of this study included three exploratory interviews with senior leadership at the organisation, as well as eighteen employee interviews to identify and define key issues among the various worker subgroups. The employee interviews were conducted in two rounds, the first being semi-structured and exploratory in nature, in which key themes were identified. The second round of employee interviews was more structured and focused on key themes identified in the first round of interviews with the intent of assisting with the development of the quantitative survey instrument. A total of nine interviews were conducted in each round of employee interviews. In both rounds, respondents were drawn from a stratified sample of employees based in the home office and offshore employees, as well as those in management and non-management positions in order to represent a broad range of viewpoints. Employees interviewed in the first round of semi-structured interviews were not asked to participate in the second round. Interviews were conducted in person where possible and by telephone among those currently working offshore. The purpose of the first round of interviews was for the author to

gain an understanding of work-family issues that presented themselves to both onshore and offshore employees, and to identify whether there was justification for further study of boundary issues in this environment. The initial interviews did yield evidence of conflict relating to high levels of segmentation between work and home, among other work-life concerns; a second round of interviews was therefore conducted to assist with the development of the quantitative survey measurement. These interviews helped to ensure that the concepts to be tested by the survey were relevant and interpretable to the respondents. Again, interviews were conducted in person for workers not currently offshore, and by telephone for workers who were on an offshore rotation. All interviews were recorded and transcribed. However, several of the transcripts from the telephone interviews were missing information due to the inaudibility of the recording. It was therefore decided not to pursue further, formal analysis of the interview transcripts.

Six months following the qualitative phase of the research, a quantitative survey of the entire employee population of the operating company was deployed. The original sample for this study was comprised of 121 employees of the operating company (representing the total number of employees) as well as 64 employees from three branch offices reporting in to the operating group. Among the sampled employees of the operating company, approximately one-half were based in the home office and one-half were considered to be offshore workers. All branch office employees were considered to be offshore workers for the purposes of this sample due to the similar, rotational work patterns described by both groups of workers. Participation in the research was voluntary and employees were assured that their individual responses would remain confidential.

Participants were sent a pre-notification email approximately one-week prior to the survey launch at which time they were sent another email with a link to the self-administered online survey. The survey was active for a six-week period. This extended data collection period was designed to maximize the ability of offshore personnel to respond should they receive the survey invitation while on a rotation. Periodic reminders were sent throughout the data collection process encouraging non-responders and partial responders to participate (Roth and BeVier, 1998).

Of the original 185 employees who were emailed the survey link, 120 respondents clicked on the link and began responding to the survey. Among these, 27 surveys had to be discarded due to limited completion, yielding a total of 93 (50%) potential cases for analysis. Of note, response rates among the employees based in the home office and offshore employees were much higher than those working in the branch offices (71% to 9% respectively). Additional missing data were accounted for using pairwise deletion (Shafer and Graham, 2002).

Among the survey participants, 42% reported they were 'all or primarily office-based' while 51% reported they were 'all or primarily field-based', meaning that they worked offshore on vessels or platforms or in branch offices. Almost two-fifths (39%) of the participants reported that their role involved managing others and the average tenure at the organization was 4.67 years. The majority of participants (75%) reported being married or in a similar type of relationship with a partner and 35% of the participants had at least one child under the age of 18. The majority of the

participants were male (74.3%) and had a bachelor's level degree or higher (72%), which is reflective of the overall population within the division.

### **3.4.2 Measures**

Dependent variable measures used in the quantitative survey were as follows:

**Work-Life Conflict:** Work-life conflict was measured using the 18-item instrument developed by Carlson et al., (2000) which includes items developed by Stephens and Sommer (1996). This measure is reflective of the bi-directional and multi-dimensional nature of the work-family conflict construct (Frone, Russell and Cooper, 1992, Greenhaus and Beutell, 1985). This measure assesses three types of conflict both in terms of how work impacts family and how family impacts work. For example, a sample measure of time-based family to work conflict is "The time I spend in my non-work roles often causes me not to spend time in activities at work that could be helpful to my career" (Carlson et al., 2000, p.274). A sample strain-based work to family conflict measure is "I am often so emotionally drained when I get home from work that it prevents me from contributing to my non-work roles" (Carlson et al., 2000, p.273). Last, a sample behaviour-based family to work conflict measure is "Behaviour that is effective and necessary for me at home would be counterproductive at work" (Carlson et al., 2000, p.273). Items were slightly reworded to allow employees without traditional family structures to represent their non-work experiences. The Cronbach's alpha for the work-life conflict measure used was .884.



**Work Life Enrichment:** Work life enrichment was assessed using the 18-item scale developed by Carlson et al. (2006). This instrument reflects the bi-directional and multi-dimensional nature of the construct and measures both work to family enrichment along three dimensions (development, affect and capital) as well as three dimensions of family to work enrichment (development, affect and efficiency) (Carlson et al., 2006). A sample item measuring developmental work to family enrichment is “My involvement in my work helps me to understand different viewpoints and this helps me be a better person at home” (Carlson et al., 2006, p.147). A sample item measuring affective work to life enrichment is “My involvement in my work makes me feel happy and this helps me be a better person at home” (Carlson et al., 2006, p.147). Last, a sample work to life capital enrichment item is “My involvement in my work provides me with a sense of success and this helps me be a better person at home” and a life to work efficiency enrichment item is “My involvement in my personal life requires me to avoid wasting time at work and this helps me be a better worker” (Carlson et al., 2006, p.147). Items were slightly reworded to allow employees without traditional family structures to represent their non-work experiences. The Cronbach’s alpha for the work life enrichment measure was .916.

**Organisational Commitment:** Organisational commitment was measured using the 15-item Organizational Commitment Questionnaire (OCQ) scale developed by Mowday et al. (1979). Sample items from this measure include “I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful” and “I am proud to tell others that I am part of this organization” (Mowday et al., 1979). This measure has been validated by the

researchers in multiple organizations, across multiple occupational classifications (Mowday et al., 1979) and the Cronbach's alpha in the present study was .902.

Independent variable measures used for this analysis are as follows:

**Work Location:** Work location was measured by a single item that asked employees whether they would classify their current role as 'all or primarily office-based', 'all or primarily field-based', 'all or primarily based in a branch-office' or if their time was 'shared equally between field and office'. These categories were further reduced for the purposes of the data analysis to 'all or primarily home office-based' versus 'all or primarily field-based'. This latter category included offshore employees working on vessels and platforms, branch office employees and employees who shared their time between the field and the home office.

**Work Segmentation Preferences and Supplies:** Work segmentation preference and work segmentation supply were each assessed using a 4-item measure developed by Kreiner (2006). A sample item for work segmentation preference was "I don't like to have to think about work while I am at home" and a sample item for work segmentation supply was "My workplace lets people forget about work when they're at home" (Kreiner, 2006, p.507). Each item was evaluated on a five-point scale ranging from '1' meaning 'strongly disagree' to '5' meaning 'strongly agree'. The Cronbach's alpha was .824 for the segmentation preference measure and .844 for the segmentation supply measure.

Moderating variables included:

**Organisational Support:** The supportiveness of the work culture was measured using a slightly modified version of the Thompson et al. Work-Family Culture scale

(1999). Items were reworded to allow employees without traditional family structures to represent their non-work experiences. The 20 components of this measure explore areas including managerial support (e.g., “Middle managers and executives in this organization are sympathetic toward employees’ child care responsibilities”), career consequences (e.g., “To get ahead at this organization, employees are expected to work more than 50 hours a week, whether at the workplace or at home”) and organization time demands (e.g., “Employees are often expected to take work home at night and/or on weekends”). The Cronbach’s alpha for the organisational support measure used was .902.

**Social and Family Support:** Social and family support was measured using six items from the larger Family Support Inventory for Workers (FSIW) (King et al., 1995). Sample items from this scale include “My family and friends have a positive attitude toward my work” and “My family and friends struggle with the amount of time I spend away from home” (King et al., 1995, p.240). Items were selected for inclusion in the questionnaire based on their ability to represent the emotional and instrumental dimensions of support that were included in the original measure, as well as their relevance to the varied working patterns of employees based in the home office as well as offshore employees. Items were also slightly reworded to allow employees without traditional family structures to represent their non-work experiences. (King et al., 1995). The Cronbach’s alpha for the social and family support measure used was .690. This is slightly lower than would be desirable for a key measure in the research and was most likely caused by the significant reduction of items from the original scale. However, due to the length of the survey instrument, and the risk of respondent fatigue, the reduction was deemed necessary by the organisation.

Control variables: The control variables included in the analysis were gender, presence of a child under 18 in the household, tenure, whether or not an employee had managerial responsibilities and household income. Gender was selected as a control variable because prior research has theorized that gender influences the relationship between work and family roles (Pleck, 1977). While the empirical evidence is mixed in terms of whether antecedents to work-life conflict are different among men and women, several studies do suggest that the pathway to work-life conflict might differ among men and women (Bedeian, 1988, Duxbury and Higgins, 1991, Parasuraman et al., 1996).

The analysis also controls for the presence of a child under 18 in the home. Prior research has demonstrated a positive relationship between presence of children in the home and work-life conflict (Beauregard, 2006, Byron, 2005, Eby et al., 2005). For example, in her examination of the situational antecedents of interference between work and home, Beauregard (2006) found that presence of dependent children in the home was positively related to work-home interference.

In addition, prior research has identified a positive relationship between tenure and organisational commitment (Mathieu and Zajac, 1990). Although the research is conflicting and no causal pathway has been specified (i.e. whether organisational commitment predicts tenure or tenure predicts organisational commitment), several studies have found an association between these measures (Mathieu and Zajac, 1990, Mowday et al., 1979, Wright and Bonett, 2002). For example, in their research for the development of the widely used Organizational Commitment Questionnaire (OCQ), Mowday et al. (1979) found a significant positive relationship between

organisational commitment and tenure. In another study, Wright and Bonett (2002) conducted a meta-analysis to examine the relationship between organisational commitment and performance, and found that tenure was a significant moderator of the relationship such that as tenure increased, the strength of the positive relationship between organisational commitment and performance declined.

Prior research has also suggested that job characteristics, particularly those which afford an individual greater power and / or privilege, may influence the work-life interface (Butler et al., 2005, Grzywacz and Butler, 2005, Hackman and Oldham, 1980). For example, in their diary study of dual-earner couples in the U.S., Butler et al. (2005) found that daily job demands were positively related to work-life conflict and that this relationship was moderated by level of perceived job control, such that the greater the perceived job control, the stronger the relationship became between job demands and work-life conflict. Attributes such as job demands and job control may be attributed to roles at a higher level of responsibility. Conversely, Grzywacz and Butler (2005), in their analysis of data from the 1995 U.S. National Survey of Mid-Life Development, found that higher levels of perceived authority and control led to higher levels of work-life facilitation, which they suggest may ameliorate the impact of work-life conflict. Therefore, in the current study, managerial status has been controlled for. Managerial status was entered as a binary variable such that if an individual noted that they managed others, they were coded as '1' and if they had no managerial responsibilities they were coded as '0'.

Last, household income was also entered as a control variable. Greater income may influence experiences of work-life conflict as it provides a material resource that

helps to minimize the impact of job demands, such that greater income can afford supports such as childcare resources that reduce the demands of the home environment. In addition to its importance as a material resource, research also suggests that perceptions of ‘imbalance’ between effort and reward may lead to higher levels of work-life conflict (Kinman and Jones, 2008). In their study of the impact of pay on U.K.-based university employees’ work-life conflict, Kinman and Jones (2008, p.236) used the Effort-Reward Imbalance Model (ERI), which suggests that “strain results from a perceived imbalance between the level of effort employees perceive that they put into their work and the rewards that they receive. Their research supports the idea that when employees perceive that the rewards they receive are imbalanced with the effort they have put in; greater work-life conflict is experienced (Kinman and Jones, 2008). In the current study, the host organisation did not allow for the collection of data on individual salary, but did allow for the collection of household income data which is used as a proxy for this control. Income data was captured in bands and for the purposes of this analysis the midpoint of each band, with the exception of the highest and lowest bands, was used as the income value. For the highest band, ‘€100,000 or more per year’, the lowest value within that band (€100,000) was used and for the lowest band, ‘less than €20,000 per year’, the highest value within that band (€19,999) was used. These values were selected as data provided by the company suggested that these figures generally represented the maximum and minimum salaries paid within the organisation and due to the extreme values of the low end (zero) and high end (infinity) boundaries, this seemed to the author to be a rational approach to assigning meaningful boundaries.

Although the host organization is located in the Netherlands, the employee population represents varying nationalities. In line with the spoken language used in the home office, the survey and interviews were conducted in English.

The full survey instrument used in this study can be found in *Appendix 1* at the end of this dissertation.

### **3.5 Analysis and Findings**

A preliminary exploration of the data was conducted using descriptive and correlation analysis. Table 3.1 presents the means, standard deviations and correlations for the study variables. Correlation coefficients among the study variables (excluding controls) ranged from -0.521 to 0.521, with the strongest correlations being found as expected among the outcome variables including organisational support and work-life conflict ( $r(93)=-.521, p<.01$ ), family/social support and work-life conflict ( $r(92)=-.519, p<.01$ ), organisational commitment and work-life enrichment ( $r(98)=.508, p<.01$ ), and organisational support and family/social support ( $r(98)=.488, p<.01$ ).

Relating to the first study hypothesis, the relationship between work location and segmentation supply is significant and positive, indicating that those working offshore experience more segmentation between work and non-work activities. This supports Hypothesis 1A. However, the correlation analysis shows that segmentation preference is not significantly correlated to work location, suggesting that those working offshore are no more likely to prefer segmentation than those based in the home office, meaning that Hypothesis 1B is not supported. Due to the cross-sectional nature of this research, this relationship could not be more fully tested;

however, the limited correlation suggests that the individuals in offshore roles have not necessarily ‘self-selected’ (Jansen and Kristoff-Brown, 2006) into roles that match a preference for segmentation.



**Table 3.1 Descriptive statistics and correlations among study variables**

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>
(1) Work location <sup>a</sup>	0.55	0.50	1												
(2) Gender <sup>b</sup>	0.14	0.35	-.224*	1											
(3) Tenure	4.67	4.76	-.131	-.193	1										
(4) Child (under 18) in home <sup>c</sup>	0.35	0.48	-.067	-.235*	-.091	1									
(5) Managerial status <sup>d</sup>	.039	.490	-.101	-.009	.182	.099	1								
(6) Household income	55,421	21,128	-.235*	.082	.192	.025	.318**	1							
(7) Work segmentation preferences	4.00	0.89	.110	.157	-.026	.133	-.203	-.104	1						
(8) Work segmentation supplies	3.30	0.82	.278**	-.069	-.086	.251*	-.019	-.052	.299**	1					
(9) Work-life conflict	2.42	0.66	.237*	-.086	.053	-.157	.131	-.149	-.016	-.215*	1				
(10) Work-life enrichment	3.24	0.63	-.099	.185	-.117	-.029	.016	.003	-.059	.072	-.039	1			
(11) Organisational commitment	3.26	0.69	-.224*	.053	-.012	.129	.156	.127	-.146	.088	-.151	.508**	1		
(12) Organisational support	3.29	0.55	-.224*	.089	-.056	.039	.125	.130	-.129	.071	-.521**	.250*	.497**	1	
(13) Family / social support	3.49	0.65	-.348**	.180	-.009	-.021	-.002	.153	-.159	.065	-.519**	.182	.298**	.488**	1

<sup>a</sup> 0=All or primarily home office-based, 1=All or primarily field-based, <sup>b</sup> 0=Male, 1=Female, <sup>c</sup> 0=No children 18 or under in home, 1=Presence of 1 or more children under 18 in home, <sup>d</sup> 0=Non-manager, 1=manager

\*\*p<.01, \*p<.05

In order to examine the level of fit between segmentation preferences and supply, and the relationship between level of fit and the outcomes of organisational commitment and work-life conflict, a three-dimensional response surface methodology for data analysis is recommended (Edwards, 1996, Edwards and Rothbard, 1999, Kreiner, 2006). The use of a response surface methodology has been found to be superior to other methods of assessing fit which often rely on the use of difference scores to assess the level of fit (Edwards, 1996, Kreiner, 2006, Ximénez and San Martín, 2000). The use of difference scores detracts from the relevance of the actual values assigned for the scores for preference and supply and neglects to take into account the variance within each of the individual measures, such that the measure with greater variance will have a greater relative influence on the relationship between the measures (Edwards, 2007, Kreiner, 2006, Ximénez and San Martín, 2000). Therefore, in order to test the hypothesized relationships, polynomial regression analysis was used to generate the relevant coefficients necessary for the response surface model. Polynomial regression allows for segmentation preference, as a representation of the 'person', and segmentation supply, as a representation of the 'environment', to be treated as separate constructs. This eliminates the issues associated with difference scores (Edwards, 2007).

Protocols outlined by Edwards (1996, 2007) and followed by Kreiner (2006) were utilized to perform the analysis. Polynomial regression was used and independent variables were centred on the variable means prior to the analysis in order to reduce multicollinearity (Aiken and West, 1991). In the first step (see Equation 1), the five control variables ( $C_{1-5}$ ) (gender, presence of a child in the home, tenure, managerial status, and household income) were entered as the independent predictors of the

dependent outcome variables ( $Z_{1-3}$ ) (work-life conflict, work-life enrichment and organisational commitment).

$$Z_{1-3} = b_0 + b_1C_1 + b_2C_2 + b_3C_3 + b_4C_4 + b_5C_5 + e \quad (1)$$

Next, in Step 2 (see Equation 2), the measures for segmentation preference (X) and supply (Y) were entered as additional predictors for the outcome variables.

$$Z_{1-3} = b_0 + b_1C_1 + b_2C_2 + b_3C_3 + b_4C_4 + b_5C_5 + b_4X + b_5Y + e \quad (2)$$

In Step 3 (see Equation 3), the interaction terms for segmentation preference and supply were entered as well as squared terms in order to account for linear and curvilinear relationships (Kreiner, 2006, Edwards, 2007).

$$Z_{1-3} = b_0 + b_1C_1 + b_2C_2 + b_3C_3 + b_4C_4 + b_5C_5 + b_4X + b_5Y + b_6X^2 + b_7XY + b_8Y^2 + e \quad (3)$$

Last, in Step 4 (see Equation 4), moderator variables (M) and their interactions were entered to determine if they have an impact on the relationship between fit and the outcome variables.

$$Z_{1-3} = b_0 + b_1C_1 + b_2C_2 + b_3C_3 + b_4C_4 + b_5C_5 + b_4X + b_5Y + b_6XY + b_7X^2 + b_8Y^2 + b_9M + b_{10}MX + b_{11}MY + e \quad (4)$$

The response surface models displayed in Figures 3.4, 3.5 and 3.6 are visual representations of the three-dimensional relationships between boundary preferences, supplies and the outcomes. The figures were created in Microsoft Excel by

calculating the linear and curvilinear slopes for both the 'fit' line ( $X=Y$ ) and the 'misfit' line ( $X=-Y$ ) and plotting the points using the unstandardized beta weights from the polynomial regression (Shanock, Baran, Gentry, Pattison and Heggstad, 2010). In each of the figures, there is a solid line representing perfect fit ( $X=Y$ ) whereby scores for preferences match scores for supply. For example, the point 2, 2 on the line would represent perfect fit between high preference for segmentation and organisational supply of segmentation. Data points to the left of this line indicate where preferences for segmentation are greater than the level supplied, while data points to the right of this line indicate where the supply of segmentation by the organisation exceeds the preferences of the individual (Edwards, 1996, Kreiner, 2006). In contrast, the horizontal, dashed line represents the line of misfit between preferences and supplies ( $Y=-X$ ) (Edwards, 1996). For example, the point 2, -2 on the line would indicate high preferences for segmentation but low organisational supply.

The first set of hypothesized relationships looks at work-life conflict as an outcome variable. As outlined above, in Step 1 the control variables of gender, presence of a child in the home, tenure, managerial status, and household income were entered into the equation as independent predictors of work-life conflict. Next, segmentation preference and supply were entered in Step 2, followed by the interaction term and tests for curvilinear relationships in Step 3. Last the moderator variable of family and social support and its interactions with segmentation supply and preferences were entered.

Table 3.2 shows the results of the regression analysis for the outcome of work-life conflict. As seen in the table, the change in  $R^2$  becomes significant after the quadratic and interaction terms are entered into the model, indicating that a non-linear relationship may exist and that a response surface method is appropriate (Edwards, 1996, 2007). Step 4 was intended to test the influence of family and social support on the relationship between preference-supply fit and work-life conflict. The findings of both the correlations ( $r(90)=-.519, p<.01$ ) and the regression models ( $\beta= -.472, P<.01$ ) indicate that family and social support does, in fact, have a significant negative relationship to work-life conflict. However, due to the lack of significance of the interaction terms, there is no evidence of a moderating relationship; therefore, Hypothesis 5 is not supported.

**Table 3.2 Polynomial regression analysis predicting work-life conflict**

<i>Step</i>	<i>Predictor variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
1	Gender	-.204	-.281	-.297	-.164
	Presence of children	-.282	-.236	-.228	-.200
	Tenure	-.008	-.010	-.008	-.001
	Managerial status	.364*	.367*	.380*	.221
	Household income	-.000	-.000	-.000	-.000
2	Segmentation preference		.069	.131	.068
	Segmentation supply		-.151	-.238*	-.225*
3	Seg. Pref. x Seg. Supply			.075	-.069
	Segmentation Pref <sup>2</sup>			.194*	.148
	Segmentation Supply <sup>2</sup>			-.262**	-.195*
4	Soc/Fam Support				-.472**
	Soc/Fam Support x Seg. Pref.				-.011
	Soc/Fam Support x Seg. Sup.				.133
	<i>R</i>	.335	.378	.504	.681
	<i>R</i> <sup>2</sup>	.112	.143	.254	.464
	$\Delta R^2$	.112	.031	.111	.210
	<i>F</i>	1.951	1.790	2.453*	4.590**

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

Gender was coded as male= '0' and female = '1'

Presence of children under 18 in the household was coded as yes= '1' and no='0'

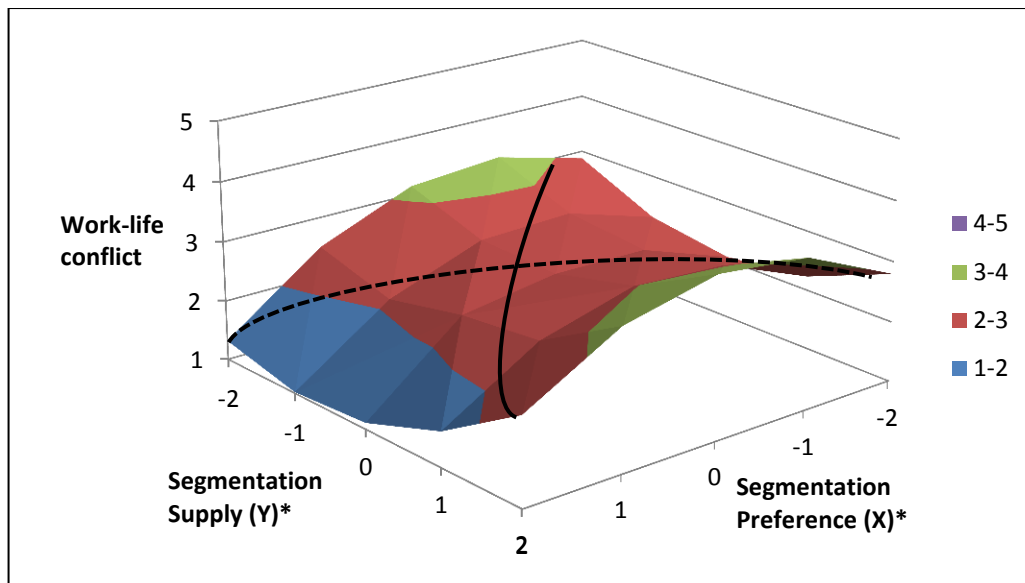
Managerial status was coded as manager='1' and non-manager='0'

Figure 3.2 shows the response surface model for the relationship between segmentation preferences, segmentation supply and work-life conflict. In order to interpret the results of the response surface analysis, the methods recommended by Edwards and Parry (1993) and used by Atwater et al. (1998), Kreiner (2006), and others have been followed. Using the beta weights from the polynomial regression, linear slope ( $a_1$ ) for the fit line ( $X=Y$ ) was calculated by adding the beta for segmentation preference ( $b_4$ ) and the beta for segmentation supply ( $b_5$ ) as follows;  $a_1 = b_4 + b_5 = -.123$ (NS). When  $a_1$  does not equal zero, then a linear slope along the line of perfect fit exists. For example, a negative slope would indicate that higher levels of congruence between segmentation preference and supplies lead to lower levels of work-life conflict. However, in this instance, the slope was not significantly different from zero. Next, the curvature associated with the line of perfect fit was calculated by adding the beta weights for the interaction and curvilinear terms as follows;  $a_2 = b_6 + b_7 + b_8 = -.016$  (NS). If  $a_2$  is positive, this indicates that the shape of the model curves upwards, while a negative value indicates it is concave. Either of these outcomes would indicate more extreme values (2, -2) for perfect fit yield different results from those found near the midpoint. However, the findings in this case were non-significant indicating no curvature along the fit line. Hypothesis 2 was not supported.

However, upon examination of the misfit ( $X=-Y$ ) line, the data show that  $a_3$  ( $a_3 = b_4 - b_5 = .369$ ,  $p = .01$ ) is positive. This indicates that at higher levels of misalignment between preferences and supplies, greater work-life conflict occurs. Tests for

curvature at the misfit line did not yield significant evidence of an upward or downward shape ( $a_4 = b_6 - b_7 + b_8 = -.0143$ , NS).

**Figure 3.4 Response Surface Analysis: Segmentation Preference, Supply and Work-Life Conflict**



\*scores are centred

Next, the relationship between segmentation preference, supply, and work-life enrichment was examined. Table 3.3 shows the results of the regression analysis and, similar to the results for work-life conflict, the change in  $R^2$  becomes significant after the segmentation-supply interaction term is entered into the model, indicating that a non-linear relationship may exist and that a response surface method is appropriate (Edwards, 1996, 2007).

Again, the final step in the regression was to test the influence of family and social support on the relationship between preference-supply fit and work-life conflict. The findings of both the correlations ( $r(90) = .182$ , NS) and the regression model ( $\beta = .141$ ,

NS) indicate that there is no relationship between family and social support and work-life enrichment. Therefore, Hypothesis 6 is not supported.

**Table 3.3 Polynomial regression analysis predicting work-life enrichment**

Step	Predictor variables	Model 1	Model 2	Model 3	Model 4
1	Gender	.226	.287	.185	.146
	Presence of children	-.016	-.030	-.015	-.008
	Tenure	-.016	-.014	-.017	-.015
	Managerial status	.089	.077	.014	-.022
	Household income	-.000	-.000	-.000	-.000
2	Segmentation preference		-.073	-.078	-.061
	Segmentation supply		.088	.042	.028
3	Seg. Pref. x Seg. Supply			-.252**	-.298*
	Segmentation Pref <sup>2</sup>			-.078	-.071
	Segmentation Supply <sup>2</sup>			.151	.132
4	Soc/Fam Support				.141
	Soc/Fam Support x Seg. Pref.				-.077
	Soc/Fam Support x Seg.				.068
	<i>R</i>	.177	.216	.385	.412
	<i>R</i> <sup>2</sup>	.031	.047	.148	.170
	$\Delta R^2$	.031	.016	.101	.022
	<i>F</i>	.500	.523	1.252*	1.087

\*\*p<.01, \*p<.05

Gender was coded as male= '0' and female = '1'

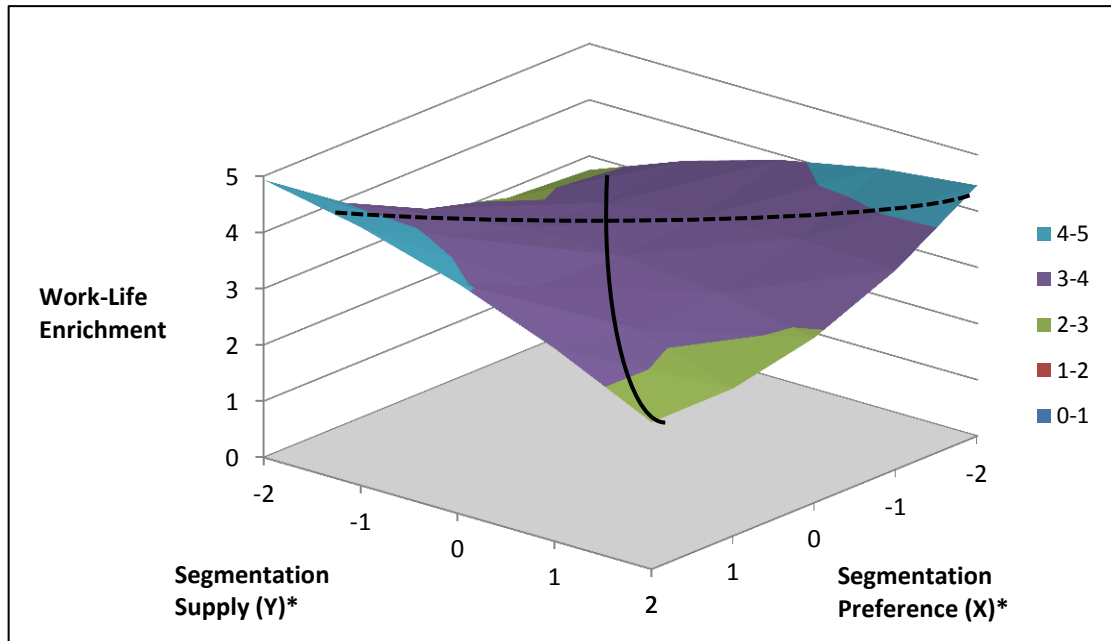
Presence of children under 18 in the household was coded as yes= '1' and no='0'

Managerial status was coded as manager='1' and non-manager='0'

Figure 3.3 shows the response surface model for the relationship between segmentation preferences, segmentation supply and work-life enrichment. The linear slope of the fit line ( $X=Y$ ) ( $a_1 = -.036$ , NS) and the curvature ( $a_2 = -.179$ ) were not significant, therefore Hypothesis 3 was not supported. When examining the misfit line ( $X=-Y$ ), no linear slope was found ( $a_3 = .120$ , NS); however, the data show a convex (upwards-curving) shape ( $a_4 = .325$ ,  $p < .05$ ), meaning that enrichment is slightly higher at extreme values of misfit.



**Figure 3.5 Response Surface Analysis: Segmentation Preference, Supply and Work-Life Enrichment**



\*scores are centred

Last, the relationship between segmentation preferences, supply and organisational commitment was examined. Table 3.4 shows the results of the polynomial regression. Again, similar to the results for work-life conflict and enrichment, the change in  $R^2$  becomes significant after the segmentation-supply interaction term is entered into the model, indicating that a three-dimensional relationship may exist and that a response surface method is appropriate (Edwards, 1994, 1996).

The final step in the regression was to test the influence of organisational support on the relationship between preference-supply fit and organisational commitment. The findings of both the correlations ( $r(90)=.497, p>.01$ ) and the regression models ( $\beta=.377, p<.01$ ) indicate that organisational support is significantly related to organisational commitment; however, there is no evidence of a moderating relationship within the interaction terms, therefore Hypothesis 7 is not supported.

**Table 3.4 Polynomial regression analysis predicting organisational commitment**

Step	Predictor variables	Model 1	Model 2	Model 3	Model 4
1	Gender	.148	.223	.148	.059
	Presence of children	.172	.154	.173	.172
	Tenure	.000	.003	-.001	.002
	Managerial status	.060	.045	.023	-.008
	Household income	.000	.000	.000	.000
2	Segmentation preference		-.091	-.176*	-.124
	Segmentation supply		.108	.109	.053
3	Seg. Pref. x Seg. Supply			-.131	-.087
	Segmentation Pref <sup>2</sup>			-.194*	-.158*
	Segmentation Supply <sup>2</sup>			.117	.043
4	Organisational Support				.377**
	Org. Support x Seg. Pref.				.028
	Org. Support x Seg. Supply				.047
	<i>R</i>	.210	.272	.440	.573
	<i>R</i> <sup>2</sup>	.044	.074	.194	.328
	$\Delta R^2$	.044	.030	.120	.134
	<i>F</i>	.710	859	1.733	2.588**

\*\*p<.01, \*p<.05

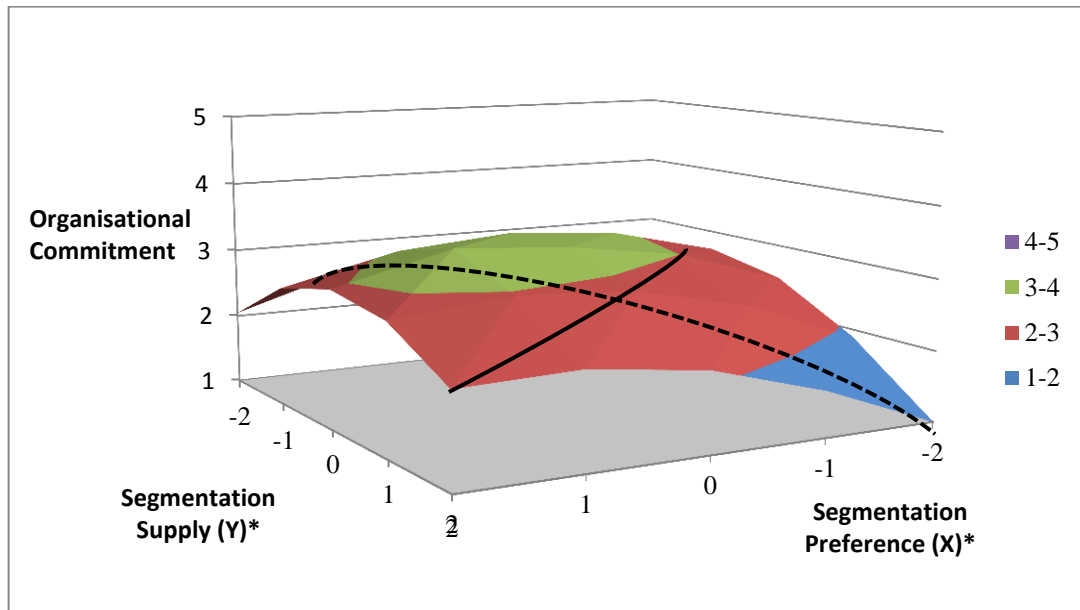
Gender was coded as male= '0' and female = '1'

Presence of children under 18 in the household was coded as yes= '1' and no='0'

Managerial status was coded as manager='1' and non-manager='0'

Figure 3.4 shows the response surface model for the relationship between segmentation preferences, segmentation supply and organisational commitment. The linear slope of the fit line ( $X=Y$ ) ( $a_1 = -.067$ , NS) and the curvature ( $a_2 = -.208$ ,  $p < .05$ ) were not significant, indicating no significant difference in level of organisational commitment along the line of fit. Hypothesis 4 was therefore not supported. However, when examining the misfit line ( $X=-Y$ ), a significant negative slope ( $a_3 = -.285$ ,  $p < .05$ ) was found, indicating that at higher levels of misfit, levels of organisational commitment are lower. Tests for the curvature of the shape around the misfit line were also significant ( $a_4 = -.442$ , NS) suggesting that at the highest levels of misfit, organisational commitment declines significantly.

**Figure 3.6 Response Surface Analysis: Segmentation Preference, Supply and Organisational Commitment**



\*scores are centred

### 3.6 Discussion

Combined, the results of this analysis make a significant contribution to the literature on highly segmented employment patterns as well as the literature on person-environment fit and boundary preferences. First, the data showed a clear relationship between offshore working and perceived organisational supply of segmentation, such that off-shore workers perceive their work environment to lead to more segmentation between their home and work role than those who are office based. While this finding was expected, one possible explanation for it may have been that workers preferring segmentation were more likely to work in off-shore roles. However, the findings did not support this self-selection premise (that workers who prefer high levels of segmentation self-select into these off-shore roles). This means that workers who prefer more integrating work environments may find that high levels of workplace segmentation can lead to the risk of ‘misfit’ between their preferences and their work environments. The data demonstrate that this ‘misfit’ can lead to

increased work-life conflict as well as reduced organisational commitment. A practical implication that may be derived from this finding is that employees may not necessarily be aware of the role segmentation that shift-based and offshore jobs may elicit. In addition, they may not be aware of their own preferences. One remedy to this situation would be improved assessment for boundary preference upon recruitment and better information relating to this aspect of these jobs could be provided to potential employees. This would allow both organisations and employees to better determine if they are suited for these roles.

Next, the relationship of 'fit' between segmentation preference and segmentation supply and work-life outcomes was examined. The results were initially disappointing as the core hypotheses relating to the level of fit and each of the outcomes were not supported. However, rather than the line of 'fit', the line of misfit emerged as a significant predictor of the outcomes in two of the models. First, examining work-life conflict as an outcome, the positive slope relative to the misfit line indicates that at higher levels of misalignment, greater work-life conflict occurs. Similarly, when examining the misfit line for organisational commitment, the data show that at higher levels of incongruence, levels of organisational commitment are lower. These findings suggest that it is the level of misfit that has a greater impact on individual outcomes relating to boundary preferences than the level of fit. In other words, while high levels of fit may not lead to enhanced outcomes, high levels of misfit, may have negative implications. Voydanoff (2005a, p.823) conceptualizes the idea of misfit as "occurring when demands and needs exceed abilities and supplies". She suggests that in many cases, individuals engage in boundary work that realigns perceptions of the environment with preferences, but that those without

the skills or resources to manage their boundaries experience negative work-life consequences: “the negative relationship between misfit and balance exists only for those who do not use boundary-spanning strategies” (Voydanoff, 2005a, p.832). For example, a working parent who prefers keeping work and non-work activities segmented may end up needing to bring work into the home environment if their hours at work are constrained by childcare resources. A study by Rothbard et al. (2005) support this idea that misfit between segmentation preferences and organisational supply is an important consideration as many employees are constrained from shaping their boundaries in a way that supports their preferences. “Decoupling the enactment of boundary management strategies from desires for these approaches provides greater theoretical clarity because it enables us to examine the fit between people's desires and the organizational context. In many cases, individuals may enact particular strategies of boundary management because of organizational constraints (e.g., which policies are actually available), perceived societal expectations, or other familial or personal expectations (Nippert-Eng 1995)” (Rothbard et al., 2005).

In the extreme environment of rotational, offshore work, it is likely that workers experience significant boundary constraints when they seek to increase the integration between their non-work and work roles. Given the long-term, physical separation between roles, employees may experience difficulties in attempting to reshape their boundaries to better match their preferences (Rothbard et al., 2005). Organisations that employ shift workers or offshore employees may need to consider more creative strategies for boundary preference and organisational resource alignment. One strategy that might be considered is to create more flexibility within

the environment in order to allow workers a greater degree of control as to how they manage their work and non-work boundaries. For example, providing resources such as adequate technology aboard vessels and platforms to use email and Skype might enable employees to have more frequent, regular contact with their family.

Similarly, allowing workers to schedule regular breaks during the day that coincide with family routines may help workers ensure that they are able to check-in with their children before bedtime or engage with friends after work.

Another possible explanation for the significant role of misfit may be the domain centrality of the participants. The measure of domain centrality is defined in the literature as a way to “determine how central work or family is in (their) lives” (Carlson, Kacmar and Williams, 2000, p.1035). Edwards and Rothbard (1999, pp.98-99) suggest that “as domain centrality increases, S-V misfit should have a stronger relationship with well-being, given that deviations of supplies from values in a domain considered more important should be experienced as more threatening to the person’s overall self-esteem”. For example, in the case of the off-shore employees, those with a high level of family domain centrality may find that the long-term, segmented nature of their off-shore roles creates conflict because it limits the ‘supply’ of interaction with family members. This idea is also supported by research conducted by Winkel and Clayton (2010). They examined the combined effects of flexibility willingness in work and family roles and role centrality. They found that the greater the role salience of a work or family role, the more likely employees were to make the alternate role boundary flexible, such that those with high family role centrality were more likely to enact flexible boundaries related to their work roles (Winkel and Clayton, 2010). This suggests that when employees are

unable to enact flexible boundaries related to less salient roles, they may experience higher levels of negative work-related outcomes. Kossek et al. (2012, p.160) suggest that “the ability to craft an individually tailored boundary management approach is of benefit to many individuals who might otherwise be out of alignment with their organizational work–life climate. When employees have some power to negotiate work and family relationships, it is possible for almost everyone to have an I-deal at some point in their life. Rather than having to leave the firm, an individual will be less likely to struggle with work–life conflicts, and be better able to adapt the situation they are in.”

This is a new and important contribution to the literature on boundary management that has implications for organisational practices. It suggests that misfit must be identified and addressed in order for employees to have better work experiences. In addition, in conjunction with Voydanoff’s (2005a) conceptual model, this suggests that misfit can be addressed by the introduction of boundary work activities and resources that may lead to some realignment between perceived segmentation and integration of the work environment and individual preferences. This becomes even more important in extreme work environments, such as offshore work, where, due to the very high levels of segmentation supply, misfit is more likely to occur and boundary management may become more difficult. Similarly, as will be examined in later chapters in this dissertation, employee perceptions of highly integrating work environments, such as homeworking, also need to be carefully examined as misfit among those preferring work-life segmentation may be more likely to occur.

A disappointing finding from this study was the lack of support for the hypotheses that family and social support would moderate the relationship between fit and work-life conflict and enrichment, and that organisational support would moderate the relationships between and fit and organisational commitment. However, the data showed that each of the measures of support was significantly related to the outcome measures, independent of the level of fit. One possible explanation for the lack of significance for support as a moderating variable would be that support is actually a direct antecedent to work-life outcomes. This idea is supported by the bivariate correlations contained in Table 3.1, which indicate significant correlations between the types of support and the outcomes for each of the hypothesized models (shown in Figures 3.1-3.3). Prior research also supports these direct relationships. For example, Carlson and Perrewé's (1999) research with governmental employees in the U.S. found that family and social support was a significant negative predictor of time and resource demands in the home environment, which then resulted in reduced work-life conflict. In addition, in their research with alumni of business and management Master's programmes, Thompson et al. (1999) found that organisational support, based on the measurement of work-family culture, had a positive relationship with affective commitment and negative relationships with work-life conflict and intentions to leave the organisation. Similarly, Beauregard (2006), in her research with UK public sector employees, found that managerial support negatively predicted work-home interference.

In addition, this finding may imply that support can supplement fit in employment situations where an individual's preferences are not met by the organisation. For example, an offshore worker who finds that the high level of segmentation between



home and work roles is causing conflict when making transitions between home and work may be able to reduce this conflict if her friends and family are supportive of the nature of her job demands. This might be particularly important for positions where finding an individual whose skills and preferences match the position is difficult, such as in offshore work. From a practical perspective, employers may look at ways to provide additional forms of support to these types of workers and their families in order to counter the negative effects of a mismatch between boundary preferences and organisational supplies.

### **3.7 Limitations**

The study was conducted within a single organization. This is a benefit, in terms of presenting a unique opportunity to compare different occupational contexts under a single management structure. However, it may limit the ability to generalize the study's findings to other organizations. In addition, due in part to the limited number of total employees within the organization, the sample size was limited. Although the response rate was high, the limited sample made it more difficult to identify significant relationships.

In addition, this research utilized self-report measures obtained at a single point in time, which may introduce a common method bias. The risk inherent in common method bias is that because one individual provided the values for both the independent and dependent variables, the nature of the relationship between these variables may be subject to bias inherent to the respondent (Podsakoff and Organ, 1986, Podsakoff, MacKensie, Lee and Podsakoff, 2003). In order to understand the potential impact of common method bias on the relationship in the models included in the chapter, confirmatory factor analysis was performed (Beauregard, 2011,

Podsakoff et al., 2003). Using Harman's single factor test, the variables constituting each of the hypothesized models were entered in a confirmatory factor analysis in order to see if the variance between the variables was better between explained by a single factor, which would indicate that common method bias may be present (Meade, Watson and Kroustalis, 2007, Podsakoff et al., 2003). None of the three sets of relationships indicated that a single factor accounts for the majority of variance in the models, suggesting that common method bias is not significantly impacting the data.

### **3.8 Conclusion**

In conclusion, this chapter offers new empirical data that help to understand the relationship between the fit of people and their environment relative to boundary preferences. This research suggests that employers and employees need to be aware of the negative consequences relating to misfit, which has implications both at the recruitment stage of the employment relationship as well as during on-going employment. For example, employers may want to make an assessment as to what level of work-home segmentation the roles in their organisation supply, in order to present a clear picture to potential employees. In addition, they may ask employees to assess their own preferences in order to determine if a potential misfit is present. Similarly, as employees progress to different positions within the organisation and their life circumstances (i.e. marriage, children, elder care) change, continued assessment of fit, as well as support and options to remedy misfit should be considered by employers.

In addition, this research suggests the importance of developing support networks, both in the home and work environment in order to create a better buffer for when

misfit occurs. While offshore workers represent an extreme example of an alternative work context, comparisons can be made to other groups of workers who might have a greater risk of misfit, such as telecommuters, individuals who spend significant percentages of the year travelling, expatriates, and other groups working alternative schedules, all of whom are becoming more prevalent in today's changing workforce.

## **Chapter 4: Mind the Gap: Negotiating Boundaries between Work and Home**

- 4.1 Introduction
- 4.2 Homeworking
  - 4.2.1 Overview of Homeworking in the UK
  - 4.2.2 Outcomes of Homeworking
  - 4.2.3 Defining Homeworking
- 4.2 Literature on Boundary Management
  - 4.2.1 Boundary Work
  - 4.2.2 Boundary Management Strategies
  - 4.2.3 Boundary Strategies and Homeworking
- 4.3 Method
- 4.4 Findings
  - 4.4.1 What are the boundary strategies and tactics used by individuals who work from their home environment?
  - 4.4.2 Do homeworker boundary strategies match their preferences for integration or segmentation?
  - 4.4.3 How do boundary management strategies differ among employees at different levels of homeworking?
  - 4.4.4 What happens when boundary management strategies are unsuccessful and boundary violations occur?
- 4.5 Discussion
- 4.6 Limitations
- 4.7 Conclusion

## 4.1 Introduction

Having examined the impact of high levels of work-home segmentation on Person-Environment Fit in Chapter 3, this chapter introduces new research with workers for whom the occupational context represents high levels of work-home role integration. The employment context for this research is that of homeworkers. Whilst the practice of ‘working from home’ can occur in varying degrees, the Office for National Statistics defines homeworkers as “people who work mainly from home (either in their own home, or in different places using home as a base)” (Ruiz and Walling, 2005, p.418). By nature, the practice of homeworking represents a more integrative approach toward managing the work-home boundary as the natural physical, and often temporal, boundaries associated with office environments are removed. Using qualitative data gathered in interviews with homeworkers, partial homeworkers, mobile workers and office-based workers, this chapter explores the work-life boundaries among these employees and addresses the second core research question outlined in the introductory paragraph;

*How can boundary strategies be implemented in order to establish or re-establish person-environment fit, when there is mismatch between organisational supply of segmenting-integrating practices and worker preference?*

Specifically, this chapter seeks to offer a better understanding of the strategies used to create boundaries, the relationship between these boundaries and preferences for segmentation and integration, the differences in boundary strategies at different levels of homeworking intensity, and to develop an understanding as to the impact to employees when boundaries fail or are violated.

First, this chapter will provide an overview of homeworking in the UK and discuss some considerations related to homeworking from the literature. Next, prior research on the benefits and drawbacks of homeworking will be reviewed, followed by an examination of the relationship between homeworking and work / non-work boundaries. Benefits and drawbacks associated with homeworking and boundary management will be identified. Next, this chapter will review the limited, but growing body of literature that examines boundary management strategies. Then, using thematic analysis, this chapter will present the findings of this study and identify the different types of strategies employed by homeworkers to manage their work and non-work boundaries, how well these boundaries reflect worker preferences for work / non-work role integration or segmentation, and how these boundary management strategies differ at varying degrees of homeworking. This chapter will also explore the consequences of what happens when boundaries are violated. Last, this chapter will conclude with some practical implications from this research for both individuals and organisations.

This research contributes to the growing literature on boundary management strategies by offering evidence of the practical arrangements that intensive homeworkers undertake in order to reduce work and non-work boundary blurring. This chapter puts forth the idea that intensive homeworking can lead employees to develop more rigorous physical, temporal, behavioural and communicative tactics for managing work and non-work boundaries such that the level of permeability is reduced to that found among their counterparts who work in office-based environments (Kreiner et al., 2009). In addition, this information can serve as a

practical guide to homeworkers who are looking to put into place a boundary structure that will support successful homeworking. To the best of the author's knowledge, this is the first study to explore boundary management among workers in similar positions, but working at varying levels of homeworking within the same organisation. This allows for direct comparisons between homeworkers, partial homeworkers, mobile workers and office-based workers engaged in similar roles within one organisational structure. In addition, because this sample contains many extensive homeworkers, some working all but one day per month at home, it allows for the examination of boundary management strategies and consequences associated with extensive levels of homeworking. This is an important contribution to literature on homeworking as there is little consensus in the literature as to the 'optimal' amount of homeworking and little variation in the types of supports developed for individuals working at different levels.

## **4.2 Homeworking**

### **4.2.1 Overview of Homeworking in the U.K.**

Similar to other forms of flexible working such as flexitime, compressed work weeks and job sharing, homeworking is increasingly offered as a benefit to UK employees in an effort to assist them with balancing their work and non-work activities and responsibilities. The prevalence of homeworkers in the UK workforce has increased substantially over the last several years. According to the Office for National Statistics, the percentage of the UK workforce using a telephone and computer to carry out their work from home increased from 4% in 1997 to 8.9% in 2007. The majority of homeworkers in the UK are considered "teleworkers", defined by the Office for National Statistics as "people who work mainly in their own home or

mainly in different places using home as a base, who use both a telephone and a computer to carry out their work at home” (Ruiz and Walling, 2005, p.418).

#### **4.2.2 Outcomes of Homeworking**

In order to understand more about the relationship between extent of homeworking, work and non-work role boundaries and work-life outcomes, it is important to look at individual and organisational outcomes that are associated with homeworking in the literature. These include benefits to individuals such as work-life balance, autonomy and well-being (Bailey and Kurland, 2002, Fonner and Roloff, 2010, Golden, Viega and Simsek, 2006, Sullivan and Lewis, 2001, Thomas and Ganster, 1995) as well as organisational benefits including improved performance, cost savings and improved employee attitudes to work (Barnatt, 1995, Baruch, 2002, Fonner and Roloff, 2010, Golden, 2006, Sanchez et al., 2007).

Prior research looking at individual motivations to homework has suggested that a core benefit of homeworking is enabling employees to facilitate work-life balance (Bailey and Kurland, 2002, Golden, 2006, Thomas and Ganster, 1995). This link between homeworking and improved work-life balance has been supported empirically in several studies (Gajendran and Harrison, 2007, Golden et al., 2006). For example, in their study of telecommuters at a high-tech firm, Golden et al. (2006) found that telecommuting was associated with lower levels of work-life conflict, particularly when employees perceived scheduling flexibility and job autonomy, such that flexible practices that offered employees more scheduling control led to greater ability to manage work and family demands. Similarly, in their meta-analysis of mediators and consequences of telework, Gajendran and Harrison (2007) found a



negative relationship between telecommuting and both work interference with family and family interference with work.

As referred to above, one of the mechanisms by which homeworking helps to promote work-life balance is by giving employees greater autonomy and control of work scheduling and decision-making (Golden, et al., 2006, Gajendran and Harrison, 2007). For example, in their study of professional workers at three multinational organisations, Kelliher and Anderson (2010) found that employees working a reduced amount of time in the office, due to either remote working or reduced hours, was positively associated with job satisfaction and organisational commitment, despite work intensification, due to perceptions that the organisation offered employees greater control over their working patterns. Similarly, in their qualitative research with homeworkers and their “co-residents”, Sullivan and Lewis (2001, p.133) found that teleworkers most frequently cited “increased independence and autonomy in the scheduling of their work” as a work-related benefit of their working arrangements.

Closely linked to increased autonomy and control over working patterns is individual well-being. Research has long demonstrated that autonomy and control over work scheduling and decision-making promotes individual well-being (Hackman and Oldham, 1980, Karasek, 1979, Karasek and Theorell, 1990, Thomas and Ganster, 1995). However, research with homeworkers presents a mixed case for the benefits of homeworking on individual well-being. While there is some evidence that homeworking may reduce job-related stress via reduced work-life conflict (Fonner and Roloff, 2010, Golden et al., 2006), reduced commuting time (Yap and Tng,

1990) and greater flexibility (Gajendran and Harrison, 2007, Kelliher and Anderson, 2010, Sullivan and Lewis, 2001), there is also evidence that telecommuting can have a negative impact on individual well-being. Recent research suggests that telecommuting can actually increase work-life conflict due to the increased permeability of boundaries that is often a result of bringing work into the home environment (Kossek et al., 2006). In their study of professionals at two information and financial services firms, Kossek et al. (2006) found that teleworkers with boundary management strategies that had a high degree of integration reported higher levels of work-life conflict.

Last, a common concern relating to homeworking is isolation. By reducing the day-to-day communications with co-workers and managers, homeworkers may experience both social and professional isolation (Banita and Dwivedi, 2009, Cooper and Kurkland, 2002). For example, using a grounded theory methodology in their study of telecommuters, their peers and supervisors, Cooper and Kurland (2002) found that telecommuting was associated with a greater sense of professional isolation resulting in reduced access to professional development activities. Similarly, Baruch and Nicholson (1997) found that, among homeworkers, telecommuting was also associated with an increase in social isolation and was a reason why employees elected to work at home less often.

It is also important to consider the outcomes for organisations relating to homeworking. Many organisations cite improved individual and team performance, organisational commitment and engagement as well as employee job satisfaction as reasons for offering homeworking programs (Baruch, 2002, Sanchez et al., 2007). In

interviews with UK teleworkers, Baruch (2002) found that teleworkers attributed their increased performance outcomes to fewer distractions from work in the home environment. Similarly, Sanchez et al. (2007) found evidence that, among small to medium sized firms in Spain, overall firm performance was higher among firms offering flexible working arrangements, including telework, flexitime and contingent work.

Considering employee attitudes toward work, Golden (2006), in his study with teleworkers at a large internet solutions business, found that teleworking was positively associated with organisational commitment and negatively associated with turnover intentions. Similarly, Fonner and Roloff (2010) found that intensive teleworking was positively associated with job satisfaction, via reduced work-life conflict, and frequency of information exchange. Golden (2006), however, also found a more complex set of relationships between teleworking and job satisfaction, mediated by the quality of relationships with peers, managers and family members.

While the above review of outcomes looks at the relationships between the presence and use of teleworking / homeworking practices and individual and organisational outcomes, Kossek et al. (2006, p. 348) put forth the argument that research should also consider “individuals’ psychological experiences with flexibility” defined as “psychological job control over where, when, and how one works, beliefs that one can choose to separate work–family boundaries”. They posit that an individual’s perceptions of control over the flexibility of their environment is an important aspect of the work-life interface for future research to consider and that boundary

management strategies are one vehicle through which individuals can enact this control (Kossek et al., 2006).

### **4.2.3 Defining Homeworking**

Sullivan (2003, p.163) challenges the notion that single definitions for teleworking and homeworking can be used consistently across studies and argues that often “project-specific” definitions will better serve research in this area. Specifically, she argues that factors which must be considered include transportation issues, use of information and communication technology, work location, the extent or proportion of work that is carried out from the home and contractual arrangements between the homeworker / teleworker and the organization (Sullivan, 2003). For example, experiences of homeworking may differ for those whose primary reason for homeworking is to avoid a lengthy commute versus those who use homeworking as a way to extend their working hours. In terms of information and communication technologies, many definitions of teleworkers focus on the use of ICTs; for example, the UK Labour Force Survey made the use of computers and telephones one of the key distinctions between teleworking and other forms of homeworking in the 1997 LFS (Ruiz and Walling, 2005, Sullivan 2003). However, standard definitions related to ICTs can often fail to take into account factors such as whether and how often ICT is used to facilitate communication and / or as a replacement for verbal communication between the home and the office (Sullivan, 2003). If technology does, in fact, facilitate communication between employees at home and employees in the office, concerns about the impact of telework on knowledge-sharing and isolation may be minimized.

Work location and the extent of work carried out from home can vary based on the nature of work being conducted. For example, some employees, such as those in sales or service occupations, may use home as a base for their work, but spend very little time actually conducting work activities within the home. Cohen's (2010) study of mobile hairdressers compared the concepts of "working while mobile", which refers predominantly to white collar workers, to "mobility as work" which applies to professions such as cycle couriers and pilots and "mobility for work" which might refer to plumbers, migrant farmers or other types of sales professions. These differences can have an impact on the realisation of positive benefits of homeworking such as scheduling control, control over work decisions and the facilitation of caring arrangements (Cohen, 2010). For example, in her qualitative interviews with mobile stylists who travel to their clients versus seeing clients in a salon, Cohen (2010, p.80) found that mobile hair stylists were less likely to have control over their work hours because they needed to be free when their clients needed them and they were often subject to last minute scheduling changes. These "mobile for work stylists" differ from other types of workers for whom "working while mobile" might enable them to have more control over their work schedule (Cohen, 2010, p.80). In addition, work context and location may impact potential downsides to homeworking such as isolation and loss of knowledge sharing (Bailey and Kurland, 2002). For example, looking at the issue of social isolation in his review of the homeworking literature, Baruch (2001, p.120) notes that "another distinction with specific relevance here is between the mobile teleworker such as the salesperson who meets customers on a daily basis and the homeworker, confined to his/her work-station". Among those identified as homeworkers in the 2005 UK

Labour Force Survey, only 3% indicated that they work mainly in their own home (Ruiz and Walling, 2005).

Last, the nature of the contracts between employees and the organisation can impact experiences of homeworking. Sullivan (2003) points out that self-employed workers or those working on a contract basis with organisations may have different experiences of working from home. Self-employed workers are likely to have different patterns of communication with organisations they work for and may have less control over work scheduling and decisions (Standen et al, 1999). In addition, some organisations may have limits as to how little or how much employees can work from home. Factors that may influence the nature of these contracts include the availability of space in the office and whether employees are paid for their time and / or costs to commute to the office.

Empirical research supports the idea that variations in the nature of homeworking (i.e. extent), can lead to divergent outcomes (Bailey and Kurland, 2002). Although much of the research on telework suggests that teleworking leads to increased job satisfaction (Fonner and Roloff, 2010, Manoochehri and Pinkerton, 2003), other studies have found that this relationship is dependent, in part, on the extent and nature of teleworking. For example, in their research with telecommuters at a large, high tech firm, Golden and Viega (2005, p.313) “suggest that there may be a crucial threshold in the amount of time an individual can telecommute beyond which the benefits of additional gains in job satisfaction are not accrued”. The following research acknowledges this debate and therefore utilizes extent of homeworking as a

continuous measure in order to explore outcomes of homeworking at varying levels of intensity.

### **4.3 Literature on Boundary Management**

#### **4.3.1 Boundary Work**

The previous chapters of this dissertation reviewed the literature on boundary preferences, demands and resources, as well as the impact of ‘fit’ between preferences and the actual boundaries enacted by individuals. This chapter will continue to explore enacted boundaries and the strategies that individuals use to negotiate, maintain and protect these boundaries. Boundaries are cognitive social constructions of the borders between activities (Kreiner et al., 2009, Nippert-Eng, 1996a; Voydanoff, 2004). Boundary violations can occur when an individual’s preferences are not matched by their work or home environments. Kreiner et al. (2009, p.704), from their qualitative research with Episcopal priests, developed a definition of boundary violations as “behaviours, events, or episodes that either breach or neglect the desired work-home boundary”. Prior research has documented a range of negative outcomes associated with a lack of fit or congruence between a person’s segmentation-integration preferences and their environment, including lower job satisfaction and organizational commitment, and increased stress and work-life conflict (Rothbard et al., 2005; Kreiner, 2006). However, further research has demonstrated that boundary violations don’t necessarily occur as a steady state; there is an interactive process of “boundary work” by which the individual responds to boundary violations (Bulger et al., 2007, Kreiner et al., 2009, Nippert-Eng, 1996a, p. xiii).

Nippert-Eng (1996a, p. xiii) describes “boundary work” as “the never-ending, hands-on, largely visible process through which boundaries are negotiated, placed, maintained, and transformed by individuals over time”. Boundary work is an interactive process by which individuals build and maintain the boundaries between domains in their lives and negotiate any differences between their preferences for integration or segmentation and the supply offered to them by their home and work environments (Nippert-Eng, 1996a, Kossek et al., 1999). For example, if employees have a preference for an impermeable boundary around their home environment, but they perceive that the culture of their office is to integrate work activities beyond the work physical location and hours, they may employ boundary tactics that minimize evening interruptions such as refusing to carry a Blackberry or leaving their work mobile phone in the car at the end of their evening commute.

Several theoretical models support the idea of boundary work. Boundary Theory in its most basic form differentiates blocks of ‘space’ and ‘time’, each of which is bordered by ‘frames’, that can be attributed to differing roles in one’s life environment (Zerubavel, 1991). As such, using Boundary Theory, we can classify some activities and experiences as being related to our ‘work’ domain and others as relating to our ‘family’ domain (Zerubavel, 1991, Ashforth, Kreiner, & Fugate, 2000). Clark (2000) further specifies her examination of boundaries to literature on work-life relationships with the development of Border Theory. She identifies three types of borders that individuals can maintain between their home and work lives; physical, temporal and psychological borders (Clark, 2000). Physical boundaries are the location in which home and work activities take place. Temporal boundaries refer to the actual timing for which work and home activities take place (Clark,



2000). Last, psychological boundaries draw on Kurt Lewin's ideas on "life space", and are those that encompasses the perceptions and beliefs embodied in our home and work roles (Clark, 2000, Hall and Richter, 1988, Lewin, 1939: p.868). In addition, Clark begins to identify factors within the home and work environments that impact the level of permeability of boundaries such as an individual's level of identification with a domain. For example, if an individual identifies more strongly with the role they play in their home environment, he or she may allow greater permeability of their work boundary for non-work interruptions. In addition, Clark discusses the impact of "border-keepers" or those that are "especially influential in defining the domain and border", such as managers or spouses, partners in boundary development. Often these individuals have some control over the boundary demands and resources provided by work and home roles.

Kossek et al. (1999) developed the theoretical model of Work-Family Role Synthesis, which they define as "the strategies an individual uses to manage the enactment of work and caregiving roles" (Kossek et al., 1999, p.105). Work-family role synthesis is enacted through an individual's decision-making processes relating to "role embracement" and "boundary management" (Kossek et al., 1999, p.105). Role embracement refers to the decisions an individual makes about how much effort and energy to put towards a particular role. For example, a working parent with a new job opportunity may work above and beyond the expectations of his or her new role in order to succeed, relying on a partner to manage childcare and household activities. Decisions relating to boundary management are influenced by an individual's preference for the integration or segmentation of work and non-work roles (Kossek et al., 1999, Nippert-Eng, 1996a). "Though it involves mental activity,

boundary management is enacted through practical and visible activities involving decisions concerning boundary separation” (Kossek et al., 199, p.106). For example, an individual who prefers segmentation between work and non-work roles may elect not to carry a Blackberry so as to minimize work interruptions during personal time.

Last, earlier research by Pleck (1977) on the Work Family Role System emphasized the role that others in the work and home environments, such as managers and spouses, have on the development of boundaries. According to Pleck (1977, p.417), the Work Family Role System “is composed of the male work role, the female work role, the female family role, and the male family role”. The permeability of the work and family boundaries are impacted by role demands and gendered expectations of the level of involvement with each role. For example, at the time Pleck’s research was published, female boundaries were hypothesized to be asymmetrically permeable such that women were more likely to allow family responsibilities to interrupt their work activities rather than the reverse. Similarly, Kossek et al. (1999) suggest that when considering boundary management strategies, one must consider the input and outcomes that involve not only the individual but also the organization and family due to the socially constructed nature of these boundaries. For example, Beehr et al. (1995), in their study of police officers and their wives found some congruence in the coping strategies shown by the officers and their spouses. In addition, the use of coping strategies was significantly negatively correlated to some types of spousal strain (Beehr et al, 1995).

### **4.3.2 Boundary Management Strategy**

There is a limited but growing body of literature on the strategies that individuals use to create, maintain and renegotiate the boundaries between work and non-work roles. Kossek and Lautsch (2012, p.152) define boundary management style as “the general approach an individual uses to demarcate boundaries and attend to work and family roles”. Most of the existing literature on boundary management consistently identifies four types of tactics that individuals use to manage the boundaries between their home and work environments; including physical, behavioural, temporal and communicative strategies (Clark, 2000, Felstead and Jewson, 2000, Kreiner et al, 2009, Nippert-Eng, 1996a, b).

Physical boundary strategies concern the location where work and non-work activities take place as well as how the physical artefacts associated with each domain are used (Clark, 2000, Kreiner et al., 2009, Nippert-Eng, 1996a, b). For example, Kreiner et al.’s (2009) research with Episcopal priests identified tactics that created physical space or barriers between work and home, such as opting to live further from the church. Similarly, in their research on work at home, Felstead and Jewson (2000, p.121) discuss spatial “marking”, or the creation of physical boundaries around work space at home, as one of the key self-management tasks facing homeworkers. Kreiner et al.’s research also found that the Episcopal priests engaged in “managing physical artefacts” that represent the work domain, such as ensuring that church mail did not enter the home environment (Kreiner et al., 2009, p.717). Similarly, in her work on how individuals define their work and home environments, Nippert-Eng (1996b) found that individuals preferring different levels of work-home segmentation-integration differed in their use of physical artefacts

such as calendars and keys. For example, individuals preferring greater segmentation between work and home carried separate calendars and sets of keys for work and non-work activities, while those preferring higher levels of integration combined them (Nippert-Eng, 1996b).

Temporal boundaries are concerned with the times during which work and non-work activities take place (Clark, 2000). In Kreiner et al.'s (2009) work with Episcopal priests, the creation of temporal boundaries utilized tactics such as taking control over deciding which hours of the day will be allocated to work versus non-work activities. For example, some participants reported taking a few hours at home during lunch in exchange for working later hours in an evening (Kreiner et al., 2009). Spoonley et al. (2002) examined the ways that independent workers in knowledge-based professions balanced the work-non-work interface. Drawing on Felstead and Jewson's (2000) propositions relating to the "marking" of temporal boundaries, Spoonley et al (2002, p.430) found that workers engaged in processes of "temporal marking" such as developing weekly or daily time-based routines relating to work tasks or work to non-work transitions. For example, in their study many workers organised their schedules around the times that the children left for school and returned home (Spoonley et al., 2002).

Research on work-life boundaries has also identified behavioural strategies for setting and maintaining boundaries between work and non-work activities. In Kreiner et al.'s (2009) research with priests, these behavioural tactics included actions like using other people or technology such as caller-ID to control the flow of interruptions between work and non-work domains. Other recent research has also

explored the use of technology as a behavioural tactic to manage the work / non-work boundary. For example, Matusik and Mickel (2011) analysed the varied reactions of users to “converged mobile devices” (p.1001) such as Blackberries, Treos and iPhones. Their research showed that different users had different perceptions of the benefits and drawbacks of using these devices based on who they were expected to be connected to, how many individuals they connected with using these devices, and why they initially sought or were given the device (Matusik and Mickel, 2011). Their findings indicated that workers used boundary management strategies such as turning off their Blackberries in the evenings and on weekends, when their feelings about the devices (i.e. level of enthusiasm) did not necessarily match the “responsiveness-accessibility expectations” of those they used the device to communicate with (Matusik and Mickel, 2011, p. 1011).

Last, research has also identified communicative and relational strategies associated with building the boundaries between home and work (Kreiner et al., 2009, Sturges, 2012). For example, in Kreiner et al.’s (2009) research with Episcopal priests, participants used communicative tactics to set clear expectations for parishioners and family members as to when they were available for work and non-work activities (Kreiner et al., 2009). Similarly, in her work with young professionals, Sturges (2012, p.15) found that participants used “relational crafting” or “managing and using relationships at work and at home to secure and reinforce the kind of work-life balance that an individual wanted to achieve”. An example of this relational crafting might be making managers and colleagues at work aware of non-work commitments so that, should an issue arise, they might offer greater understanding and autonomy to employees to manage their boundaries as needed (Sturges, 2012).

### **4.3.3 Boundary Strategies and Homeworking**

Homeworking often removes the traditional boundaries between an individual's work and non-work domains. Drawing on the three types of boundaries (physical, temporal and psychological) identified in Clark's (2000) work on Border Theory, homeworking can be envisaged as impacting two, if not all three types of boundaries between home and work. Physical boundaries, those which determine the location at which work activities and non-work activities occur, become blurred with homeworking because often work and home activities are taking place in the same location. Similarly, in part due to the blurring of physical boundaries, temporal boundaries, which denote the timing that work and non-work activities are engaged in, can also become blurred as homeworkers may be able to move back and forth between work activities and non-work activities throughout the day (Ashforth et al., 2000, Clark 2000, Hall and Richter, 1988). Last, the psychological boundaries, which denote our perceptions of the activities associated with work and non-work roles, may also become blurred as role identities overlap due to the shared location and frequency of transitions (Ashforth et al., 2000, Clark, 2000, Hall and Richter, 1988, Lewin, 1939).

Prior research has supported the idea that homeworking presents a unique challenge to the management of boundaries because many of the traditional physical and temporal boundaries associated with an office environment are absent (Felstead and Jewson, 2000, Kossek et al., 2006, Olson-Buchanan and Boswell, 2006, Raghuram and Wiesenfeld, 2004). However, some research has suggests that intensive homeworkers have developed boundary management strategies that recreate the types of strong boundaries traditionally found in an office environment (Felstead and

Jewson, 2000, Mustafa and Gold, 2012, Spoonley et al., 2002). One explanation for the strength of the non-work boundary at high levels of homeworking could be that intensive homeworkers have developed alternate strategies to manage the boundaries between work and non-work activities into order to better match their boundary preferences. Prior research supports this explanation. In their study of self-employed teleworkers in France, the UK and the US, Mustafa and Gold (2012, p.14) found that their study participants “strove to create a physical work location separate from their home life (detachment) and to establish routines to break up the day into work and non-work time”. Based on these earlier findings, the first two research questions to be addressed in this chapter seek to explore the boundary management strategies and tactics employed by those working in their home environment.

*What types of boundary strategies are used by individuals who work from their home environment?*

*How do worker preferences for integration or segmentation influence homeworker boundary strategies?*

While there is a great deal of literature that compares homeworking with other types of flexible working practices as well as employment contexts which offer homeworking versus those that do not, very little research has been conducted which compares outcomes at varying degrees of homeworking within organisations. For example, both Felstead and Jewson (2000) and Spoonley et al. (2002) studied boundary management techniques adopted by homeworkers, but neither study examined the impact of the extent or frequency of homeworking on the outcomes.

Golden, Viega and Dino (2008) studied the impact of homeworking on worker isolation and work outcomes. Their research found that amount of time spent teleworking did have a significant impact on these outcomes, suggesting that those working from home at varying levels may experience the job context differently. Therefore, in order to understand how intensive homeworkers differ from those working fewer hours from home or primarily in an office environment, this research further seeks to compare boundary management strategies among these different categories of workers. The third research question to be addressed in this chapter is as follows:

*How do boundary management strategies differ among employees at different levels of homeworking?*

The first three research questions examine strategies for the successful management of boundaries between work and non-work activities. The final goal of this chapter is to explore what happens when boundary strategies are unsuccessful and boundary violations occur. There is limited research on boundary violations aside from Kreiner et al.'s (2009) study with Episcopalian priests, which found that boundary violations were associated with increased work to life conflict. However, prior research has associated weaker boundaries, which are likely to be more susceptible to breach, with outcomes including increased work to life conflict (Ashforth et. al., 2000, Clark, 2000, Olson-Buchanan and Boswell, 2006) and a decreased ability to detach from work, which can negatively affect employee engagement and well-being (Sonnentag, Binneweis and Mojza, 2010). Therefore the final research question to be addressed in this chapter is as follows:



*What is the impact on homeworkers when boundary management strategies are unsuccessful and boundary violations occur?*

### **4.3 Method**

The data in this chapter were collected using semi-structured, in-person interviews with employees of a medium-sized large, public sector body that provides a range of advisory and other services to businesses in Great Britain, with offices across England, Scotland and Wales. A purposive (systematic, non-probability) sampling approach was used in the recruitment of interview participants (Marshall, 1996).

This approach was used to ensure that the research participants represented the broad range of roles and experiences that might be found within the organisation based on job role and seniority, location and type of working arrangement and gender.

Although this method of sampling cannot be statistically representative of other groups of workers, it allowed for the exploration of a variety of homeworking experiences that might not be adequately explored using a scientific sampling method (Mays and Pope, 1995). “This method of purposive sampling is used when the aim is to select people who possess specific characteristics in order to illuminate the phenomena being studied, rather than to select a representative sample drawn from a population” (Emslie and Hunt, 2009, p. 157).

A total of 40 interviews were conducted with employees of the organisation.

Interviews were conducted in four locations; at the London headquarters as well as regional offices in Leeds, Bristol and Cardiff. All interviews were conducted in person and were recorded. Interviews ranged in length from 35 to 90 minutes.

Individuals who reported that they engaged in homeworking and / or were managers

were asked a slightly longer series of questions. Question topics included general working patterns, homeworking benefits and drawbacks, managing homeworkers, communications, information technology, work-life outcomes, boundaries and preferences, task interdependence, autonomy and control and organizational culture and support. The full interview guide used in this study can be found in *Appendix 2* at the end of this dissertation.

Among the interview participants, 21 were men and 19 were women. The average tenure with the organisation was 14.6 years. A total of 29 interview participants were married or in a similar relationship and 22 participants indicated that a child under the age of 18 was living in their household. A full breakdown of interview participants by gender, tenure, presence of children in the household, job role and extent of homeworking can be found in Table 4.1.

As can be seen in Table 4.1 many of the research participants held the job role of Advisor or Advisor Manager. Advisor job functions were to assist businesses and employees with the resolution of employment disputes before they reach the employment tribunal. Some participants were engaged in individual advisory services, between an individual employee and their employer; while others were involved in collective advisory services, which involved disputes between trade unions or other collective groups of employees and their employer. Advisors were assigned their own cases and worked fairly autonomously to attempt to bring their cases to resolution. Advisory managers oversaw the individual Advisors. Other roles held by research participants include those who analysed employment policy and developed advisory recommendations, trade union representatives, information

technology support staff, telephone advisors who provided general advice to members of the public on a call-in basis, as well as individuals in various senior leadership positions.

The working patterns of study participants represented a range of working arrangements. Table 4.1 identifies the study participants in terms of their weekly working arrangements. Among the 40 participants, 13 reported that they were ‘homeworkers’; those who worked from home for the majority of their week and were designated by the organization as homeworkers. Many of these employees reported coming into the office as little as once per month. Another 5 participants were ‘partial homeworkers’, who reported spending substantial proportions (more than 20% and less than 50%) of their workweek working from home, with the remainder of their time spent in the office. Another 5 participants were classified as ‘mobile workers’ because they tended to move back and forth between home and the office, and also travelled for work purposes and worked on the road. This group of workers tended to use their home as a base to work *from*, but did not necessarily do their work *at* home. Of note, this group was the most varied in terms of their working arrangements, often due to the demands of their jobs. The final group of participants consisted of 17 office-based workers. While these workers were officially designated by the organisation as office-based, many of them occasionally worked from home or on the road and were able to comment on experiences of homeworking.

**Table 4.1 Demographic breakdown of research participants**

<i>Participant*</i>	<i>Gender</i>	<i>Tenure</i>	<i>Marital status</i>	<i>Presence of Children in Household</i>	<i>Weekly working arrangements</i>	<i>Job Role</i>
Kate	F	16 years	N	N	Partial homemaker	Advisor Manager
Thomas	M	12 years	Y	N	Mobile worker	Senior Management
Joe	M	21 years	Y	N	Mobile worker	Senior Management
Grace	F	20 Years	N	Y	Partial homemaker	Advisor Manager
Daniel	M	27 years	N	Y	Mobile worker	Senior Management
Gavin	M	16 years	N	Y	Partial homemaker	Advisor
Rachael	F	14 years	Y	Y	Partial homemaker	Advisor
Amy	F	23 years	Y	Y	Mobile worker	Policy / trade union
Oliver	M	18 years	Y	Y	Partial homemaker	Advisor Manager
Harold	M	8 years	Y	Y	Mobile worker	Policy / trade union
Jessica	F	12 years	Y	N	Homemaker	Advisor
Imogen	F	17 years	Y	N	Homemaker	IT
Paige	F	8 years	Y	N	Homemaker	Advisor
Henry	M	24 Years	Y	N	Homemaker	Advisor
David	M	21 years	Y	N	Homemaker	Advisor
Jasmine	F	15 years	N	Y	Homemaker	IT Manager
Laura	F	22 years	Y	Y	Homemaker	Advisor
Ella	F	18 years	Y	Y	Homemaker	Advisor
Leah	F	15 years	Y	Y	Homemaker	Advisor
Jack	M	16 years	Y	Y	Homemaker	Senior Management
Alexander	M	13 years	Y	Y	Homemaker	Advisor
Jacob	M	12 years	Y	Y	Homemaker	Advisor
Scott	M	17 years	Y		Homemaker	IT
Elizabeth	F	8 years	N	N	Office-based worker	Telephone Advisor
Kimberly	F	19 years	N	N	Office-based worker	Advisor
Jonas	M	6 years	N	N	Office-based worker	Advisor
Kevin	M	8 years	N	N	Office-based worker	Telephone Advisor
Samuel	M	10 years	N	N	Office-based worker – 1-2 days at home/on road	Advisor Manager
Caroline	F	11 years	Y	N	Office-based worker	Telephone Advisor
Victoria	F	27 years	Y	N	Office-based worker	Policy / trade union
Matthew	M	26 years	Y	N	Office-based worker	Advisor
Mohammed	M	5 years	Y	N	Office-based worker - occasional work at home	Senior Management
Brooke	F	4 years	Y	N	Office-based worker	Advisor
Gretchen	F	5 years	N	Y	Office-based worker	Manager
Colleen	F	7 years	Y	Y	Office-based worker (PT)	Telephone Advisor
Sara	F	8 years	Y	Y	Office-based worker	Advisor Manager
Benjamin	M	22 years	Y	Y	Office-based worker	Advisor
Charlie	M	13 years	Y	Y	Office-based worker	Senior Management
Edward	M	15 years	Y	Y	Office-based worker	Advisor Manager
Lewis	M	5 years	Y	Y	Office-based worker - 1 day at home	Senior Management

\* All names have been changed to protect respondent confidentiality.

Thematic analysis was used to analyse the interview transcripts (King, 2004). The initial coding template was developed from the portion of the interview topic guide that focused on work-life boundaries and was refined and expanded to include

hierarchical levels during the process of reviewing the transcripts (King, 2004). For example, the original template included only ‘1 – Current Working Arrangements’, however this was expanded to capture ‘2 – Reasons for Current Working Arrangements’ as it became clear that some homeworking arrangements were ‘employee-driven (2a)’ and some were ‘manager-driven(2b)’, based on iterative reviews of the interview transcripts. The coding framework drew on existing literature on homeworking as well as work-life boundary theories relevant to the research questions as a basis for the initial thematic coding categories. For example, the first research question sought to explore the types of boundary strategies employed by homeworkers, therefore the coding categories made use of the existing literature which has identified behavioural, communicative, physical and temporal strategies (Clark, 2000, Felstead and Jewson, 2000, Kreiner et al, 2009, Nippert-Eng, 1996a, b). Additional categories for type of strategy would have been added if the coding had identified alternative strategies, but none were revealed.

The second question sought to explore the influence of an employee’s individual preferences for work/non-work role segmentation vs. integration on their boundary strategy. Therefore, coding categories for segmentation preference and integration preference were set up based on Nippert-Eng’s (1996a) identification of a continuum of individual preferences relating to these categories. These categories have been validated by numerous other work-life boundary researchers (Bulger et al., 2007, Kreiner, 2009, Rau and Hyland, 2002). During the coding process, a few new categories were introduced to the coding framework as they identified meaningful differences in participant experiences relating to their preferences as well as their perceptions of boundary violations (see question 4). These categories included

degree of control, perceived flexibility and reciprocity. Findings relating to these categories will be further discussed in Section 4.4.2.

The third question sought to explore the differences in boundary strategies at varying levels of homeworking. Initially, the coding framework utilised the categories provided by the organisation that reflected the formal designation of the employees as either ‘homeworkers’, ‘flexible workers’ or ‘office-based workers’. However, upon examination of the participant responses, it was noted that these categories were not entirely reflective of the actual homeworking practice that was occurring throughout the organisation. Therefore, these categories were adjusted to reflect the true differences between working patterns. The new categories included ‘full homeworkers’, ‘office-based workers’, ‘mobile workers’ and ‘partial homeworkers’. In addition, as referred to earlier, categories were added relating to the source of the decision for an individual’s current working pattern. It was quickly revealed during the interviews that some participants were working from home because their local office had closed and homeworking was the only way for them to retain their job. Due to the possible impact this might have of work-life outcomes and the potential for boundary violations, categories identifying ‘employee-driven’ versus ‘organisation or manager-driven’ homeworking patterns were added.

The final research question sought to identify what happened when boundaries were violated. In order to evaluate the impact of boundary violation, coding categories relating to work-life outcomes were included in the initial framework. In addition, as noted above, additional codes related to degree of control, perceived flexibility and

reciprocity were added as the analysis suggested that these factors might influence respondent perceptions of boundary violations.

Additional codes that were initially included in the framework related to benefits of homeworking and office-based work, as well as concerns about homeworking were removed from the framework as they did not make a meaningful contribution to the research questions explored in this chapter.

Last, as this interviews were part of a larger project on homeworking with multiple research objectives, there was a great deal of data in the transcripts that was not coded into the framework used in this chapter as it was not relevant to the research questions. However, it is important to note that the interview transcripts were reviewed in their entirety, not just the subsections of the interviews relating to questions on boundary management. Any data relevant to these research questions and this coding framework was saved and coded.

Coding was performed by the author of this dissertation; however, the coding framework was reviewed by the dissertation supervisor. NVivo 9™ was used during the coding and analysis of the data. Table 4.2 presents the final coding template from the research.

**Table 4.2: Final Coding Framework**

- 1.) Current working arrangements
  - a. Office-based working
    - i. Occasional homeworking
    - ii. No homeworking
  - b. Homeworking (majority of time)
  - c. Flexible working
  - d. Mobile working
  - e. Partial homeworking
- 2.) Reasons for current working arrangements
  - a. Employee-driven
  - b. Manager-organisation driven
- 3.) Boundary preferences
  - a. Segmentation
  - b. Integration
- 4.) Enacted boundaries
  - a. Segmentation
  - b. Integration
  - c. Boundary violations
  - d. Degree of control
  - e. Perceived flexibility
  - f. Reciprocity
- 5.) Boundary strategies
  - a. Behavioural Tactics
  - b. Communicative and Relational Tactics
  - c. Physical Tactics
  - d. Temporal Tactics
- 6.) Work-life outcomes
  - a. Conflict
  - b. Facilitation / Enrichment
- 7.) Benefits of homeworking
  - a. For homeworkers
  - b. For office workers
  - c. For the organization
- 8.) Benefits of working from the office
- 9.) Concerns about homeworking
  - a. Career aspirations
  - b. Extending working hours
  - c. Health and safety
    - i. Managing the stress of the job
    - ii. Isolation
  - d. Knowledge transfer
  - e. Impact on office workers

**Note:**

- Items in green were added to the initial framework during the coding process.
- Items in red were deleted from the framework during the coding process.
- All items in black were retained from the initial coding framework.



## 4.4 Findings

### 4.4.1 *What types of boundary strategies are used by individuals who work from their home environment?*

The interviews yielded evidence of strong boundary management strategies that helped to recreate boundaries similar to those which might be found in an office-environment. For this question, interviews with all participants who indicated that they participated in homeworking were included in the analysis. This included homeworkers, partial homeworkers, mobile workers and even those categorized as office-based workers, who may have less frequent experiences with homeworking, but may be more likely to employ boundary strategies as the ad hoc homeworking may mean that they do not have dedicated spaces and routines for homeworking. In total, only 6 participants reported that they had no experience of homeworking and were excluded from this analysis. Consistent with the prior literature on boundary management strategies, the interviews demonstrated the use of physical, temporal, behavioural and communicative strategies for managing boundaries (Clark, 2000, Felstead and Jewson, 2000, Kreiner et al, 2009, Nippert-Eng, 1996a, b). The most commonly indicated method by which homeworkers and flexible workers maintained their boundaries between home and work was through recreating the physical boundary of an office environment by having separate, designated areas for work activities.

*I work in the back of the garage looking out at the garden. So to me when I shut that door and go indoors that is like leaving the office. So it is quite separate for me. I mean I don't hear the phone or anything like that because it's at the end of the garage and that's my office. (Ella, homeworker, advisor)*

*I am one of the lucky ones, I actually have a dedicated office. I've got a door and a lock. So I didn't have to do the mental changing of shoes, it's a case of switching my computer off and closing the door. I know some of my colleagues have a work space in their living room. It is switching off the phone and all those stress factors of having it in plain sight. I don't have that. (Sarah, homeworker, advisor)*

Homeworkers who did not have the ability to create a separate space for work activities often struggled with the lack of a physical boundary between home and work.

*So I worked in the dining room for two years. No consideration to my situation was offered or did I even think it would be considered to be perfectly frank but I went with the fact that I still have a job. A job that I enjoy, largely and that I would have no costs of travelling. I saw those as the benefits. I had to convince my new wife to be that it was a good idea. So for two years whilst we had dinner, tea, lunch, the computers and my files sat next to us. It was far from ideal especially if the children had time off. (Henry, homeworker, advisor)*

Again, consistent with prior literature on boundary management strategies, homeworkers also used temporal tactics to create boundaries between home and work activities (Clark, 2000, Felstead and Jewson, 2000, Kreiner et al, 2009, Nippert-Eng, 1996a, b). Often, these mimicked routines that might be found in an office environment.

*I have dogs to walk. So there is always at least a natural break around five o'clock where I meet up with friends and we walk the dogs. So that signals that it is the end of the working day for me. It doesn't mean to say that is when I elect to stop working but it does give me that focus of this is the end of the day. (Kate, partial homemaker, advisor manager)*

*To get to the point, most people know my working pattern because I am quite regular about it. So they know if they want to get in touch with me do it before half past four or you'll have to wait until the next day... so I may take five minutes but after that I am not interested in my work's phone until the next morning. When I am coming in on the train I might have another look at that point in time but that is only because there is nothing else to do. (Sara, office-based worker, advisor manager)*

Again, reflective of earlier research on boundary management (Kreiner et al., 2009, Matusik and Mickel, 2011), homeworkers also used behavioural strategies to maintain the boundaries between home and work. In this sample, the behavioural strategies were primarily related to the use of telephone and computer equipment.

*I wouldn't answer the phone after close of business time because the danger with that is then that people think you are available 24/7 and those calls become later and later and later. I actually switch the phone off so that I am not even tempted to hear it and then if it is just me and the PC that is fine. (Kate, partial homemaker, advisor)*

*I work hard when the kids are at school, less hard when they are at home and I do voice type duties when they are away so it is quieter and more mundane, administrative stuff if they are there so it doesn't really matter so much. (Oliver, partial homemaker, advisor manager)*

Last, the interviews also found evidence of communicative tactics by which homeworkers were able to reinforce boundaries between work and non-work activities. Many of these tactics involved communicating with spouses and children about issues like noise in the household and the use of space designated for work activities.

*I have to have a rule with my children that if they are at home and I am working then they have to knock on the door and then if they come in to the room and they see I am on the telephone they just don't start babbling away. That can be a very hard lesson for them to learn. (Jack, homemaker, senior manager)*

*I only get around to taking a lunch break because my husband comes up and goes, eat some food. He literally physically removes me from my seat and sends me on my way down so we have something to eat but that's because I become focused and I have no track of time at all, absolutely no track of time. (Imogen, homemaker, IT)*

*I suppose the other thing is your personal support network. I happen to be married to someone who gives me a severe telling off if I switch the Blackberry on over the weekend. Your personal support network I think is one of the crucial*

*factors in helping you to keep that balance. That is how I do it. (Mohammed, office-based worker, senior manager)*

#### **4.4.2 How do worker preferences for integration or segmentation influence homeworker boundary strategies?**

Similar to the first research question, interviews with all participants who had some experience of homeworking were analysed for this question. In total, only 6 participants were excluded from this analysis due to their lack of experience with any homeworking. Although much has been written about the fact that homeworkers experience blurred boundaries due to the removal of physical boundaries between home and work (Ashforth et al, 2000, Clark 2000, Hall and Richter, 1988), findings from these interviews suggested that homeworkers are able to develop strategies that align their enacted boundaries to their preferences for segmentation or integration. In fact, boundary preference emerged as a better predictor of enacted boundaries than extent of homeworking.

*I just prefer that way of working. So if I am enjoying myself in my private life I don't want work to encroach on that but similarly if I am concentrating on work I don't want to be taken away from that. That is just how I am. Some people don't like flitting. I like boundaries. (Rachael, partial homeworker, advisor)*

*I'm very disciplined. I have a separate work space and even when I didn't I still was very disciplined in psychologically feeling I was in a separate work space. I managed to emotionally block out all the stuff that needed doing at home and just*

*focus on work. I think a less self-disciplined person might find it difficult. (Grace, partial homemaker, advisor)*

*I am a butterfly. I go backwards and forwards. I quite like that actually, switch on, switch off. (Charlie, office-based worker, senior manager)*

Perceived level of autonomy and control emerged as a factor which assisted employees with matching their enacted boundaries to their preference. Employees with higher levels of autonomy and control were better able to engage integrating or segmenting strategies to match their boundary preferences. In general, respondents working from home some or all of the time reported higher levels of autonomy and control, in part due to their working arrangements, but also due to the autonomous nature of advisory work done by many of these respondents.

*Well it's my choice, isn't it? It's about the boundaries that you put in yourself, isn't it really? It is down to me. (Laura, homemaker, advisor)*

*I liked the quiet of working from home and the fact that it was easier to plan your day out. I know that sounds a bit bizarre but it was easier to plan your day out and if you'd got to a point of well I've had enough for now, I really do need to take a break, you could take that break but still come back and get your work done. (Kate, partial worker, advisor manager)*

*I didn't regard that as encroaching. To me that was the deal. To a certain extent it could still be if I chose, maybe, to have a long lunch hour on a Friday afternoon and then do some work on a Saturday morning but it would be my choice. (Grace, partial homemaker, advisor)*

*...as I say I like to sling it all in a drawer and walk out and work's done . . .yes for me it just works that work is work and when I've done that my time is my time and that is how I like to operate. (Matthew, office-based worker, advisor)*

#### **4.4.3 How do boundary management strategies differ among employees at different levels of homeworking?**

The interviews yielded evidence that boundary management strategies were used to create the highest levels of segmentation among very infrequent homeworkers and among those homeworking quite extensively. As noted in the analysis for Question 1 above, the boundary management tactics used by intensive homeworkers often mimicked the boundaries described by office-based workers, creating high levels of segmentation between work and non-work roles. Among mobile workers and partial homeworkers who spent fewer days working from home, boundary strategies were less rigorous and seemed to foster higher levels of role integration and more frequent transition between work and non-work roles.

The 17 office-based workers frequently relied on the natural physical and temporal boundary supports provided by an office-environment to create separation between work and non-work activities.

*I think having that set deadline when you've got to leave by an hour or you've had it kind of gives me that cut off point and that balance. So then because I haven't got the software at home I can't do anything at home. So I've got a clear cut off. So I am OK with my life balance at the moment. (Brooke, office-based worker, advisor)*

*I mean I think I am fortunate in the role that I am doing. I readily switch off from work when I leave work and particularly on the (call-in line) it is a good role in that respect because there is no in tray and no out tray with it. So you come in and do the task for the day and it may be stressful during the day but equally when you go home there is nothing coming in. (Colleen, office-based worker, telephone advisor)*

In addition, office-based workers also used behavioural and communicative tactics involving communications technology to further strengthen the boundary between work and non-work activities.

*I don't want a Blackberry, for example, I don't want to be too contactable. It's bad enough that I pick up things at home. That is one of the things that some people feel difficult to let to go, it's homeworking and they feel they have to (Benjamin, office-based worker, advisor).*

*One of the things I've done is that with the Blackberry you are always tuned in to work and as soon as that light goes you want to know what is going on. So I now*



*have my separate mobile phone and I have purposefully switched off the Blackberry and created space. (Charlie, office-based worker, senior manager)*

Several office-based workers acknowledged that it would be difficult for them to enact these boundaries without the structure of working in an office-environment.

*I'd be useless at it. I know I'd be useless at it. I don't have the discipline. I would get in to that habit where I wouldn't get up in the morning to start and then I wouldn't stop at the end of the day. I think I would lose that line. (Brooke, office-based worker, advisor)*

*I just get distracted by everything, distracted by what I need to do, put the washing machine on, put the dishwasher on, ooh television. I know my limitations therefore I choose to come in to the office. (Victoria, office-based worker, policy / trade union rep)*

Among the 5 mobile workers and 5 partial homeworkers in the sample, boundary strategies tended to be less rigorous and both working patterns, as well as the employee attitudes toward working patterns, were more flexible. This provided evidence of more frequent transitions between home and work roles and greater work / non-work role integration.

*There are times when you could easily switch off. I mean weekends I don't work weekends or very occasionally, there would have to be a good reason to do it. I think during the week the working hours are a bit more flexible because there is a*

*bit of give and take for the days that you want a bit of time to yourself during the day to go the school play. (Gavin, partial homeworker, advisor)*

*So it is not necessarily home, it is just a location away from the office. So you don't have to be at home. I think that is the benefit. I can live a life with my kids before six o'clock because six o'clock might be the time you'd usually be getting home. If they want to go to their tutor or they want to go swimming or they've got a music class I can sit in the car if they're inside and I can keep working and that I think is the beauty of it. (Oliver, partial homeworker, advisor manager)*

*So there is a big difference between working from home in work time and if you elect to work from home in your own time because that is a personal choice and you can do it or not do it and you can do it at your own pace. So I am very aware that yes I might be doing more hours but it is personal and I don't have to do it. I do it because it is my preference to. (Kate, partial homeworker, advisor manager)*

*I feel I am more productive because I can work far more flexibly. So when I need to do work in the evening I don't need to stay in the office to do it. I can come home or I am at home, I can stop work, do other things and do some work later in the evening if I need to. (Joe, mobile worker, senior management)*

In addition, mobile and flexible workers indicated high levels of control over their working patterns, something which did not emerge as clearly among full homeworkers and office-based workers.

*Again it is just having the control. I might get up at four o'clock in the afternoon and say, that's it, I am going to do x, y, z or I could go and collect my son from school. So it just works for me. (Amy, mobile worker, policy and trade union rep)*

*I think the opportunity to work from home lets you plan a day. Lets you plan your working week better because I decide what I will do at home. So if I am doing lots of intense figure work or report writing then I will schedule to do it from home. When I need to see staff and have team meetings of course those are the days that I will be in the office. So it does enable you to focus more on your working week. (Daniel, mobile worker, senior management)*

*I have my cases which are allocated to me and I deal with them as I see fit within the broad framework of [Organisation's] rules of do's and don'ts. As long as I stay inside that box of the do's and don'ts basically I deal with it however I see fit. (Gavin, partial homemaker, advisor)*

*Now I think that one of the best ways of dividing the week is by taking control of your diary rather than being managed by it. So I try and designate a day a week*

*from working from home and I do that in advance. (Thomas, mobile worker, senior management)*

Among the 13 full homeworkers in the sample, boundary management strategies tended to be more formal and focused on creating segmentation between home and work roles. In this analysis, homeworkers and comments from those who indicated that their role involved the management of homeworkers were considered. As noted in the findings from Question 1, those working extensively from their home environment tended to recreate some of the traditional physical and temporal boundaries found in offices in their home environment.

*I remember when I first started and they sent me to go and observe how a homemaker worked at home. I got there at something like ten o'clock in the morning and I said, are we having a cup of tea then? He said, yeah but it's at half past (tea break) while he was sat in his own bedroom, which seemed to me a bit bizarre. So the formality was being applied to the domestic setting, which replicated what he might do at work... He would get up and get dressed and go in to the office even though it was only a walk along his own corridor and he would want set meal times etc. and that's the way that he dealt with it. I think some people like a bit of formality like that around things. (Thomas, mobile worker, manager of homeworkers)*

*It's our conservatory so that it where our desks and PCs are so when we log in that is where we do it from. On the weekends to try and keep it clear, you get*

*Blackberries with emails, I try to turn off emails to my phone and I suppose I try and keep it separate like that sometimes where I make an effort to log off when everything is fine. I don't log in then from that PC all weekend. I've got a separate laptop to do personal surfing on. So I try not to think about work then.*  
(Scott, homemaker, IT)

*Well I've got a separate room where I do work so that is entirely separate from everything else in the house which helps. I've been in some other people's homes where they basically work in the kitchen with family and other things around which is much less than ideal. I don't like that arrangement. I am separate. I can leave my office space when I stop work and I can go back there when I start work. So physically the layout is good for me.* (Alexander, homemaker, advisor)

#### **4.4.4 What is the impact on homeworkers when boundary management strategies are unsuccessful and boundary violations occur?**

Despite the strong presence of boundary tactics, employees working from home in this sample did experience boundary violations. Similar to the analysis for the first two research questions, interviews with all participants with some experience of homeworking were analysed for this question. In total, only 6 participants were excluded from this analysis due to their lack of experience with any homeworking. Overall, the interviews demonstrated that non-work to work boundary violations, whereby something in the home environment interrupted work activities, were more likely to occur than work to non-work violations, causing work-home conflict.

*Stress, not stress, it just becomes fractious, you are screaming at children to sit there and be quiet and that would usually happen in school holidays or at times when you've got an urgent phone call to make or an important phone call to make and you don't want them shouting in the background. Those are the rubbing points but other than that it is fine. (Oliver, partial homemaker, advisor)*

*I guess it is difficult for the children because all they've ever known is me working from home where most of their friends' dads aren't at home and sometimes if I am in the office and it's a nice day, they'll say come and play football. I will say, no I can't I am at work at the moment. The oldest two understand it because they've grown up but the youngest one who is seven doesn't always understand it but he gets the general idea, so yeah. (Paul, homemaker, advisor)*

Work-home conflict caused by non-work to work boundary violations was not only experienced by those working from home. Office-based workers also report similar non-work to work conflict.

*I'd find it most inconvenient if I had a call from my son's school to say he'd taken ill and I had to leave work because I am one of those people that pre-plan my day and any interruption like that can be very irritating but if I have to go I have to go. (Gretchen, office-based worker, manager)*

Although reports of work to non-work boundary violations were infrequent, mobile workers, partial homeworkers and homeworkers reported finding temporal boundaries the most difficult to enforce.

*I think partly that is a bit of a conundrum of why you sometimes feel a bit stressed. I think if I were based in the office it's easier to say, right I'm going home, I've got a train to catch, if this person doesn't phone me in the next two minutes that's it I'm going. I'm gone, they've missed the boat and I go. When you are at home you haven't got that train. You can go downstairs and make the tea or do something around the house and then if the phone goes in 20 minutes' time or half an hour's time you can go up and you can answer it and it is that person saying, I've thought about and can we do this, can we do that and can we talk for ten minutes and you would do it. (Gavin, partial homeworker, advisor)*

*...because I live on my own and because I am by nature a bit of a workaholic, the stopping point becomes more difficult. I didn't have any problem about starting because I am a fairly motivated person anyway but switching off and actually finishing and closing that as a working day. I found it easier to work longer hours than I would have done had I been in the office. (Kate, partial homeworker, advisor)*

However, many respondents reported that occasional boundary violations did not necessarily lead to negative perceptions of their relationship with the organisation due to their sense of reciprocity toward their employer. Workers who benefit from the flexibility of the organisation seem to feel more of an obligation to the

organisation to be flexible themselves. This theme emerged most strongly among partial homeworkers, mobile workers and homeworkers, who felt that because the organisation gave them flexibility, they were willing to be flexible in return.

*I think we do operate a very fair, flexible type of arrangement. I think there is an expectation that you will deal with things but I think there is an equal or equivalent amount of flexibility in terms of if you need to take a bit of time back. I think it is very fair the way that we run it, certainly in my experience. (Thomas, mobile worker, senior management)*

*You get that you are inclined to leave your computer on, revisit things in the evening and weekends but then by the same token because of the flexibility of my role I could be off at the gym during the day. So I am totally flexible there. I don't have any problems with that. (Amy, mobile worker, policy developer / trade union representative)*

*I accepted that the flexibility was such that sometimes, the nature of being an advisor was that you were responding to urgent calls sometimes and also you are up early on a Monday morning sometimes and maybe you need to do some prep on a Sunday evening. I didn't regard that as encroaching. To me that was the deal. To a certain extent it could still be if I chose, may be, to have a long lunch hour on a Friday afternoon and then do some work on a Saturday morning but it would be my choice. (Grace, partial homeworker, senior management)*



*If, for whatever reason, there was something that needed to be done then I would say I am pretty accommodating because the work gives me a lot so I am quite happy to give things back to the work in terms of flexibility as well. (Jacob, homeworker, advisor)*

#### **4.5 Discussion**

The first research question that this chapter attempted to investigate was to understand what types of boundary strategies and tactics were used by those working from their home environment. The sample included those working infrequently from home, as well as those working intensively from home and those who worked ‘on the road’ or while travelling and using home as their base. The specific types of boundary strategies used by the homeworkers in the present study mirror the types found in other research and include physical, temporal, communicative and behavioural tactics (Clark, 2000, Felstead and Jewson, 2000, Kreiner et al, 2009, Nippert-Eng, 1996a, b). The tactics employed most often in this sample were physical, in the sense that importance was placed on having a separate space for work and non-work activities. In addition, temporal tactics that recreated breaks and a natural stopping point in the day were also frequently utilized. Behavioural and communicative strategies assisted with this process in the sense that homeworkers would, at times, engage others to assist them with separating from work activity. For example, one worker indicated that her stay-at-home husband would bring her lunch at a particular time of day to ensure that she took a break. Similarly, rules communicated to other household members, such as quiet hours in the household during the work day, helped to reduce the number of non-work to work interruptions experienced by those working from home. While this question does not make a

significant contribution to the literature on boundary management styles as it replicates earlier findings, some of the specific tactics employed by homeworkers may offer practical advice to others considering homeworking. Organisations offering homeworking may want to consider gathering information on specific tactics used by their homeworkers in order to provide a resource to employees who are new to homeworking and may be experiencing difficulty in managing their boundaries.

The second research question investigated whether homeworkers are able to adopt boundary management strategies that match their preferences for integration versus segmentation. While prior research has sought to describe boundary tactics, as noted in the discussion of Question 1 (Clark, 2000, Felstead and Jewson, 2000, Kreiner et al, 2009, Nippert-Eng, 1996a, b), and prior research has sought to evaluate whether workers experience 'fit' between their segmentation preferences and their organisational experiences (Kreiner, 2006, Rau and Hyland 2002, Rothbard et al. 2005), there is much more limited research on the actual mechanisms which assist workers in establishing this sense of fit. The findings from this study suggest that homeworkers are able to engage in boundary management strategies that attempt to match boundary preferences. For example, individuals working from home all or most of the time who prefer separation between home and work often had separate areas of the home for work activities and recreated temporal boundaries, such as lunch breaks and end of day stopping points, that resembled those that might be associated with working in the office. Often they did not engage in any non-work activities during the traditional workday. However, those who report higher levels of comfort switching back and forth between work and non-work activities were more

likely to report taking time out of the traditional workday hours for household activities or hobbies, such as going to the gym, and then making up the hours at alternate times. This is in line with recent research conducted by Kossek et al. (2012) that used cluster analysis to examine the boundary management profiles of managers. The cluster analysis used measures of role identification and perceived control over boundary demands and resources, as well as individual behaviours relating to allowing cross-role interruptions to develop six typologies for boundary management strategies. The typologies were created using a “person-centered approach” such that individual boundary preference and role identification guided the research (Kossek et al., 2012, p.4). Kossek et al.’s (2012) research, along with the findings in the current study, supports the idea that individual differences are a core determinant of boundary management styles. Recognition of these individual differences is important because, as examined in Chapter 3, research has shown that higher congruence between boundary preference and organisational supply of integrating or segmenting practices can lead to better work-life outcomes, including reduced work-life conflict and stress, and higher job satisfaction (Kreiner, 2006).

Technology played an important role in boundary management for both homeworkers and those spending more time in the office. The behavioural acts of switching off phones and computers were important to the demarcation of work and non-work periods of time. This is supported by prior research on technology and work and non-work boundaries. In their examination of the role of technology on occupational health outcomes, Macik-Frey, Quick and Nelson, (2007, p.828) suggest that the use of work-enabling technology can result in the “loss of a specific ‘workday’ and ‘workplace’”; however, as suggested by Diaz, Chiaburu and

Zimmerman (2012) technology can also increase the perceptions of flexibility over working time and place. However, in a study of mobile loan officers in the United States, Cousins and Robey (2005, p. 179) found that workers used technology as a tool for “controlling boundaries between business and personal social contexts”. As noted earlier, Matusik and Mickel (2011) also found that users of Blackberries, Treos and iPhones used technology to control work and non-work boundaries by turning off their Blackberries on evenings and weekends. The current study suggests that homeworkers may adopt a similar strategy for reinforcing work and non-work boundaries.

The third research question sought to address how boundary management differs between individuals at different levels of homeworking. The interviews were analysed to reflect the differences in boundary management between infrequent homeworkers who were largely office-based; moderate homeworkers, who were considered to be either mobile workers using home as a base, or partial homeworkers; and those working from home extensively. The findings from this question draw attention to an area of both the homeworking and boundary management literatures that to date has been relatively unexplored; that of the differences in boundary management tactics that might be needed at differing levels of homeworking. To date, there has been relatively limited research on the impact of the extent of teleworking on work-life outcomes. In their study of high tech professionals with teleworking opportunities, Golden and Viega (2005) found that extent of teleworking had a curvilinear relationship with job satisfaction, such that satisfaction was highest at moderate levels of telework. The findings in this chapter suggest that more aggressive boundary management styles are needed at infrequent

and extensive levels of homeworking, while those engaging in more moderate levels of homeworking are able to enjoy an exchange-based relationship of flexibility with their organisation (Blau, 1964, Lambert, 2000).

Further support for this exchange-based relationship was through the emergence of reciprocity as a key theme in interviews primarily with those working moderate amounts from home - partial homeworkers and mobile workers. These employees frequently made reference to the idea that they offered the organisation flexibility in terms of working evenings and weekends in exchange for having more day to day flexibility in managing their personal responsibilities. Even when they felt that a work / non-work boundary had been violated, the sense of reciprocity or the idea that their organisation would somehow offer reciprocation in the future seemed to diffuse the negative impact of the violation.

Closely related to reciprocity, another theme which emerged from this research question was the employees' perceptions of autonomy and control over their working patterns. Again, this theme emerged consistently among partial homeworkers and mobile workers, suggesting that the working arrangements among these groups afforded the employees with greater control over their working habits. While telework and homeworking has been linked to greater levels of autonomy in prior research (Baruch, 2000, Gajendran and Harrison, 2007), to the best of the author's knowledge this is the first study to suggest that experiences of autonomy differ according to the *extent* of homeworking. One explanation for this finding might be that the flexible schedules of those engaged in moderate amounts of homeworking offer more autonomy than those who are homeworking to a greater extent, such that

at more extensive levels of homeworking there may be the expectation that, similar to an office environment, the employee is available all day, every day at home. This pressure to be 'present' or reachable in the home environment may detract from employee perceptions of autonomy. This finding has important implications for practitioners because it suggests that policies that organisations may implement in an effort to offer more flexibility to employees may not always be perceived as flexible by employees. Prior research has supported the idea that employee perceptions of flexible working practices have a significant impact on whether they help to deliver the desired outcomes (Allen, 2001, Pierce and Newstrom, 1983)

Last, the fourth research question sought to explore what happens when boundary strategies are unsuccessful. While most of the employees interviewed reported the ability to manage their boundaries successfully, some gave examples of non-work to work conflict, often resulting from others in the home environment interrupting work activities. In general this seemed to occur more often when the established routines could not be followed, such as during school holidays. There was very limited evidence that these employees experienced work to non-work boundary violations; however, this could be partially explained by the nature of their roles and the culture of the organisation. The majority of the homeworkers in this sample were 'advisors', who are assigned a caseload and given a great deal of autonomy in how to manage it. In addition, this organisation, similar to others in public service, does not have a culture that calls for long working hours (Buelens and Van den Broeck, 2007). Last, many of those who did report higher levels of integration preferred to make frequent transitions back and forth between work and non-work activities; therefore they did not experience boundary violations.

This research makes a unique contribution to the literature by being the first study to examine boundary management among workers at varying levels of homeworking. By drawing on a sample of workers from a single organization, this study was able to make direct comparisons between homeworkers, partial homeworkers, mobile workers and office-based workers doing similar roles under the same management structure. The findings from this study can be used to inform the development of future homeworking policy such that it highlights that homeworking at different levels of intensity can lead to different experiences of autonomy and flexibility. If the aims of a homeworking policy are to provide more flexible working for employees then it is important to analyse whether the actual homeworking practices are, in fact, delivering on this promise. This research suggests that very intensive homeworking may recreate the culture of an office environment such that employees continue to adhere to formal, rather inflexible schedules and enact high levels of segmentation between work and non-work activities. Last, this study draws attention to the importance of understanding that workers have different preferences and different levels of ability to manage their work and non-work boundaries. Organisations must take both of these issues into account when developing strategies to support future homeworkers.

#### **4.6 Limitations**

One of the key limitations of this research is the ability to generalize these results and practical implications to all individuals working from their homes. This sample represents a set of respondents who are employed to work a specified number of hours by an organisation. The organisation supplies the work and distributes the

workload across all employees. In contrast, many homeworkers in the UK are either self-employed or working for multiple employers, which may mean that they are responsible for bringing in the work and managing the flow of work. Several studies have identified that homeworkers employed by an organisation and those who are self-employed may experience homeworking differently, whereby the added pressure of generating your own workload as a self-employed worker can lead employees to work longer and more varied hours in order to accommodate the needs of their clients (Felstead and Jewson, 1997, Matsuo, 1992, Standen et al., 1999, Sullivan, 2003). In addition, homeworking at the organisation was a widely utilized working arrangement by employees. The cultural acceptance of and support for homeworking may have positively influenced the homeworking experiences of these employees.

However, not all of the homeworkers began homeworking by choice. Many of the organisations' homeworkers began working from home when regional office closures led to commuting times that prevented them from continuing office-based work. While they 'chose' to become homeworkers to avoid the time and expense associated with lengthy commutes, several indicated that they would not have become homeworkers if there had been an alternative office environment for them to work in. While there is some reflection of this in the data discussed, there was no way for the author to clearly identify those who chose to homework and those who became homeworkers out of necessity. This may have impacted homeworkers' experiences of homeworking in terms of their ability to create boundaries within the home environment. For example, an employee who became a homeworker out of necessity might not have had a home set-up that allowed them to designate a separate



area for work activity. As a result, their ability to utilize the physical boundary tactic of having a separate physical space for working was beyond their control.

Last, participants in the study were aware that the homeworking programme at the organisation was under evaluation. Fear that a study which reflected negative outcomes associated with homeworking would result in reduction or discontinuation of the homeworking programme may have led to a “social desirability” response bias on the part of the respondents (Krosnick and Presser, 2010, p.285). In effect, respondents may have given more positive accounts of their homeworking experiences in an attempt to be ‘viewed more favourably’ by the researchers, leading to a more positive assessment of the homeworking programme.

#### **4.7 Conclusion**

This chapter highlights the important effect of boundary management strategies on homeworking experiences by demonstrating the tactics homeworkers use to reduce the permeability of the boundaries between their work and non-work roles. This research makes a significant contribution to the practice literature by applying a boundary management framework to the work-life practice of homeworking, which is being adopted by organisations with increasing frequency. The findings from this research can be used to encourage organisations to proactively assess worker preference for permeability and the demands and resources associated with their home and work environments before entering into a homeworking arrangement. Similarly, the tactics identified may be used prescriptively to assist homeworkers who may be struggling to establish comfortable boundaries, by providing them with tangible ideas to regulate the interaction between home and work.

In addition, this research also suggests that experiences of homeworking differ based on the extent to which employees adopt this practice. It suggests that at very low and very high levels of homeworking, employees may perceive less flexibility than those homeworking more moderate levels. While those working more moderate levels may experience more flexibility which can lead to greater reciprocity with the organisation, moderate levels of homeworking may also involve more frequent transitions between work and non-work roles. These transitions may increase the level of integration between roles which could lead to higher levels of work to non-work conflict. This relationship will be explored further in the subsequent chapters. It should also be noted that negotiating work and non-work boundaries is not the only challenge for intensive homeworkers. Other considerations include individual concerns such as isolation (Banita and Dwivedi, 2009, Cooper and Kurkland, 2002) and organisational issues such as knowledge transfer (Taskin and Bridoux, 2010).

The next chapter further explores boundary management among homeworkers, using an empirical approach that draws on survey data from individuals engaged in varying degrees of homeworking. The next chapter will build on the results of this current chapter's qualitative research by attempting to identify the role of boundary permeability in the relationship between highly integrated working practices (i.e., homeworking) and work-life conflict. It will also examine whether boundary preference influences the relationship between these measures such that when levels of permeability match individual preference, the relationship to conflict becomes weakened.

## **Chapter 5: Boundary Management and the Highly Integrated Worker**

- 5.1 Introduction
- 5.2 Homeworking, Boundary Flexibility and Permeability
- 5.3 Boundary Preferences, Demands and Resources
- 5.4 Person-Environment Fit
- 5.5 Method
  - 5.5.1 Research Design
  - 5.5.2 Quantitative Measures
- 5.6 Analysis and Findings
- 5.7 Discussion
- 5.8 Limitations
- 5.9 Conclusion

## 5.1 Introduction

Having examined the impact of high levels of work-home segmentation on Person-Environment Fit in Chapter 3, and explored how boundary management strategies can be used to re-align organisational supplies with segmentation-integration preferences in Chapter 4, the primary goal of this chapter is to explore the role of permeability in the work-life interface and address the third core research question posed in the introductory paragraph:

*What is the role of boundary permeability in the work-life interface?*

As noted in Chapters 1 and 2, the definition of boundary permeability has been addressed inconsistently in prior work-life literature and its role in the work-life interface is unclear. The research in this chapter attempts to expand current theory on work-life boundaries by clarifying the role of permeability in the relationship between organizational supply of segmenting-integrating working practices, and work-life outcomes. This research will build on the qualitative findings from Chapter 4 and examine the role of permeability among a sample of employees from an organisation with an extensive homeworking practice. As noted in Chapter 2, new technologies, a more global economy and changing trends in work-home legislation has led to greater variation in physical and temporal work patterns (Golden, 2009, Kreiner et al., 2009, Messersmith, 2007). These new patterns include the increased use of flexitime, compressed workweeks, part-time work and working from home. The substantial uptake of these new patterns of work which impact the level of segmentation and integration employees experience between their work and non-work role necessitates a better understanding of the mechanisms by which

positive work-life outcomes can be achieved. While this chapter builds on the research contained in Chapter 4, it samples the entire employee population (including both homeworking and non-homeworking employees), in order to capture the full range of working practices.

This chapter will first review prior literature on boundary flexibility and boundary permeability as measures of boundary strength and discuss their relationship to the practice of homeworking. Benefits and drawbacks associated with permeability will be identified. Then, using the concept of Person-Environment Fit (Edwards, Caplan and Harrison, 1998, Kreiner, 2006, Rothbard et al., 2005) as a guiding theoretical framework, this chapter will review how individuals may react and respond differently to being a homeworker depending on their own preferences for integration and/or segmentation of their work and non-work roles. Drawing on research with a sample of employees with a wide variation in homeworking practices, these relationships will be tested using a moderated regression approach. Last, this chapter will conclude with a discussion of limitations as well as some practical implications derived from the findings of this study. This chapter adds to the body of literature on boundary management by providing new empirical evidence that helps to explain the role of boundary permeability in the relationship between homeworking and work-life outcomes.

## **5.2 Homeworking, Boundary Flexibility and Permeability**

As noted in the review of the literature on homeworking and boundaries in Chapter 4, homeworking has been perceived to weaken or remove many of the traditional physical, temporal and even psychological boundaries between work and non-work

roles (Ashforth et al., 2000, Clark 2000, Hall and Richter, 1988). This weakening of boundaries suggests that homeworking represents a working pattern that provides a high level of integration between an individual's work and non-work lives (Nippert-Eng, 1996a). While it is the case that boundaries among homeworking employees are different from those enacted by employees working in traditional office-based work environments, the qualitative research contained in Chapter 4 suggests that homeworkers may be able to use boundary management techniques to create boundaries similar to those found in office-based work environments. This is also supported by prior research on homeworking and boundaries. For example, in their study of self-employed teleworkers in France, the UK and the US, Mustafa and Gold (2013, p.14) found that their study participants "strove to create a physical work location separate from their home life (detachment) and to establish routines to break up the day into work and non-work time". Therefore, given what we know about individuals' ability to actively engage in boundary work activities to manage the demarcation between work and non-work roles, simply focusing on an integrating or segmenting work context as a predictor of boundary strength may be short-sighted.

As discussed in the literature review in Chapter 2, levels of flexibility and permeability are important determinants of the strength of the boundaries that surround work and non-work roles (Ashforth et al. 2000, Clark 2000, Hall and Richter 1988). Flexibility, according to Hall and Richter (1988, p.215) is "the extent to which the physical time and location markers, such as working hours and workplace, may be changed". Matthews, Barnes-Farrell and Bulger (2010a) have expanded on this construct to incorporate perspectives on flexibility relating to both organisational demands and individual preferences with their measures of

“flexibility-ability” and “flexibility-willingness”. As reviewed in the broader literature review in Chapter 2, flexibility-ability is the extent to which an individual is able to modify the boundaries of one domain to meet the needs of another (Matthews et al., 2010a). For example, having flexibility-ability in the work domain might mean that an employee has the ability to work from home on days when they have a sick child at home. Flexibility-willingness reflects the individual’s *preference* for allowing the boundary of one domain to be flexible to meet the needs of another (Matthews et al., 2010a). An example of flexibility-willingness in the work domain would be if an employee decides that they would prefer not to take advantage of a flexible scheduling policy offered by their work environment despite the fact that it might facilitate easier childcare arrangements at home.

Permeability is a second aspect of boundary strength identified by the literature. While prior literature on boundary permeability is somewhat inconsistent, Hall and Richter define boundary permeability as “the degree to which a person physically located in one domain may be psychologically concerned with the other”; in other words the amount that experiences and interruptions from one domain enter into another (Hall and Richter, 1988, p.215). Permeations can be both physical and psychological in nature; for example a child may have the ability to physically interrupt a parent working in a home office or a parent may have a hard time concentrating during a meeting knowing that their child is taking a test during that same time (Clark, 2000). While much of the literature identifies flexibility and permeability as co-determinants of boundary strength, some research suggests that there may be a more complex relationship between the two constructs. For example, Matthews et al. (2010a, p.448) redefined the concept of permeability around the

frequency of transitions between domains. Their new measure of “inter-domain transitions” focuses on the frequency of physical and psychological transitions between domains. Bulger et al. (2007, p. 373) also suggest that more research is needed on the relationship between flexibility and permeability, proposing that “it is possible that the two flexibility measures predict permeability”.

As noted above, Matthews et al. (2010a) have identified that transitions are an important element of boundary permeability. Hall and Richter (1988, p.215) state that:

“...the best way to understand how the two domains affect each other is to look at them in their interface; that is, as they come into contact with one another. The point at which home and work come into contact with one another is when the employee is moving, either physically or psychologically, from one to the other. We propose that the transitions between work and home capture the major issues in the general relationship between the two domains”.

Consistent with Matthews et al. (2010a), this research has adopted the perspective that boundary permeability is a reflection of the frequency of all types of transitions between work and non-work roles. Unlike Matthews et al. (2010a), this research does not seek to redefine the concept, rather the aim is to better identify the role of permeability in the relationship between work and non-work domains.

Reflecting on the volume of transitions within particular working patterns, this research assumes that office-based workers have relatively few transitions during the workday; with the most significant occurring in the morning as work begins and at the end of the day as they return home. When workers begin working from home



part of the time, the number of transitions will increase as they move back and forth between work and home physical environments and as they psychologically transition from home to work within their home environment. As homeworking becomes the dominant pattern for work, these transitions may decrease, in part due to the homeworking routines and resources that homeworkers have in place in their home environments. Felstead and Jewson (2000) identified behaviours adopted by homeworkers to assist them with managing their work and non-work boundaries. One of these was the organisation of time when work would take place and the location where work would take place. Spoonley et al. (2002), in their research with self-employed workers in New Zealand found that those working from home engaged in the process of “spatial marking” or identifying an area of the home that was reserved for work activities. This, in effect, recreates a physical boundary for work, reducing the risk of interruptions from or transitions to the home environment. For example, qualitative interviews conducted in conjunction with this study found that high intensity homeworkers were more likely to report having dedicated physical spaces for work and often had temporal boundaries that designate work versus personal time. In a sense, they recreated some of the traditional office-based boundaries with versions that apply to their home environment. Therefore, the first hypothesis will be that the relationship between extent of homeworking and boundary permeability will be curvilinear in nature.

*Hypothesis 1: The extent of homeworking will have a curvilinear relationship with permeability of the non-work boundary such that boundaries will be most permeable at moderate levels of homeworking.*

Similar to the outcomes relating specifically to homeworking reviewed earlier in this chapter, academic literature has also identified both positive and negative outcomes associated with highly integrated roles (Ashforth et al., 2000, Kossek et al., 2006). Some research suggests that high levels of integration between work and non-work roles provide benefits such as easier transitions between work and non-work roles (Freidman et al., 1998) as well as a facilitation of positive spillover between work and non-work roles (Ilies et al., 2009). For example, Ilies et al. (2009) looked at the impact of job satisfaction on mood at home and marital satisfaction. Their findings demonstrated that the level of work-home integration moderated the spillover effects of job satisfaction, whereby the greater the integration of work and home, the more strongly job satisfaction influenced mood at home (Ilies et al., 2009).

However, research has more compellingly demonstrated that the converse can also be true and that high levels of work-life integration can have negative consequences, in particular an increase in work-life conflict (Ashforth et al., 2000, Beauregard and Henry, 2009, Bulger et al, 2007, Hecht and Allen, 2009, Kossek et al., 2006 and Olson-Buchanan and Boswell, 2006). In a study of firms with teleworking policies, Kossek et al. (2006) found that employees with more integrating boundary management styles reported higher levels of work-life conflict. Similarly, in their research on role integration-segmentation, Olson-Buchanan and Boswell (2006) found that roles with which individuals were highly identified with are more likely to be integrated into other domains. While the high level of role integration was related to less negative reactions to interruptions from one domain into another, employees with a high level of integration between work and non-work roles set fewer limits on their use of communications technology in non-work domains and indicated more

work-life conflict (Olson-Buchanan and Boswell, 2006). The data supported their hypothesis that work to non-work permeability is positively related to work-life conflict (Olson-Buchanan and Boswell, 2006). Additional literature in the field also supports a bi-directional view of the relationship between boundary permeability and work-life conflict (Ashforth et. al., 2000, Clark, 2000). For example, in the development of their boundary management profiles, Bulger et al. (2007) found that high permeability of the work boundary lead to greater family interference with work. This leads to the next set of hypotheses for this chapter:

*Hypothesis 2: Permeability of the non-work boundary will have a positive relationship with work-life conflict.*

*Hypothesis 3: Permeability of the non-work boundary will moderate the relationship between extent of homeworking and work-life conflict.*

As the prior hypotheses predict that the relationship between extent of homeworking and permeability will be curvilinear, and that permeability will be directly correlated to work-life conflict, we also hypothesize that the extent of homeworking will have a curvilinear relationship with work-life conflict.

*Hypothesis 4: Extent of homeworking will have a curvilinear relationship with work-life conflict.*

### **5.3 Boundary Preferences, Demands and Resources**

Although the practice of homeworking may be highly prevalent in an organisation due to either attempts to assist employees with work-life balance or due to necessity, it may be the case that not all homeworkers are similarly suited to that particular working arrangement. Nippert-Eng's (1996a) work on the segmentation-integration continuum identifies that individuals have preferences relating to the level of integration and / or segmentation between work and non-work roles. In addition to the influence of the individual, work and home cultures develop norms and values regarding the nature of work-home boundaries. As boundary norms gather strength, they can become "institutionalized and difficult to change (Kreiner et al, 2009, Zerubavel, 1991). Boundaries over which individuals have some level of control can be considered socially constructed (Kreiner et al, 2009, Zerubavel, 1991), whereby "the individual is an active agent in the 'co-construction' of boundaries in negotiated interaction with others." (Kreiner et al, 2009. p.705). The "others" may refer to those whom Clark (2000, p.761), in her work on Border Theory, calls "border-keepers and other domain members". In the work domain, this may include supervisors, co-workers and subordinates, while in the home domain, these may include spouses, partners, children and friends, among others (Clark, 2000). Nippert-Eng's (1996a, p.6) work also suggests that an individual's place along the spectrum is dependent on three elements; "internalised, cultural images" of the home and work domains, such as perceptions of gender roles; the social and structural demands that each domain places on the individual; and an individual's own actions and rituals that support the boundary definition of the domains.

In this research, boundary preference is defined as the level of flexibility an individual is willing to allow relating to the boundaries around their work and non-work environments. As noted earlier, flexibility can be perceived as both a preference and a resource or demand based on the distinction developed by Matthews and Barnes-Farrell (2010a) between “flexibility-ability” and “flexibility-willingness”. For example, an organization may offer an employee the opportunity to work from home; however, that employee might not be comfortable being out of the office. Therefore, this employee is demonstrating a lack of willingness to allow flexibility in their work boundary. Similarly, an employee’s childcare support may allow her to work later due to work demands, however, she may prefer not to do so, exercising a lack of willingness to have a flexible non-work boundary.

Boundary demands and resources, on the other hand, are based on the actual amount of flexibility that an individual is able to have in their work and non-work environments (Matthews and Barnes-Farrell, 2010a). Building on Demerouti et al.’s (2001) Job-Demands Resources Model, the idea of “flexibility-ability” suggests that certain structural or social supports exist or don’t exist to allow the flexibility of those role boundaries (Matthews and Barnes-Farrell, 2010a). For example, a worker who lacks the structural resource of flexible childcare is limited in their “flexibility-ability” to extend their home-work boundary should a need arise to stay later at work. Similarly, a worker who has the ability to ask a grandparent to collect her children from nursery if she needs to stay late at work can be said to have a structural resource in terms of having the ability to have a flexible home boundary.

#### **5.4 Person-Environment Fit**

Similar to Chapter 3, some of the research presented in this chapter draws on the theoretical framework of Person-Environment Fit to help explain the relationship between individual boundary preferences, demands and resources. As noted in Chapter 3, Rothbard et al. (2005, p. 246) define person-organization fit as “congruence between the individual and the environment”. As established in Chapter 3, prior research has demonstrated that organisational policies can foster environments that promote integration or segmentation. While Chapter 3 focused on the impact of ‘fit’ between an individual’s preferences for segmentation organisational supply of segmentation and work-life outcomes within a working environment that offered high levels of segmentation, this chapter seeks to explore the impact of ‘fit’ among workers in a highly integrated environment. Prior research suggests that ‘fit’ between work environments and worker preferences leads to the best work-life outcomes (Kreiner, 2006, Rau and Hyland 2002, Rothbard et al. 2005). Therefore, this research attempts to incorporate the idea of fit in the examination of homeworkers’ work and non-work boundaries. Having earlier identified flexibility-willingness as a measure of boundary preference, the next hypothesis is that the level of willingness will moderate the relationship between boundary permeability and work-life conflict, such that those who are more willing to have flexible boundaries will experience less work-life conflict at high levels of boundary permeability. For example, a homemaker who is willing to interrupt non-work activities with work duties may not experience as much conflict when asked to take work home, as someone who is not willing to allow work to interfere with non-work activities.

*Hypothesis 5: Flexibility preference moderates the relationship between permeability and work-life conflict, such that those who are willing to have more flexible boundaries will experience less conflict at high levels of boundary permeability.*

As the prior hypotheses predict that the relationship between extent of homeworking and work-life conflict will be similar to the relationship between permeability and work-life conflict, we also hypothesize that flexibility preference will moderate the relationship between extent of homeworking and work-life conflict.

*Hypothesis 6: Flexibility preference also moderates the relationship between extent of homeworking and work-life conflict, such that the relationship between extent of homeworking and work-life conflict will be weaker for those who prefer to have more flexible boundaries.*

## **5.5 Method**

### **5.5.1 Research Design**

The findings in this chapter are based on a larger research project on homeworking for a large, public-sector organisation providing advisory and other services to businesses in Great Britain. The research involved several phases and methods including semi-structured interviews with senior staff, a review of prior research and employee data, a series of in-depth, semi-structured interviews with employees, a quantitative online employee survey as well as a two-week diary study with homeworkers. The initial phases supported the development of the quantitative

online survey used to investigate the hypotheses within this chapter. Findings from other phases of the research are reported in Chapters 4 and 6 of this dissertation.

All employees (912) of the organisation were invited to participate in an online survey. The survey was pre-tested by a sample of 12 employees prior to full-scale distribution. A total of 514 employees (including pre-testers) completed the survey for a response rate of 56.4%. The survey took approximately 45 minutes to complete and contained a mix of open and closed end responses.

The survey was distributed to all employees of the organisation and the demographic and organisational characteristics of the final group of participants were highly similar to that over the overall population of the organisation's employees.

Consistent with the overall demographics of the organisation, 57.7% of the participants were female. The average age of participants was 46.2 years and almost three-quarters (73.3%) of the participants were married or in a similar relationship. More than one-third (35.2%) indicated that at least one child under the age of 18 lives in their household. Participants represented a range of job roles and levels and 23% of participants were line managers. Average tenure with the organisation was 11.4 years. Participants also represented the organisation's geographic distribution of workers in multiple regions across the U.K. and Scotland. Almost all participants (90.5%) indicated their ethnicity was white / white British.

Among the 514 employees completing the survey, 225 (44%) reported that they worked from home 20% or more of the time during an average work week.

Although the organisation does have formal demarcations for office-based and



home-based employees, it was found during the qualitative interviews that ‘informal’ homeworking was quite prevalent in the organisation. Therefore, self-reported homeworking was perceived to be a more reliable measure of homeworking activity than official designation.

### **5.5.2 Quantitative Measures**

**Work-Life Conflict:** Work-Life Conflict was measured with a 6-item scale based on Matthews, Kath and Barnes-Farrell’s (2010b) validation of an abbreviated measure of Carlson et al.’s (2000) multidimensional measure of work–family conflict. The 6-item scale includes time, strain and behaviour based measures for conflict as well as measures for the bi-directional (work-to-family and family-to-work) nature of the construct. Items were slightly reworded to allow employees without traditional family structures to represent their non-work experiences. Sample measures include “I am often so emotionally drained at the end of a workday that it prevents me from engaging with my family or friends” and “I have to miss work activities due to the amount of time I must spend on family responsibilities or personal commitments” (Carlson et al., 2000, p.259). Participants were asked to indicate their agreement with each statement on a 5-point scale ranging from ‘strongly agree’ to ‘strongly disagree’. The Cronbach’s alpha for the measure of work-life conflict was .694.

It should be noted that this is slightly lower than the desired range of .7 or higher for this statistic (Nunnally, 1978). Of note, the original Cronbach’s alpha from Matthews et al.’s (2010) measure validation study was also at the low end of the desired range (.75). A possible explanation for the lower reliability of this measure in the present study may be that the items have been reworded such that they are

meaningful for employees with and without spouses / families at home. Further analysis was done relating to this potential issue and it was found that the reliability of the measure was in fact stronger among employees who were married or in a similar type of relationship (Cronbach's alpha of .720) and among employees who report that one or more children under the age of 18 live in their household (Cronbach's alpha of .741). As will be noted in the limitations section of this chapter, this may reduce the reliability of the study results among individuals with fewer family responsibilities in the home environment.

**Boundary Permeability:** Boundary permeability was measured with 2 sets of 5-item measures adapted from Clark (2002). One set represented work to non-work permeability and one set represented non-work to work permeability. Throughout the chapter work to non-work permeability, or the extent that work interrupts non-work roles, will be referred to as the permeability of the non-work boundary while non-work to work permeability, or the extent that non-work role activities interrupt a work role, will be referred to as permeability of the work boundary. Consistent with edits made to the measures for work-life conflict, the items were slightly reworded to allow employees without traditional family structures answer the questions fully. A sample item used to measure the permeability of the non-work boundary was "Please indicate how frequently you speak to colleagues about work matters during (your) personal time, outside of work hours" (Clark, 2002, p.34). A sample item used to measure the permeability of the work boundary was "Please indicate how frequently you take care of personal business while (you are) at work" (Clark, 2002, p.35). Participants were asked to indicate their agreement with each statement on a 5-point

scale ranging from 'strongly agree' to 'strongly disagree'. The Cronbach's alpha for the measure of boundary permeability was .786.

Boundary Preferences: Boundary preference was measured with a 4-item scale for "flexibility-willingness" based on Matthews and Barnes Farrell's (2010a, p.330) Measure of Boundary Flexibility for the Work and Family Domains. Two of the items measured life-to-work "flexibility-willingness" and two measured work-to-life "flexibility willingness" (Matthews and Barnes Farrell, 2010a, p.330). Due to constraints set by the study organisation on survey length, the number of items used to measure each construct was reduced from the original scale, leaving just two of the five original measures for work flexibility-willingness and two of the four original measures for life flexibility-willingness. Items were slightly reworded to allow employees without traditional family structures at home to represent their non-work experiences and, based on the preferences of the study organisation, items were rephrased such that a high score for each item reflected higher levels of flexibility-willingness. Respondents were asked to indicate their level of agreement on a scale from 1 meaning 'strongly disagree' to 5 meaning 'strongly agree'. A sample item used to measure work flexibility willingness was "I am willing to take an extended lunch break so that I can deal with responsibilities relating to my family and personal life" (Matthews and Barnes-Farrell, 2010a, p.346) and a sample item measuring non-work flexibility willingness was "When I am not working, I do not mind stopping what I am doing to complete a work related task" (Matthews and Barnes-Farrell, 2010, p.345).

The Cronbach's alpha for the measure of work flexibility-willingness was .646 and the Cronbach's alpha for non-work flexibility-willingness was .538. Similar to the reliability scores for work-life conflict, it should be noted that the Cronbach's alpha scores for both measures are lower than the typically acceptable cut-off of .70 (Nunnally, 1978). Again, the original reliability scores from Matthews and Barnes-Farrell's validation study were also at the low end of the desired range; the Cronbach's alpha for work flexibility willingness was .71 and the Cronbach's alpha for family flexibility-willingness was .79 (Matthews and Barnes-Farrell, 2010a). The likely source of the lower reliability in the current study was the reduction in scale items due to constraints on survey length. In addition, not all items selected represented those with the highest factor loadings, due to the preference of the organisation to select items that seemed most relevant to their employee population. Further analysis examined whether, as was the case with the earlier measure of work-life conflict, this measure may be more reliable among employees who were married or in a similar relationship or those with children under 18 at home. The analysis did not show improvement in the reliability scores among these subgroups of employees. Further investigation into the use of Cronbach's alpha as a measure of reliability for a two-item scale was conducted and although the literature does support the use of this statistic, it is noted that "as these conditions are typically too much to expect from a composite scale, coefficient alpha almost always underestimate true reliability, sometimes rather substantially" (Eisinga, 2012, p.8).

**Homeworking / Extent of Homeworking:** As noted in the earlier discussion relating to research design, due to the inconsistencies between formal organisational designation and the actual practice of homeworking, this analysis relied on

employees' self-reports of homeworking behaviour. In order to add to the richness of the empirical analysis, scalar data was collected from the respondents by asking them to indicate the percentage of time they spend working from home in a typical week as opposed to their formal organisational categorizations. Percentages ranged from 0% to 100%, with 50% of respondents indicating that they work from home less than 5% of the time, an additional 10% reporting they work from home between 5% and 20% of their time, 15% reporting that they work more between 20% and 65% of their time from home, and the final 25% of the sample reporting that they work from home 65% of their time or more. This demonstrates the wide range of homeworking practices adopted by employees in the organisation.

**Control Variables:** In order to understand the true relationship between boundary alignment and work-life outcomes, four variables in the survey were controlled for which prior research has suggested have a relationship to the dependent variables in this study. Gender was selected as a control variable because prior research has demonstrated that the antecedents for work-life conflict differ among men and women due, in part, to societal norms (Duxbury and Higgins, 1991). For example, in their study of dual-earning, professional and managerial parents, Duxbury and Higgins (1991) found that men and women differ in perceptions of work-family conflict due to level of work involvement, level of family involvement, perceived conflict at work and perceived family conflict. The analysis also controls for the presence of a child under 18 in the home. Prior research has demonstrated a positive relationship between presence of children in the home and work-life conflict (Byron, 2005, Eby et al., 2005).

In addition, job grade and business area worked in were entered as control variables in order to ensure that job characteristics such as type of role, rank and pay levels were not confounding the results. At the sample organisation, job grade ranges from '7' as assigned to more junior, administrative staff to '11' which represents the CEO and other senior leaders in the organisation. Among the sample, 5.3% of participants indicated that they were a Grade 7, 16.3 per cent were assigned a Grade 8, 42.8 per cent were a Grade 9, 29.6 per cent were a Grade 10 and 6 per cent were a Grade 11. The organisation has a functional structure whereby business areas are grouped by type of job function. Job functions range from administrative roles to estates functions as well as advisory and senior manager roles. For the purposes of this analysis, these roles were grouped into 5 categories; 'administrative, operations and delivery', 'advisory', 'senior advisory', 'management' and 'other / mixed' roles. Among the sample, 26 per cent of the participants were in administrative, operations or delivery roles, 21 per cent were in advisory roles, 39 per cent were in senior advisory roles, 8 per cent were in managerial roles and 6 per cent held other types of positions or a mix of roles.

Prior literature supports the idea that job characteristics can influence the way individuals experience work-life conflict (Frone, 1992, Jones and Butler, 1980, Poppleton et al., 2008, Voydanoff, 2004). For example, Voydanoff (2004) found that certain work role characteristics relating to job demands were positively related to work-life conflict. Furthermore, in his research on the antecedents and outcomes of work-family conflict, Frone (1992) found that blue collar and white collar workers experienced work-family conflict differently, such that high levels of job involvement were linked as an antecedent to work-family conflict only among white

collar workers, while family distress was linked as an outcome to work-family conflict only among blue collar workers. This may suggest that those at higher levels in an organisation (as reflected by higher grade levels) may experience greater job-related demands and therefore more work family conflict.

In addition to established links between job characteristics and work-life conflict, prior research has also found a link between job characteristics and boundary permeability (Kossek et al., 2006, Williams and Alliger, 1994). For example, in their study of teleworkers, Kossek et al. (2006) found that individuals reporting higher perceived job control were able to enact boundary management strategies that reduced the permeability of work and family domains. Higher job control may be a characteristic associated with specific job types and / or higher job grades, therefore this aspect of the sample must be controlled for.

The full survey instrument used in this study can be found in *Appendix 3* at the end of this dissertation.

## **5.6 Analysis and Findings**

First, a preliminary exploration of the data was made using descriptive and correlation analysis. Table 1 presents the means, standard deviations and correlations for the study variables. Correlation coefficients among the study variables (excluding controls) ranged from -0.121 to 0.411, with the strongest correlations being found between non-work boundary permeability and boundary flexibility-willingness ( $r(512)=.411, p<.01$ ), non-work boundary permeability to

work-life conflict ( $r(512)=.178, p<.01$ ), supporting Hypothesis 2, and extent of homeworking and work-life conflict ( $r(512)=-.119, p<.01$ ).



**Table 5.1 Descriptive statistics and correlations among study variables (N=514)**

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4a</i>	<i>4b</i>	<i>4c</i>	<i>4d</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
(1) Gender <sup>a</sup>	.577	.494	1										
(2) Presence of child <sup>b</sup>	.35	.478	-.061	1									
(3) Job grade	3.15	.944	.215**	-.055	1								
(4) Business area:													
(4a) Admin / Operation / Delivery <sup>c</sup>	.261	.439	.047	.017	.062	1							
(4b) Advisory <sup>d</sup>	.208	.406	.057	-.037	.392**	-.304**	1						
(4c) Senior Advisory <sup>e</sup>	.389	.488	.013	.030	-.155**	-.474**	-.409**	1					
(4d) Managerial <sup>f</sup>	.079	.271	-.119**	-.007	-.343**	-.175**	-.151**	-.235**	1				
(5) Extent of homework. (% of time)	30.5	39.0	.007	.156	.156**	-.067	-.219**	-.386**	.520**	1			
(6) Perm. of non-work boundary	2.38	.771	-.040	.044	-.367**	.056	-.226**	-.014	.189**	.053	1		
(7) Non-work flexibility willingness	3.22	.805	-.049	.055	-.186**	.081	-.137**	-.041	.116**	.072	.411**	1	
(8) Work-life conflict	2.55	.792	.030	-.002	.043	-.043	.098*	-.006	-.039	-.119**	.178**	-.121**	1

<sup>a</sup> 0=Male, 1=Female

<sup>b</sup> 0=No children 18 or under in home, 1=Presence of 1 or more children under 18 in home

<sup>c</sup> 0=Not in administrative, operation or delivery role, 1=Employed in administrative, operation or delivery role

<sup>d</sup> 0=Not in advisory role, 1=Employed in advisory role

<sup>e</sup> 0=Not in senior advisory role, 1=Employed in senior advisory role

<sup>f</sup> 0=Not in managerial role, 1=Employed in managerial role

\*\*p<.01, \*p<.05

Hierarchical stepwise regression analysis was used to test the hypotheses. Likert scale variables were centred prior to the conduct of the regression analysis in order to prevent interference from outliers and to increase the interpretability of the results (Aiken and West, 1991).

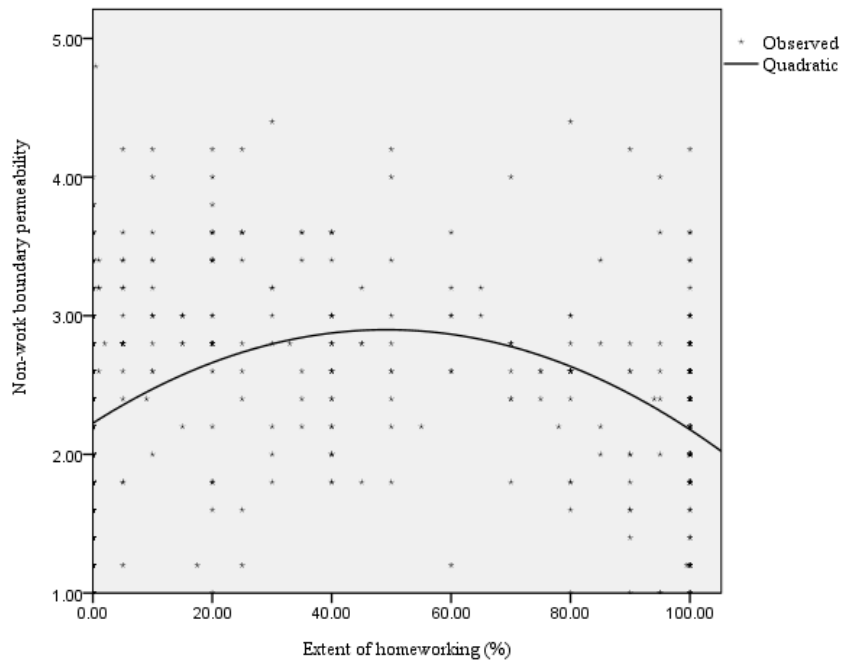
The first hypothesis predicted that there would be a curvilinear relationship between extent of homeworking and permeability of the non-work boundary. In order to test this hypothesis, the bivariate correlation was examined and showed a non-significant positive relationship between the measures indicating the lack of a linear relationship. Next, a 3-step hierarchical regression model was created. In the first step, the four control variables (gender, presence of children in the household, job grade and business area) were entered. In the second step, extent of homeworking was entered and, as seen in Table 2, the resulting change in  $R^2$  was not significant. In the third step, a squared term for extent of telecommuting was computed and entered into the model. This yielded a significant change in  $R^2$  ( $\beta = -.282$ ,  $\Delta R^2 = 0.017$ ,  $p < .002$ ) indicating the presence of a curvilinear relationship, supporting Hypothesis 1. This relationship is graphed in Figure 4.1.

**Table 5.2: Hierarchical regression predicting non-work boundary permeability**

Step	Predictor variables	B	$\Delta R^2$
1	Gender	.048	.161**
	Presence of children	.026	
	Job grade	-.255	
	Business area: admin/ops/delivery	-.046	
	Business area: advisory	-.150	
	Business area: senior advisory	-.095	
	Business area: management	.026	
2	Extent of homeworking	.214	.000
3	Extent of homeworking <sup>2</sup>	-.282	.017**

\*\*p<.01, \*p<.05

**Figure 5.1: Curvilinear Relationship between Extent of Homeworking and Non-Work Boundary Permeability**



Hypothesis 2 predicted that permeability of the non-work boundary would have a significant, positive relationship with work-life conflict. First, the bivariate correlations were examined which showed a significant, positive relationship with work-life conflict ( $r=.18, p<.01$ ). Next, the controls (Step 1) and non-work permeability (Step 2) were

entered into the hierarchical regression model to predict work-life conflict. As seen in Table 3, the addition of non-work permeability to the model yielded a significant change in  $R^2$  ( $\beta = .243$ ,  $\Delta R^2 = 0.049$ ,  $P < .001$ ) in support of the positive linear relationship predicted in Hypothesis 2.

**Table 5.3 Hierarchical regression predicting work-life conflict**

<i>Step</i>	<i>Predictor variables</i>	<i>B</i>	<i><math>\Delta R^2</math></i>
1	Gender	.022	.012
	Presence of children	.000	
	Job grade	.001	
	Business area: admin/ops/delivery	.013	
	Business area: advisory	.124	
	Business area: senior advisory	.051	
	Business area: management	.001	
2	Non-work boundary permeability	.243	.049**

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

Hypothesis 4 predicted that, similar to the relationship between extent of homeworking and permeability, extent of homeworking would also have a curvilinear relationship with work-life conflict. The bivariate correlation demonstrated a significant negative relationship between extent of homeworking and work-life conflict ( $r = -.12$ ,  $p = .007$ ).

This indicates that the relationship between extent of homeworking and work-life conflict is, in fact, linear rather than curvilinear. This was further tested using a hierarchical regression model. In Step 1 of the model, the control variables of gender, presence of children in the household, job grade, and business area were entered into the model. Next, extent of homeworking was added as an independent variable (Step 2) and then in the third step a squared term for extent of homeworking was added to test for a curvilinear relationship. As seen in Table 4.4, the resulting change in  $R^2$  was non-significant meaning that Hypothesis 4 was not supported ( $\beta = -.001$ ,  $\Delta R^2 = 0.000$ ;  $p = .998$ ).

**Table 5.4 Hierarchical regression analysis work-life conflict**

<i>Step</i>	<i>Predictor variables</i>	<i>B</i>	$\Delta R^2$
1	Gender	.022	.012
	Presence of children	.000	
	Job grade	.001	
	Business area: admin/ops/delivery	.013	
	Business area: advisory	.124	
	Business area: senior advisory	.051	
	Business area: management	.001	
2	Extent of homeworking	-.143	.014**
3	Extent of homeworking <sup>2</sup>	-.001	.000

\*\*p<.01, \*p<.05

Hypotheses 3 and 6 propose that non-work boundary permeability and non-work flexibility preference will moderate the relationship between extent of homeworking and work-life conflict. In order to test for these moderation effects, the three predictor variables were entered together in Step 2 of the hierarchical regression model and then their interaction effects were entered in Step 3. As seen in Table 5, the change in  $R^2$  at Step 3 was statistically significant ( $\Delta R^2=0.010$ ;  $p=.065$ ). However, upon examination of the beta coefficients, only the coefficient for the interaction of extent of homeworking and non-work boundary permeability was statistically significant ( $\beta= .118$ ,  $p=.077$ ), supporting the moderating effect of boundary permeability from Hypothesis 3. The beta coefficient for the interaction between extent of homeworking and non-work boundary flexibility willingness was not significant ( $\beta=-.046$ ,  $p=.483$ ).

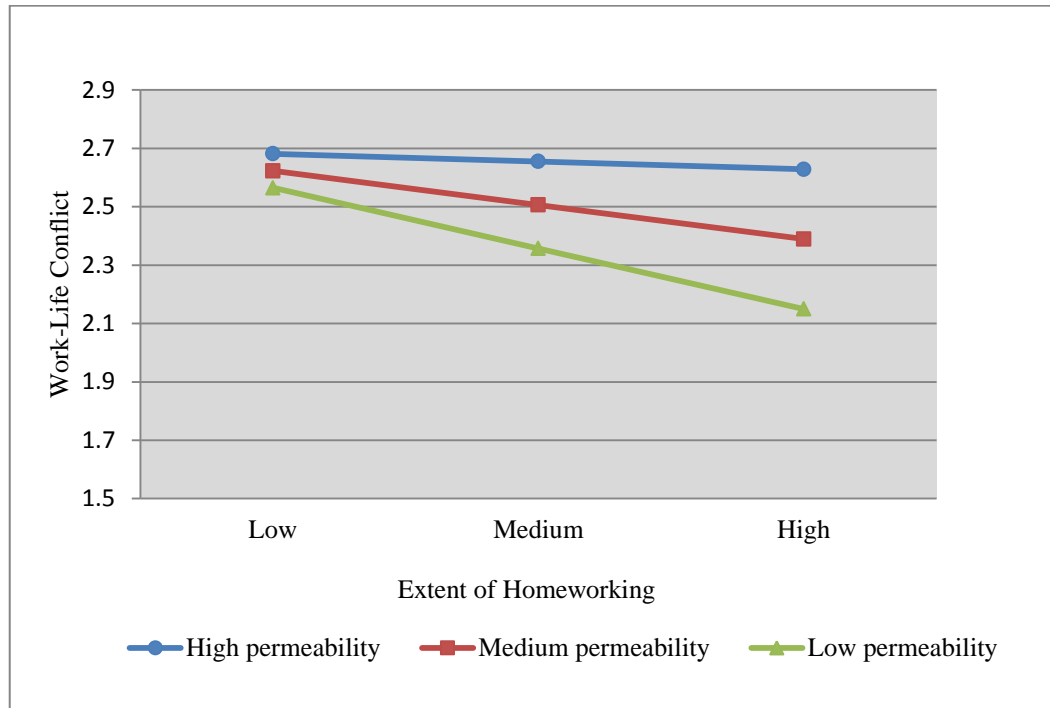
**Table 5.5 Hierarchical regression analysis work-life conflict**

<i>Step</i>	<i>Predictor variables</i>	<i>B</i>	<i>ΔR<sup>2</sup></i>
1	Gender	.022	.012
	Presence of children	.000	
	Job grade	.001	
	Business area: admin/ops/delivery	.013	
	Business area: advisory	.124	
	Business area: senior advisory	.051	
	Business area: management	.001	
2	Extent of homeworking	-.121	.100**
	Non-work boundary permeability	.322	
	Non-work flexibility willingness	-.216	
3	Extent of homeworking x non-work bound. permeability	.118	.010*
	Extent of homeworking x non-work flex. willingness	.046	

\*\*p<.01, \*p<.05

Figure 4.2 graphs the interaction effects of permeability and extent of homeworking with high permeability being defined as one standard deviation above the mean and low permeability being defined as one standard deviation below. An examination of simple slopes supports the moderating effect of boundary permeability on the relationship between extent of homeworking and work-life conflict at low and medium levels of permeability (at low permeability, simple slope=.005,  $t(510)=-5.05$ ,  $p>.001$ , at medium permeability, simple slope =.003,  $t(510)=-3.36$ ,  $p>.001$ ). However, at the highest levels of permeability, the simple slope is not significant (simple slope=.0006,  $t(510)=-0.46$ ,  $p=.645$ ).

**Figure 5.2 Moderating Effects of Boundary Permeability**



Last, the proposed moderation effect of non-work boundary flexibility-willingness on the relationship between non-work boundary permeability and work-life conflict (Hypothesis 5) was tested using hierarchical regression. As seen in Table 6, when entered together in Step 2, permeability and willingness led to a significant change in  $R^2$ , however, upon entering the interaction term in Step 3 to test for moderation there was no change in  $R^2$  and the beta coefficient for the interaction was not significant ( $\beta = -.010$ ,  $p = .830$ ).

**Table 5.6 Hierarchical regression analysis predicting work-life conflict**

<i>Step</i>	<i>Predictor variables</i>	<i>B</i>	<i>ΔR<sup>2</sup></i>
1	Gender	.022	.012
	Presence of children	.000	
	Job grade	.001	
	Business area: admin/ops/delivery	.013	
	Business area: advisory	.124	
	Business area: senior advisory	.051	
	Business area: management	.001	
2	Non-work boundary permeability	.327	.091**
	Non-work flexibility willingness	-.223	
3	Non-work bound. permeability x non-work flex. willingness	-.010	.000

\*\*p<.01, \*p<.05

## 5.7 Discussion

The findings from this chapter make important contributions to the literature on homeworking as well as the literature on work life boundaries. First, relating to literature on homeworking, one of the more important findings from these analyses was that the extent of homeworking had a curvilinear relationship with non-work boundary permeability such that permeability was highest at moderate levels of homeworking. This is a new contribution to the literature on boundaries and homeworking. Prior literature generally associates homeworking with higher levels of work-home integration and therefore greater work-home boundary permeability (Boswell and Olson-Buchanan, 2004, Kossek et al., 2006, Standen et al., 1999). One interpretation of this finding would be that homeworkers who work extensively in the home environment have put in place boundary management strategies that help to create segmentation between their work and non-work activities (Kossek et al., 1999). Drawing on Kossek et al.'s (1999, p.105) work-family role synthesis model, “defined as the strategies an individual uses to manage the joint enactment of work and family roles”, we can conjecture that high intensity homeworkers have adopted strategies to reduce the level of boundary



permeability to one which supports their preference. These strategies may involve rituals that assist homeworkers in preserving boundaries and managing transitions between work and non-work tasks. For example, Nippert-Eng (1996b) studied workers' use of calendars and clocks as both symbolic and behavioural means to manage work-home boundaries. Her work identified the use of rituals such as using separate key rings for work and personal keys and separate calendars for work and home events as a means of creating boundaries that supported employees' preferences for work-life integration-segmentation (Nippert-Eng, 1996b). In the case of homeworkers, these rituals may include having specific rooms of the household dedicated to work activity or having separate phone lines for work and home, among others. This finding is also supported by the research in Chapter 4 of this dissertation, which uses qualitative data to explore homeworkers' boundary management strategies. As reported in Chapter 4, extensive homeworkers were often found to employ boundary strategies that mimicked the traditional boundaries of office environments, such as set times for breaks and working hours, separate physical spaces for work and non-work activities, and using technology to signal the end of a work day by shutting down phones and computer access. As suggested earlier in the present chapter, the peak in permeability experienced by those working moderate levels of homeworking may be explained by the number of transitions made between work and non-work environments over the course of a work day or week. This higher frequency of transitions may make it more difficult to enact stable boundaries demarcating work and non-work roles (Felstead and Jewson, 2000, Matthews et al., 2010, Spoonley et al., 2002).

This finding has practical implications for employees who currently or plan to engage in homeworking as well as the organisations that employ them. From the perspective of employees, understanding the level of permeability they might encounter at varying levels of homeworking may help to inform their decisions on homeworking schedules. For example, an employee who prefers some degree of integration between home and work roles, but would like to reduce the amount of time they spend each week commuting to their company office, they might consider adopting a schedule whereby they work two to three days per week in the office with the remaining days at home. A partial homeworking schedule might allow this employee to reduce some of the spent commuting back and forth to the office, while at the same time providing a flexible schedule that allows for more frequent transitions between work and non-work roles. Similarly, an employee who prefers high levels of segmentation might adopt a schedule that is either fully office-based or one where the majority of time is spent working from home in order maintain segmentation between work and non-work roles.

Central to an employee's decision to request a schedule that matches their preference for segmentation or integration is the presumption that they are fully aware of the types of experiences that varying levels of homeworking might generate. This presents human resource managers within the organisation with an opportunity to provide further education and assessment of homeworking candidates to assist with designing a schedule which is more likely to lead to a successful homeworking arrangement. One way in which this information could be disseminated within the organisation might be the establishment of a peer mentoring scheme for homeworkers whereby new homeworkers are assigned to more seasoned homeworkers and information regarding

their experiences can be shared (Raghuram, 1996). Similarly, the organisation could host online discussion groups for homeworkers as a way to exchange information about the impact of different scheduling options.

Findings from the next set of hypotheses contribute to theory and research relating to work-life boundary management, and specifically to literature relating to boundary permeability. The second hypothesis looked at the relationship between boundary permeability and work-life conflict. As noted earlier in this chapter, in the literature there are both positive and negative outcomes associated with boundary permeability (Ashforth et al., 2000, Kossek et al., 2006). Some research suggests that boundary permeability via integrated roles can result in positive work-life outcomes by offering employees the flexibility to manage the demands of multiple roles (Bailyn and Harrington, 2004, Stanko, 2009). However, much of the other literature on integration and boundary permeability suggests that, despite the potential for an enhanced ability to manage multiple roles and/or the opportunity for skills and resources to transfer between domains, role blurring resulting from higher levels of permeability tends to lead to higher work-life conflict (Desrochers et al., 2005, Glavin and Schieman, 2012). This research supported the contention that non-work boundary permeability is, in fact, associated with higher work-life conflict. This finding is not new to this dissertation and, as noted, has been well established by prior research; however, it is an important consideration for employees and organizations using or planning to use homeworking in practice. Employees may need assistance with the development of boundary management strategies in order to reduce conflict, and organisations may want to

consider employees' boundary resources as part of their assessment of suitability for homeworking.

The fourth hypothesis predicted that, similar to boundary permeability, extent of homeworking would also have a curvilinear relationship with work-life conflict, such that employees would experience the highest levels of conflict at moderate levels of homeworking. Despite the fact that the hypothesized relationships between extent of homeworking and permeability, and between permeability and work-life conflict were supported, this fourth hypothesis was not supported and the data showed a significant negative, linear relationship between extent of homeworking and work-life conflict. This indicates that other factors, aside from level of permeability, influence employees' perceptions of work-life conflict. Other factors to consider include perceptions of autonomy and control (Gajendran and Harrison, 2007, Golden, 2005, Kelliher and Anderson, 2010, Kossek et al., 2006) and job attitudes, such as job satisfaction, perceived organisational support and organisational commitment (Fonner and Roloff, 2010, Golden, 2006). For example, in their study of flexible workers, Kelliher and Anderson (2010, p.83) found that despite evidence of work intensification, flexible workers continue to report high levels of job commitment and satisfaction; this suggests an exchange relationship, whereby employees "trad(e) flexibility for effort". Similarly, in the path analysis relating to job satisfaction and work-life conflict among teleworkers and office-based workers, Fonner and Roloff (2010) found that high-intensity teleworkers may experience reduced work-life conflict due to a reduction in interruptions and meetings as well as reduced exposure to the potentially negative impact of office politics. This suggests that further research needs to be done to

understand factors that may influence the relationship between homeworking, boundary permeability and work-life conflict.

Hypothesis 3 proposed that non-work boundary permeability would moderate the relationship between homeworking and work-life conflict. The data supported the moderating influence of permeability, such that at higher levels of permeability the relationship between extent of homeworking and work-life conflict is stronger. This contributes a new finding to the literature on homeworking and work-life boundaries that supports the idea that the way workers manage the permeability of their work / non-work boundaries can mitigate the outcomes relating to homeworking. This finding also extends current theory on boundaries by clarifying the role of permeability in the relationship between boundary strength and work-life outcomes. As noted earlier, prior theory on work-life boundaries has envisaged boundary flexibility and permeability as co-antecedents to boundary strength, which then is a determinant of work-life integration/segmentation (Ashforth et al., 2000, Bulger et al., 2007, Hall and Richter, 1988, Olson-Buchanan and Boswell, 2006). The support found for Hypothesis 3 suggests that boundary permeability serves a unique role in that it moderates the relationship between flexibility and work-life outcomes. Given that research has demonstrated that permeability can, to some degree, be controlled by individuals, this identifies permeability as a unique ‘lever’ by which individuals can control the effects of flexible work arrangements (Clark, 2000, Felstead and Jewson, 2000, Kossek et al., 1999, Kreiner et al, 2009, Nippert-Eng, 1996a, b).

The last group of hypotheses attempted to contribute to research on Person-Environment Fit as it relates to the management of work and non-work role boundaries (Demerouti et al., 2005) by looking at the boundary preference and its impact on the relationships between extent of homeworking, boundary permeability and work-life conflict. Rothbard et al.'s (2005) research on 'fit' between an individual's preferences and the integrating or segmenting nature of their employer's organisational policies demonstrated that alignment between preferences and resources resulted in greater satisfaction and commitment. Hypotheses 5 and 6 proposed that non-work flexibility preference would moderate the relationships between homeworking and work-life conflict and permeability and work-life conflict. Although the findings here did not fully support the moderating influence of employee flexibility preference on the relationship between extent of homeworking or permeability to work-life conflict, the relationships between the variables in the regression equation were significant indicating that the extent of fit can influence the likelihood of positive outcomes for homeworkers. The practical implications of this are that employers must understand that workers have different preferences for work-life integration. Offering or forcing a worker to adopt integrating practices can have negative effects for some workers.

## **5.8 Limitations**

This research relied on self-report measures which may introduce a common method bias, meaning because one individual has provided the values for both the independent and dependent variables, the relationship between these variables may be subject to bias inherent to the respondent (Podsakoff and Organ, 1986, Podsakoff et al., 2003).

However, due to the nature of the research questions it can be argued that an individual's

subjective perceptions of these measures are, in fact, what this research aims to understand, and therefore the data are, in fact, representative of these relationships (Spector, 1994). In order to assess the potential impact of common method bias on this analysis, confirmatory factor analysis was performed using Harman's single factor test (Beauregard, 2011, Podsakoff et al., 2003). For each of the hypothesized regression models, the variables were entered into a confirmatory factor analysis in order to determine if the variance between the variables was better explained by a single factor, indicating that common method bias may be present (Meade et al., 2007, Podsakoff et al., 2003). None of the factor analyses indicated that a single factor accounts for the majority of variance in the models, suggesting that common method bias is not significantly impacting the data.

In addition, this study was conducted with employees of a single organization, which may mean that the results are difficult to generalize. However, it may be argued that the value of a sample of employees who have adopted a range of homeworking patterns would outweigh the drawbacks of this approach. The use of this sample has allowed the research to explore the relationships between homeworking and work-life conflict over a wide range of working arrangements, from those who indicate they do not homework at all to those who homework all the time. Without this diversity in working patterns, the curvilinear relationship that was identified between extent of homeworking and non-work boundary permeability would have been difficult to establish.

Many of the measures used were adapted in order to measure the work versus non-work interface of individuals both with and without families. However, some research

indicates that these populations experience this interface differently. For example, in their examination of Netemeyer et al.'s (1996) work –family conflict and work-life conflict scales, Waumsley et al. (2010, p.9) found that “people with children reported significantly more conflict between family and work than between life and work”. This would imply that the use of generalized work-life measures, as has been done in this chapter, might underreport the extent of conflict experienced by workers with families. Further testing and refinement of scales for individuals with a variety of life situations is called for in the field.

However, as noted in Section 5.5.2, the Cronbach's alpha measures for work-life conflict and boundary preferences were lower than the desired cut-off of .70 (Nunnally, 1978). For the work-life conflict measure, further examination showed that the reliability of the measure was better among employees who were married or in a similar relationship and among those with children under 18 living in the home. This lower reliability among other groups of respondents may limit the generalizability of the findings in this chapter among workers with fewer marital or childcare-related responsibilities in the home environment.

In addition, further examination was conducted on the measures for boundary preference. While little difference in reliability was noted among varying employee subgroups, the literature does indicate that often the tests for reliability among two-item scale measures underestimate the actual reliability of the measure (Eisinga, 2012). However, it is important to consider the implications for the study findings if, in fact, these measures are less reliable. Given that the findings were non-significant for the



influence of boundary preference on the relationship in the model, it can be questioned as to whether this is due to the weakness of the measures used. Further research might attempt to retest these relationships with more robust measures in order to truly determine the whether boundary preference impacts these models.

## **5.9 Conclusion**

In conclusion, this chapter has made a significant contribution to the literature on work-life boundaries by clarifying the role of boundary permeability in the relationship between organisational practices and work-life outcomes. The empirical evidence has identified that boundary permeability moderates the impact of flexible (integrating) work life practices on negative work-life outcomes (conflict). In addition, this chapter also makes a strong contribution to literature on homeworking by suggesting that workers experience difference levels of permeability at varying degrees of homeworking. The curvilinear relationship between extent of homeworking and boundary permeability suggests that more intensive homeworkers may be employing boundary management strategies that recreate some of the traditional physical, temporal and behavioural boundaries that are associated with working in an office environment. It also suggests that more moderate homeworkers may experience higher levels of permeability or role interruption which has the potential to lead to greater work-life conflict. Further exploration as to how homeworkers create and maintain boundaries at varying levels of homeworking may help to inform current and future homeworkers about the types of routines and support that might be important to successful homeworking arrangements.

In addition, although the data do not fully support the idea that employees' preferences for integrating versus segmenting work and non-work roles moderate the relationship between permeability and conflict, preference did contribute significantly to the regression model suggesting that employee boundary preferences must still be a consideration when adopting homeworking arrangements. This is important for practitioners as it may help to grow their understanding of the potential outcomes related to offering homeworking arrangements. In addition, it might also allow them to better assess which employees might be best suited to different types of work arrangements. For example, helping employees assess their own boundary preferences and providing them with information on boundary strategies may help to improve their experience of homeworking. The next chapter will further explore boundary management strategies and seeks to determine whether boundary permeability impacts the relationship between other job demands and resources and work-life and well-being outcomes.

## **Chapter 6: Boundary Management over Time**

6.1 Introduction

6.2 Literature Review

6.2.1 Antecedents to Non-Work Boundary Permeability among Homeworkers

6.2.2 Boundary Permeability as a Moderator between Job Demands and Negative Work-Life Outcomes

6.2.3 Boundary Permeability as a Moderator between Job Resources and Positive Work-Life Outcomes

6.3 Method

6.3.1 Research Design

6.3.2 Measures

6.3.3 Analyses

6.4 Findings

6.5 Discussion

6.6 Limitations

6.7 Conclusion

## 6.1 Introduction

While the previous chapter sought to redefine the role of permeability in the relationship between work and non-work role segmentation and work-life outcomes, this chapter intends to extend these findings by examining the role of boundary permeability in the relationship between other job demands and resources and work-life and well-being outcomes. This chapter addresses the fourth core research question identified in Chapter 1:

*How does boundary permeability impact the relationship between other job demands and resources, beyond flexible working practices, and positive and negative work-life outcomes?*

This chapter also extends earlier findings by using time series data that allows for the development of predictive models for the relationships between boundary strength and work-life and well-being outcomes. The use of a daily diary method for data collection addresses the inherently dynamic nature of work and non-work interactions by allowing for an examination of the daily fluctuations in boundary strength and individual work-life and well-being outcomes. First, this chapter will explore the importance of using time series data in work-life research as well as review the findings of prior research on boundary management using these methods. Next, using the theoretical framework of the Job Demands-Resources Model (Demerouti et al., 2001), this chapter will examine whether boundary permeability also plays a moderating role in the relationships between antecedents and outcomes associated with job demands and resources. Three new models will be introduced to explain these relationships. Then, using the findings from

a 14-day diary study of homeworkers, these models will be tested and findings of the research presented. Last, this chapter will discuss the practical implications of these findings as well as present some limitations to this research.

The purposes of this chapter are twofold. First, this research seeks to use daily diary data in order to understand how homeworking, job control and segmentation preference interact to predict day-to-day non-work boundary permeability. Next, having established the drivers of boundary permeability, this study seeks to examine how the daily levels of non-work boundary permeability act as a mechanism regulating how job demands lead to negative work-life outcomes and job resources lead to positive work life outcomes.

Much of the prior literature on boundary permeability envisages it as an antecedent to individual work-life outcomes. This chapter offers a new perspective by investigating the moderating influence of boundary permeability on the relationships between work-to-life conflict and facilitation and their antecedents. Moderation by level of boundary permeability would offer an important contribution to our knowledge of these relationships, because individuals and organisations can affect boundary permeability through the use of a variety of boundary strategies. For example, individuals wanting greater segmentation may set strict temporal limits on their workday. Others, wanting greater integration may take time out of the workday for personal obligations and then take work home in the evening to account for lost time. These strategies could either enhance the positive impact of work-life relationships or ameliorate the negative impact of work-life relationships. This makes a significant contribution to both academic and

practitioner literature such that boundary permeability can be identified as a key lever that can be influenced to seek out the most positive outcomes from the work-life interface.

## **6.2 Literature review**

Research on work-life relationships provides clear evidence that the processes by which the work and life domains interact are dynamic in nature (Doumas, 2003, Ilies et al., 2007, Tenbrunsel, 1995, Williams and Alliger, 1994). However, most of the research to date that examines work-life relationships uses cross-sectional data that only capture a single point in time (Caspar et al., 2007). In their meta-analysis of methods used in work-family research, Caspar et al. (2007) found that 89 per cent of the studies examined were cross-sectional in nature. The findings from their review call for researchers “to increase the field’s understanding of causal and dynamic Work-Family (sic) relations” (Caspar et al., 2007, p.34). Time-series studies, such as diaries, are methods that allow researchers to study both causal and dynamic relationships (Bolger et al., 2003).

The analysis of time-series data allows for researchers to look beyond “between-person” differences relating to the work-life interface to examine “within-person” processes that influence our experiences (Bolger et al., 2003, p.585). Between-person difference is the extent to which members of the sample differ from each other in terms of their perception of work-life constructs, such as work-life conflict. For example, traditional cross-sectional designs allow us to only compare static “levels” of work-life constructs such as perceived work-life conflict between groups of individuals, such as

homeworkers vs. office-based workers (Maertz and Boyar, 2011, p.68). Time series data allow researchers to look at “within-person” fluctuations in work-life indicators over time, which allow for the examination of the processes underlying the episodic changes in participant experiences (Bolger et al, 2003, p.586, Maertz and Boyar, 2011).

Prior research using time series data to examine work life boundaries has reinforced the importance of using these methods to explore the work-life interface. For example, in their diary study of U.S. university employees, Ilies et al. (2007) found that within-person perceived workload predicted perceptions of work-family conflict over time. In addition, they found that within-person positive and negative affect at work predicted affect at home (Ilies et al., 2007). Prior research on work-life boundaries using time-series methods is limited; however, the studies employing diary methods have made important contributions to the literature. For example, Wajcman, Bittman and Brown et al. (2008) used a baseline questionnaire, followed by a phone log and time diary to examine boundary management relating to participants’ use of mobile phone technology. Their study found that mobile phones were not being used primarily as a means of “work extension” but rather for social and leisure purposes or as a means to better manage work-family boundaries (Wajcman et al., 2008, p.640). Poppleton, Briner and Kiefer (2008) used a qualitative diary method to examine levels of permeability and work to non-work spillover among fixed schedule factory workers vs. governmental workers with flextime options. The research showed the importance of work context in relation to the work-life boundary; governmental workers with the option of working flexibly experienced more time-based work-life conflict, while factory workers reported higher levels of positive and negative spillover from work to home, due to the

“physically demanding, but mentally undemanding nature of the work, which resulted in the carry-over of tiredness from work to non-work, and the carry-over of thoughts and moods from non-work to work” (Poppleton et al., 2008, p.497).

The present study attempts to examine factors that impact the day to day management of boundaries and the associated outcomes among homeworkers. This chapter will rely on the theoretical framework of the Job Demands-Resources Model (Demerouti et al., 2001). According to the Job Demands-Resources Model, “job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs” (Demerouti et al., 2001, p.312). Meanwhile, job resources are the “physical, psychological, social, or organizational aspects of the job that are ...functional in achieving work goals, reduce job demands and the associated physiological and psychological costs or stimulate personal growth, learning, and development.” (Demerouti et al., 2001, p.312). As noted in the broader literature review in Chapter 2, the Job Demands-Resources Model was initially used to measure employee burnout resulting from stress caused by balancing work and non-work roles. More recently, however, research has used the Job Demands-Resources Model to study work-life outcomes (Demerouti et al., 2001, Glavin and Schieman, 2012, Grotto and Lyness, 2010). Specifically, Glavin and Schieman (2012, p.72) use the Job Demands-Resources Model to “investigate whether the consequences of role blurring are contingent on access to job resources and exposure to job demands”. Their research has identified that job demands, such as pressure at work, strengthened the relationship between role blurring and work-to-family conflict, while the job



resources, such as decision-making latitude, weakened the relationship between role blurring and work-to-family conflict (Glavin and Schieman, 2012).

However, the research in this chapter argues that permeability, which can be thought of as the extent to which boundaries allow for the blurring of work and non-work roles, actually moderates the relationship between job demands and resources and work-life and well-being outcomes. Both Boundary Theory and Border Theory suggest that boundaries are cognitive social constructions of the borders between activities (Ashforth et al., 2000, Clark, 2000, Zerubavel, 1991). This suggests that individuals are actively co-constructing boundaries in tandem with the resources and strengths of their environment, allowing boundaries to serve as a “linking mechanism” between work and non-work roles (Edwards and Rothbard, 2000). This research contends that the strength of this linking mechanism will moderate the impact of demands and resources between domains. Using this framework, this study will examine the relationships between workload as a job demand and job satisfaction as a resource and work-life and wellbeing outcomes. In addition, this research will seek to understand how boundary permeability affects the Job Demands-Resources relationship with these outcomes (Demerouti et al., 2001).

### **6.2.1 Antecedents to Non-work Boundary Permeability among Homeworkers**

Because homeworkers are the focus of the current study, the first relationship to be examined is that between working from home and perceived job control. As we discussed earlier in Chapter 4 of this dissertation, many intensive homeworkers are able to recreate the traditional work-life boundaries within their home environment using

physical and temporal boundary strategies. Central to the ability to recreate these traditional boundaries is the amount of control that individuals have over how and when they will perform their duties. Prior literature has found that individuals who are offered flexible work arrangements such as working from home perceive higher levels of autonomy and control over their working habits (Fonner and Roloff, 2010, Kelliher and Anderson, 2008). For example, in their research with high frequency teleworkers, Fonner and Roloff (2010) found that teleworkers reported higher levels of control over work-home boundaries and the ability to work without interruption than their office-based counterparts. Similarly, Kelliher and Anderson (2008, p.213), in their interviews with flexible workers at a UK software company, found that participants reported that flexible working afforded them more control over the management of their work and non-work duties as well as “a general sense of empowerment”. While the relationship between daily work arrangements and perceptions of control on that day have not been examined in prior literature, this research makes the assumption that the lack of physical proximity between an individual and their work environment would lead to an immediate perception of enhanced control. While employees who work mainly ‘on the road’ also experience a lack of physical proximity to the office environment, this research assumes that other factors associated with travel (such as needing to be available for clients on their schedules, reliance on transport schedules, and variable internet connectivity) may reduce levels of control relative to those working from home. Therefore the first hypothesis for this chapter is as follows:

*Hypothesis 1: Perceived job control will be higher on days when participants work mainly from home than on days when they work in the office, on the road or in a mix of locations.*

Prior research has also linked job control and boundary permeability. Greater control over their work environment affords individuals working from home the ability to manage the number of inter- and intra-domain interruptions during the day (Duxbury and Neufeld, 1999). Working from home eliminates the possibility that a colleague might stop by your desk to ask a question, interrupting work activity. Instead, an individual working from home can choose when and whether to answer the phone or respond to an email with that colleague's question. For example, Duxbury and Neufeld (1999), in their study of part-time Canadian teleworkers found that teleworkers reported fewer interruptions on days they worked from home. Similar to the hypothesis for the relationship between working from home and daily job control, it is assumed that the impact on boundary permeability would be immediate in the sense that, as control declines, interruptions from work into the non-work domain occur. Therefore the next hypothesis is as follows:

*Hypothesis 2: Within individuals, non-work boundary permeability will be lower on days when perceived job control is higher.*

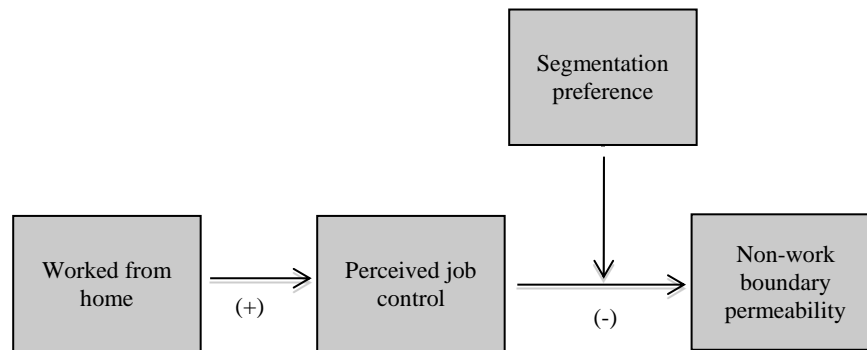
A potentially important factor in the relationship between control and permeability is segmentation preference. As explained in prior chapters, individuals have preferences along a continuum for either integration or segmentation between work and non-work

activities (Nippert-Eng, 1996a, Rothbard et al., 2005, Ashforth et al., 2000). These preferences often drive the way individuals manage their work-home boundaries. For example, in her research on boundary tactics, Nippert-Eng (1996a) found that individuals differentially used objects such as calendars and keys to manage work-home boundaries according to their preferences. For example, her research found that those who prefer segmentation between home and work tended to use separate diaries and key rings for work and non-work activities (Nippert-Eng, 1996b). This demonstrates that, given control over how to allocate work and non-work responsibilities, those preferring integration may adopt work habits that are more integrative in nature, increasing the permeability of the boundaries between work and non-work activities. Therefore, the next hypothesis suggests that segmentation preference will moderate the extent to which job control reduces non-work boundary permeability.

*Hypothesis 3: Segmentation preference will moderate the relationship between perceived job control and non-work boundary permeability such that at higher levels of preference for segmentation, the daily, negative effects of job control on boundary permeability are strengthened.*

Figure 6.1 illustrates the relationships predicted in Hypotheses 1, 2 and 3.

**Figure 6.1: Model of Antecedents to Non-work Boundary Permeability among Homeworkers**



### **6.2.2 Boundary Permeability as a Moderator between Job Demands and Negative Work-Life Outcomes**

The next set of hypotheses will examine the relationship between boundary permeability, daily perceived workload and work-life conflict. Workload was selected as a job demand because it is commonly associated in the literature with an increase in work-life conflict. For example, in her study among UK public sector employees, Beauregard (2006) found that organizational time demands positively predicted work to home interference. Similarly, in the studies of recent graduates in the UK, Sturges and Guest (2004) found that hours worked positively predicted work-life conflict. Therefore the first relationship that will be examined in this study is as follows:

*Hypothesis 4: Within individuals, work-life conflict will be higher on days when perceived workload is higher.*

As found in Chapter 5, boundary permeability has a positive relationship with work-life conflict when measured using between-person analysis of difference. This is also supported by prior research such as Kossek et al.'s (2006) study of telecommuters, which found that employees with more integrative boundary management styles reported higher levels of work to life conflict (also Ashforth et al, 2000, Bulger et al, 2007, Hecht and Allen, 2009 and Olson-Buchanan and Boswell, 2006). One possible explanation for this link to higher work-life conflict is that more permeable boundaries allow greater spillover of job demands into the non-work domain (Chesley, 2005). As reviewed in Chapter 2, the work-life literature defines spillover as a “transmission (which) takes place within the individual who has been either positively or negatively affected by events in the source environment which then spill over into the next environment” (Dilworth, 2004, p.243). For example, using longitudinal data from the Cornell Couples and Careers Study, Chesley (2005) found that work-related mobile phone use, which is often associated with increased boundary permeability, was positively related to negative forms of work-home spillover. Among homeworkers, we anticipate that boundary permeability impacts the link between job demands and work-life conflict. For example, a homeworker with high job demands and high non-work boundary permeability may frequently experience interruptions to their home life, such as phone calls, emails and work in the evenings. However, homeworkers with high job demands and low non-work boundary permeability may elect to shut down their computer in the evening or turn off their mobile phone in order to minimize interruptions. Despite these links, prior research has not examined work-life boundary permeability as a moderator between job demands and work-life outcomes. Therefore,

the next hypothesis predicts that boundary permeability will moderate the relationship between job demands (workload) and work-life conflict.

*Hypothesis 5: Non-work boundary permeability will moderate the relationship between perceived workload and work-life conflict such that higher levels of permeability will strengthen the daily positive effects of perceived workload on work-life conflict.*

Last, it is important to investigate outcomes related to experiences of work-life conflict. Prior literature has linked between-person work-life conflict to negative reports of well-being (Allen, Herst, Bruck and Sutton, 2000, Parasuraman and Simmers, 2001, Vodanoff, 2005). Research has shown that work-life conflict is associated with stress-related symptoms including somatic issues, physical and psychological strain and burnout, among others (Allen et al., 2000). As reviewed in Chapter 2, the Conservation of Resources Model (Hobfoll, 1989) provides insight into how work-life conflict leads to poor well-being. “The COR model proposes that interrole conflict leads to stress because resources are lost in the process of juggling both work and family roles. These potential or actual losses of resources lead to a negative ‘state of being’, which may include dissatisfaction, depression, anxiety, or physiological tension” (Grandey and Cropanzano, 1999, p.352). In their meta-analysis of studies examining the consequences of work-life conflict, Allen et al. (2000) identified several studies that linked work-life conflict to psychological and physical aspects of well-being. For example, in their study of evening MBA students in the US, Parasuraman and Simmers (2001) found that work to life conflict was positively related to life stress in both organizationally and self-

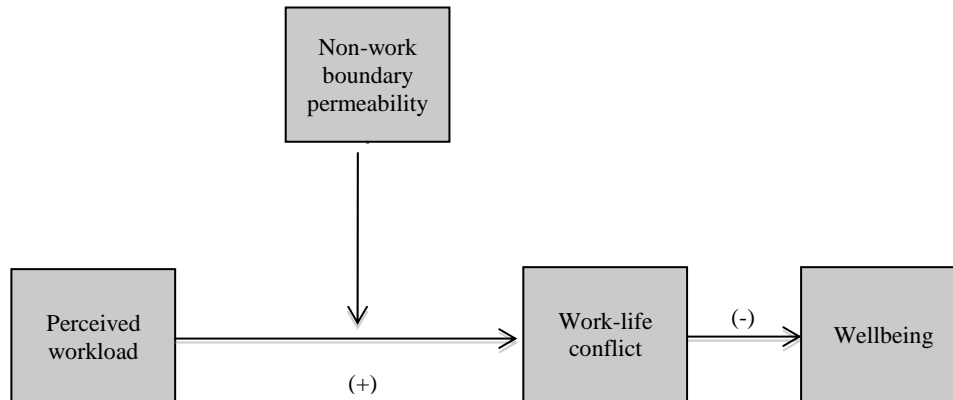
employed participants. Similarly, using data from the 2002 National Study of the Changing Workforce, Voydanoff (2005a) found that work-family conflict was a partial mediator of the relationship between work and home demands and resources and perceptions of stress. Although the majority of studies examining the link between work-life conflict and stress-related outcomes are cross-sectional in nature, the limited diary research conducted in the work-life literature suggests that many of the between-person relationships identified in earlier research may be replicated in within-person analysis. In addition, prior diary research has supported the idea that the effects of work-life conflict can lead to immediate fluctuation in well-being. For example, in her diary study among Dutch teachers, Sonnentag (2001, p.203) found that “work-related activities had a negative effect on situational well-being before going to sleep”. Therefore the last hypothesis related to the model of the impact of boundary permeability on negative work-life outcomes is as follows:

*Hypothesis 6: Within individuals, daily perceptions of work-life conflict will be negatively related to daily perceptions of positive wellbeing and positively related to daily perceptions of negative well-being.*



Figure 6.2 presents a model of the relationships proposed by Hypotheses 4, 5 and 6.

**Figure 6.2: Model of Boundary Permeability as a Moderator between Job Demands and Negative Work-Life Outcomes**



### **6.2.3 Boundary Permeability as a Moderator of the relationship between Job Resources and Positive Work-Life Outcomes**

While the model above examines how boundary permeability can amplify or ameliorate the relationship between job demands and the negative outcomes associated with work-life conflict, it is also important to examine how this same mechanism might enhance or limit positive outcomes associated with job resources. As this research seeks to identify tools that may be used to enhance the relationship between work and non-work roles, the relationship between boundary permeability, job resources and work-to-life facilitation is also investigated in this chapter.

The first step in examining these relationships is to understand the association between job resources and the positive work-life outcome of work-to-life facilitation. As seen in

the literature review in Chapter 2, work-to-life facilitation is defined by Wayne, Grzywacz, Carlson and Kacmar (2007, p.64) as “the extent to which an individual's engagement in one life domain (i.e., work/family) provides gains (i.e., developmental, affective, capital, or efficiency) which contribute to enhanced functioning of another life domain (i.e., family/work)”. For example, a working mother may find that the negotiating skills she has used with her children provide her with a resource that she is able to use in the management of her team. Prior literature has demonstrated that there is a positive link between job satisfaction and work-to-life facilitation; however, research is mixed as to the direction of the relationship. For example, Grzywacz and Butler (2005), in their analysis of data from the National Survey of Midlife Development in the United States (MIDUS), found that individuals who reported that their jobs offered them greater autonomy, variety and complexity (all factors associated with job satisfaction) were more likely to experience work-to-family facilitation. Other research suggests that work-to-family facilitation predicts job satisfaction (Ilies et al., 2009, van Steenbergen, Ellemers, and Mooijaart, 2007, Wayne et al., 2007, Wayne, Musica and Fleeson, 2004). For example, in their research with a national sample of US adults, Wayne et al. (2004) found that family-to-work facilitation was a predictor of job satisfaction. Therefore, the next hypothesis linking job satisfaction and work-to-life facilitation will predict a positive association only, rather than a directional relationship.

*Hypothesis 7: Within individuals, daily job satisfaction will be positively associated with work-to-life facilitation.*

Similar to the model hypothesized above for work-to-life conflict, work-to-life facilitation is also linked in the literature to the concept of positive spillover. For facilitation to occur, research suggests there is a spillover of affect, values, skills or behaviours (Edwards and Rothbard, 2000) between the home and work domains. Boundary permeability is one determinant of how this spillover may occur, such that if boundaries are permeable, an employee is likely to make more frequent transitions between work and non-work roles. Spillover occurs when an employee makes a transition from one role to another (Williams and Alliger, 1994). Therefore, the greater the frequency of transitions, the more likely spillover between roles will occur. For example, the more frequently an employee transitions between work and non-work roles during the day, the more likely a positive mood generated from an accomplishment at work is to impact the non-work environment.

One possible explanation for increased spillover due to frequent transitions is that the more frequently an individual transitions from one role to the next, the less likely they are to have the time and energy to fully engage in their new role and disengage with the prior (Ashforth et al., 2000). Research has demonstrated that individuals will often engage in rituals that assist with role transition, such as listening to music or reading a newspaper during the commute home (Ashforth et al., 2000, Nippert-Eng, 1996b, Shumate and Fulk, 2004). The more frequently transitions occur the less likely individuals are to have the opportunity to complete the transition process, creating greater opportunity for spillover to occur. Another possible explanation is that making frequent transitions between different groupings of affect, values, skills and behaviors associated with different roles may be cognitively and emotionally challenging for

individuals. Therefore maintaining the affect, values, skills and behaviors from one role to the next becomes more efficient, albeit enabling spillover.

There has been very limited prior research looking at the relationship between boundary permeability and work-life facilitation; however, as noted earlier in support of Hypothesis 5, research that does exist suggests that permeability is important to the transfer of both positive and negative resources from the work to home environments (Grycwacz and Marks, 2000, Ilies et al., 2009). For example, in their diary study of university employees, Ilies et al. (2009) found that level of work-life integration moderated the positive relationships between job satisfaction and marital satisfaction as well as job satisfaction and affect at home, such that greater integration led to stronger relationships between variables (Ilies et al., 2009). As work-life integration is associated with high levels of boundary permeability, this suggests that higher levels of permeability may facilitate the impact of work-related positive experiences on non-work outcomes (Ashforth et al., 2000, Olson-Buchanan and Boswell, 2005). Therefore, the next hypothesis is as follows:

*Hypothesis 8: Non-work boundary permeability will moderate the relationship between job satisfaction and work-to-life facilitation such that higher levels of permeability will strengthen the daily positive effects of job satisfaction on work-to-life facilitation.*

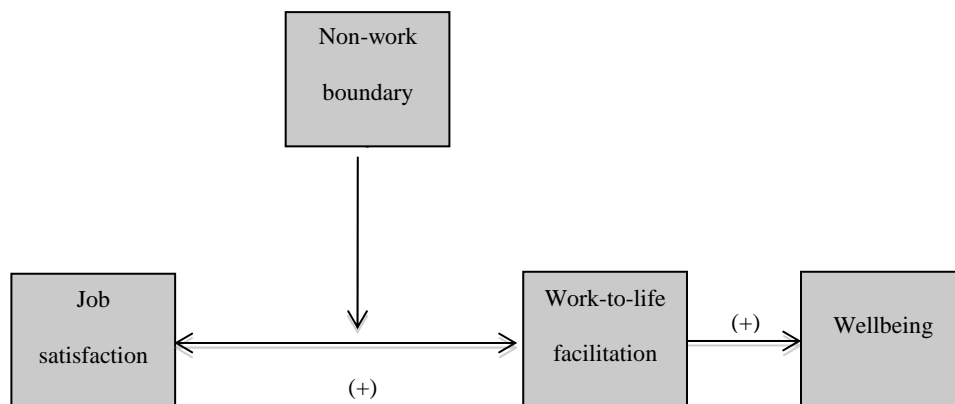
Last, in order to make a case for the practical importance of these relationships, it is important to look at outcomes associated with work-to-life facilitation. Prior cross-

sectional and longitudinal research suggests that family-to-work life facilitation is associated with a range of positive outcomes including individual well-being (Allis and O’Driscoll, 2008, Grzywacz & Bass, 2003). For example, in the study of government workers in New Zealand, Allis and O’Driscoll (2008) found that non-work to work facilitation was positively related to individual well-being. Therefore, the final relationship this study will examine is that between daily perceptions of work-to-life facilitation and individual well-being.

*Hypothesis 9: Within individuals, daily perceptions of work-to-life facilitation will be positively related to daily perceptions of positive well-being and negatively related to daily perceptions of negative well-being.*

Figure 6.3 presents a model of the relationships proposed by Hypotheses 7, 8 and 9.

**Figure 6.3: Model of Boundary Permeability as a Moderator between Job Resources and Positive Work-Life Outcomes**



## **6.3 Method**

### **6.3.1 Research Design**

The research contained in this chapter is based on data collected from a 14-day diary study among homeworkers who are employees of a large, public sector firm providing advisory and other services to businesses in Great Britain, with offices across England, Scotland and Wales. The reasons for selecting a diary method include the idea that concepts of work-life conflict and work-life facilitation are not static in nature and it is important to understand the processes and mechanisms which link experiences together (Bolger et al, 2003, Butler et al, 2005, Doumas, 2003, Tenbrunsel et al., 1995, Williams and Alliger, 1994). Maertz and Boyar (2011, p.68) compare and contrast research on work-life conflict relating to “levels” versus “episodes” and propose a model that incorporates a cross-sectional measure of balance as a “level”, as well as time-series “episodes” of conflict that are used as a way to develop a deeper understanding of the mechanisms and causal pathways relating to work-life relationships. Other prior research on the work-life interface has also suggested the use of an episodic or critical incident approach to the study of the conflict and enrichment (Greenhaus and Powell, 2006). In addition, diary studies add to the validity of the self-report measures used in the research due to the immediacy of the reporting (Bolger et al., 2003, Doumas et al, 2003, Symon and Cassell, 1998) as well as provide the added benefit of ‘ecological validity’ not found in lab and other forms of research, due to the fact that reports are filled out in the natural home environment (Larson and Almeida, 1999).

Further support for the need for more diverse methods within the work-family literature can be found in a meta-analysis conducted by Caspar et al. (2007), which demonstrates

that the majority of research in the field is cross-sectional in nature, typically relies on survey methods and most often only provides individual levels of analysis. Diary studies also provide the ability to look beyond between-person differences to within-person event-based changes which becomes quite relevant within the work-family literature (Bolger et al., 2003). For example, instead of simply assessing differences in average levels of work-life conflict between groups of people, the examination of within-person differences allows us to understand variation in an individual's level of work-life conflict over time such that direct antecedents and consequences can be identified.

Diary participants were recruited via a follow-on question after the completion of an online survey. After the completion of the survey, participants who indicated that they worked 20 per cent or more of their time from home were asked if they would be willing to participate in a follow up diary study. Diary participants were asked to complete the survey in the evening after the completion of work and non-work activities for the day. Links were activated and emailed daily to participants in mid-afternoon to their employee email accounts so that employees could forward the messages to their personal accounts before the end of the work day if they were unable to access work email at home. Respondents were asked to participate in the diary for 14 consecutive days, including weekends. Weekend links were emailed on Fridays, but were not activated until the appropriate days so that, again, respondents without access to work email during the weekend could forward these links to their personal email accounts at home. A two-week time period was selected for this study in order to maximize the statistical power that could be drawn from the sample size before the quality of the data

declines due to participant exhaustion (Stone, Kessler, Haythomthwatte, 1991). In addition, a two-week period has been suggested to represent an adequate time period to measure social processes and psychological measures (Bolger et al., 1993, Ilies et al, 2007).

A total of 225 employees were eligible to participate in the diary study based on their responses relating to extent of homeworking in the online survey. Among these, 88 expressed initial an interest in participating in the diary research. Within in week of their completion of the online survey, all of those expressing an interest in the diary research received instructional emails relating to the diary as well as their link to the first day's survey. As expected there was some drop off during the 14 day period. Among the 88 initial participants, 71 completed at least two consecutive weekday daily entries of the diary, which was the minimum number of entries needed for the analysis (Ilies et al., 2007). The sample size of 71 participants is in line with sample sizes in other diary research (Conway and Briner, 2002). Overall, a total of 706 daily entries were obtained, with the average participant completing 9.94 daily entries. Among these 706 daily entries, 540 were weekdays and 166 were weekend days.

In order to account for any differences between the sample population and the overall population of those working 20 per cent or more of their time at home within the organization, an analysis of variance (ANOVA) of sample characteristics including gender, tenure with the organization, the presence of a child under 18 in the home and extent of homeworking was performed on the two groups (Bolger et al., 1989). The results of the ANOVA presented in Table 6.1 demonstrated no significant differences



between the homeworkers participating in the diary and those in the general homeworking population of the organization.

**Table 6.1 Analysis of Variance (ANOVA) of diary / non-diary sample characteristics**

Variable	Diary Sample (N=71)		Diary non- participants (N=153)		F	p (sig.)
	Mean	Std. Dev.	Mean	Std. Dev.		
(1) Gender <sup>a</sup>	.61	0.49	.53	0.50	1.136	.288
(2) Tenure (years)	14.45	6.96	14.25	7.21	.038	.846
(3) Presence of child <sup>b</sup>	.44	.50	.42	.50	.042	.838
(4) Extent of homework (% of time)	70.44	29.04	66.91	31.61	.637	.425

<sup>a</sup> 0=Male, 1=Female

<sup>b</sup> 0=No children 18 or under in home, 1=Presence of 1 or more children under 18 in home

\*\*p<.01, \*p<.05

### 6.3.2 Measures

The daily diary instrument took respondents approximately 8 minutes to complete. The instrument contained a range of measures related to a larger study on homeworking; those relevant to the current investigation on work and non-work boundaries are described below.

Daily Work Location: Participants were asked to indicate the location (home, office, on the road or a mix) where they worked from each day. This was coded into a binary variable whereby ‘1’ indicated that the respondent worked ‘mainly at home’ and ‘0’ indicated that the respondent worked in the office, on the road or in a mix of locations.

Job Control: Job control was assessed using a 2-item measure of job control that Butler et al. (2005, p.160) adapted for use in a daily diary from Karasek and Theorell’s (1990)

Job Content Questionnaire. The items, “I had a say in deciding what tasks I did at work today” and “I had freedom to decide how I did my job today”, were assessed using a 5-point scale ranging from ‘strongly agree’ to ‘strongly disagree’. The Cronbach’s alpha for this measure was .906.

Workload: Employee perceptions of daily workload were assessed with a single item (“I had too many demands on me at work today”) that Butler et al. (2005, p.160) adapted for use in a daily diary from Karasek and Theorell’s (1990) Job Content Questionnaire. Participants were asked to indicate their agreement with that statement on a 5-point scale ranging from ‘strongly agree’ to ‘strongly disagree’.

Job satisfaction: Job satisfaction was measured using a shortened, 5-item version of the Brayfield-Rothe (1951) Index for job satisfaction that been used in prior work-life research (Ilies et al., 2007, Mount et al., 2006). Items have been slightly reworded to reflect the daily nature of the measurement context. Sample items used include ‘Today, each minute of work seemed like it would never end’ and ‘Today, I felt enthusiastic about my work’. The Cronbach’s alpha for this measure is .895.

Boundary Strength: Strength of the non-work boundary was examined using a 4-item measure of work boundary permeability adapted from Clark (2002). The number of items was reduced to eliminate those that were not relevant for homeworking respondents, such as “I have work-related items at my home” and “I take care of work-related activities while I am at home” (Clark, 2002, p.37). In addition, items were slightly reworded to allow employees without traditional family structures to represent

their non-work experiences. A sample item used to measure the strength of the non-work boundary was “I spoke to colleagues about work matters during my personal time.” Participants were asked to indicate the frequency of these experiences during the day using a 5-point scale ranging from ‘very frequently’ to ‘very infrequently’. The Cronbach’s alpha for the measure of non-work boundary permeability was .837.

Boundary Preference: Boundary preference was measured in an initial baseline survey of employees, prior to the start of the diary research. This was measured using the 4-item scale for “flexibility-willingness” based on Matthews and Barnes Farrell’s (2010a, p.330) Measure of Boundary Flexibility for the Work and Family Domains. The scale items were reworded slightly to allow employees without traditional family structures at home to represent their non-work experiences. Among the four items, two measured life to work “flexibility-willingness” and two measured work-to-life “flexibility willingness” (Matthews and Barnes Farrell, 2010a, p.330). A sample item used to measure work flexibility-willingness was “I am willing to take an extended lunch break so that I can deal with responsibilities relating to my family and personal life” and a sample item measuring non-work flexibility-willingness was “When I am not working, I do not mind stopping what I am doing to complete a work related task” (Matthews and Barnes Farrell, 2010a, pp.345-6). Respondents were asked to indicate their level of agreement with each statement on a scale from 1 meaning ‘strongly disagree’ to 5 meaning ‘strongly agree’.

Work-Life Conflict: Work-life conflict was measured using a 3-item scale developed by Butler et al. (2005) which was based on the longer 18-item measure from Carlson,

Kacmar and Williams (2000). Items were slightly reworded to allow employees without traditional family structures to represent their non-work experiences. A sample item from this measure was “Even though I wanted to, I couldn’t get work off my mind during my personal time today” (Butler et al., p.160). Participants were asked to indicate their agreement with each statement on a 5-point scale ranging from ‘strongly agree’ to ‘strongly disagree’. The Cronbach’s alpha for the measure of work-life conflict was .783.

Work-Life Facilitation: Work-life enrichment was also measured using a 3-item scale developed by Butler et al. (2005). The items represent both cognitive and affective measures of positive spillover. Items include “I had a good day at work today so I was a happier person at home” and “Doing my job gave me a more positive attitude during my personal time today” (Butler et al., 2005, p.160). Participants were asked to indicate their agreement with each statement on a 5-point scale ranging from ‘strongly agree’ to ‘strongly disagree’. The Cronbach’s alpha for the measure of work-life facilitation was .894.

Well-Being: The diary measured positive and negative aspects of well-being using a 6-item measure of daily mood that Conway and Briner (2002) adapted from Warr (1990a). Using a 5-point scale ranging from ‘all of the time’ to ‘never’, respondents were asked to indicate how often they felt each of the following during the course of the day: comfortable, tense, calm, relaxed, worried and uneasy. The Cronbach’s alpha for the positive well-being measures was .940 and was .857 for the negative well-being measures.

The full daily diary instrument used in this study can be found in *Appendix 4* at the end of this dissertation.

### **6.3.3 Analyses**

The within-individual hypotheses were tested using Hierarchical Linear Modeling (HLM) (Bryk and Raudenbush, 1992). First, the data were examined to ensure that there was sufficient within-individual and between-individual variability in the outcome variables to warrant modeling the relationship between outcomes and predictors over time (Bryk and Raudenbush, 1992, Garson, 2012). This was done by creating models for null hypotheses for each of the outcome variables (Garson, 2012). Next, the study hypotheses were tested using two levels of analysis. Level one represented the daily measures nested within the individuals participating in the diary. Daily outcome measures (boundary permeability, work to life conflict, and well-being) were regressed on daily measures of the predictor variables (workload, job control and boundary permeability). All predictor scores for Level 1 were centered on the mean for the individual participant (Hoffman and Gavin, 1998). Level 2 predictors were centered on the grand mean, representing the overall mean from the averages created for each individual (Garson, 2012). The analysis used a random coefficients regression model using multiple Level 1 (within-person) day to day predictors. At Level 2, no other predictors aside from the grouping variable of the individual case identifier were specified (Garson, 2012).

## **6.4 Findings**

Table 6.2 presents the between-individual descriptive statistics and correlations for the study variables. Scores for each participant were averaged for the days that data were provided.

**Table 6.2 Descriptive statistics and correlations among study variables**

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
(1) Work location (mainly at home)	0.64	0.272	1									
(2) Job control	4.07	0.675	-0.143	1								
(3) Workload	2.93	0.811	0.131	-.322**	1							
(4) Job satisfaction	3.77	0.567	-0.221	.320**	-.320**	1						
(5) Non-work boundary permeability	1.92	0.711	-.406**	-0.079	.330**	0.034	1					
(6) Boundary preference (flexibility willingness)	3.46	0.767	-0.038	.341**	-0.098	.298*	.262*	1				
(7) Work-life conflict	2.11	0.731	-0.074	-.322**	.491**	-.358**	.677**	0.112	1			
(8) Work-life facilitation	3.07	0.559	-0.192	.306**	-.339**	.574**	0.036	.267*	-0.115	1		
(9) Well-being – positive measures	3.66	0.655	-0.048	.357**	-.494**	.455**	-.274*	0.125	-.596**	0.22	1	
(10) Well-being – negative measures	1.69	0.532	-0.022	-0.225	.515**	-.340**	.432**	0.067	.734**	-0.217	-.770**	1

\*\*p<.01, \*p<.05

As seen in the table above, there are significant correlations between the study variables. Working from home has a significant negatively correlation to non-work boundary permeability ( $r(71)=-.406, p<.01$ ). Job control is positively correlated with job satisfaction ( $r(71)=.320, p<.01$ ), flexibility willingness ( $r(71)=.341, p<.01$ ), work-life facilitation ( $r(71)=.306, p<.01$ ) and positive measures of well-being ( $r(71)=.357, p<.01$ ). Job control is negatively correlated with workload ( $r(71)=-.322, p<.01$ ) and work-life conflict ( $r(71)=-.322, p<.01$ ). In addition, workload is positively correlated with non-work boundary permeability ( $r(71)=.330, p<.01$ ), work-life conflict ( $r(71)=.491, p<.01$ ) and negative measure well-being ( $r(71)=.515, p<.01$ ) and negatively correlated with job satisfaction ( $r(71)=-.320, p<.01$ ), work-life facilitation ( $r(71)=-.339, p<.01$ ) and positive measures of wellbeing ( $r(71)=-.494, p<.01$ ). Job satisfaction is positively correlated with flexibility willingness ( $r(71)=.298, p<.05$ ), work-life facilitation ( $r(71)=.574, p<.01$ ) and positive well-being ( $r(71)=.455, p<.01$ ), and negatively correlated with work-life conflict ( $r(71)=-.358, p<.01$ ) and negative wellbeing ( $r(71)=-.340, p<.01$ ). Non-work boundary permeability is positively correlated to flexibility willingness ( $r(71)=.262, p<.05$ ), work-life conflict ( $r(71)=.677, p<.01$ ) and negative well-being ( $r(71)=.432, p<.01$ ) and negatively correlated to positive wellbeing ( $r(71)=-.274, p<.01$ ). Work-life conflict is also negative correlated to positive measures of well-being ( $r(71)=-.596, p<.01$ ) and positively correlated to negative measures of well-being ( $r(71)=-.734, p<.01$ ). Last, as might be expected, positive well-being is highly negatively correlated with negative well-being ( $r(71)=-.770, p<.01$ )

Next, the parameter variance for each outcome variable was tested as a null hypothesis. To do this, the level 1 score for each outcome was entered as the sole



predictor in the model. The intercept represents the overall grand mean for each outcome across all participants and observations. As seen in Table 6.3, each of the five intercepts was significant in the model, indicating that there was significant variance in the day to day measures of the outcome variable between participants (Garson, 2012). In addition, as seen in Table 6.3, for each of the outcomes, more than half of the total variance is due to within-person (daily) differences. This indicates that the examination of daily predictors is a meaningful and relevant method for analyzing this data (Garson, 2012, Ilies et al., 2007). As seen in Table 6.3, 61.9% of the variability within the job control measure was due to within person differences and 46.5% of the difference in job satisfaction. In terms of non-work to work boundary permeability, half (51.4%) of the variance is explained by within person day-to-day differences. Just over half (53.7%) of the variation in scores for work-life conflict and just under two-thirds of the variation in the work-life enrichment measure were found at the within-person level (63.5%). Within-person differences are also pronounced for well-being scores with 64.9% of negative well-being and 63.6% of positive well-being explained by within-person day-to-day differences. This high percentage of variation found in the within-person daily scores supports the need for a multi-level model which includes additional daily predictors.

**Table 6.3 Estimates of Parameter Variance for Null Hypotheses**

<i>Dependent Variable</i>	<i>Intercept (<math>\beta_{00}</math>)</i>	<i>Within- person variance (<math>\sigma^2</math>)</i>	<i>Between- person variance (<math>\tau_0</math>)</i>	<i>% of within- person variance<sup>+</sup></i>
Job control	4.05**	.584	.360	61.9
Job satisfaction	3.76**	.244	.281	46.5
Non-work boundary permeability	1.92**	.449	.424	51.4
Work to life enrichment	3.07**	.395	.227	63.5
Work to life conflict	2.11**	.508	.438	53.7
Well-being – positive measures	3.66**	.606	.328	64.9
Well-being – negative measures	1.69**	.397	.227	63.6

\*\*p<.01, \*p<.05

<sup>+</sup> % of within person variance is calculated as  $\sigma^2 / (\sigma^2 + \tau_0)$  (Ilies et al., 2007)

Table 6.4 shows the results of the HLM analysis for the first model (Figure 6.1) specified by study hypotheses. Hypothesis 1, which predicted that perceived job control would be higher on days participants worked “mainly at home”, was supported by the data ( $\beta = .18$ ,  $p < .001$ ). Hypothesis 2 predicted that boundary permeability would have a negative relationship with perceived control, such that permeability would be lower on days that perceived control was higher. This was also supported by the data whereby perceived control negatively predicted boundary permeability ( $\beta = -.21$ ,  $p < .001$ ). Last, Hypothesis 3 predicted that the level two predictor of boundary preference (flexibility-willingness) would moderate the relationship between job control and boundary permeability. This was not supported by the data ( $\beta = .00071$ ,  $p = .948$ ).

**Table 6.4 HLM Parameter Estimates for Within-Person Model - Antecedents to Non-Work Boundary Permeability**

<i>Dependent Variable</i>	<i>b</i>	<i>SE</i>	<i>T</i>	<i>β</i>
Job control Worked from home	.373	.10	3.70**	.18
Non-work boundary permeability (main effect)				
Job control	-.27	.06	-4.64**	-.21
Flexibility willingness	.25	.09	2.77**	.29
Non-work boundary permeability (interaction)				
Job control x flexibility willingness	.01	.08	.07	<.01

\*\*p<.01, \*p<.05

*b* = unstandardized regression coefficient

Table 6.5 shows the results of the HLM analysis for the second model (Figure 6.2) specified by study hypotheses. Hypothesis 4 predicted that perceived workload would positively predict work-life conflict. The results support Hypotheses 4, showing that perceived workload is a significant within-person predictor of work-life conflict ( $\beta = .22$ ,  $p < .001$ ). Next, the interaction between workload and non-work boundary permeability was examined to test Hypothesis 5 which predicted that non-work boundary permeability would moderate the relationship between workload and work-life conflict, such that higher levels of permeability, workload will contribute to higher levels of work-life conflict. The interaction term in the model was significant ( $\beta = .02$ ,  $p < .001$ ), and Figure 6.4 illustrates the interactive effect. An examination of simple slopes supports the moderating effect of boundary permeability on the relationship between workload and work-life conflict at low, medium and high levels of permeability (at low permeability, simple slope = .226,  $t(536) = 3.51$ ,  $p > .001$ , at medium permeability, simple slope = .310,  $t(536) = 5.66$ ,  $p > .001$ , and at high permeability, simple slope = .393.,  $t(536) = 6.09$ ,  $p > .001$ ).

Last, the impact of daily experiences of work-life conflict on wellbeing was examined and the relationships predicted in Hypothesis 6 were supported such that daily work-life conflict was a negative predictor of positive measures of wellbeing ( $\beta = -.37, p < .001$ ) and a positive predictor of negative measures of wellbeing ( $\beta = .42, p < .001$ ).

**Table 6.5 HLM Parameter Estimates for Within-Person Model – Job Demands / Outcomes**

<i>Dependent Variable</i>	<i>b</i>	<i>SE</i>	<i>T</i>	<i>β</i>
Work-life conflict (main effects)				
Workload	.31	.06	5.19**	.22
Non-work boundary permeability	.49	.05	9.34**	.30
Work-life conflict (interaction)				
Workload x non-work bound. perm.	.13	.01	13.82**	.02
Well-being – positive measures				
Work-life conflict	-.37	.06	-6.61**	-.23
Well-being – negative measures				
Work-life conflict	.42	.04	10.75**	.23

**Figure 6.4 Moderating Effects of Boundary Permeability on Work-Life Conflict**

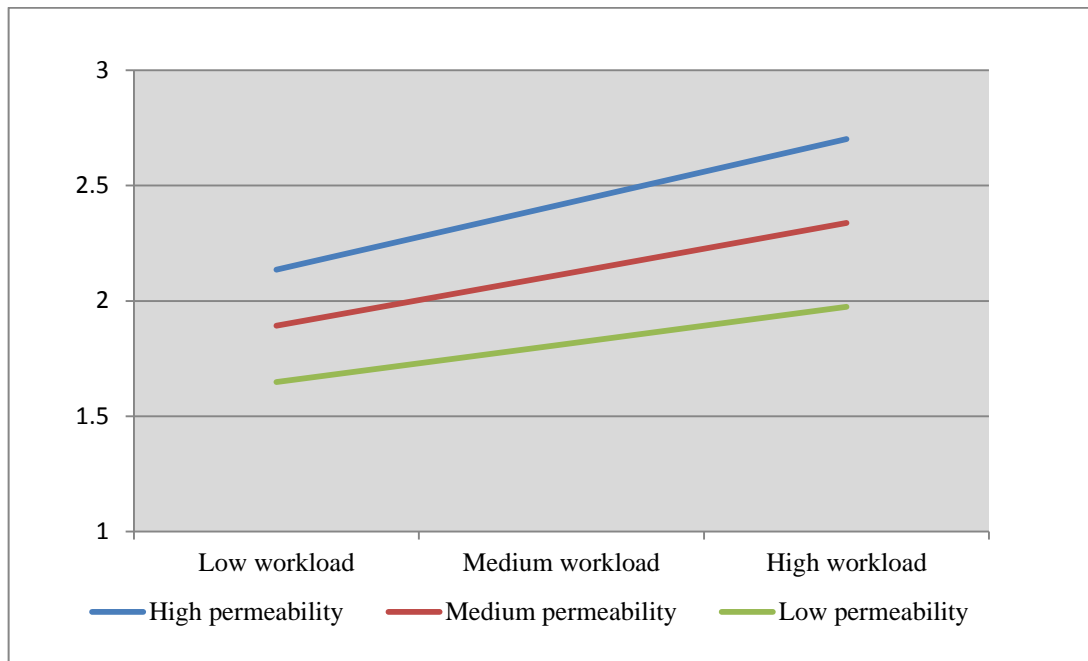


Table 6.6 shows the results of the HLM analysis for the third model (Figure 6.3). The data support Hypothesis 7, which predicted that job satisfaction will have a positive relationship with work-life facilitation ( $\beta = .77, p < .001$ ). Next, Hypothesis 8 predicted that non-work boundary permeability would moderate the relationship between job satisfaction and work-life facilitation such that at higher levels of permeability, the positive relationship between job satisfaction and work-life facilitation would be strengthened. The data support Hypothesis 8 ( $\beta = .003, p < .05$ ) and the interaction effects are graphed in Figure 6.5. Simple slopes analysis also supports the moderating effect of boundary permeability on the relationship between workload and work-life facilitation at low, medium and high levels of permeability (at low permeability, simple slope = .737,  $t(536) = 12.37, p > .001$ , at medium permeability, simple slope = .754,  $t(536) = 16.86, p > .001$ ) and at high permeability, simple slope = .771,  $t(536) = 14.66, p > .001$ ).

Last, the impact of daily experiences of work-life facilitation on wellbeing was examined and the relationships predicted in Hypothesis 9 were supported such that daily work-life facilitation was a positive predictor of positive measures of wellbeing ( $\beta = .42, p < .001$ ) and a negative predictor of negative measures of wellbeing ( $\beta = -.43, p < .001$ ).

**Table 6.6 HLM Parameter Estimates for Within-Person Model – Job Resources / Outcomes**

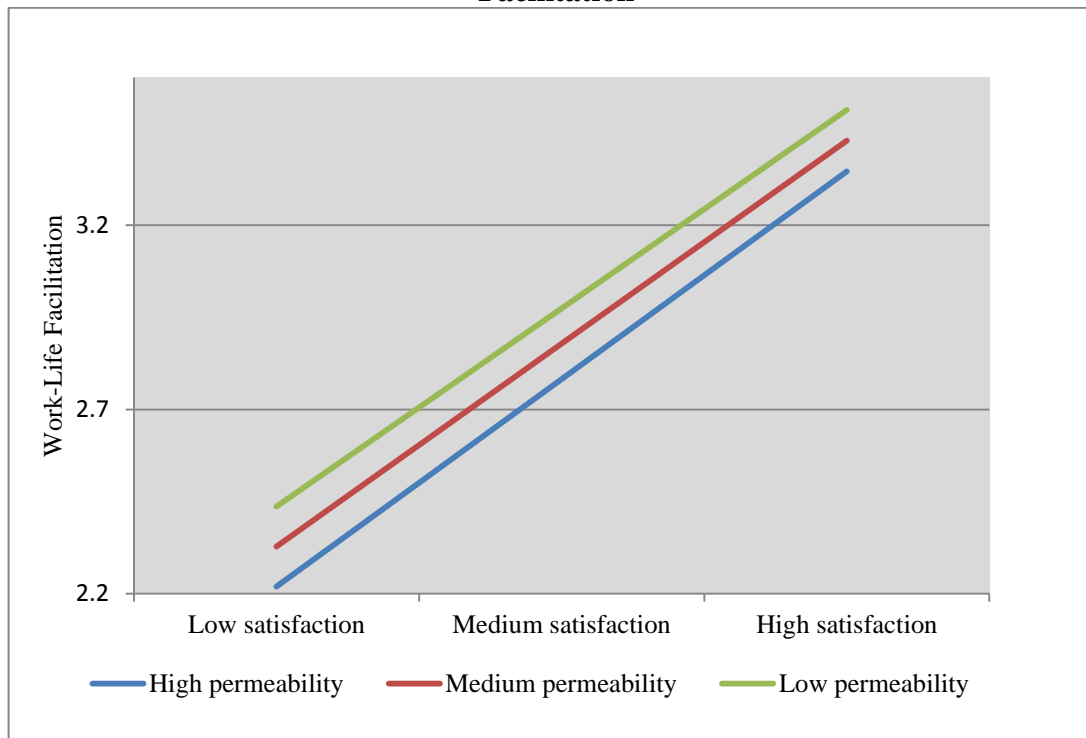
<i>Dependent Variable</i>	<i>B</i>	<i>SE</i>	<i>T</i>	<i>β</i>
Work-life facilitation (main effects)				
Job satisfaction	.75	.07	11.08**	.77
Non-work boundary permeability	-.15	.08	.1.91	-.18
Work-life facilitation (interaction)				
Job sat. x non-work bound. perm.	.03	.01	2.01*	<.01
Well-being – positive measures				
Work-life facilitation	.42	.04	9.35**	.22
Well-being – negative measures				
Work-life facilitation	-.43	.07	-6.60**	-.42

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

*b* = unstandardized regression coefficient

$\beta$  = standardized regression coefficient (Hox, 2010)

**Figure 6.5 Moderating Effects of Boundary Permeability on Work-to-Life Facilitation**



## 6.5 Discussion

This study makes several important contributions to the work-life literature. First, from a methodological standpoint, this research was the first study to examine the impact of homeworking on the day-to-day work-non-work boundary interface using a time series method. This is important because time series methods allow the data to model predictive relationships versus associations (Bolger et al, 2003). By understanding the day-to-day drivers of successful homeworking, organisations can begin to develop better tools to assess the suitability of individuals for homeworking as well as identify factors in the work environment which may enhance or detract from an employee's homeworking experience.

The next area of contribution to the literature stems from the first model presented in this chapter which examined the relationships between working from home,

perceived job control, boundary preference and boundary permeability. The data showed that employees perceived greater job control on days that they worked from home. This finding has been supported in prior literature that associated homeworking with autonomy and job control (Fonner and Roloff, 2010, Kelliher and Anderson, 2008). Perceptions of higher levels of control on days when employees work from home could be the result of greater freedom over when and where work is performed, greater autonomy over work decisions and / or reduced perceptions of monitoring and supervision. The model then examined how this level of control impacted the permeability of the work-home boundary, and the data showed that greater control led to decreased boundary permeability. While prior research has demonstrated the importance of understanding the difference between access to flexible practices, such as homeworking, and how an employee “psychologically experiences flexibility (perceived control over where, when and how one works, boundary management strategies regarding separation between work and family roles)” (Kossek et al., 2006, pp.347-8), this is the first study to empirically link control with permeability. Similar to the findings from Chapter 5, this builds support for the idea that aspects of flexibility are, in effect, antecedents to permeability, which can be perceived as a measure of boundary strength. As noted in Chapters 2 and 5, while prior research has suggested this possibility, this is the first study to provide empirical support for this idea (Bulger et al., 2007, Matthews et al., 2010a). This finding extends current theory on work-life borders and boundaries by clarifying the sources of boundary strength (Ashforth et al. 2000, Clark 2000, Hall and Richter, 1988). This is important, because as demonstrated by the findings in Chapter 5, boundary strength moderates the relationship between flexible working practices and work-life conflict, therefore understanding sources of this strength will



allow employees and HR practitioners better consider way to manage boundary strength to maximise beneficial work-life outcomes.

Another consideration of this model was the relationship between the segmentation preference of an individual employee and their perceptions of job control and permeability. While it was hypothesized that those preferring less segmentation would experience less permeability at higher levels of control and that those preferring more segmentation would experience more permeability at higher levels of control, the data did not support the hypothesis for this relationship between segmentation preference and boundary permeability. A possible explanation for the lack of a significant impact from segmentation preference on the relationship between control and permeability could be that boundary preference, measured as flexibility-willingness in this model, was highly correlated ( $r(71) = .341, p < .01$ ) with job control to influence the relationship.

The next model tested in this chapter sought to test whether boundary permeability was a moderator for the interaction between job demands and work-life conflict. This model makes a significant contribution to the literature as it is the first time that boundary permeability is tested as a moderating mechanism for the day-to-day antecedents to work-life conflict. The data supported the model, finding that boundary permeability moderated the relationship between perceived workload and work-life conflict, such that at higher levels of permeability, higher workload led to greater work life conflict. This finding makes a significant contribution to the literature on work-life boundaries because prior research has only looked at the direct relationship between permeability and conflict-based outcomes. By empirically

establishing permeability as a moderating mechanism, this research clarifies the role of permeability in the work-life boundary interface (Ashforth et al., 2000, Bulger et al., 2007, Hall and Richter, 1988, Olson-Buchanan and Boswell, 2006). In addition, this finding extends Boundary Theory, such that prior theory and research has identified permeability as a characteristic of work-life boundaries, which serve as antecedents to role integration or segmentation (Ashforth et al., 2007, Bulger et al., 2007, Hall and Richter, 1988, Olson-Buchanan and Boswell, 2006). This research, however, suggests that boundary permeability instead acts as a moderating variable, one over which individuals have some degree of control, which can regulate the impact of positive and negative experiences in one role on the next.

This finding also has important practical implications for individuals and organizations, because, as demonstrated in the first model, individuals and organisations can have some impact over level of boundary permeability. For example, giving workers more autonomy over where and when they do their jobs may help to decrease boundary permeability, thus reducing the impact of a heavy workload on experiences of work-life conflict. In further support for the importance of assessing boundary permeability as a tool that can be used to modulate work-life conflict, this second model also tested for the day-to-day outcomes associated with work-life conflict and found that work-life conflict led to decreased wellbeing on a daily basis.

The final model in this study examined whether boundary permeability would also moderate the relationship between job satisfaction and work-to-life facilitation. The data supported this moderating relationship, again, making a unique contribution to

the literature on the role of permeability as a moderating mechanism between resources and outcomes. In addition, prior literature has not looked at relationships between permeability and positive outcomes such as work-life facilitation. Rather, it has focused (from a conflict perspective) on the idea that reduced permeability leads to reduced negative outcomes (Glavin and Schieman, 2012, Voydanoff, 2005b). Therefore the present research also extends the discussion of theory on boundary permeability into more positivist streams of work-life literature (Bakker & Schaufeli, 2008, Greenhaus and Powell, 2006, Luthans, 2002). Of note, the impact of the moderation was weaker than in the prior model, which may be explained by the stronger direct relationship found between job satisfaction and work-to-life facilitation.

Again, the model also examined whether work-to-life facilitation impacted daily individual outcomes and the data supported the hypothesized relationship that work-to-life facilitation improved day-to-day well-being. Given that employee well-being is associated with numerous organizational outcomes such as better job performance, reduced absenteeism and an increase in discretionary behaviour (Warr, 1999), the pathway to well-being is important for organisations to consider. In sum, this model contributes both to academic literature and to knowledge for practitioners by identifying boundary permeability as a new 'lever' on the pathway from homeworking to well-being.

In addition to the findings relating to conceptions of permeability in the work-life literature, the prior two models also extend theory on the Job Demands-Resources Model. As noted earlier, prior research uses the Job Demands-Resources Model to

evaluate the impact of cross-domain demands and resources on stress and employee burnout (Demerouti et al., 2001). Research that has looked at the Job Demands-Resources Model from a work-life perspective has assessed whether the conflict relating to role blurring is impacted by workplace demands and resources (Glavin and Schieman, 2012). However, the present research has empirically established that permeability can be considered a linking mechanism that moderates the impact of demands and resources between domains (Demerouti et al., 2001). This finding extends theory using the Job Demands-Resources Model in the work-life literature by creating a clearer picture of the process by which role blurring impacts the relationship between job demands and resources and work-life and well-being outcomes.

## **6.6 Limitations**

There are several limitations to note in the use of a diary method of collecting data. A significant concern is the possibility that participation in the diary study itself impacts the study outcomes. This can occur in several ways. First, there is the risk of ‘reactance’ or the idea that participants will change their behaviour as a response to the measurement process and instruments. For example, if participants found the use of a diary to be therapeutic in dealing with work-life conflict, this may have moderated or reduced the likelihood of negative reactions to job demands. The idea of a therapeutic outcome resulting from a process of self-reflection is supported in the literature (Bolger et al, 2003, Suedfeld and Pennebaker, 1997).

Another risk resulting from asking participants to complete the same measurements each evening is that of “habituation” or the idea that participants will respond with a

similar pattern to each diary entry, regardless of the experiences of the day (Bolger et al., 2003, Larson and Almeida, 1999). Other research has looked at the issue of sensitization and boredom with a repetitive research process, however, and found that effects on outcomes are minimal (Song et al., 2008).

Another consideration is a range of common method biases due to having a single source for predictor and outcome measures (Podsakoff et al., 2003). In an attempt to determine the extent that common method bias may have influenced the findings in this study, confirmatory factor analysis was performed using Harman's single factor test (Podsakoff et al., 2003). For each of the three models, the variables were entered into a confirmatory factor analysis in order to determine if the variance between the variables was better explained by a single factor, indicating that common method bias may be present (Meade et al., 2007, Podsakoff et al., 2003). The data showed that a single factor solution was not the best fit for any of the models, suggesting that common method bias is limited in this data set.

Other forms of bias relating to having a common source include attempts by respondents to maintain consistency between their responses, or the impact of a "transient mood state" caused by something unrelated to the research constructs may have influenced the responses (Podsakoff et al., 2003, p.883). For example, a respondent may experience a stressful event such as the sudden illness of a child which may influence their responses to the surveys. In addition, as noted in Chapter 5, participants were aware that the homeworking programme was under evaluation; they may have therefore been biased to report more positive experiences, in effect producing a "social desirability bias" (Podsakoff et al., 2003, p.881).

An additional risk is that many of the scales often used to measure the constructs in diary studies were validated using cross-sectional, between-person analysis. The impact on reliability and validity of using these measures for within-person analysis is unknown (Bolger, 2003, Ohly et al., 2010).

Other limitations that result from a diary methodology include the tendency for smaller sample sizes (Larson and Almeida, 1999). However, this is partially compensated for by the multiple data points collected from each participant. On average, participants completed 9.94 daily entries, resulting in 706 daily entries, 540 which were weekdays and 166 which were weekend days. In addition, all data were collected within the home domain. Prior research has recommended that data regarding activities in a particular domain be collected while the individual is physically present in that domain to avoid bias associated with retrospective perspectives (Netermeyer et al., 1996, Ilies and Judge, 2004 and Ilies et al, 2007).

Last, as noted in Chapter 5, the generalizability of the results may be limited due to the participating sample of homeworkers. All of the participants were engaged in regular employment by the organization and several studies have found that homeworkers in regular employment may experience homeworking differently from those who are self –employed or working under non-standard arrangements (Felstead and Jewson, 2000, Matsuo et al., 1992, Standen et al., 1999, Sullivan, 2003). In addition, homeworking is a well-established and widely accepted practice at this organization, which may have had a positive effect on employees' experience of homeworking.

## **6.7 Conclusion**

This chapter makes significant contributions to the literature on work-life boundaries as well as the Job Demands-Resources Model, by introducing causal evidence of the relationships between homeworking, job control, job demands and resources, boundary permeability, work-to-life conflict and facilitation, and well-being. The use of a diary method in this study helped to clarify several relationships that have only been able to be interpreted as associations in prior studies.

This study has empirically supported a new function for boundary permeability in the work-home interface. The identification of boundary permeability as a lever that moderates the negative impact of job demands and the positive impact of job resources has important implications for individual and organizational work-life strategy. In effect, boundary permeability is a double-edged sword such that it controls the flow of both positive and negative experiences between work and non-work domains. Boundary permeability can, to some degree, be influenced by individuals and the organisations they work for. Nippert-Eng (1996a, p. xiii) describes “boundary work” as “the never-ending, hands-on, largely visible process through which boundaries are negotiated, placed, maintained, and transformed by individuals over time”. By identifying the factors in both home and work environments that increase or decrease the permeability of boundaries, individuals and organisations can either reduce the negative impact of job demands on the home environment or strengthen the positive impact of job resources. For example, during a seasonal period of increased workload in an organization, managers may take actions, such as prohibiting email communications after a certain time in the evening, in an effort to reduce boundary permeability and diminish the negative impact of the

heavy workload on their employees' work-life interface. In addition, organisations should help workers to assess their work and non-work environments in order to assess for factors that may either influence or be used as resources to control boundary permeability. Many organisations develop checklists which assist both employees and their managers with an assessment of the suitability of the home environment for homeworking. Future assessments could include the identification of factors which might be used to increase or decrease boundary permeability as needed such as having a separate work space, family support for homeworking, ability to come into the office to work as needed and other factors which might influence the transitions between work and non-work roles.

Last, the significant level of daily variation in perceptions of job demands and resources suggests that organisations and individuals must develop strategies that are flexible in nature and can be adapted to environmental changes that may occur on a periodic basis. For example, the sudden resignation of a key employee may trigger a temporary increase in job demands for a work team. This increase in job demands may lead to negative work-life outcomes; however, an organization may be able to counter this by having flexible policies that may allow the team members to manage their boundaries in a way that prevents too much stress. For example, temporary homeworking might be offered, in order to allow the affected employees to save time away from their families by not commuting in to the office. This type of flexible response makes use of the boundary permeability 'lever' identified by this research.



## **Chapter 7: Conclusions**

### 7.1 Introduction

### 7.2 Overall Contributions of this Dissertation to the Literature

### 7.3 Contributions and Implications from Core Research Questions

7.3.1 *What impact does occupational context have on Person-Environment Fit and the work-life boundary interface?*

7.3.1.1 Contributions to the Literature

7.3.1.2 Implications for Practice

7.3.2 *How can boundary strategies be implemented in order to establish or re-establish person-environment fit, when there is mismatch between organisational supply of segmenting-integrating practices and worker preference?*

7.3.2.1 Contributions to the Literature

7.3.2.2 Implications for Practice

7.4.3 *What is the role of boundary permeability in the work-life interface?*

7.3.3.1 Contributions to the Literature

7.3.3.2 Implications for Practice

7.3.4 *How does boundary permeability impact the relationship between other job demands and resources, beyond flexible working practices, and positive and negative work-life outcomes?*

7.3.4.1 Contributions to the Literature

7.3.4.2 Implications for Practice

### 7.4 Limitations

7.4.1 Selection / Number of Employees

7.4.2 Types of Employees

7.4.3 Scale Revision

7.4.4 Common Method Bias

### 7.5 Areas for Future Research

### 7.6 Conclusion

## **7.1 Introduction**

This dissertation presented four papers that sought to make both theoretical and practical contributions to the literature on work-life boundary management.

Specifically, this research explored new relationships between boundary antecedents, moderators and outcomes, tested the impact of different working arrangements, and used multiple research methods in order to add to our understanding of how we can manage work-life boundaries in such a way that better work-life outcomes are recognized. The combined findings from these papers make valuable research contributions that extend academic literature on work-life boundary strategy as well as make practical contributions that will assist employers and employees with the development of boundary strategies that support individuals in many types of work contexts. This chapter will summarize how this research has extended theory on work-life boundary management as well as identify the utility of these findings to individual boundary management strategies and broader HR management practices. First, this chapter will present an overview of the contributions made by this dissertation in its entirety. Next, the contributions made by this dissertation will be linked back to the original research questions posed in the introduction, and specific implications for practice relating to these questions will be discussed. Next, the overall limitations of the research contained in this dissertation will be reviewed. Last, this chapter will discuss the potential for future research that may build on the findings of this dissertation.

## **7.2 Overall contributions of the dissertation to the literature**

The research contained in this dissertation makes eight specific contributions to three areas of work-life literature. The most important contributions and those that are

more significant in terms of extending theory relate to literature on work–life boundary management. The core contribution of this dissertation to literature on work-life boundaries is the redefinition of the role of permeability as an essential mechanism by which boundaries can influence work life outcomes. Prior examination of the construct of permeability in the literature has been inconsistent. Much of the literature which uses Border and Boundary Theories suggests that permeability, along with flexibility, is an antecedent to boundary strength which determines whether there is integration or segmentation between work and non-work roles (Ashforth et al., 2000, Bulger et al., 2007, Clark, 2000, Hall and Richter, 1988, Olson-Buchanan and Boswell, 2006). For example, if an individual has strong boundaries, they are more likely to keep their work role separate from their non-work roles (Ashforth et al., 2000, Bulger et al., 2007, Hall and Richter, 1988, Nippert-Eng, 1996a). Similarly, weaker boundaries suggest that individuals are more likely to integrate work and non-work roles and that there are more frequent interruptions and transitions between roles (Ashforth et al., 2000, Bulger et al., 2007, Hall and Richter, 1988, Nippert-Eng, 1996a). The research in this dissertation suggests that instead of being an antecedent, boundary permeability is, in fact, a moderator that influences the impact of flexibility, as an antecedent, on work-life outcomes. For example, an organisation may decide to increase the level of work-life flexibility by offering employees the opportunity to work from home a few days per week, which in itself may lead to greater work and non-work role integration and potentially greater work-life conflict (Ashforth et al, 2000, Bulger et al., 2007). However, employees and / or organisations may use boundary strategies to reduce the permeability (i.e. frequency of interruptions or transitions) related to this working pattern, therefore minimizing the potential increase of work-life conflict. Individual interventions may involve the

use of the physical, temporal, behavioural or communicative strategies described in Chapter 4 to clearly communicate and delineate the boundaries surrounding work and non-work roles (Clark, 2000, Felstead and Jewson, 2000, Kreiner et al, 2009, Nippert-Eng, 1996a, b). Organisations may also intervene and develop strategies that counteract the increased permeability related to flexible working policies. For example, they may set rules relating to sending emails late in the evening, they may ensure that workers have separate technology for personal versus professional use and / or they may engage in assessment to ensure that employees home environments are suitable for homeworking such that the home provides appropriate separation for work tasks and that non-work responsibilities, such as child care, will not encroach on employees ability to perform their work-related duties.

In addition to this reconceptualization of permeability, this dissertation also contributes to literature on boundary management by identifying the importance of employment context when considering boundary management. The research from both highly segmented and highly integrated work environments has underscored the importance of considering that boundary strategies are not 'one size fits all'. The research in this dissertation demonstrated that those working in more extreme contexts of work and non-work role segmentation are more at risk for segmentation preference supply 'misfit' and that this misfit can lead to negative work-life outcomes, including increased levels of work-life conflict and decreased organisational commitment. In addition, this research has also identified that even within environments that may appear at face value to be similar, such as workplaces that offer homeworking, workers may experience these environments differently and

must use boundary strategies to attempt to create some alignment between their own preferences and the environments they live and work in.

This dissertation also contributes to the growing body of research that relates Person-Environment Fit to boundary management and individual preferences for segmentation versus integration between work and non-work roles. While there has been rigorous prior literature that has examined the impact of fit between an individual's preferences for segmentation or integration and organisational supply of segmenting or integrating practices, this research has extended this debate by introducing the idea that 'misfit' between preferences and supply is a more important area of focus for both researchers and practitioners (Kreiner, 2006, Rau and Hyland 2002, Rothbard et al. 2005). The research found that while 'fit' did not lead to more positive work-life outcomes, 'misfit' led to higher levels of work-life conflict and lower levels of organisational commitment. Importantly, this research also suggests that misfit is more likely to occur when employees lack skills or resources to enact boundary strategies that are in line with their preferences (Rothbard et al., 2005, Voydanoff, 2005a). A lack of resources to enact boundary strategies that are aligned with segmentation-integration preference may be more prevalent in organisations where the work context is more highly segmented or integrated such as in the organisations where the research for this dissertation was conducted.

Last, the research in this dissertation also makes a contribution to the literature that connects the Job Demands-Resources Model to the work-life interface (Demerouti et al., 2001). This research demonstrates that boundary permeability is a moderating mechanism that regulates the impact of job demands and resources on positive and

negative work-life outcomes. While prior research has examined how job demands and resources impact role blurring, the present research has more clearly identified the mechanism by which the role blurring occurs, and the outcomes associated with role blurring (Glavin and Schieman, 2012). This extends the way that the Job Demands-Resources Model can be applied to work-life literature such that it defines the process by which role blurring impacts the relationship between job demands and resources, and work-life and well-being outcomes.

### **7.3 Contributions and implications from core research questions**

The next sections of this chapter will discuss the contributions to literature and practical implications of the research from this dissertation as they pertain to each of the core research questions.

#### **7.3.1 What impact does occupational context have on Person-Environment Fit and the work-life boundary interface?**

The first research question addressed by this dissertation examined the impact of occupational context on Person-Environment Fit and the work-life boundary interface. This research question was primarily addressed in Chapter 3, which examined the relationship between boundary segmentation preference and boundary segmentation supply among a sample of workers in both off-shore and office-based working environments. In addition to the findings in Chapter 3, the qualitative (Chapter 4) and quantitative (Chapter 5) research with homeworkers also contributes to the analysis of this question. The research contained in this dissertation makes a contribution that extends current theory relating to Person-Environment Fit as applied to a work-life context, and has implications for boundary management

practices for those individuals facing either highly segmented or highly integrated work environments as well as for the organisations that employ them.

### **7.3.1.1 Contributions to the Literature**

Prior research has demonstrated the benefits of aligning employee preferences for integrated and segmented boundaries with the resources provided by their work environments (Kreiner, 2006, Rau and Hyland 2002, Rothbard et al. 2005). This research suggests that greater Person-Environment Fit between employee preferences for segmentation and the supply of segmenting practices from the organisation results in positive outcomes such as reduced work-life conflict, reduced stress, higher levels of job satisfaction and greater organisational commitment (Kreiner, 2006, Rothbard et al., 2005). This research sought to explore these relationships in the context of an occupational environment that offered extreme levels of segmentation in order to better understand the phenomena of fit in non-traditional work environments.

The first set of research questions sought to explore whether workers in non-traditional work environments ‘self-selected’ into either highly segmented or highly integrated environments based on their boundary preferences. Prior literature, using Schneider’s (1987, p.441, Schneider et al., 2000) attraction-selection-attrition framework, has suggested that workers are attracted to particular roles because they are consistent with their own preferences relating to the “career environment”.

While the present research did demonstrate that off-shore workers perceived their work environment to offer high levels of segmentation, it did not indicate that they preferred segmentation. This may suggest that while comparisons between

preferences and supply of certain characteristics relating to the work environment are readily available to employees, comparisons of other job characteristics, such as supply of boundary segmentation or integration, may need to be more clearly considered upon entering into an employment relationship. This finding was also reflected in the research in later chapters with homeworkers. The research suggested that those working from home most extensively were more likely to enact rigorous boundary management styles in order to create boundaries that were reflective of office-based environments in order to bring the enacted boundaries back in line with their preferences, again suggesting that not all homeworkers self-select into working patterns that are highly integrative due to high preferences for integration. For example, many homeworkers may find themselves working from home due to circumstances beyond their control, such as an office closure or as an attempt to balance work and family responsibilities. The fact that homeworking may enable them to better balance the practical concerns of their work and family roles, does not necessarily mean that they have a preference for work and non-work role integration.

In addition to examining whether workers in non-traditional work contexts self-select into segmenting or integrating work environments, this research also sought to understand the impact of person-environment fit in these environments with work-life outcomes. While the initial results were disappointing and indicated a lack of significance in the relationships between high levels of fit and decreased work-life conflict, increased work-life enrichment and increased organisational commitment, further investigation found that the line of misfit did significantly influence these outcomes. Specifically, at higher levels of misfit between segmentation preference and supply, employees experienced greater work-life conflict and reported lower



levels of organisational commitment. Combined with the initial finding that workers in alternative work environments have not necessarily self-selected or had a thorough understanding of the supply of segmenting practices offered by their work environment, this suggests that it is workers at the extremes that may experience higher levels of misfit and therefore are more at risk for negative work-life outcomes.

This finding, while unexpected, has important implications for the way in which Person-Environment Fit literature is applied to the work-life context. While previous literature has focused on the impact of congruence or fit between employee preferences and their work environments, this research calls to light the importance of misfit as a source for role conflict. As discussed in Chapter 3, Voydanoff (2005a, p.283) conceptualizes the idea of misfit as “occurring when demands and needs exceed abilities and supplies”. She suggests that misfit occurs because individuals are somehow unable, due to a lack of skills or resources, to engage in boundary management activities which allow for the realignment of perceptions of the environment with employee preferences and that this leads to the experience of negative work-life consequences.

Rothbard et al.’s 2005 (p.243) study on “Managing Multiple Roles” also supports this idea. Their research suggests that when organisational policies are enacted in a way that makes it difficult for employees to enact boundaries strategies that support their preferences, it reduces employee satisfaction and commitment (Rothbard et al., 2005). The findings in this dissertation provide empirical support for these ideas. For example, in the case of the offshore workers in Chapter 3, this extreme work environment tends to offer high levels of segmentation between work and non-work

roles due to the physical separation that occurs when employees are deployed on vessels or platforms. In this environment, employees who prefer a greater degree of integration may experience a misfit between this preference and what their employment context offers. In addition, this misfit may lead to negative work-life consequences such as work life conflict or reduced organisational commitment, because these employees may find it difficult to employ boundary management strategies in this environment due to the physical constraints of being away from their families, rotation schedules which determine the length of time they are away, and other rules and resources related to the work setting, such as telephone and internet access. This is a new and important contribution which extends the literature on boundary management, and which has implications for organisational practices. It suggests that misfit must be identified and addressed in order for employees to have better work experiences.

In addition, in conjunction with Voydanoff's (2005a) conceptual model, this contribution suggests that misfit can be addressed by the introduction of boundary work activities and resources that may lead to some realignment between perceived segmentation and integration of the work environment and individual preferences. This becomes even more important in extreme work environments, such as offshore work and extensive homeworking, where, due to the very high levels of segmentation or integration supply, misfit is more likely to occur. Similarly, employee perceptions of highly integrating or highly segmenting work environments, such as off-shore work or homeworking, also need to be carefully examined as misfit among those preferring different levels of work-life integration or segmentation may be more likely to occur.

### **7.3.1.2 Implications for Practice**

The findings highlighted above, which suggest that employees in non-traditional or more extreme work environments are more susceptible to ‘misfit’ between segmentation preference and supply and that this ‘misfit’ is a significant predictor of role conflict, have important implications for practice. As noted in the introductory chapter, a substantial proportion of workers in the UK are employed in organisational contexts that might offer high levels of segmentation, such as shift work (according to the 2009 LFS, 14% of UK workers are engaged in some form of shift work) (Steel, 2011), or high levels of integration, such working from home (according to the 2007 LFS, 8.9% of the UK workforce uses a phone and computer to carry out their work from home) (Ruiz and Walling, 2005). This indicates that the risk for misfit may be prevalent in many UK workplaces and that both employers and employees should be aware of the negative consequences relating to misfit at both the recruitment stage of the employment relationship as well as during on-going employment.

At the recruitment phase, it would suggest that employers should assess the level of work/ non-work segmentation or integration of their employment context and make that transparent to new candidates so that the candidates may consider whether the environment will be a good match for them. This may also involve a segmentation preference self-assessment on the part of the candidate in order to better understand their own preferences if not already considered. Similar to other forms of pre-hire testing, assessment for segmentation-integration fit may be a useful aspect of the selection process. Dr. Ellen Kossek, in conjunction with the Center for Creative

Leadership, has recently developed an online self-assessment tool called the WorkLife Indictor™ which may serve to help with this form of assessment. The WorkLife Indictor™ measures “the degree to which an individual combines or separates work and family (Behaviors), the degree to which an individual identifies with and invests in work and family roles (Identity), and the degree to which an individual feels in control of how he or she manages the boundaries between work and family (Control)” (CCL.org, 2011). This assessment could be implemented individually for employees who seem to struggle with misfit between preferences and organisational practices as tool with which they gain better perspective on their own preferences. It may also be implemented at the organisational level so that the organisational as a whole can identify the preferences and boundary management abilities among their employees in order to inform the development of future work life policies.

As employees advance in their careers and progress to different positions within the organisation, take on different working patterns or encounter changes to their life circumstances (i.e. marriage, children, elder care), continued re-evaluation of fit should be considered by employers. In addition to re-evaluation, as noted by Voydanoff (2005a), employees may lack the skills or resources that they need to employ boundary strategies that would help to resolve the misalignment. As discussed in the overall findings for this dissertation, employers may want to engage in support activities which assist employees with establishing and maintaining boundaries and levels of permeability that align with their preferences. Some activities that organisations could consider to support employees in establishing and maintaining boundaries might be providing education and/or the aforementioned

self-assessment tool so that employees can better understand the impact of good boundary management on work-life outcomes, monitoring employees working patterns to determine the extent to which work may be interfering with non-work roles as well as the reverse and /or increasing the autonomy given to individuals to design their own work schedules and maintain them.

### **7.3.2 How can boundary strategies be implemented in order to establish or re-establish person-environment fit, when there is mismatch between organisational supply of segmenting-integrating practices and worker preference?**

The second research question addressed by this dissertation examined the ways that boundary strategies can be enacted to establish or re-establish person-environment fit when there is a mismatch between organisational supply and employee preferences. This builds on the research from Question 1, but looks for specific mechanisms by which levels of ‘misfit’ can be reduced. This research question was primarily addressed in Chapter 4, which qualitatively explored the use of boundary strategies among UK-based homeworkers. The goals of this chapter were to understand the current strategies used by homeworkers and whether these strategies match their preferences for work / non-work role integration versus segmentation, to understand how boundary management strategies differed among employees at different levels of homeworking, and to explore what happens when these strategies fail and violations of the work-home boundary occur. In addition to the research contained in Chapter 4, Chapters 5 and 6 also contribute to the analysis of this question as they examine the role of boundary permeability and work-life outcomes.

### **7.3.2.1 Contributions to the Literature**

The research in Chapter 4 serves to build on the research from Chapter 3 by identifying the mechanisms used by employees to reduce the levels of misfit experienced between boundary preferences and supply of integrating practices. In contrast to Chapter 3, this research was conducted with a sample of employees immersed in an environment of organisational practices that provides high levels of work / non-work role integration: that of homeworkers. While the initial findings support earlier research on typologies of boundary strategies (Kreiner et al., 2009) and provide tangible ideas for homeworkers in terms of boundary building activities they might engage in, this chapter makes its unique contribution to the literature by exploring boundary management among homeworkers engaged in homeworking at varying levels of intensity. Through a thematic analysis of qualitative interview data among infrequent homeworkers who were largely office-based, moderate homeworkers, who were either mobile workers using home as a base or partial homeworkers, and those working from home almost all of the time, the findings suggested that more intensive boundary management styles were applied among infrequent homeworkers and homeworkers who work from home almost all of the time. The interview data demonstrated that those working from home extensively often recreated in their own homes the traditional boundaries that one might find in office-based environments. For example, most high-intensity homeworkers reported having a separate physical space in their home for work activities and set times of the day in which to conduct these activities.

The findings suggest that moderate homeworkers perceived flexibility from their organisation to a greater degree than infrequent or extensive homeworkers and that

these perceptions of flexibility may have led them to enter an exchange-based relationship with the organisation such that they perceive that the organisation is flexible with them; therefore they are flexible in return and allow for more work interruptions during non-work time or activities (Blau, 1964, Lambert 2000). The nature of this flexible relationship is also supported by the empirical data analysis with the similar, albeit larger population of employees from the same organisation. The analysis documented in Chapter 5 found a curvilinear relationship between extent of homeworking and boundary permeability such that employees reported the highest levels of boundary permeability at moderate levels of homeworking. This suggests again that moderate homeworkers are making more frequent transitions between work and non-work roles. Two themes emerged from the analysis which provided support for the idea that at moderate levels, homeworking can facilitate an exchange-based relationship. The first theme is that of reciprocity. Partial homeworkers and mobile workers frequently made reference to the idea that they offered the organisation flexibility in terms of working evenings and weekends in exchange for having more day to day flexibility in managing their personal responsibilities. Closely related to the theme of reciprocity was partial homeworker and mobile worker perceptions of autonomy and control over their working patterns. This suggests that homeworking at moderate levels affords employees with greater control over their working habits. One explanation for this finding might be that the flexible schedules of those engaged in moderate amounts of homeworking offer more autonomy than those who are homeworking to a greater extent, such that at more extensive levels of homeworking there may be the expectation that, similar to an office environment, the employee is available all day, every day during traditional

working hours. This pressure to be 'present' or reachable in the home environment may detract from employee perceptions of autonomy.

Work-life practices such as homeworking have been linked to both reciprocity and autonomy and control in prior research (Baruch, 2002, Gajendran and Harrison, 2007, Kelliher and Anderson, 2010, Lambert, 2000). For example, Lambert's (2000) research with manufacturing workers in the U.S. found that when workers perceived work-life interventions to be useful, they reciprocated with organisational citizenship behaviours. Similarly, Kelliher and Anderson (2010) found that employees who worked a reduced number of hours in the office reported higher levels of job satisfaction and organisational commitment, despite work intensification, due to perceptions that the organisation offered them greater control over their working patterns.

Where this research makes its contribution is that, to the best of the author's knowledge, this is the first study to look at the impact of extent of homeworking on the relationship between work-life boundary preferences and organisational boundary resources. Prior research has suggested that extent of telework may impact job satisfaction (Fonner and Roloff, 2010) and levels of isolation (Golden et al., 2008), and that motivations for teleworking differ depending on the frequency in which one engages in it (Bailey and Kurland, 2002); however, the impact of extent of teleworking on work and non-work role segmentation, integration and boundary management has been yet unexamined. Therefore this research makes a contribution to literature both on work-life boundaries and on homeworking. Specifically, this research suggests that moderate levels of homeworking actually represent the most



flexible forms of working, such that mobile and partial workers perceive higher levels of autonomy over their working patterns. In addition, the research suggests that it is at this level of homeworking where employers stand to gain the most, such that at moderate levels employees perceive flexibility from their organisation and therefore reciprocate with greater effort. However, due to the higher levels of permeability reported by these employees, they are somewhat more at risk for negative work-life consequences and therefore must apply appropriate boundary strategies.

### **7.3.2.2 Implications for Practice**

The findings relating to the varied outcomes based on extent of homeworking have very clear and relevant implications for practitioners. First, the research supporting this question makes a significant practical contribution by providing ‘real world’ examples of boundary strategies that can be adopted by homeworkers in order to support successful homeworking. The qualitative findings emphasized homeworker use of primarily physical, as well as temporal, communicative and behavioural tactics used to temper the level of permeability in their home environment to levels that matched their preferences (Kreiner et al., 2009). Access to real-world, concrete examples may, in a sense, provide a ‘toolkit’ to workers who are struggling to achieve their ideal level of boundary permeability. For example, this research identified several useful tactics for homeworkers preferring segmentation such as finding a separate space in the home that is only used for work activities and turning off computers and mobile phones at a regular hour in the evenings. Similarly, homeworkers preferring more integration could adopt tactics such as regularly planning to do work in the evening in order to make time to spend with their children

after school or participate in some other non-work related activity such as an athletic team or continuing education; thus making greater use of flex-time policies that would allow them to take care of personal concerns during the workday and make up the time on evenings or weekends.

However, the research also offers practical implications for organisations. The research suggests that employees working from home for more moderate portions of their workweek are more likely to perceive flexibility from their organisation and identify that they are willing to be more flexible in 'giving back' to their organisation due to a sense of reciprocity for this perceived flexibility. For example, a homemaker who was able to take a few hours out of her morning to visit her ailing parent in hospice may be more willing to work longer hours for an upcoming project deadline because she wants to 'give back' to the organisation for allowing her to meet her personal obligations. This might imply that organisations should reflect on their current homeworking practices in order to determine a.) if workers perceive that the organisation is giving them flexibility, and b.) if this flexibility is encouraging reciprocity. Organisations with intensive homeworking practices may find that extensive homeworkers do not perceive their working patterns as offering flexibility and therefore neither the employee nor the organisation is reaping the full benefits of this work-life practice. Through surveys or other forms of feedback from their employees, organisations may need to assess perceptions of flexibility among their employees in order to better understand if their work-life policies are in fact achieving the desired outcomes.

### **7.3.3 What is the role of boundary permeability in the work-life interface?**

The third research question builds on the findings relating to fit between segmentation-integration preferences and organisational supply by looking at the role of boundary permeability in the work-life interface. Boundary permeability is a measure of the strength or weakness of the boundaries that separate work and non-work roles (Ashforth et al. 2000, Clark 2000, Hall and Richter, 1988). Boundaries that are highly permeable mean that there are more cross-domain interruptions and individuals make more frequent transitions between roles, which leads to a more integrative approach to managing the work-life interface. Boundaries that have low levels of permeability mean there are fewer cross-role interruptions and less frequent transitions, leading to a more segmenting approach to the work-life interface. This research suggests that boundary permeability is therefore an important ‘lever’ in the relationship between organisational demands and resources and work-life outcomes. This research question was primarily addressed in Chapter 5 which examined the relationship between boundary permeability, extent of homeworking and work-life conflict, and is also supported by the findings in Chapter 6.

#### **7.3.3.1 Contributions to the literature**

Building on the findings on boundary management and person-environment fit, this dissertation also looked specifically at the role of boundary permeability as a determinant of work-life outcomes. As noted in Section 7.3.2.1 above, this research found that the extent of homeworking had a curvilinear relationship with non-work boundary permeability such that permeability was highest at moderate levels of homeworking. This in itself is a new contribution to the literature on boundaries and homeworking, as prior literature generally unilaterally associates homeworking with

higher levels of work-home integration and therefore greater work-home boundary permeability (Boswell and Olson-Buchanan, 2004, Kossek et al., 2006, Standen et al., 1999). This also suggests that those working more extensively from home have reduced the level of permeability that this typically integrating work-life practice tends to result in by adopting boundary strategies (as discussed in the prior section) which increase the strength of the work / non-work boundary and reduce permeability.

This research has also made a contribution which extends boundary theory by clarifying the role of permeability in the relationship between the demands and resources of the workplace environment and work-life outcomes. Chapter 5 found that non-work boundary permeability acted as a moderator of the relationship between homeworking and work-life conflict, such that at higher levels of permeability the relationship between extent of homeworking and work-life conflict was stronger. This supports the idea that the way workers manage the permeability of their work / non-work boundaries can mitigate the outcomes relating to homeworking. In addition, this finding extends boundary theory by clarifying the role of boundary permeability in the work-life interface. Boundary and border theories have envisaged boundary flexibility and permeability as co-antecedents to boundary strength, which then acts as a determinant of work-life integration/segmentation (Ashforth et al., 2000, Bulger et al., 2007, Clark, 2000, Hall and Richter, 1988, Olson-Buchanan and Boswell, 2006). This finding, in conjunction with the prior findings relating to the use of boundary strategy, suggests that while flexibility does in fact remain an antecedent to boundary strength, permeability instead serves as a moderator between the antecedent (flexibility) and

work-life outcomes (in this case, conflict). In addition, given that there is evidence that employees can control levels of boundary permeability through boundary management strategies; permeability then becomes a unique mechanism by which individuals can control the effects of flexible work arrangements (Clark, 2000, Felstead and Jewson, 2000, Kossek et al., 1999, Kreiner et al, 2009, Nippert-Eng, 1996a, b).

### **7.3.3.2 Implications for Practice**

The identification of boundary permeability as a key ‘lever’ which can be manipulated to moderate the impact of work-life practices on work-life outcomes has important implications for both individuals and organisations. Notably, it suggests that individuals and organisations can take actions such as enacting policies, on the part of the organisation, or adopting boundary strategies, on the part of the employees, which can influence the impact of workplace supply of integrating and segmenting practices on employees. For example, prior to determining that a particular employee is able to become a homeworker, the potential homeworker and their employer could conduct an assessment of both employee preferences for integration or segmentation between roles, and the resources and demands of the work role and home environment which may influence levels of boundary permeability. This could include a review of the space in the home where work might take place, in order to assess potential overlap with space used for non-work activities. Similarly, the method and timing of communications between homeworkers and their managers and colleagues might be assessed in order to develop some standard by which homeworkers are not interrupted during their non-work time. Factors which may impact the permeability of the work boundary might

also be assessed in order to ensure that homeworkers are able to work productively in the home environment. For example, if young children are present in the home, homeworkers and their employer may need to ensure that adequate childcare arrangements are in place so that non-work interruptions during working hours are minimized.

In addition to an assessment of the resources and demands which may influence permeability in the work and non-work environments, it may also be useful to provide employees with resources and suggested strategies for adjusting this ‘lever’ of permeability to suit their preferences. From the organisation’s perspective, this may involve increasing the autonomy with which employees can control their working patterns. For example, in the case of the offshore workers, greater employee voice in terms of the timing and length of rotations may aid offshore workers in making smoother transitions between roles. Similarly, in the case of extensive homeworkers, this may involve letting them have more control over setting their work hours and encouraging them to use technology and other behavioural techniques, such as shutting down their PC or turning off their work telephone, in order to establish and maintain boundaries which match their segmentation – integration preferences.

### **7.3.4 How does boundary permeability impact the relationship between other job demands and resources, beyond flexible working practices, and positive and negative work-life outcomes?**

The final research question builds on the prior question by further expanding the examination of the role of boundary permeability in terms of how it may influence the relationship between other workplace demands and resources and positive and negative work-life outcomes. This is an important consideration because the intersection of work and non-work roles involves a complex set of relationships. As noted by Hall and Richter (1988, p.214), “management needs to understand this unstructured, largely undefined and highly charged process by which work and home affect each other on a daily basis before it can begin to solve the problems involved”. Therefore considering boundary permeability only from the perspective of whether an organisation offers integrating or segmenting work-life practices may lead us to miss some of the other, perhaps unintended, consequences of increasing and decreasing boundary permeability. This question is primarily answered in Chapter 6, which uses a diary study among homeworkers to evaluate the day-to-day effects of job workload, job satisfaction and reported permeability on work-life conflict and work-life facilitation.

#### **7.3.4.1 Contributions to the Literature**

The findings related to the fourth research question from this dissertation make several important contributions to the literature on work-life boundaries, specifically relating to boundary permeability, as well as literature that applies the Job Demands Resources model to the work-life interface. First, these findings make two

contributions to the literature on work-life boundaries. First, to the best of this author's knowledge, this was the first study to examine the impact of homeworking on the day-to-day work-non-work boundary interface using a time series method. This is important because time series methods allow the data to model predictive relationships versus associations (Bolger et al, 2003); this research therefore provides empirical support for the idea that perceived job control negatively predicts boundary permeability. Earlier research has identified that differences in employee perceptions of the true flexibility offered by certain organizational practices, such as homeworking, are related to positive and negative work-life outcomes; this is, however, the first study to empirically link control with permeability (Bulger et al., 2007, Kossek et al., 2006, pp.347-8, Matthews et al., 2010a).

The second contribution of this research to literature on work-life boundaries builds on what was determined by Question 3 and suggests that boundary permeability may serve a more important role as a moderator of the relationship between a variety of job demands, job resources and work-life outcomes. While Question 3 specifically looks at the impact of boundary permeability on the relationship between integrating and segmenting work practices and work-life outcomes, the research contained in Chapter 6 extended this premise to include the job demand of workload and the job resource of job satisfaction. The data provide empirical support for the idea that boundary permeability acts as a moderator for the interaction between job demands and work-life conflict, such that at higher levels of permeability, higher workload can lead to greater work-life conflict. Similarly, the data also provide empirical support for the hypothesis that boundary permeability moderates the relationship between job satisfaction and work-to-life facilitation. Combined, these findings



further extend Boundary Theory to include the role of permeability in the work-life boundary interface as a construct which can regulate the impact of both positive and negative experiences in alternate domains (Ashforth et al., 2000, Bulger et al., 2007, Hall and Richter, 1988, Olson-Buchanan and Boswell, 2006).

In addition to making a contribution to the literature on work-life boundaries, this research also extends literature that uses the Job Demands-Resources Model (Demerouti et al., 2001) to examine the work-life interface. Prior research has sought to understand whether the conflict relating to role blurring is impacted by workplace demands and resources (Glavin and Schieman, 2012). The present study has provided empirical support for the idea that permeability can be considered a linking mechanism that moderates the impact of demands and resources between domains (Demerouti et al., 2001). This extends the application of the Job Demands-Resources Model to work-life literature by clarifying the process by which role blurring impacts the relationship between job demands and resources and work-life and well-being outcomes. This suggests that boundary permeability can be a ‘double-edged sword’ such that it can be used to control the harmful effects of cross-domain demands but, if too constrained, may also hinder the benefits derived from cross-domain resources.

#### **7.3.4.2 Implications for Practice**

The key finding that boundary permeability moderated the relationship between job demands and resources and work-life outcomes, such that permeability not only reduced the negative impact of job demands on work-life outcomes, but also increased the positive impact of job resources on work-life outcomes in the non-work

domain, has important implications for practitioners. A practical implication of this ‘double-edged’ effect of boundary permeability is that individual employees must not only learn to adopt boundary management strategies that match their preferences, but that they also take into account the demands and resources provided by their work and non-work environments.

For example, Chapter 3 found that misfit between boundary segmentation preferences and segmentation supply led to negative effects on the work-life interface. Given that the participants in that study were faced with high levels of work-life segmentation due to the off-shore environment in which they were working, one possible outcome might be that positive resources from their home environment, such as family or social support, were not able to positively influence their work experience due to low levels of boundary permeability. In this case, adopting a more integrating work environment, such that employees increase the amount of contact with family and friends during work rotations or engage in more interactions with colleagues and managers in between rotations, might lead to more positive work-life outcomes. Similarly, in cases where low levels of permeability are reducing the positive influences of work activities on non-work roles (work-life facilitation), organisations may encourage activities that increase permeability. For example, homeworkers may be asked to come into the office more frequently or managers may arrange face to face meetings with their homeworking employees in their home environment. In addition, companies may also sponsor or encourage more social interactions with colleagues such as after-work outings.

Alternatively, employees may be faced with situations where high levels of permeability between work and non-work roles lead to negative work-life outcomes (conflict) due to the influence of cross-role role demands. For example, a management consultant may find that as work demands increase due to a project deadline, greater work to non-work boundary permeability creates work-life conflict due to multiple work interruptions in the non-work domain. In this case, developing organisational norms such that limited emails are sent after working hours and managers refrain from contacting employees outside of their designated hours for working may serve to reduce the cross-role interruptions and minimize conflict. In sum, the recognition of boundary permeability as a mechanism that can control the flow of positive and negative resources and demands between domains provides employees and their employers with tools to better manage the work-life interface.

#### **7.4 Limitations**

There are some important limitations to the research contained in this dissertation relating to both the overall research model for the dissertation and specific limitations to the studies detailed in Chapters 3, 4, 5 and 6. In this section, the key limitations relating to the overall research model will be discussed.

##### **7.4.1 Selection / Number of Organisations:**

The first overall limitation of this dissertation is that each chapter focuses on a single organisation, which may limit the ability to generalize the findings to other organisations. While these organisations were chosen specifically because they represented an opportunity to study the phenomena associated with more extreme environments relating to integrating and segmenting practices, employee reactions to

these extreme environments may differ from workplaces that are more neutral in terms of their work-life policy offerings. In addition, as identified by Rousseau and Fried (2001, p.1), “first, the domain of organizational research is becoming more international, giving rise to challenges in transporting social science models from one society to another. Second, the rapidly diversifying nature of work and work settings can substantially alter the underlying causal dynamics of worker-organizational relations”. This suggests that the challenges of generalizing the results of any study set in a single organisational setting or national context are increasing with the changing business climate.

#### **7.4.2 Types of Employees**

Another important limitation of the research contained in this dissertation is the ability to generalize the findings to all workers who may encounter highly segmented (e.g., shift workers) or highly integrated (e.g., homeworkers) work environments. The employees in both of the organisations where fieldwork for this dissertation was conducted were employed full-time in professional roles. In both cases, the employees were contracted to work a specific number of days / hours by the organisation, and employees were not responsible for generating their own projects or sales. This is in direct contrast to many workers who work either shift-based jobs or work from home. For example, many workers who work specific shifts or rotational schedules are subject to having their shifts cut unexpectedly due to changes in demand. Similarly, many individuals who work from home may be either self-employed or working for multiple employers, which may mean that they are responsible for bringing in the work and managing the flow of work. The additional pressure of maintaining a core number of hours by either agreeing to less favourable

days or times for shift work or generating your own workload may lead employees to work longer, more varied and less desired hours in order to maintain steady employment (Beers, 2000, Felstead and Jewson, 1997, Presser, 2000, Standen et al., 1999, Sullivan, 2003). The results contained in this dissertation may not be generalizable to these groups of workers due to these added pressures that they may face.

### **7.4.3 Common Method Bias**

In addition, the research in all of the chapters relied on self-reported measures which may have introduced common method bias. The risk inherent in common method bias is that because one individual provided the values for both the independent and dependent variables, the nature of the relationship between these variables may be subject to bias inherent to the respondent (Podsakoff and Organ, 1986, Podsakoff, MacKensie, Lee and Podsakoff, 2003). The quantitative chapters (Chapters 3, 5 and 6) attempted to determine the extent that common method bias may have influenced the findings by employing confirmatory factor analysis using Harman's single factor test (Podsakoff et al., 2003). In all of the chapters and for all of the models, the data showed that a single factor solution was not the best fit, suggesting that common method bias is limited in this dissertation.

### **7.4.4 Scale Revision**

As noted in the individual chapters, many of the measures used in the studies contained in this dissertation were adapted in order to measure the work versus non-work experiences of individuals both with and without families. However, this adaptation presents two important challenges to this research. First, the validation

research which supports the reliability of these measures was conducted with the original wording and therefore, at times, this could have been the source of less reliable Cronbach's alpha scores in the current studies. In addition, as noted earlier in this dissertation, some research does indicate that individuals with and without families perceive and interpret the work-life interface differently. For example, Waumsley et al.'s (2010) evaluation of Netermeyer et al.'s (1996) work-life and work-family conflict scales determined that people with children interpreted the phrase 'family' differently from the phrase 'life' and reported higher levels of conflict when the term 'family' was used. This suggests that using more general measures of work-life outcomes, as done in this dissertation, might underreport the experiences of workers with family obligations.

## **7.5 Areas for Future Research**

Based on the research contained in this dissertation, I would like to put forth an agenda for future work that could build on and enhance these research findings. First, given that a limitation of the studies in this dissertation was that they each focused solely on the individual, future research should explore dynamic and interactional processes involving other actors in the work-home interface. Much of the prior research on work-life conflict and boundary management has an exclusive focus on the individual, when more often work-family circumstances are better reflected by looking at both a given individual and those within the work-family system that surrounds him or her (Barnett, 1999, Kossek, Noe and DeMarr, 1999, Ozbilgin, Beauregard, Tatli and Bell, 2011). In her work on Border Theory, Clark (2000) identifies individuals who serve as 'border-keepers', or other stakeholders that contribute to an individual's boundary management strategy. For example,

Beehr et al. (2006), in their study of police officers and their wives, found some congruence in the coping strategies used by the officers and their spouses. In addition, the use of coping strategies was significantly negatively correlated to some types of spouse strain (Beehr et al, 2006). The inclusion of other actors in the research does not need to be limited to spouses; other actors involved in boundary management strategies may include co-workers, managers, subordinates and dependent children, among others.

In addition to the inclusion of other actors who may influence the work-life interface, future research should also continue to incorporate time series methods in order to further understand how work-life interactions predict individual and organizational outcomes. As noted in Chapter 6, the work-life interface is not static in nature, therefore we need to use research methods that allow us to capture data on both “levels”, state-like aspects of the work-life interface, and “episodes” (Maertz and Boyar, 2011, p. 68) that trigger changes to the interface that can lead to positive or negative outcomes (Bolger et al., 2003, Butler et al., 2005, Doumas, 2003, Greenhaus and Powell, 2006, Tenbrunsel et al., 1995, Williams and Alliger, 1994). In their 2007 meta-analysis on research methods used in work-family research, Caspar et al. (2007) provide additional support for the need for more diverse methods. Their analysis demonstrated that the majority of research in the field is cross-sectional in nature, typically relies on survey methods, and most often only provides individual levels of analysis.

Last, much of the current research on boundary management and flexible work arrangements focuses on white collar workers for whom flexibility or mobility is a

perceived benefit that is facilitated by technology resources. However, future research should explore the implications of flexible and mobile working on boundary management strategies for other groups of workers. For example, in her research with mobile hairstylists, Cohen (2010, pp. 6-7) differentiates between the white collar experience of “working while mobile”, which tends to involve choice in the timing and location in which the mobile working takes place, and “mobility as work” and “mobility for work”, both of which involves workers whose work is transportation of people or goods, such as pilots and truck drivers, and workers whose employment requires working at a number of different locations, such as plumbers or construction workers. Similarly, workers who are employees of an organisation versus those who are self-employed are likely to experience boundary management differently. For example, workers who are self-employed may experience problems relating to flow and volume of work because job security may be an issue. Self-employed workers may find that they are unable to turn down work; therefore their workload expands and contracts in unpredictable ways. Given the rise in self-employed and entrepreneurial work in the UK in recent years, particularly among certain immigrant and ethnic groups, these populations are very important to consider (Clark and Drinkwater, 2010).

## **7.6 Conclusion**

This paper concludes by suggesting that boundary management is an important tool that individuals and organisations can employ to protect the work-life interface, in a way that accounts for individual and contextual differences. While further research is needed that examines the dynamic processes of boundaries over time as well as the interactive nature of boundaries across couples, families, co-workers and other social



groupings (Ozbilgin et al., 2011, Kossek et al., 1999), this dissertation offers a step toward a better understanding of the relationship between boundaries and the work-life interface. By understanding the processes by which boundaries help us regulate our work and non-work roles; we can better develop strategies to influence boundary preferences and resources in order to increase the alignment between the needs of the individual worker and organizational resources.

## References

Adams, G.A., King, L.A. & King, D.W. (1996). Relationship of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology*, 81(4), 411-420.

Adler, A.B., McGurk, D., Stetz, M.C. & Bliese, P.D. (2003). Military occupational stressors in garrison, training, and deployed environments. *Presentation at the NIOSH/APA Symposium: Modeling Military Stressors: The WRAIR Occupational Stress Research Program*; Toronto 21 March 2003.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications, Incorporated.

Allen, T. D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior*, 58(3), 414-435

Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: a review and agenda for future research. *Journal of Occupational Health Psychology*, 5(2), 278-308.

Allis, P., & O'Driscoll, M. (2008). Positive effects of nonwork-to-work facilitation on well-being in work, family and personal domains. *Journal of Managerial Psychology*, 23(3), 273-291.

Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A meta-analysis of work–family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology, 16*(2), 151.

Anderson, S. E., Coffey, B. S., & Byerly, R. T. (2002). Formal organizational initiatives and informal workplace practices: Links to work-family conflict and job-related outcomes. *Journal of management, 28*(6), 787-810.

Angle, H. L., & Perry, J. L. (1981). An empirical assessment of organizational commitment and organizational effectiveness. *Administrative Science Quarterly, 26*(1), 1-14.

Aryee, S., Srinivas, E. S., & Tan, H. H. (2005). Rhythms of life: antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology, 90*(1), 132-146.

Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review, 25*(3), 472-491.

Atwater, L. E., Ostroff, C., Yammarino, F. J., & Fleenor, J. W. (1998). Self-other agreement: Does it really matter? *Personnel Psychology, 51*(3), 577–598.

- Bailey, D.E. & Kurland, N.B. (2002). A review of telework research: findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior*, 23(4), 383-400.
- Bailyn, L. & M. Harrington (2004). Redesigning work for work-family integration. *Community, Work and Family*, 7(2), 197-208.
- Bakker, A. & Schaufeli, W. (2008). Positive organizational behaviour: Engaged employees in flourishing organizations. *Journal of Organizational Behaviour*, 29(2), 147-154.
- Banita, L. & Dwivedi, K. (2009). Homeworkers' usage of mobile phones; social isolation in the home-workplace. *Journal of Enterprise Management*, 67(2), 257-274.
- Barnatt, C. (1995). Office space, cyberspace and virtual organization. *Journal of General Management*, 20(4), 78-78.
- Barnett, R. C. (1999). A new work-life model for the twenty-first century. *The Annals of the American Academy of Political and Social Science*, 562(1), 143-158.
- Baruch, Y. (2001). The status of research on teleworking and an agenda for future research. *International Journal of Management Reviews*, 3(2), 113-129.
- Baruch, Y. (2002). Teleworking: benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment*, 15(1), 34-49.

Baruch, Y., & Nicholson, N. (1997). Home, sweet work: requirements for effective home working. *Journal of General Management*, 23(2), 15-30.

Beauregard, T. A. (2006). Predicting interference between work and home: a comparison of dispositional and situational antecedents. *Journal of Managerial Psychology*, 21(3), 244-264.

Beauregard, T. A. (2011). Direct and indirect links between organizational work-home culture and employee well-being. *British Journal of Management*, 22(2), 218-237.

Beauregard, T. A., & Henry, L. C. (2009). Making the link between work-life balance practices and organizational performance. *Human Resource Management Review*, 19(1), 9-22.

Bedeian, A. G., Burke, B. G., & Moffett, R. G. (1988). Outcomes of work-family conflict among married male and female professionals. *Journal of Management*, 14(3), 475-491.

Beehr, T. A., Johnson, L. B., & Nieva, R. (2006). Occupational stress: Coping of police and their spouses. *Journal of Organizational Behavior*, 16(1), 3-25.

Beers, T.M. (2000). Flexible schedules and shiftwork: Replacing the '9-5' workday? *Monthly Labor Review*, 123, 33-40.

- Beutell, N. J. (2010). Work schedule, work schedule control and satisfaction in relation to work-family conflict, work-family synergy, and domain satisfaction. *Career Development International, 15*(5), 501-518.
- Blau, P. M. (1964). *Exchange and power in social life*. Transaction Publishers.
- Bolger, N., Davis, A. & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology, 54*(1), 579-616.
- Boswell, W. R., Olson-Buchanan, J. B., & LePine, M. A. (2004). Relations between stress and work outcomes: The role of felt challenge, job control, and psychological strain. *Journal of Vocational Behavior, 64*(1), 165-181.
- Boyar, S. L., Maertz Jr, C. P., Pearson, A. W., & Keough, S. (2003). Work-family conflict: A model of linkages between work and family domain variables and turnover intentions. *Journal of Managerial Issues, 15*(2), 175-190.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*(5), 307-311.
- Bryk, A. S. & Raudenbush, SW (1992). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage Publications, Incorporated.

Buelens, M., & Van den Broeck, H. (2007). An analysis of differences in work motivation between public and private sector organizations. *Public Administration Review*, 67(1), 65-74.

Bulger, C. A., Matthews, R. A., & Hoffman, M. E. (2007). Work and personal life boundary management: boundary strength, work/personal life balance, and the segmentation-integration continuum. *Journal of Occupational Health Psychology*, 12(4), 365-375.

Burrell, L.M., Adams, G.A., Durand, D.B. & Castro, C.A. (2006). The impact of military lifestyle demands on well-being, Army and family outcomes. *Armed Forces and Society*, 33(1), 43-58.

Butler, A.B., Grzywacz, J.G., Bass, B.L. & Linney, K.D. (2005). Extending the demands-control model: A daily diary study of job characteristics, work-family conflict and work-family facilitation. *Journal of Occupational and Organizational Psychology*, 78(2), 155-169.

Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, 67(2), 169-198.

Caligiuri & Lazarova (2005). The theory of met expectations applied to expatriate adjustment: The role of cross-cultural training. *International Journal of Human Resource Management*, 12(3), 357-372.

Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work–family interface: Development and validation of a work–family enrichment scale. *Journal of Vocational Behavior*, 68(1), 131-164.

Carlson, D.S., Kacmar, K.M. & Williams, L.J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior*, 56(2), 249-276.

Carlson, D.S. & Perrewe, P.L. (1999). The role of social support in the stressor-strain relationship: An examination of work-family conflict. *Journal of Management*, 25(4), 513-540.

Caspar, W.J., Eby, L.T., Bordeaux, C. Lockwood, A. & Lambert, D. (2007). A review of research methods in IO/OB work-family research. *Journal of Applied Psychology*, 92(2), 28-43.

Cassell, C., & Symon, G. (Eds.). (2004). *Essential guide to qualitative methods in organizational research*. Sage.

Center for Creative Leadership (2011). *Increasing your effectiveness on and off the job*, Available from: < <http://www.ccl.org/leadership/pdf/assessments/WLIBrochure.pdf>>. [7 March 2014]



- Chesley, N. (2005). Blurring boundaries? Linking technology use, spillover, individual distress, and family satisfaction. *Journal of Marriage and Family*, 67(5), 1237-1248.
- Chen, Z., Powell, G. N., & Greenhaus, J. H. (2009). Work-to-family conflict, positive spillover, and boundary management: a person-environment fit approach. *Journal of Vocational Behavior*, 74(1), 82-93.
- Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations*, 53(6), 747-770.
- Clark, S. C. (2002). Communicating across the work/home border. *Community, Work & Family*, 5(1), 23-48.
- Clark, K., & Drinkwater, S. (2010). Patterns of ethnic self-employment in time and space: evidence from British Census microdata. *Small Business Economics*, 34(3), 323-338.
- Cohen, R. L. (2010). Rethinking 'mobile work': boundaries of space, time and social relation in the working lives of mobile hairstylists. *Work, Employment & Society*, 24(1), 65-84.
- Collinson, D.L. (1998). 'Shift-ing lives': Work-home pressures in the North Sea oil industry. *Canadian Review of Sociology*, 35(3), 301-324.

Conway, N., & Briner, R. B. (2002). A daily diary study of affective responses to psychological contract breach and exceeded promises. *Journal of Organizational Behavior*, 23(3), 287-302.

Cooper, C. D. & Kurland, N. B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behavior*, 23(4), 511-532.

Corley, K. G., & Gioia, D.A. (2011). Building theory about theory building: What constitutes a theoretical contribution? *Academy of Management Review*, 36(1), 12-32.

Cousins, K. C., & Robey, D. (2005). Human agency in a wireless world: Patterns of technology use in nomadic computing environments. *Information and Organization*, 15(2), 151-180.

Creswell, J. W. (2003). *Research design: qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, Calif.: Sage Publications.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.

Desrochers, S., & Sargent, L. D. (2004). Boundary/Border Theory and Work-Family Integration. *Organization Management Journal*, 1(1), 40-48.

Desrochers, S., Hilton, J. M. & Larwood, L. (2005). Preliminary validation of the work-family integration-blurring scale. *Journal of Family Issues*, 26(4), 442-466.

Diaz, I., Chiaburu, D. S., Zimmerman, R. D., & Boswell, W. R. (2012).

Communication technology: Pros and cons of constant connection to work. *Journal of Vocational Behavior*, 80(2), 500-508.

Dilworth, J. E. L. (2004). Predictors of negative spillover from family to work. *Journal of Family Issues*, 25(2), 241-261.

Doumas, D.M., Margolin, G. & John, R.S. (2003) The relationship between daily marital interaction, work, and health-promoting behaviors in dual-earner couples: An extension of the work-family spillover model. *Journal of Family Issues*, 24(1), 3-20.

Duxbury, L. E., & Higgins, C. A. (1991). Gender differences in work-family conflict. *Journal of Applied Psychology*, 76(1), 60.

Duxbury, L. E., Higgins, C. A. & Mills, S. (1992). After-hours telecommuting and work-family conflict: A comparative analysis. *Information Systems Research*, 3(2), 173-190.

Duxbury, L., & Neufeld, D. (1999). An empirical evaluation of the impacts of telecommuting on intra-organizational communication. *Journal of Engineering and Technology Management*, 16(1), 1-28.

Eagle, B. W., Miles, E. W., & Icenogle, M. L. (1997). Interrole conflicts and the permeability of work and family domains: are there gender differences? *Journal of Vocational Behavior*, 50(2), 168-184.

Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behavior*, 66(1), 124-197.

Edwards, J. R. (1996). An examination of competing versions of the person-environment fit approach to stress. *Academy of Management Journal*, 39(2), 292-339.

Edwards, J. R. (2007). Polynomial regression and response surface methodology. In C. Ostroff & T. A. Judge (Eds.), *Perspectives on Organizational Fit* (pp. 361-372). San Francisco, CA: Jossey-Bass.

Edwards, J. R. (2008). Person-environment fit in organizations: An assessment of theoretical progress. *Academy of Management Annals*, 2(1), 167–230.

Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person-environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 28-67). Oxford: Oxford University Press.

Edwards, J. R., & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, 36(6), 1577-1613.

Edwards, J. R., & Rothbard, N. P. (1999). Work and family stress and well-being: An examination of person-environment fit in the work and family domains. *Organizational Behavior and Human Decision Processes*, 77(2), 85-129.

Edwards, J. R. & N. P. Rothbard (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review*, 25(1), 178-199.

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75(1), 51-59.

Eisinga, R., Grotenhuis, M. T., & Pelzer, B. (2012). The Reliability of a Two-item Scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health*, 2012: 1-6.

Emslie, C., & Hunt, K. (2008). 'Live to Work' or 'Work to Live'? A qualitative study of gender and work-life balance among men and women in mid-life. *Gender, Work & Organization*, 16(1), 151-172.

Faber, A.J., Willerton, E., Clymer, S.R., MacDermid, S.M. & Weiss, H.M. (2008).

Ambiguous absence, ambiguous presence: A qualitative study of military reserve families in wartime. *Journal of Family Psychology*, 22(2), 222-230.

Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, 4(1), 6-16.

Felstead, A. & Jewson, N. (2000). *In Work, At Home: Towards an Understanding of Homeworking*. London: Routledge.

Felstead, A., Jewson, N., Phizacklea, A., & Walters, S. (2002). Opportunities to work at home in the context of work-life balance. *Human Resource Management Journal*, 12(1), 54-76.

Fenwick, R., & Tausig, M. (2001). Scheduling stress family and health outcomes of shift work and schedule control. *American Behavioral Scientist*, 44(7), 1179-1198.

Fonner, K. L., & Roloff, M. E. (2010). Why teleworkers are more satisfied with their jobs than are office-based workers: When less contact is beneficial. *Journal of Applied Communication Research*, 38(4), 336-361.

Friedman, S. D., Christensen, P., & DeGroot, J. (1998). Work and life: The end of the zero-sum game. *Harvard Business Review*, 76, 119-130.

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology, 77*(1), 65-78.

Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior, 50*(2), 145-167.

Frone, M. R., Russell, M., & Cooper, M. L. (1997). Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology, 70*(4), 325-335.

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology, 92*(6), 1524-1541.

Garson G. D. (2012). *Hierarchical Linear Modeling: Guide and Applications*. Thousand Oaks, CA: Sage Publications, Inc.

Glavin, P., & Schieman, S. (2012). Work-Family Role Blurring and Work-Family Conflict The Moderating Influence of Job Resources and Job Demands. *Work and Occupations, 39*(1), 71-98.

Goff, S. J., Mount, M. K., & Jamison, R. L. (1990). Employer supported child care, work/family conflict, and absenteeism: A field study. *Personnel psychology*, 43(4), 793-809.

Golden, T. D. (2006). The role of relationships in understanding telecommuter satisfaction. *Journal of Organizational Behavior*, 27(3), 319-340.

Golden, T.D. (2009) Applying technology to work: Toward a better understanding of telework. *Organization Management Journal*, 6(3), 241-250.

Golden, A. G. & Geisler, C. (2007). Work-life boundary management and the personal digital assistant. *Human Relations*, 60(3), 519-551.

Golden, T. D., & Veiga, J. F. (2005). The impact of extent of telecommuting on job satisfaction: Resolving inconsistent findings. *Journal of Management*, 31(2), 301-318.

Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, 93(6), 1412-1421.

Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: is there no place like home? *Journal of Applied Psychology*, 91(6), 1340-1350.



Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources model applied to work–family conflict and strain. *Journal of Vocational Behavior*, *54*(2), 350-370.

Greenhaus, J. H. & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, *10*(1), 76-88.

Greenhaus, J. H. & G. N. Powell (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, *31*(1), 72-92.

Grotto, A. R., & Lyness, K. S. (2010). The costs of today's jobs: Job characteristics and organizational supports as antecedents of negative spillover. *Journal of Vocational Behavior*, *76*(3), 395-405

Grzywacz, J. G., & Bass, B. L. (2003). Work, Family, and Mental Health: Testing Different Models of Work-Family Fit. *Journal of Marriage and Family*, *65*(1), 248-261.

Grzywacz, J. G., & Butler, A. B. (2005). The impact of job characteristics on work-to-family facilitation: Testing a theory and distinguishing a construct. *Journal of Occupational Health Psychology*, *10*(2), 97-109.

Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work–family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5(1), 111.

Gutek, B. A., Nakamura, C. Y., & Nieva, V. F. (1981). The interdependence of work and family roles. *Journal of Organizational Behavior*, 2(1), 1-16.

Hackman, R. and Oldham, G. (1980) *Work Redesign*. Reading, MA: Addison-Wesley.

Hall, D. T. & Richter, J. (1988). Balancing work life and home life: What can organizations do to help? *Academy of Management: EXECUTIVE*, 2(3), 213-223.

Hardill, I., & MacDonald, S. (1998, February). Choosing to relocate: An examination of the impact of expatriate work on dual-career households. In *Women's Studies International Forum* (Vol. 21, No. 1, pp. 21-29). Pergamon.

Hardill, I., & Green, A. (2003). Remote working-altering the spatial contours of work and home in the new economy. *New Technology, Work and Employment*, 18(3), 212-222.

Hecht, T. D., & Allen, N. J. (2009). A longitudinal examination of the work–nonwork boundary strength construct. *Journal of Organizational Behavior*, 30(7), 839-862.

Hertz, R. and Charlton, J. (1989) "Making family under a shiftwork schedule: Air force security guards and their wives." *Social Problems*, 36(5), 491-507.

Hobfoll, S. E. (1989). Conservation of resources. *American Psychologist*, 44(3), 513-524.

Hoffman, D.A. & Gavin, M.B. (1998) Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24(5): 623-636.

Hogg, M. A., Terry, D. J., & White, K. M. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. *Social Psychology Quarterly*, 255-269.

Hox, J. (2010). *Multilevel analysis: Techniques and applications*. New York, NY: Routledge Academic.

Hyman, J., Baldry, C., Scholarios, D., & Bunzel, D. (2003). Work–life imbalance in call centres and software development. *British Journal of Industrial Relations*, 41(2), 215-239.

Ilies, R., & Judge, T. A. (2004). An experience-sampling measure of job satisfaction and its relationships with affectivity, mood at work, job beliefs, and general job satisfaction. *European Journal of Work and Organizational Psychology*, 13(3), 367-389.

Ilies, R., Schwind, K. M., Wagner, D. T., Johnson, M. D., DeRue, D. S., & Ilgen, D. R. (2007). When can employees have a family life? The effects of daily workload and affect on work-family conflict and social behaviors at home. *Journal of Applied Psychology, 92*(5), 1368-1379.

Ilies, R., Wilson, K. S., and Wagner, D. T. (2009). The spillover of daily job satisfaction onto employees' family lives: The facilitating role of work-family integration. *Academy of Management Journal, 52*(1), 87-102.

Jansen, K. J., & Kristof-Brown, A. (2006). Toward a multidimensional theory of person-environment fit. *Journal of Managerial Issues, 18*(2), 193-212.

Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly, 24*(4) 602-611.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133.

Jones, A.P. & Butler, M.C. (1980). A role transition approach to the stresses of organizationally-induced family role disruption. *Journal of Marriage and the Family, 42*(2), 367-376.

Karasek Jr, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*: 285-308.

Karasek, R. T. & Theorell, T.T. (1990). *Healthy Work–Stress, Productivity and the Reconstruction of Working Life*. New York, NY: Basic Books.

Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, 63(1), 83-106.

King, L.A., Mattimore, L.K., King, D.W. and Adams, G.A. (1995) Family support inventory for workers: A new measure of perceived social support from family members. *Journal of Organizational Behavior*, 16(3), 235-258.

King, N. (2004). Using templates in the thematic analysis of texts. In Cassell, C. & Symon, G. (Eds.), *Essential guide to qualitative methods in organizational research* (pp.256-270). London, England: Sage Publications Limited.

Kinman, G., & Jones, F. (2008). Effort-reward imbalance, over-commitment and work-life conflict: testing an expanded model. *Journal of Managerial Psychology*, 23(3), 236-251.

Kirchmeyer, C. (1992). Perceptions of nonwork-to-work spillover: Challenging the common view of conflict-ridden relationships. *Basic and Applied Social Psychology*, 13(2), 231-249.

Kirchmeyer, C. (1995) Managing the work-nonwork boundary: An assessment of organizational responses. *Human Relations*, 48(5), 515-536.

Kossek, E. E., Noe, R. A. & DeMarr, B.J. (1999). Work-family role synthesis: Individual and organizational determinants. *The International Journal of Conflict Management*, 10(2), 102-129.

Kossek, E. E., & Lambert, S. J. (Eds.). (2012). *Work and life integration: Organizational, cultural, and individual perspectives*. Mahwah, N.J.: Psychology Press.

Kossek, E. E. & Lautsch, B. A. (2012). Work–family boundary management styles in organizations: A cross-level model. *Organizational Psychology Review*, 2(2), 152-171.

Kossek, E.E., Lautsch, B.A. & Eaton, S.C. (2006) Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work-family effectiveness. *Journal of Vocational Behavior*, 68(2), 347-367.

Kossek, E.E., & Ozeki, C. (1998). Work–family conflict, policies, and the job–life satisfaction relationship: A review and directions for organizational behavior–human resources research. *Journal of Applied Psychology*, 83(2), 139.

Kossek, E. E., Ruderman, M. N., Braddy, P. W. & Hannum, K. M. (2012). Work-nonwork boundary management profiles: A person-centered approach. *Journal of Vocational Behavior*, 81(1), 112-128.

Kreiner, G. E. (2006). Consequences of work-home segmentation or integration: a person-environment fit perspective. *Journal of Organizational Behavior*, 27(4), 485-507.

Kreiner, G. E., Hollensbe, E. C. & Sheep, M. L. (2009). Balancing borders and bridges: Negotiating the work-home interface via boundary work tactics. *Academy of Management Journal*, 52(4), 704-730.

Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1), 1-49.

Kristof-Brown, A. L., Zimmerman, R. D. & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281-342.

Krosnick, J. A., & Presser, S. (2010). Question and questionnaire design. In Marsden, P.V. and Wright, J.D. (2010) *Handbook of Survey Research*. 2nd edition. (pp.263-314). Bingley, UK: Emerald Group Publishing Limited.

Lambert, S. J. (1990). Processes linking work and family: A critical review and research agenda. *Human relations*, 43(3), 239-257.

- Lambert, S. J. (2000). Added benefits: The link between work-life benefits and organizational citizenship behavior. *Academy of Management Journal*, 43 (5), 801-815.
- Larson, R. W., & Almeida, D. M. (1999). Emotional transmission in the daily lives of families: A new paradigm for studying family process. *Journal of Marriage and the Family*, 61(1), 5-20.
- Le Guin, U. K. (2012). *The Left Hand of Darkness*. Hachette UK.
- Lewin, K. (1939). Field theory and experiment in social psychology: Concepts and methods. *The American Journal of Social Psychology*, 44(6), 868-896.
- Lobel, S. A. (1991). Allocation of investment in work and family roles: Alternative theories and implications for research. *Academy of Management Review*, 16(3), 507-521.
- Luthans, F. (2002). The Need For and Meaning of Positive Organizational Behavior. *Journal of Organizational Behavior*, 23(6), 695-706.
- Macik-Frey, M., Quick, J. C. & Nelson, D. L. (2007). Advances in Occupational Health: From a stressful beginning to a positive future†. *Journal of Management*, 33(6), 809-840.



Maertz, C.P. and Boyar, S.L. (2011). Work-family conflict, enrichment and balance under 'levels' and 'episodes' approaches. *Journal of Management*, 37(1), 68-98.

Manoochehri, G. & Pinkerton, T. (2003). Managing telecommuters: opportunities and challenges. *American Business Review*, 21(1), 9-16.

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522-526.

Martins, L. L., Eddleston, K. A., & Veiga, J. F. (2002). Moderators of the relationship between work-family conflict and career satisfaction. *Academy of Management Journal*, 45(2), 399-409.

Masuo, D. M., Walker, R., & Furry, M. M. (1992). Home-based workers: Worker and work characteristics. *Journal of Family and Economic Issues*, 13(3), 245-262.

Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194.

Matthews, R.A. & Barnes-Farrell, J.L. (2010). Development and initial validation of an enhanced measure of boundary flexibility for the work and family domains. *Journal of Occupational Health Psychology*, 15(3), 330-346.

(a) Matthews, R. A., Barnes-Farrell, J. L. & Bulger, C. A. (2010). Advancing measurement of work and family domain boundary characteristics. *Journal of Vocational Behavior*, 77(3): 447-460.

(b) Matthews, R. A., Kath, L.M. & Barnes-Farrell, J.L. (2010). A short, valid, predictive measure of work–family conflict: Item selection and scale validation. *Journal of Occupational Health Psychology*, 15(1), 75-90.

Matusik, S. F. & Mickel, A. E. (2011). Embracing or embattled by converged mobile devices? Users' experiences with a contemporary connectivity technology. *Human Relations*, 64(8), 1001-1030.

Mays, N., & Pope, C. (1995). Rigour and qualitative research. *British Medical Journal*, 311(6997), 109-112.

McFadyen, J.M., Kerpelman, J.L. & Adler-Baeder, F. (2005). Examining the impact of workplace supports: Work-family fit and satisfaction in the U.S. Military. *Family Relations*, 54(1), 131-144.

Meade, A. W., Watson, A. M. & Kroustalis, C. M. (2007, April). *Assessing common methods bias in organizational research*. Paper presented at the 22nd Annual Meeting of the Society for Industrial and Organizational Psychology, New York.

Messersmith, J. (2007). Managing work-life conflict among information technology workers. *Human Resource Management*, 46(3), 429-451.

Morgan, D. L. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research*, 8(3), 362-376.

Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, 59(3), 591-622.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247.

Mustafa, M., & Gold, M. (2013). 'Chained to my work'? Strategies to manage temporal and physical boundaries among self-employed teleworkers. *Human Resource Management Journal*, 23(4), 413-429.

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology*, 81(4), 400-410.

(a) Nippert-Eng, C. (1996) *Home and Work: Negotiating Boundaries through Everyday Life*. Chicago, Il.: University of Chicago Press.

(b) Nippert-Eng, C. (1996). Calendars and keys: The classification of 'home' and 'work'. *Sociological Forum*, 11(3), 563-582.

Noor, N. M. (2004). Work-family conflict, work-and family-role salience, and women's well-being. *The Journal of Social Psychology, 144*(4), 389-406.

Nunnally, J.C. (1978). *Psychometric Theory (2<sup>nd</sup> Edition)*. New York: McGraw-Hill.

Ohly, S., Sonnentag, S., Niessen, C., & Zapf, D. (2010). Diary studies in organizational research. *Journal of Personnel Psychology, 9*(2), 79-93.

Olson-Buchanan, J. & W. R. Boswell (2006). Blurring Boundaries: Correlates of integration and segmentation between work and non-work. *Journal of Vocational Behaviour, 68*(3), 432-445.

Ozbilgin, M.F., Beauregard, T.A., Tatli, A. & Bell, M.P. (2011). Work-life, diversity and intersectionality: A critical review and research agenda. *International Journal of Management Reviews, 13*(2), 177-198.

Parasuraman, S., Purohit, Y. S., Godshalk, V. M. & Beutell, N. J. (1996). Work and family variables, entrepreneurial career success, and psychological well-being. *Journal of Vocational Behavior, 48*(3), 275-300.

Parasuraman, S., & Simmers, C. A. (2001). Type of employment, work–family conflict and well-being: a comparative study. *Journal of Organizational Behavior, 22*(5), 551-568.

Perlow, L. (1998). Boundary control: The social ordering of work and family time in a high tech corporation. *Administrative Science Quarterly*, 43(2), 328-357.

Perrucci, R., MacDermid, S., King, E. Tang, C-Y, Brimeyer, T., Ramados, K., Kiser, S.J. & Swanberg, J. (2007). The significance of shift work: Current status and future directions. *Journal of Family and Economic Issues*, 28(4), 600-617.

Pierce, J. L., & Newstrom, J. W. (1983). The design of flexible work schedules and employee responses: Relationships and process. *Journal of Occupational Behaviour*.

Piszczek, M. & Berg, P. (2014). Expanding the boundaries of boundary theory. *Forthcoming in Human Relations* (cited with permission of the authors).

Pleck, J. H. (1977). The work-family role system. *Social problems*, 24(4), 417-427.

Podsakoff, P. M. & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management*, 12(4), 531-544.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y. and Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.

Poppleton, S., Briner, R. B., & Kiefer, T. (2008). The roles of context and everyday experience in understanding work-non-work relationships: A qualitative diary study of white-and blue-collar workers. *Journal of Occupational and Organizational Psychology, 81*(3), 481-502.

Presser, H.B. (2000). Non-standard work schedules and marital instability. *Journal of Marriage and the Family, 62*(1), 93-110.

Rau, B. L., & Hyland, M. A. (2002). Role conflict and flexible work arrangements: The effects on applicant attraction. *Personnel Psychology, 55*(1), 111-136.

Raghuram, S. (1996). Knowledge creation in the telework context. *International Journal of Technology Management, 11*(7-8), 7-8.

Raghuram, S., & Wiesenfeld, B. (2004). Work-nonwork conflict and job stress among virtual workers. *Human Resource Management, 43*(2-3), 259-277.

Roth, P.L. & BeVier, C.A. (1998). Response rates in HRM/OB survey research: norms and correlates. *Journal of Management, 24*(1), 97-111.

Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly, 46*(4), 655-684.

- Rothbard, N.P., Phillips, K.W. & Dumas, T.L. (2005). Managing multiple roles: Work-family policies and individual's desires for segmentation. *Organization Science*, 16(3), 243-258.
- Rousseau, D. M., & Fried, Y. (2001). Location, location, location: Contextualizing organizational research. *Journal of Organizational Behavior*, 22(1), 1-13.
- Ruderman, M. N., Ohlott, P. J., Panzer, K., & King, S. N. (2002). Benefits of multiple roles for managerial women. *Academy of Management Journal*, 45(2), 369-386.
- Ruiz, Y. & Walling, A. (2005). Home-based working using communication technologies. National Statistics Feature: Office for National Statistics, UK: 417-426.
- Sánchez, A. M., Pérez, M. P., de Luis Carnicer, P., & Jiménez, M. J. V. (2007). Teleworking and workplace flexibility: a study of impact on firm performance. *Personnel Review*, 36(1), 42-64.
- Santos, J. R. A. (1999). Cronbach's alpha: A tool for assessing the reliability of scales. *Journal of extension*, 37(2), 1-5.
- Seawright, J., & Gerring, J. (2008). Case selection techniques in case study research A Menu of Qualitative and Quantitative Options. *Political Research Quarterly*, 61(2), 294-308.

- Schafer, J.L. & Graham, J.W. (2002). Missing data: Our state of the art view. *Psychological Methods*, 7(2), 147-177.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40(3), 437-453.
- Schneider, B., Smith, D.B., Goldstein, H.W. (2000), Attraction-Selection-Attrition: toward a person-environment psychology of organizations. In Price, R.H. (ed.), *Person-Environment Psychology: New Directions and Perspectives* (pp.61-85), Mahwah, N.J.: Lawrence Erlbaum Associates Publishers.
- Shaffer, M. A., Harrison, D. A., & Gilley, K. M. (1999). Dimensions, determinants, and differences in the expatriate adjustment process. *Journal of International Business Studies*, 30(3), 557-581.
- Shaffer, M.A., Harrison, D.A., Gilley, K.M. & Luk, D.M. (2001). Struggling for balance amid turbulence on international assignments: work-family conflict, support and commitment. *Journal of Management*, 27(1), 99-123.
- Shanock, L. R., Baran, B. E., Gentry, W. A., Pattison, S. C., & Heggestad, E. D. (2010). Polynomial regression with response surface analysis: A powerful approach for examining moderation and overcoming limitations of difference scores. *Journal of Business and Psychology*, 25(4), 543-554.



Shumate, M., & Fulk, J. (2004). Boundaries and role conflict when work and family are colocated: A communication network and symbolic interaction approach. *Human Relations*, 57(1), 55-74.

Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39(4), 567-578.

Song, Z., Foo M. & Uy, M.A. (2008). Mood spillover and crossover among dual-earner couples: A cell phone event sampling study. *Journal of Applied Psychology* 93(2), 443-452.

Sonnentag, S. (2001). Work, recovery activities, and individual well-being: a diary study. *Journal of Occupational Health Psychology*, 6(3), 196-210.

Sonnentag, S., Binnewies, C. & Mojza, E.J. (2010). Staying well and engaged when demands are high: the role of psychological detachment. *Journal of Applied Psychology*, 95(5), 965-976.

Spector, P.E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organisational Behavior*, 15(5), 385-392.

Spoonley, P., de Bruin, A., & Firkin, P. (2002). Managing non-standard work arrangements: choices and constraints. *Journal of Sociology*, 38(4), 425-441.

Staines, G. L., & O'Connor, P. (1980). Conflicts among work, leisure and family roles. *Monthly Labor Review*, 103(8), 35-39.

Staines, G. L., & Pleck, J. H. (1984). Nonstandard work schedules and family life. *Journal of Applied Psychology*, 69(3), 515.

Standen, P., Daniels, K., & Lamond, D. (1999). The home as a workplace: work-family interaction and psychological well-being in telework. *Journal of Occupational Health Psychology*, 4(4), 368.

Stanko, T. L. (2009). *A Wolf in Sheep's Clothing? Uncovering the Hidden Costs of Compartmentalizing Multiple Roles*. Paper presented at the 2009 Academy of Management Meeting, Chicago, IL.

Steel, M. (2011). *Changes in shift work patterns over the last ten years (1999-2009)* (Health and Safety Executive: Research Report 887). Newport, UK: Office for National Statistics. Retrieved June 1, 2013, from <http://www.hse.gov.uk/research/rrpdf/rr887.pdf>.

Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22(1), 46-56.

Stephens, G.K. & Sommer, S.M. (1996). The measure of work to family conflict. *Educational and Psychological Measurement*, 56(3), 475-486.

Stone, A. A., Kessler, R. C. & Haythomthwatte, J. A. (1991). Measuring daily events and experiences: Decisions for the researcher. *Journal of Personality*, 59(3), 575-607.

Sturges, J. (2012). Crafting a balance between work and home. *Human Relations*, 65(12), 1539-1559.

Sturges, J., & Guest, D. (2004). Working to live or living to work? Work/life balance early in the career. *Human Resource Management Journal*, 14(4), 5-20

Suedfeld, P. & Pennebaker, J.W. (1997). Health outcomes and cognitive aspects of recalled negative life events. *Psychosomatic Medicine: Journal of Biobehavioural Medicine*, 59(2) 172-7.

Sullivan, C. (2003). What's in a name? Definitions and conceptualisations of teleworking and homeworking. *New Technology, Work and Employment*, 18(3), 158-165.

Sullivan, C. & Lewis, S. (2001) Home-based telework, gender and the synchronisation of work and family: Perspectives of teleworkers and their co-residents. *Gender, Work and Organisation*, 8(2):123-145.

Sutherland, K. M., & Flin, R. H. (1989). Stress at sea: a review of working conditions in the offshore oil and fishing industries. *Work & Stress*, 3(3), 269-285.

- Symon, G., & Cassell, C. (Eds.). (1998). *Qualitative methods and analysis in organizational research*. London: Sage Publications, Incorporated.
- Taskin, L., & Bridoux, F. (2010). Telework: a challenge to knowledge transfer in organizations. *The International Journal of Human Resource Management*, 21(13), 2503-2520.
- Tausig, M. and Fenwick, R. (2001). Unbinding time: Alternate work schedules and work-life balance. *Journal of Family and Economic Issues*, 22(2), 101-119.
- Teddlie, C., & Tashakkori, A. (Eds.). (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage Publications Inc.
- Tenbrunsel, A.E., Brett, J.M., Maoz, E., Stroh, L.K. & Reilly, A.H. (1995). Dynamic and Static Work-Family Relationships. *Organizational Behavior and Human Decision Processes*, 63(3):233-246.
- Thomas, L.T. & Ganster, D.C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 80(1), 6-15.
- Thomas, M., Sampson, H., & Zhao, M. (2003). Finding a balance: companies, seafarers and family life. *Maritime Policy & Management*, 30(1), 59-76.

Thompson, C.A., Beauvais, L.L. & Lyness, K.S. (1999) When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict.” *Journal of Vocational Behaviour*, 54(3), 392-415.

Thompson, C. A., Jahn, E. W., Kopelman, R. E., & Prottas, D. J. (2004). Perceived organizational family support: A longitudinal and multilevel analysis. *Journal of Managerial Issues*, 16(4), 545-565.

van Steenbergen, E. F., Ellemers, N., & Mooijaart, A. (2007). How work and family can facilitate each other: Distinct types of work-family facilitation and outcomes for women and men. *Journal of Occupational Health Psychology*, 12(3), 279.

Voydanoff, P. (2001). Incorporating community into work and family relationships: A review of basic relationships. *Human Relations*, 54(12), 1609-1637.

Voydanoff, P. (2004). The effects of work demands and resources on work-to-family conflict and facilitation. *Journal of Marriage and Family*, 66(2), 398-412.

Voydanoff, P. (2005a). Toward a conceptualization of perceived work-family fit and balance: A demands and resources approach. *Journal of Marriage and the Family*, 67(4), 822-836.

Voydanoff, P. (2005b). Consequences of boundary-spanning demands and resources for work-to-family conflict and perceived stress. *Journal of Occupational Health Psychology, 10*(4), 491.

Wajcman, J., Bittman, M., & Brown, J. E. (2008). Families without borders: Mobile phones, connectedness and work-home divisions. *Sociology, 42*(4), 635-652.

(a) Warr, P. B. (1990). Decision latitude, job demands, and employee well-being. *Work & Stress, 4*(4), 285-294.

(b) Warr, P.B. (1999). Well-Being and the Work-place. In Kahneman, Diener, and Schwarz (eds.), *Well-Being: The Foundations of Hedonic Psychology* (pp. 392-412), New York, NY: Russell Sage Foundation.

Waumsley, J.A., Houston, D.M. & Marks, G. (2010) What about Us? Measuring the Work-Life Balance of People Who Do Not Have Children. *Review of European Studies, 2*(2), 3-17.

Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work–family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review, 17*(1), 63-76.

Wayne, J.H., Musisca, N. & Fleeson, W. (2004). Considering the role of personality in the work—family experience: Relationships of the big five to work—family conflict and facilitation. *Journal of Vocational Behavior, 64*(1), 108-130

Westman, M. (2001). Stress and strain crossover. *Human Relations*, 54(6), 717-751.

Williams, C. (2008). "Work-life balance of shift-workers." *Perspectives on Labor and Income*, 9(8): Statistics Canada, Catalogue no 75-001-XIE:5-16.

<http://www.statcan.gc.ca/pub/75-001-x/2008108/pdf/10677-eng.pdf> (accessed October 27, 2010).

Williams, K.J. & Alliger, G.M. (1994). Role stressors, mood spillover, and perceptions of work-family conflict in employed parents." *The Academy of Management Journal*, 37(4):837-868.

Winkel, D. E., & Clayton, R. W. (2010). Transitioning between work and family roles as a function of boundary flexibility and role salience. *Journal of Vocational Behavior*, 76(2), 336-343.

Wright, T. A., & Bonett, D. G. (2002). The moderating effects of employee tenure on the relation between organizational commitment and job performance: a meta-analysis. *Journal of Applied Psychology*, 87(6), 1183-1190.

Ximénez, M. C., & San Martín, R. (2000). Application of response surface methodology to the study of person-organization fit. *Psicothema*, 12(1), 151-158.

Yap, C.S. & Tng, H. (1990). Factors associated with attitudes towards telecommuting. *Information and Management*, 19(4), 227-235.

Zerubavel, E. (1991). *The Fine Line*. New York: Free Press. P. 5-20.



## **Appendix 1 - Survey Instrument (Chapter 3)**

### **Section 1: Introduction**

Dear **Company X** Colleague,

I am writing to request your assistance with the quantitative phase of our research on work-life balance at COMPANY X.

The purpose of this phase of the research will be to capture data at an organizational level that can generalised (i.e., extended and applied to other **Company X Operating companies**) and interpreted with the use of statistical measures.

The survey contains a mix of closed and open ended questions and will take approximately 30 minutes to complete. If you begin the survey but are unable to finish in the same session you can elect to 'finish later' and return to the survey at a convenient time.

All survey responses will be kept entirely confidential and your name will not be linked to your responses. Results will be reported in aggregate formats and comments will be edited to ensure that respondents can not be identified.

The survey is active as of today and will be open for a total of six weeks to allow for maximum participation from everyone in the organization. The close date for the survey will be **12<sup>th</sup> July, 2010**. The greater the participation, the more accurate and reliable our findings will be. Periodically, I will send reminder emails to those who have not yet responded. If you would like to be removed from this mailing, please just let me know.

If you have any questions about the research or survey instrument, please feel free to contact me at [K.A.Basile@lse.ac.uk](mailto:K.A.Basile@lse.ac.uk)

I thank you in advance for your continued cooperation with this research effort.

By clicking on the following link to continue, you are acknowledging your agreement to participate in the survey.

**[CONTINUE]**

**Section 1: Occupational Characteristics and Overall Job Satisfaction**

How many years in total have you worked in the Geoscience sector? \_\_\_\_ years N/A

How many years have you worked for Company X? \_\_\_\_ years

How many years have you worked for Company X? \_\_\_\_ years

Which country does your Company X contract originate from? \_\_\_\_\_

Are you currently:

- a) Working a full-time schedule
- b) Working a reduced hour schedule
- c) Other (please specify \_\_\_\_\_)

Does your current role at Company X involve managing others?

- a) Yes
- b) No

In your current role, would you classify your job as being:

- a) All or primarily office-based
- b) All or primarily field-based
- c) All or primarily based in a branch-office
- d) Shared equally between field and office
- e) None of the above

(If office-based) Does your role include providing direct support to field-based staff?

- a) Yes
- b) No

For your current role, please estimate the percentage of time (on an annual basis) you work in each of the following locations: (please ensure that percentages sum to 100%)

- \_\_\_ % Time spent in Leidenscham
- \_\_\_ % Time spent offshore
- \_\_\_ % Time spent other travel (ex. sales, conferences, tradeshow, client visits)
- \_\_\_ % Time spent in Branch offices
- \_\_\_ % Time spent (other not in office \_\_\_\_\_)

For each of the following statements, please indicate your level of agreement of a scale from 1 to 5 with '1' meaning strongly disagree and '5' meaning strongly agree.

- \_\_\_ Generally speaking, I am very satisfied with this job
- \_\_\_ I frequently think of quitting my job
- \_\_\_ Generally speaking, I am very satisfied with the kind of work I do on my job

**Strongly Disagree** ..... **Strongly Agree**

**Section 2: Work-Life Enrichment**

The next series of questions will ask you to think about the interaction between your work and non-work roles. For each of the following statements, please indicate your level of agreement on a scale from 1 to 5 with ‘1’ meaning strongly disagree and ‘5’ meaning strongly agree. (ROTATE QUESTION ORDER)

Item:	1	2	3	4	5
My involvement in my work helps me to understand different viewpoints and this helps me be a better person at home.					
My involvement in my work helps me to gain knowledge and this helps me be a better person at home.					
My involvement in my work helps me acquire skills and this helps me be a better person at home.					
My involvement in my work puts me in a good mood and this helps me be a better person at home.					
My involvement in my work makes me feel happy and this helps me be a better person at home.					
My involvement in my work makes me cheerful and this helps me be a better person at home.					
My involvement in my work helps me feel personally fulfilled and this helps me be a better person at home.					
My involvement in my work provides me with a sense of accomplishment and this helps me be a better person at home.					
My involvement in my work provides me with a sense of success and this helps me be a better person at home.					
My involvement in my personal life helps me to gain knowledge and this helps me be a better worker.					
My involvement in my personal life helps me acquire skills and this helps me be a better worker.					
My involvement in my personal life helps me expand my knowledge of new things and this helps me be a better worker.					
My involvement in my personal life puts me in a good mood and this helps me be a better worker.					
My involvement in my personal life makes me feel happy and this helps me be a better worker.					
My involvement in my personal life makes me cheerful and this helps me be a better worker.					
My involvement in my personal life requires me to avoid wasting time at work and this helps me be a better worker.					
My involvement in my personal life encourages me to use my work time in a focused manner and this helps me be a better worker.					
My involvement in my personal life causes me to be more focused at work and this helps me be a better worker.					

**Section 3: Leadership Communication:**

Next, using the same scale, please evaluate COMPANY X as an employer on the following attributes:

Item:	1	2	3	4	5
Provides me with opportunities for career development					
Gives feedback on my performance					
Provides internal communication on what is happening within COMPANY X					
Shares information between Company X operating companies					
Provides training opportunities for career advancement					
Provides training opportunities within my current position					

Are there other areas where you feel COMPANY X should provide more communication or training? Please explain.

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**Section 4: Organizational Commitment**

Next, I would like you to think about your relationship with COMPANY X. For each statement, please indicate your level of agreement on the same scale from 1 to 5 with '1' meaning strongly disagree and '5' meaning strongly agree. (ROTATE QUESTION ORDER)

Item:	1	2	3	4	5
I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.					
I talk up this organization to my friends as a great organization to work for.					
I feel very little loyalty to this organization.					
I would accept almost any type of job assignment in order to keep working for this organization.					
I find that my values and the organization's values are very similar					
I am proud to tell others that I am part of this organization					
I could just as well be working for a different organization as long as the type of work were similar.					
This organization really inspires the very best in me in the way of job performance.					
It would take very little change in my present circumstances to cause me to leave this organization.					
I am extremely glad that I chose this organization to work for, over others I was considering at the time I joined.					
There's not too much to be gained by sticking with this organization indefinitely.					
Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.					
I really care about the fate of this organization.					
For me this is the best of all possible organizations for which to work.					
Deciding to work for this organization was a definite mistake on my part.					

What do you perceive to be the biggest threat to employee commitment to COMPANY X? Please explain.

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**Section 5: Work-Life Conflict**

Using the same scale, please indicate your level of agreement with each of the following statements relating to your work and personal lives. (ROTATE QUESTION ORDER)

Item:	1	2	3	4	5
My work keeps me from my personal activities more than I would like.					
The time I must devote to my job keeps me from participating equally in household responsibilities and activities.					
I have to miss personal activities due to the amount of time I must spend on work responsibilities.					
The time I spend on personal responsibilities often interferes with my work responsibilities.					
The time I spend in my non-work roles often causes me not to spend time in activities at work that could be helpful to my career.					
I have to miss work activities due to the amount of time I must spend on personal responsibilities.					
When I get home from work I am often too frazzled to participate in personal activities/responsibilities.					
I am often so emotionally drained when I get home from work that it prevents me from contributing to my non-work roles.					
Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy.					
Due to stress at home, I am often preoccupied with personal matters at work.					
Because I am often stressed from personal responsibilities, I have a hard time concentrating on my work.					
Tension and anxiety from my personal life often weakens my ability to do my job.					
The problem-solving behaviours I use in my job are not effective in resolving problems at home.					
Behaviour that is effective and necessary for me at work would be counterproductive at home.					
The behaviours I perform that make me effective at work do not help me to be a better person outside of work.					
The behaviours that work for me at home do not seem to be effective at work.					
Behaviour that is effective and necessary for me at home would be counterproductive at work.					
The problem-solving behaviour that works for me at home does not seem to be as useful at work.					

**Section 6: Non-Work Support**

How would you describe your current relationship status:

- a) Single / Divorced / Widowed (PROGRAM SKIP TO PREFERENCES SECTION)
- b) Married or live with a partner in a similar relationship

Using the same scale, please indicate your level of agreement with each of the following statements relating to your home life. (ROTATE QUESTION ORDER)

Item:	1	2	3	4	5
I am not pleased with the personality and personal habits of my spouse/partner.					
I am very happy with how we handle role responsibilities in our relationship.					
I am very unhappy about our communication and feel my spouse/partner does not understand me.					
I am not happy about how we make decisions and resolve conflicts.					
I am unhappy about our financial position and the way we make financial decisions.					
I am very happy with how we manage our leisure activities and the time we spend together.					
I am not satisfied with the way we each handle responsibilities as parents.					
I am dissatisfied about our relationships with my family members.					
I feel very good about how we each practice our religious beliefs and values.					
I am dissatisfied about our relationships with friends.					

The next set of questions will ask you to consider different types of support you receive. Please indicate your level of agreement with each of the following statements.

Item:	1	2	3	4	5
At COMPANY X, employees can easily balance their work and family lives.					
In the event of a conflict, managers are understanding when employees have to put their family first.					
At COMPANY X, it is generally okay to talk about one’s family at work.					
Employees are often expected to take work home at night and/or on weekends.					
Higher management in this organization encourages supervisors to be sensitive to employees’ family and personal concerns.					
Employees are regularly expected to put their jobs before their families.					
To turn down a promotion or transfer for family-related reasons will seriously hurt one’s career progress at COMPANY X.					
In general, managers at COMPANY X are quite accommodating of family-related needs.					
Many employees are resentful when women in this organization take extended leaves to care for newborn or adopted children.					
To get ahead at this organization, employees are expected to work more than 50 hours a week, whether at the workplace or at home.					

To be viewed favourably by top management, employees in this organization must constantly put their jobs ahead of their families or personal lives.					
At COMPANY X, employees who participate in available work–family programs (e.g., job sharing, part-time work) are viewed as less serious about their careers than those who do not participate in these programs.					
Many employees are resentful when men in this organization take extended leaves to care for newborn or adopted children.					
At COMPANY X it is very hard to leave during the workday to take care of personal or family matters.					
COMPANY X encourages employees to set limits on where work stops and home life begins.					
Middle managers and executives in this organization are sympathetic toward employees’ child care responsibilities.					
COMPANY X is supportive of employees who want to switch to less demanding jobs for family reasons.					
Management at COMPANY X is sympathetic toward employees’ elder care responsibilities.					
In this organization employees who use flex-time are less likely to advance their careers than those who do not use flex-time.					
At COMPANY X, employees are encouraged to strike a balance between their work and family lives.					
My work schedule allows sufficient flexibility to meet my personal/family needs.					

Does COMPANY X currently provide you with the services of coach to help manage your career and work to life balance?

- a) Yes
- b) No

Are there additional services that COMPANY X could offer you that would better help you manage your work and non-work commitments? If so, please describe.

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On the same scale, I will now ask you to think about the role your family and friends play in your work-life relationship. For each of the following statements, please indicate your level of agreement of a scale from 1 to 5 with ‘1’ meaning strongly disagree and ‘5’ meaning strongly agree.

Item:	1	2	3	4	5
My family and friends are satisfied with my work schedule.					
My family and friends struggle with the amount of time I spend working.					
Members of my family cooperate with me to get things done around the house.					
If I had to go out of town for my job, my family would have a hard time managing household responsibilities.					
My family and friends understand when I am needed at work unexpectedly.					
My family and friends have a positive attitude toward my work.					

**Section 7: Preferences**

For each of the following statements relating to working preferences, please indicate your level of agreement on the same scale with ‘1’ meaning strongly disagree and ‘5’ meaning strongly agree.

Item:	1	2	3	4	5
I don't like to have to think about work while I'm at home.					
I prefer to keep work life at work.					
I don't like work issues creeping into my home life.					
I like to be able to leave work behind when I go home.					
My workplace lets people forget about work when they're at home.					
Where I work, people can keep work matters at work.					
At my workplace, people are able to prevent work issues from creeping into their home life.					
Where I work, people can mentally leave work behind when they go home.					

**Section 8: New Technology**

Which of the following devices do you currently have access to? (Please select all that apply)

- (a) Company mobile phone
- (b) Laptop computer for home use
- (c) Remote access to Company X network
- (d) Duty phone
- (e) Blackberry
- (f) Other (please specify \_\_\_\_\_)

(For each device accessed) How often do you use <insert device>? Would you say you use it

- (a) More than 5 times per day
- (b) 2 to 5 times per day
- (c) Once a day
- (d) 2 to 5 times per week
- (e) Once per week
- (f) Less than once per week

**Section 9: Demographics**

Please indicate the age(s) of your children (if any):

- Child 1 (age) \_\_\_\_\_ years
- Child 2 (age) \_\_\_\_\_ years
- Child 3 (age) \_\_\_\_\_ years
- Child 4 (age) \_\_\_\_\_ years
- Child 5 (age) \_\_\_\_\_ years
- Child 6 (age) \_\_\_\_\_ years



What other significant roles do you have outside of work and home? Please select as many of the following that apply:

- a) I am providing a caregiving role (i.e., to a spouse, family member or friend)
- b) I am a leader or volunteer in my community/neighbourhood
- c) I am a leader or volunteer in my religious organization
- d) I am a leader or volunteer at a charity
- e) I am a participant in an organized school sports team or league
- f) I am attending school part-time on a voluntary (non-work related) basis.
- g) Other (please specify \_\_\_\_\_)
- h) Refused

What is the highest level of education you have achieved?

- a) Secondary school / high school diploma
- b) MTS/HTS/Polytechnic degree
- c) University degree (Bachelor's level)
- d) University degree (Master's level)
- e) University degree (Doctoral level)
- f) Other (please specify \_\_\_\_\_)
- g) Refused

Please indicate what type of (non-schooling) work experiences you had prior to working at COMPANY X. Please select all that apply:

- a) No prior work experience
- b) Work for a company similar to / competing with COMPANY X
- c) Work in another Company operating company
- d) Work in the oil and gas sector
- e) Work in a different industry (please specify \_\_\_\_\_)
- f) Military service
- g) Other (please specify \_\_\_\_\_)
- h) Refused

Please indicate your gender:

- a) Male
- b) Female

To what ethnic group would you say you belong? (please specify) \_\_\_\_\_

Please select the category that contains your current age:

- a) Less than 25
- b) 25 to 34 years
- c) 35 to 44 years
- d) 45 to 54 years
- e) 55 to 64 years
- f) 65 or older
- g) Refused

Into which of the following categories does your *annual total household* income fall?

- a) Less than 20,000€ per year
- b) 20,000€ to less than 40,000€ per year
- c) 40,000€ to less than 60,000€ per year
- d) 60,000€ to less than 80,000€ per year
- e) 80,000€ to less than 100,000€ per year
- f) More than 100,000€ per year
- g) Refused

Many thanks for your participation in this very important research!

## **Appendix 2 – In-Depth Interview Guide (Chapter 4)**

### **Organisation B Homeworking - Draft Qualitative Interview Guide**

#### **Introduction and General Information:**

I want to thank you for taking the time to participate in this research. The purpose of these interviews is to help us understand key factors associated with homeworking from the perspectives of homeworkers, flexible workers and office-based workers.

If you don't mind, I would like to record our interview. This will not be shared with anyone, but will help me to avoid taking notes during our talk. It will also help me to be more accurate when I go back and listen to the interview and create notes after our session. Do I have your agreement?

Anything that you tell me during this interview will be kept confidential and will not be shared with other research participants. When the final report is written up, your identity will be kept anonymous, and anything you say that could identify you won't be included.

This interview will take approximately 60 minutes. You can refuse to answer any question you are not comfortable with and if you would like to stop the interview at any point, please let me know. Do you have any questions before we begin?

#### **General Employee Information:**

- 1.) How long have you been working at Organisation B?
  - a. Have you changed jobs/role during that time? (e.g., Helpline to Individual Conciliator)
  
- 2.) I'd like to know a bit about your working arrangements at Organisation B:
  - a. What is your official designation (homeworker, flexible worker or office-based worker)?
  - b. What are your typical working patterns (probe for specifics on hours, office vs. "at home" vs. "from home", amount of time travelling or on the road, evening and weekends)?
  - c. (If time spent "on the road") How often do you work on trains?
  - d. What type of access do you have to work outside of the office (full homeworking set-up, remote log-in, laptop, smartphone)?
  
- 3.) In your role, do you manage others?
  - a. If Yes, how many and what role do they have?
  - b. Are they office, flexible or homeworkers?
  
- 4.) Do you get feedback about your work from the people that you work with? (This question is still quite abrupt and maybe should be moved back a bit? It might work better in the internal communications or organisational commitment sections. )
  - a. Do you agree with this feedback?
  - b. How successfully do you feel that you perform your role at Organisation B?

**Homeworking Issues and Benefits:  
(For Flexible Workers and Homeworkers Only)**

- 1.) Have you always been a homeworker / flexible worker at Organisation B, or did you used to be office-based? (probe for job changes / advancement since becoming a homeworker)
- 2.) *[If applicable]* Please tell me a little bit about your decision to become a homeworker / flexible worker and the transition process.
  - a. Was your line manager involved with this decision? (All of the homeworkers so far have indicated that an office closure prompted their decision.)
  - b. What were your primary work-related concerns about homeworking / flexible working at that time?
  - c. What, if any, concerns did you have about how homeworking / flexible working would impact your personal life?
  - d. Were there certain aspects of homeworking / flexible working that you were not prepared for?
  - e. How well did Organisation B support your transition to becoming a homeworker / flexible worker?
- 3.) What challenges have you faced as a homeworker? Please describe.
- 4.) What benefits do you recognize from homeworking? Please describe.
- 5.) As a homeworker, how do you create a separation between your work and private life? Are you able to “switch off” from work during evenings and weekends? (probe for answering the phone, checking emails, etc.)
- 6.) What tactics do you use to maintain this separation? (probe for designated working areas, household rules, time of day, etc.)
- 7.) Are these tactics successful? What happens when these tactics are not successful?
- 8.) What happens when you are sick on days you are working from home? Do you carry on working or do you take sick leave?
- 9.) Have the demands of your job changed since you have begun homeworking / flexible working?
  - a. Increase or decrease? Why?
- 10.) Do you have regular contact with other homeworkers / flexible workers? Is this for work-related or non-work related reasons?
- 11.) Would you ever be interested in returning to an office-based position? Why or why not? (probe for career development / promotion)

- 12.) How often do you work from the office?
  - a. How it is decided when you will be at home and when you will be in the office? Do you plan your own schedule or does your manager intervene?
  - b. When you work in the office, do you have a designated space? Equipment?
  - c. Do you enjoy your days in the office? Why?
  - d. How do days in the office differ from days working from home (e.g. are they spent entirely in meetings?)
  - e. How often do you attend team or office-based meetings? What, if any, difficulties do you experience with attending team meetings?
  
- 13.) (For Individual Conciliators Only) How often do you have face to face meetings with one or both parties in a dispute?
  - a. What factors impact the likelihood of having a face to face meeting?
  - b. What are the expectations of your line manager regarding having face to face meetings with your clients? Do you agree with these expectations?

**(For Office-Based Workers Only)**

- 1.) Do you feel that you or others in your office benefit from having flexible or homeworking colleagues (peers/managers)? If so, please describe.
- 2.) Do you feel that there are challenges in collaborating with peers/managers who are flexible workers or homeworkers? If so, please describe.
- 3.) Is flexible working or homeworking a working arrangement you might consider using yourself in the future? Why / Why not? (probe for role constraints, home environment, segmentation preferences, concerns about social isolation, career concerns)

**(For Managers of Homeworkers / Flexible Workers Only)**

- 1.) How often do you communicate with your employees who are homeworkers? How do you keep in touch with them? (probe for formal and ad hoc communications, regular calls, meetings, emails, etc.)
- 2.) How do you monitor the performance of employees who work from home? Do you have a different strategy for monitoring homeworkers versus office-based workers?
  - a. What types of measures and controls do you use (probe for behaviour vs. output based)?
- 3.) Are there specific challenges or concerns that you have with managing homeworkers?

**Questions for Senior Management / Area Directors**

- 1.) How do you feel Organisation B as an organisation benefits from Homeworking/ Flexible working? What are the drawbacks?

- 2.) What, if any, changes to the Homeworking / Flexible working policies would you propose?
- 3.) What roles within Organisation B do you feel are suitable for Homeworking / Flexible Working? Which, if any, are not suitable? Why?
- 4.) (For ADs) Within your region, how would you describe the relationship between homeworkers, flexible workers and office-based workers?

**Internal Communications:**

- 1.) How often do you communicate with your line manager, and how do you do so (probe for formal vs. ad hoc communication)?
  - a. Do you think this is enough, too often or too little?
  - b. (*For Flexible Workers and Homeworkers Only*) Do you ever communicate with your manager specifically about homeworking / flexible working?
  - c. Is your line manager a homeworker?
- 2.) On an average day while working from home, how often are you communicating with colleagues or clients? By phone or online? Meetings?

**Information Technology:**

- 1.) (*For Flexible Workers and Homeworkers Only*) How satisfied are you with the technological resources made available to you to work from home?
  - a. How well do these resources allow you to do your job?
  - b. How well do these resources allow you to communicate with others?
- 2.) (*For Flexible Workers and Homeworkers Only*) Are there technology resources that you wish you had that aren't available to you at the moment?
- 3.) (*Ask All*) (*If their office is already on the Phoenix system*) Has the roll-out of the Phoenix system had any impact on your work?
- 4.) (*Ask All*) Do you use social media such as Facebook, Twitter or instant messaging to communicate with anyone at work or outside of work? (probe on reasons for use)
  - a. If yes, do you think that social media would be useful for communicating with professional colleagues? If so, please describe.
  - b. Do you ever use Skype as a means of communicating with clients or colleagues? If not, is this something that you feel would be useful? Why / why not?

**(For IT Support Providers Only)**

- 1.) Does your role change when assisting homeworkers and flexible workers vs. office-based workers? If so, how?
- 2.) What do you see as being the biggest challenge to homeworkers from a technology perspective?

- 3.) What enhancements to IT technology would you recommend in order to make homeworking more effective?
- 4.) (*For Cardiff & Leeds only*) What are your impressions of the Phoenix system? How has this impacted homeworking at Organisation B?
- 5.) (*For London only*) What impact do you think the Phoenix system will have on homeworking at Organisation B?

**Key Constructs Related to Homeworking:**

**Workload and Responsibilities:**

- 1.) How would you describe your workload?
  - a. Do you experience stress or pressure related to the demands of your job?
  - b. Where does that pressure come from? (probe for deadlines, different groups demand different things, etc.)
- 2.) Are you able to take breaks from work when you need them? (examples are a good probe here)

**Non-Work Responsibilities:**

- 1.) When you're not working, how do you spend your spare time?
  - a. Do you have a partner / children at home?
  - b. What outside activities do you participate in (community, sporting, religious, political, hobbies, etc)?

**Work Life Conflict:**

1. How satisfied are you with your work-life balance?
  - a. Does your work ever interfere with your ability to get things done in your personal life?
  - b. Does your personal life ever interfere with your ability to get things done on the job?

**Work Life Enrichment:**

- 1.) Do you think you get anything out of your job that's useful to you in your personal life? Pay would be an obvious example, but other examples might be, skills that you learned at work that you can use at home, or social support, for instance...
- 2.) What about the other way around? Are there any ways in which your personal life helps you to perform your work role?

**Autonomy and Control:**

- 1.) In general, how much control do you feel you have over how you do your work? (probe for control over schedule and making decisions)

**Task Interdependence:**

- 1.) How closely do you need to work or coordinate with others at Organisation B to do your job?  
(prompt for how much their work impacts their colleagues and how much they rely on information from their colleagues)
- 2.) What helps you to coordinate with others in your team? (probe for factors relating to coordination and knowledge sharing, as well as differences relating to homeworking) (also probe for formal and informal systems that support this coordination)
- 3.) Is there anything that sometimes makes it difficult for you to coordinate with your team members? (probe for factors relating to homeworking)

**Support:**

- 1.) How would you describe your relationships with your co-workers? (Probe on office-based versus homeworkers) (I got the sense that there are a lot of informal teams that workers develop among themselves to go to for support / coverage if they are going to be out. I might be interesting to probe more on this issue.)
- 2.) How would you describe your relationship with your line manager?
- 3.) How supportive are your friends and family of the demands you have from work? Are they satisfied with how you manage your home and work demands? (if flexible or homeworkers, probe for issues relating to working from home)

**Boundaries and Preferences:**

1. How flexible is your job in terms of allowing you to meet demands from outside of work? For example, are you able to schedule time away from work to deal with family issues or events happening in your personal life?
2. *[IF previous response indicates flexibility:]* How willing are you to change your working patterns to meet family or personal needs? For example, are you willing to leave early to accommodate a family request?
  - a. How do you feel when you are interrupted at work to deal with personal or family matters?
3. How flexible is your personal life in terms of allowing you to meet work demands? For example, if you suddenly needed to stay late at work, do your responsibilities outside of work allow you to do this?
4. *[IF previous response indicates flexibility:]* How willing are you to change your personal plans / routines to deal with work issues? For example, are you willing to cancel plans with friends in order to take on a new assignment?
  - a. How do you feel when you are interrupted by work during time when you feel you not are 'on duty' to Organisation B?



5. In general, do you prefer to have separate blocks of time for work and non-work activities, or do you like having the ability to switch back and forth between work and non-work tasks during the day?
  - a. Do you find it difficult to switch back and forth between work tasks and non-work-related tasks or activities?

### **Organizational Commitment and Career Development**

- 1.) What is more important to you – working for Organisation B as an organization, or doing the actual type of work that you do?
- 2.) Do you see yourself working for Organisation B for a long time? Why or why not?
- 3.) What are your career aspirations within Organisation B? What positions would you be interested in seeking in the future? (probe for motivations related to career progression, particularly for homeworkers) (I think it would be OK to ask directly “Would you give up homeworking / flexible working if it meant a promotion at Organisation B?”)
- 4.) Have you participated in any type of training while working at Organisation B? Please describe. (probe for courses, secondments, shadowing, etc)
  - a. When was this? (probe for career development activities since becoming a homeworker)
  - b. What did you hope to gain from participating in the training?

### **Closing:**

If you were tasked with improving homeworking at Organisation B, what recommendations would you have?

Is there anything else related to homeworking that we haven't yet discussed that you feel it is important for me to know?

Thank you for your participation in this research.

### **Appendix 3 – Survey Instrument (Chapter 5)**

#### **Organisation B Baseline - Full Baseline**

Welcome to the Organisation B Staff Survey on Homeworking. We greatly appreciate your assistance with this important research. The survey should take you approximately 25 minutes to complete. If you need to stop the survey at any time, simply close your browser. When you return to the survey, simply click on the original link in your email and it will bring you to where you left off in the survey. If you encounter any difficulties or have questions during the survey, please contact us via email ([K.A.Basile@lse.ac.uk](mailto:K.A.Basile@lse.ac.uk))

Q1 First, we'd like to ask for some general information about your role at Organisation B. How long have you worked at Organisation B? Please indicate number of years. If you have worked for Organisation B for less than one year, please enter '0'; in the box provided next to 'Years'; and enter number of months in the box below.

\_\_\_\_\_ Years (1)

\_\_\_\_\_ Months (if less than one year) (2)

Q2 Which part of Organisation B do you work in?

- Birmingham (01)
- Bristol (02)
- Bury St Edmunds (03)
- Cardiff (04)
- Fleet (05)
- Glasgow (06)
- Leeds (07)
- Liverpool (08)
- Manchester (09)
- Newcastle (10)
- Nottingham (11)
- London (12)
- Organisation B National (13)

Q3 Which Organisation B business area do you work in? (If you have a split role, please select each role that applies.)

- Administration (01)
- Collective Conciliation (02)
- Good Practice Services (03)
- Individual Conciliation (04)
- Helpline (05)
- Regional and Area Management (i.e. Area Directors, Regional Directors) (06)
- Delivery Directorate (07)
- Finance Directorate (08)
- HR and Estates Directorate (09)
- IT Directorate (10)
- Strategy Directorate (11)
- CAC and Cert Office (12)
- Other (please describe) (94) \_\_\_\_\_

Q4 What is your grade?

- SMT (grade 7 and above) (01)
- Grade 8 (02)
- Grade 9 (03)
- Grade 10 (04)
- Grade 11 (05)
- Grade 12 (06)

Q5 Do you work...

- Full-time (01)
- Part-time (02)
- Job share (03)

Q6 Which of the following best describes your employment status?

- Permanent contract (01)
- Fixed term/temporary contract (02)
- On loan to Organisation B from another organisation in the Civil Service (03)
- Temporary worker (employed and paid through an employment agency) (04)
- Contract or freelance worker (your employer invoices Organisation B directly) (05)
- On secondment to Organisation B from an organisation outside of the Civil Service (06)

Q7 How many hours per week are you contracted to work for Organisation B? (Standard full-time = 36/37 hours per week) (excluding paid lunch breaks)

\_\_\_\_\_ hours / week (1)

Q8 On average, how many hours per week do you typically spend working?

\_\_\_\_\_ hours / week (1)

Q9 On average, how long does it take you to travel from home to your nearest Organisation B office?

\_\_\_\_\_ Hours (1)

\_\_\_\_\_ Minutes (2)

Q10 Do you line manage others at Organisation B?

Yes (01)

No (02)

Q11 Next, we'd like to know more about your working pattern at Organisation B. First, what is your official working arrangement with Organisation B?

Office-based worker (01)

Flexible homeworker (02)

Designated homeworker (03)

Don't know (97)

Q12 In general, would you say that ...

you work mainly at home (01)

you work mainly at an Organisation B office (02)

you work mainly on the road / travelling (03)

your time is evenly split between home and an Organisation B office (04)

your time is evenly split between home and on the road / traveling (05)

your time is evenly split between an Organisation B office and on the road / travelling (06)

Q13 On average, in a typical week, what percentage of your working time do you spend

...

\_\_\_\_\_ Working at home? (1)

\_\_\_\_\_ Working at an Organisation B office? (2)

\_\_\_\_\_ Working on the road or travelling? (3)

Q16 In the last 12 months, have you made use of any of the following arrangements? If not, are they available to you if you need them?

	I have used this arrangement (01)	Available to me but I do not use (02)	Not available to me (03)	Don't know if this option is available to me (97)
Flexi-time (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Job sharing (sharing a full-time job with someone) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The chance to reduce your working hours (e.g. full time to part time) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working the same number of hours per week across fewer days (e.g. 37 hours in four days instead of five) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working at or from home in normal working hours (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working only during school term times (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paid leave to care for dependents in an emergency (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 Now, we would like to ask about your job satisfaction. How satisfied or dissatisfied are you with the following aspects of your job?

	Very satisfied (05)	Satisfied (04)	Neither satisfied nor dissatisfied (03)	Dissatisfied (02)	Very dissatisfied (01)
The volume of work (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The variety in the work (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The opportunity to use my abilities (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My promotion prospects (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support from my line manager (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The sense of achievement I get from my work (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My pay (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The balance between the time I spend on my paid work and the time I spend on other aspects of my life (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My current working patterns (i.e. balance between time spent working at home, working in office, working whilst travelling etc.) (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job overall (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18 Next, we would like to know more about how you feel when you're working. Thinking of the past few weeks, how often has your job made you feel the following?

	All of the time (05)	Most of the time (04)	Some of the time (03)	Occasionally (02)	Never (01)
Tense (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relaxed (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uneasy (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Content (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19 Thinking of the past few weeks, how often have you felt the following about your job?

	All of the time (05)	Most of the time (04)	Some of the time (03)	Occasionally (02)	Never (01)
At work, I feel that I am bursting with energy (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On the job, I feel strong and vigorous (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am enthusiastic about my job (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job inspires me (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I get up in the morning, I feel like going to work (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel happy when I am working intensely (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud of the work that I do (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am immersed in my work (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get carried away when I'm working (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 Thinking of the past few weeks, how often have you felt the following about your job?

	All of the time (05)	Most of the time (04)	Some of the time (03)	Occasionally (02)	Never (01)
I feel worn out from work. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel used up at the end of my workday. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel emotionally drained from my work. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21 Next, we would like you to think about how much influence you feel that you have over certain aspects of your work. For each of the following, please indicate to what extent you agree or disagree.

	Strongly agree (05)	Agree (04)	Neither agree nor disagree (03)	Disagree (02)	Strongly disagree (01)
My job allows me to make my own decisions about how to schedule my work. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job allows me to decide on the order in which things are done on the job. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job allows me to plan how I do my work. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job gives me a chance to use my own initiative or judgment in carrying out the work. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job allows me to make a lot of decisions on my own. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job provides me with significant autonomy in making decisions. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job allows me to make decisions about what methods I use to complete my work. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job gives me considerable opportunity for independence and freedom in how I do the work. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job allows me to decide on my own how to go about doing my work. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q22 Now we would like to ask some questions about how you work with others at Organisation B. For each of the following, please indicate to what extent you agree or disagree.

	Strongly agree (05)	Agree (04)	Neither agree nor disagree (03)	Disagree (02)	Strongly disagree (01)
I need to work closely with others in Organisation B to do my work. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently must coordinate my efforts with others in Organisation B to do my job. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My own performance is dependent on receiving accurate information from others in Organisation B. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The way I perform my job has a significant impact on others in Organisation B. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to work fairly independently of others in Organisation B in my work. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely have to obtain information from others in Organisation B to complete my work. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q23 Next, we would like to know more about your communications with other people at Organisation B. For each of the following, please indicate to what extent you agree or disagree.

	Strongly agree (05)	Agree (04)	Neither agree nor disagree (03)	Disagree (02)	Strongly disagree (01)
In my team we discuss work-related problems and solutions. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can easily contact those who can help me with job-related problems when I need them. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my team, we share our experiences of work-related success and failure. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can get solutions to job-related problems from people who work from other locations. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable seeking help for job-related problems from people in my team. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to share information with my colleagues in a timely way. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My colleagues share information with me in a timely way. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The information I share with colleagues is useful for their work. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The information my colleagues share with me is useful for my work. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24 How often do you have the following types of communication with your colleagues (other than your manager) at Organisation B?

	Most days (05)	Once or twice per week (04)	2-4 times per month (03)	Once a month (02)	Less than once per month (01)	Not applicable (96)
Formal / planned face-to-face discussion with an office-based colleague (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formal / planned face-to-face discussion with a homeworking colleague (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informal / ad hoc face-to-face discussion with an office-based colleague (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informal / ad hoc face-to-face discussion with a homeworking colleague (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formal / planned telephone discussion with an office-based colleague (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formal / planned telephone discussion with a homeworking colleague (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informal / ad hoc telephone discussion with an office-based colleague (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informal / ad hoc telephone discussion with a homeworking colleague (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24b In general, would you say that your line manager ...

- works mainly at home (01)
- works mainly at my local Organisation B office (02)
- works mainly at another Organisation B office (03)
- a combination of the above (04)
- Don't know (97)

Q25 On average, how often do you communicate with your line manager?

- Most days (05)
- Once or twice per week (04)
- 2-4 times per month (03)
- Once a month (02)
- Less than once per month (01)

Q27 On average, how often do you communicate with your line manager on the following subjects?

	Most days (05)	Once or twice per week (04)	2-4 times per month (03)	Once a month (02)	Less than once per month (01)
Feedback on your performance (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working arrangements (i.e. working from home, schedule, etc.) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sharing information that would be helpful for your job (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social / personal interaction (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26 What are the primary methods you use to communicate with your line manager? Please select up to three in order of frequency and drag and drop them into the box provided at the right of the screen. (i.e. select the method used most often first).

Communication methods
_____ Formal / Planned Face-to-face discussion (1)
_____ Informal / Ad Hoc Face-to-face discussion (2)
_____ Formal / Planned telephone discussion (3)
_____ Informal / Ad Hoc telephone discussion (4)
_____ Email (5)
_____ Other (please specify) (6)

Q28 During the course of a typical day ....

	Very frequently (05)	Frequently (04)	Occasionally (03)	Infrequently (02)	Very infrequently (01)
How often do you have formal, planned conversations with colleagues to share information? (e.g. scheduled meetings or phone calls) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do you have informal conversations with colleagues to share information? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do you e-mail colleagues to share information? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q29 Next, we'd like to know how you feel about technology at Organisation B. You indicated earlier in the survey that  $\{q://QID10/ChoiceGroup/SelectedChoices\}$ . For each of the following IT and telephony services, how satisfied are you with the equipment Organisation B provides to you in allowing you to work effectively in that working arrangement?

	Very satisfied (05)	Satisfied (04)	Neither satisfied nor dissatisfied (03)	Dissatisfied (02)	Very dissatisfied (01)
The IT equipment I need to do my job (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The software programmes I need to do my job (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone equipment (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teleconferencing facilities (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videoconferencing facilities (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service Desk support (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable telephone line (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable internet connections (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable connection to the Organisation B network (shared drives, email, etc.) (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q30 For each of the following, please indicate if you use it for personal use, professionally or both.

	Currently use for ...		
	Personal use (01)	Professional use (02)	Don't use (3)
*Grouptext / Instant messaging (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Networking (eg. Linked In, Facebook or Twitter) (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skype / 1-2-1- videoconferencing (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Group videoconferencing (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q30x \*Grouptext is a technology feature that allows you to send texts or emails to groups of respondents (such as a work group). \*Instant messaging is a technology feature that instantly transmits messages between a sender and receiver over the internet allowing for a real-time conversation using written messages.

Q30b Would you like to use the following technology features professionally?

	Like to use professionally?	
	Yes (01)	No (02)
Grouptext / Instant messaging (1)	<input type="checkbox"/>	<input type="checkbox"/>
Social Networking (eg. Linked In, Facebook or Twitter) (2)	<input type="checkbox"/>	<input type="checkbox"/>
Skype / 1-2-1- videoconferencing (3)	<input type="checkbox"/>	<input type="checkbox"/>
Group videoconferencing (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q31 Are there any technology resources that aren't available to you at the moment that would be useful to you in your job? (Please describe.)

Q32 What aspect of Organisation B technology could be improved to make working from home easier? (Please describe.)

Q33 Next, we'd like to ask some questions specifically about homeworking. How long have you been working at or from home?

\_\_\_\_\_ Years (1)

\_\_\_\_\_ Months (If less than one year, please indicate number of months) (2)

Q34 What were the main reasons you started working at or from home? Please tick all that apply.

- To balance my home/family and work commitments (01)
- My manager asked me to (02)
- The office I was working in closed (03)
- The job I am / was doing was better suited to homeworking (04)
- When I took my job, it was a homeworking role (05)
- To avoid commuting (11)
- To help manage a long-term illness, health problem or disability that I had (12)
- To reduce my financial costs (e.g. childcare, travel) (13)
- Other (please specify) (94) \_\_\_\_\_
- Don't remember (97)

Q35 What are the main reasons you still continue to work at or from home? Please tick all that apply.

- To balance my home/family and work commitments (01)
- My manager wants me to (02)
- I live too far away from the nearest Organisation B office (03)
- The job I am doing is better suited to homeworking (04)
- To avoid commuting (05)
- To help manage a long-term illness, health problem or disability that I have (06)
- To reduce my financial costs (e.g. childcare, travel) (07)
- Other (please specify) (94) \_\_\_\_\_

Q36 Which of the following interactions happened when you began homeworking at Organisation B? Please tick all that apply.

- General discussion about homeworking with your line manager (01)
- Evaluation of your home environment for suitability of homeworking (02)
- Visit from IT to set up telephone and computer equipment (03)
- A discussion about how often visits to the office will be required (04)
- A full health and safety assessment (05)
- Provision of furniture (06)
- None (00)

Q37 How satisfied were you with the support that you received from your line manager when you began working from home?

- Very satisfied (05)
- Satisfied (04)
- Neither satisfied nor dissatisfied (03)
- Dissatisfied (02)
- Very dissatisfied (01)

Q38 How satisfied were you with the IT support that you received when you began working from home?

- Very satisfied (05)
- Satisfied (04)
- Neither satisfied nor dissatisfied (03)
- Dissatisfied (02)
- Very dissatisfied (01)

Q39 How often do you come in to an Organisation B office to work?

- Three or more times per week (04)
- One or two times per week (03)
- Two to four times per month (02)
- Less than once per month (01)

Q40 Please indicate how important each of the following reasons are in your decisions to come in to an Organisation B office to work.

	Very important (05)	Important (04)	Neither important nor unimportant (03)	Unimportant (02)	Very unimportant (01)
To attend an area meeting (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To meet with my line manager (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To meet with clients / parties in a dispute (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To catch up socially with Organisation B colleagues (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To find out more about what is going on at the organisation (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To gain / share work-related information with colleagues (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q41 Which of the following issues might prevent you from coming in to an Organisation B office to work? Please tick all that apply:

- Finding a space to sit (01)
- Accessing the necessary technology to do my work in the office (02)
- Noise / distractions (03)
- Accessing the information I need to do my job (04)
- Time commuting (05)
- Cost of travelling (06)
- Rearranging my non-work commitments (e.g. to meet household/family responsibilities) (07)
- I can't get as much work done from an Organisation B office as I do when I work from home. (08)
- Other (Please specify) (94) \_\_\_\_\_
- None (00)



Q42 Please indicate how frequently you experience the following with regard to your work:

	Very frequently (05)	Frequently (04)	Occasionally (03)	Infrequently (02)	Very infrequently (01)
I miss out on activities and meetings that could enhance my career (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I miss out on opportunities to be mentored (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel out of the loop (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I miss face-to-face contact with coworkers (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel isolated (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I miss the emotional support of coworkers (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I miss informal interaction with others (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q43 The next few questions relate to homeworking and your career at Organisation B. Do you feel that working from home has a positive impact, negative impact, or has no impact at all on your opportunity to advance in your career at Organisation B?

- Positive impact (03)
- No impact at all (02)
- Negative impact (01)

Q44 Why?

Q45 How willing would you be to take up an office-based position in the near future if it meant greater opportunity for career progression at Organisation B?

- Very willing (03)
- Somewhat willing (02)
- Not at all willing (01)

Q46 Why not? Please select as many reasons as apply in order of importance and drag and drop them into the box provided at the right of the screen.

Reasons:	
_____	It would be difficult to manage my home / family commitments if I were to stop homeworking (01)
_____	My commute would be too long (02)
_____	My commute would be too expensive (03)
_____	I like the job that I have (04)
_____	I do not like the jobs that are available in the office (05)
_____	I do not feel qualified to do another job (06)
_____	I do not like the office environment (07)
_____	I am not interested in career progression at Organisation B (08)
_____	Other (please specify) (97)

Q47 If your personal situation was to change in the future, would you consider returning to an office-based position?

- Yes (01)
- No (02)

Q48a Why?

Q48b Why not?

Q49 What challenges have you faced as a homeworker? Please describe.

Q50 What benefits do you gain from homeworking? Please describe.

Q50a How do you feel that Organisation B benefits from having homeworkers? Please describe.

Q51 You have indicated that you manage others in your role. We'd like to know more about your communications with your staff. Do you currently manage employees who work mainly from the office, mainly from home or a mix of both?

- I manage employees who work mainly from the office (01)
- I manage employees who work mainly from home (02)
- I manage both office and home-based employees (03)

Q52 On average, how often do you communicate with your office-based employees?

- Most days (05)
- Once or twice per week (04)
- 2-4 times per month (03)
- Once a month (02)
- Less than once per month (01)

Q53 On average, how often do you communicate with your homeworking employees?

- Most days (05)
- Once or twice per week (04)
- 2-4 times per month (03)
- Once a month (02)
- Less than once per month (01)

Q54 What are the primary methods you use to communicate with your office-based employees? Please select up to three in order of frequency (i.e. select the method used most often first).

Communication Methods
_____ Formal / Planned Face-to-face discussion (01)
_____ Informal / Ad Hoc Face-to-face discussion (02)
_____ Formal / Planned telephone discussion (03)
_____ Informal / Ad Hoc telephone discussion (04)
_____ Email (05)
_____ Other (please specify) (06)

Q55 What are the primary methods you use to communicate with your home-based employees? Please select up to three in order of frequency and drag and drop them into the box provided at the right of the screen. (i.e. select the method used most often first).

Communication Methods
_____ Formal / Planned Face-to-face discussion (01)
_____ Informal / Ad Hoc Face-to-face discussion (02)
_____ Formal / Planned telephone discussion (03)
_____ Informal / Ad Hoc telephone discussion (04)
_____ Email (05)
_____ Other (please specify) (94)

Q56 On average, how often do you communicate with your employees on the following subjects?

	Most days (05)	Once or twice per week (04)	2-4 times per month (03)	Once a month (02)	Less than once per month (01)
Feedback on their performance (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working arrangements (i.e. working from home, schedule, etc.) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sharing work-related information (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social / personal interaction (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q57 For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
Managing homeworkers is more difficult than managing office-based staff. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could manage homeworking staff more effectively if they had a more frequent presence in the office. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to manage the working hours of the homeworkers I manage. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to monitor the work quality of the homeworkers I manage. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to monitor the amount of work completed by homeworkers I manage. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q58 Next, we'd like to ask some questions related to the attitudes you hold about yourself. For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
I have the ambition to reach a higher position in my line of work or organisation. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the ability to reach a higher position in my line of work. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to be challenged in my work. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a career is important to my sense of identity. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to achieve the highest possible position in my line of work. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My career is not a priority in my life. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The major satisfactions in my life come from my life outside of work. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important things that happen to me involve my life outside of work. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The major satisfactions in my life come from my job. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important things that happen to me involve my job. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q59a Now we'd like to ask about some ways in which your work and your personal life might influence one another. For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
I have to miss family, social or leisure activities due to the amount of time I must spend on work responsibilities. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am often so emotionally drained at the end of a workday that it prevents me from engaging with my family or friends. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The behaviours I perform that make me effective at work do not help me to be a better parent, spouse, or friend. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have to miss work activities due to the amount of time I must spend on family responsibilities or personal commitments. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because I am often stressed from family responsibilities or personal commitments, I have a hard time concentrating on my work. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q59b For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
Behaviour that is effective and necessary for me in my personal life is counterproductive at work. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a good day on the job makes me happier in my personal life. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more confident personally when I feel that I am being successful professionally. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a good day in my personal life makes me more effective in my professional role. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more confident professionally when I feel that I am being successful in my personal life. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q60 Next, we have some questions about the boundaries that exist between your work and your personal life. For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
Responsibilities in my family and personal life would prevent me from working an extra day (i.e., on the weekend) in order to meet work responsibilities. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a family and personal life standpoint, there is no reason why I cannot rearrange my schedule to meet the demands of my work. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am not working, I do not mind stopping what I am doing to complete a work related task. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to cancel plans with my friends and family to deal with work related responsibilities. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If the need arose, I could stop working early to attend to (non-emergency) family/household related issues. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
While I am working, I can stop what I am doing for a short period of time to meet responsibilities related to my family and personal life. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to take an extended lunch break so that I can deal with responsibilities relating to my family and personal life. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to take time off from work to deal with my family and personal life responsibilities. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q61 Nearly there now! Please indicate how frequently you experience the following:

	Very fre- quentl y (05)	Fre- quentl y (04)	Occa- sionall y (03)	Infre- quentl y (02)	Very infe- quentl y (01)
Have work-related items (i.e. documents, files) in areas of my home that are not designated for working. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Think about work-related concerns during my personal time. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speak to colleagues about work matters during my personal time, outside of work hours. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stop in the middle of my personal activities to address a work concern. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Take care of work-related business during my personal time. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Receive personal calls while I am working. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have personal items (i.e. personal documents, personal phone, personal calendar) in my work area. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Think about personal concerns when I am working. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stop in the middle of my work to address a personal concern. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Take care of personal business while I am at work. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q62 All in all, do you currently see yourself as someone who keeps work and personal roles separated most of the time, or someone who keeps them integrated?

- Keeps work and personal roles separated (01)
- Keeps work and personal roles integrated (02)

Q63 When you are working from home, where do you sit with your computer to do your work? Do you . . .

- Sit in a separate room or office that is used only for work? (01)
- Sit in a room that you or your family use at other times of the day? (02)
- Move around to different areas with a laptop? (03)

Q64a Now we'd like to know more about the general impressions you have of Organisation B as an employer. For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
My relationship with Organisation B is strictly an economic one - I work and they pay me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not care what Organisation B does for me in the long run, only what it does right now. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I only want to do more for Organisation B when I see that they will do more for me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I watch very carefully what I get from Organisation B, relative to what I contribute. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All I really expect from Organisation B is that I be paid for my work effort. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most accurate way to describe my work situation is to say that I give a fair day's work for a fair day's pay. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My relationship with Organisation B is impersonal, I have little emotional involvement at work. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organisation B has made a significant investment in me. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q64b For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
The things I do on the job today will benefit my standing in Organisation B in the long run. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a lot of give and take in my relationship with Organisation B. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that all my efforts on behalf of Organisation B will never be recognised. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't mind working hard today – I know I will eventually be recognised by my organisation. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My relationship with Organisation B is based on mutual trust. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to look out for the best interests of the organisation because I can rely on Organisation B to take care of me. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even though I may not always receive the recognition from Organisation B I deserve, I know my efforts will be recognised in the future. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q65 For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
I share many of Organisation B' values. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel loyal to Organisation B. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to tell people who I work for. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q66a Next, we'd like you to think about the role your family and friends play in how you manage your work responsibilities and personal commitments. Do you tend to discuss your work with friends and family?

- Yes (01)
- No (02)

Q66b For each of the following, please indicate to what extent you agree or disagree.

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
My friends and family are interested in my job. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am frustrated by work, a friend or family member tries to understand. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I have a problem at work, my friends and family express concern. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends and family are sympathetic when I am upset about my work. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends and family are proud when something good happens at work (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q67 Finally, please help us to analyse the results of the survey by providing some general information about yourself. The information you provide will be completely confidential. Are you male or female?

- Male (01)
- Female (02)

Q68 Marital status:

- Single / Divorced / Widowed (01)
- Married or live with a partner in a similar relationship (02)
- Married or in a similar relationship but do not live with partner (03)

Q69 Is your partner:

- Working full-time (01)
- Working part-time (02)
- At home / Not currently working (03)

Q70 Would you describe yourself as the main earner in your household at present?

- Yes (01)
- No (02)
- Refused (98)

Q71 Please tell us who else lives in your household. Please tick all that apply:

- Child(ren) age 18 or younger (01)
- Children over age 18 (02)
- Non-family member / friend (03)
- My parent(s) / My partner's parent(s) (04)
- Other family (i.e. aunts, uncles, cousins) (05)
- None of the above (6)

Q71b What are the ages of your children under 18 living in your household? For children less than 1 year of age, please enter "0" in the box provided.

- \_\_\_\_\_ Child 1 (years) (1)
- \_\_\_\_\_ Child 2 (years) (2)
- \_\_\_\_\_ Child 3 (years) (3)
- \_\_\_\_\_ Child 4 (years) (4)
- \_\_\_\_\_ Child 5 (years) (5)
- \_\_\_\_\_ Child 6 (years) (6)
- \_\_\_\_\_ Child 7 (years) (7)
- \_\_\_\_\_ Child 8 (years) (8)

Q71a How many children over age 18 are living in your household?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- More than 8 (9)

Q71c How many non-family members / friends are living in your household?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- More than 8 (9)

Q71d How many parents are living in your household?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- More than 4 (5)

Q71e How many other family members (i.e. aunts, uncles, cousins) are living in your household?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- More than 8 (9)

Q72 (Aside from dependent children) Do you have caring responsibilities for anyone due to age, illness, or disability?

- Yes (01)
- No (02)

Q73 How old are you? (years)

Q74 To which of these groups do you consider yourself to belong?

- White / White British (01)
- Asian / Asian British (02)
- Any mixed background (03)
- Any other non-white background (04)

Q75 Do you have any long-term illness, health problem or disability? By long-term, we mean that it can be expected to last for more than one year.

- Yes (01)
- No (02)

Q76 There is one last phase to our Homeworking Research. This involves a Daily Event Survey that will take place over a two-week period. Your participation in this part of the research is essential for us to truly understand the day-to-day factors that impact your experiences relating to homeworking. The daily event survey will be online and should take no more than 5 to 7 minutes per day to complete. We ask that you complete it at the end of the day to accurately reflect both your home and work experiences for the day. You will receive an email with the link to each day's survey every afternoon. We do appreciate that you are busy and your participation is of course voluntary; however, we hope that you can find time to support this final phase of the research. Many thanks in advance for your assistance with this research.

For queries on this research, please contact Kelly Basile at [K.A.Basile@LSE.AC.UK](mailto:K.A.Basile@LSE.AC.UK). To register for the Daily Event Survey, please click on the following link. This link will provide you with further details on the study as well as allow you to select a start date for your participation.

- Register to participate in daily event study (1)
- Continue without registering (2)

Q77 Many thanks for agreeing to participate in the Daily Event Study. Please enter your email address in the box below. The research team will be in touch with you by email over the next few days to provide instructions for participation.

Q78 Many thanks for your participation in the Staff Survey on homeworking!

- Submit completed survey (1)



## **Appendix 4 – Dairy Survey Instrument (Chapter 6)**

### **Organisation B Daily Event Day 1**

Dear { First Name}, Welcome to Day 1 of the Daily Event Survey! We really appreciate your participation in this portion of the research and ask that you make sure to fill in your diary entries each day. The more responses we get, the more useful our data will be in helping to understand homeworking practices in Organisation B. If you encounter any difficulties or have questions during the survey, please contact us via email (K.A.Basile@lse.ac.uk)

Q1 Today, where did you work from?

- I did not work today / Weekend (01)
- Mainly at home (02)
- Mainly at an Organisation B office (03)
- Mainly on the road / travelling (04)
- My time fairly evenly split between home and an Organisation B office (05)
- My time fairly evenly split between home and on the road / travelling (06)
- My time fairly evenly split between an Organisation B office and on the road / travelling (07)
- Other (please specify) (08) \_\_\_\_\_

Q2 Please indicate which of the following interactions with others at work you had today (please select all that apply):

- None (01)
- Phone call with a colleague (02)
- Email with a colleague (03)
- Face-to-face conversation with a colleague (04)
- Phone call with your manager (05)
- Email with your manager (06)
- Face-to-face conversation with your manager (07)
- Phone call with a customer/client (08)
- Email with a customer/client (09)
- Face-to-face conversation with a customer/client (10)

Q2a Approximately how many phone calls with colleagues did you have today?

Q2b Approximately how many emails with colleagues did you exchange today?

Q2c Approximately how many face-to-face conversations with colleagues did you have today?

Q2d Approximately how many phone calls with your manager did you have today?

Q2e Approximately how many emails with your manager did you exchange today?

Q2f Approximately how many face-to-face conversations with your manager did you have today?

Q2g Approximately how many phone calls with customers/clients did you have today?

Q2h Approximately how many emails with customers/clients did you exchange today?

Q2i Approximately how many face-to-face conversations with customers/clients did you have today?

Q3 Now, we would like to ask about your workload today. Please indicate your level of agreement with this statement:

I had too many demands on me at work today.

- Strongly agree (5)
- Agree (4)
- Neither agree nor disagree (3)
- Disagree (2)
- Strongly disagree (1)

Q4 Next, we would like to ask about your experiences with Organisation B technology today (i.e. computer, phone, network access etc.). Did you have any issues with your homeworking technology today?

- I did not use Organisation B technology today (0)
- Yes (1)
- No (2)

Q5 How did these issues impact your ability to work (please select all that apply):

- I was unable to make / had difficulty making phone calls. (01)
- I was unable to send / had difficulty sending emails. (02)
- I was unable to access / had difficulty accessing customer/client records. (03)
- I was unable to access / had difficulty accessing Organisation B information. (04)
- My connection speed was too slow (05)
- I had trouble with specific applications on my computer (06)
- Other (please specify) (94) \_\_\_\_\_

Q6 Was the issue resolved?

- Yes (01)
- No (02)

Q6a Were all of the issues resolved?

- All of the issues were resolved (03)
- Some, but not all of the issues were resolved (02)
- None of the issues were resolved (01)

Q7 How long did it take to resolve the issue?

\_\_\_\_\_ Minutes (1)

\_\_\_\_\_ Hours (2)

Q7x How long did it take to resolve all of the issues?

\_\_\_\_\_ Minutes (1)

\_\_\_\_\_ Hours (2)

Q8 Next, we would like you to think about how much influence you had over certain aspects of your work today. Please indicate your level of agreement with these statements today:

	Strongly agree (05)	Agree (04)	Neither agree nor disagree (03)	Disagree (02)	Strongly disagree (01)
I had a say in deciding what tasks I did at work today. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had freedom to decide how I did my job today. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 Now we would like to ask some questions about how you felt at work today. Please indicate how often you felt each of the following today:

	Very frequently (05)	Frequently (04)	Occasionally (03)	In-frequently (02)	Very infrequently (01)
I missed out on activities and meetings that could enhance my career (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I missed out on opportunities to be mentored (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt out of the loop (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I missed face-to-face contact with co-workers (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt isolated (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I missed the emotional support of co-workers (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I missed informal interaction with others (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Next, we would like you to think about how satisfied you were with your work today. Please indicate your level of agreement with these statements:

	Strongly agree (05)	Agree (04)	Neither agree nor disagree (03)	Disagree (02)	Strongly disagree (01)
Today, I found real enjoyment in my work. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I felt enthusiastic about my work. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this very moment, I feel fairly satisfied with my job. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, each minute of work seemed like it would never end. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At the present time, I consider my job rather unpleasant. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 We would like to know how you felt in general today. Please indicate how often you felt each of the following today.

	All of the time (05)	Most of the time (04)	Some of the time (03)	Occasionally (02)	Never (01)
Calm (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uneasy (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comfortable (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tense (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relaxed (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Now we'd like to ask about some ways in which your work and your personal life might have influenced one another today. Please indicate your level of agreement with these statements:

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
Something that happened at work made me unhappy during my personal time today. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I couldn't do some personal things I wanted to do today because of work. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even though I wanted to, I couldn't get work off my mind during my personal time today. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13 Please indicate your level of agreement with these statements:

	Strongly Agree (05)	Agree (04)	Neither Agree nor Disagree (03)	Disagree (02)	Strongly Disagree (01)
I had a good day at work today so I was a happier person during my personal time today. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Doing my job gave me a more positive attitude during my personal time today. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My mood when I stopped working made me a better person during my personal time today. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 Please indicate how often you felt each of the following today.

	Very frequent ly (05)	Fre- quently (04)	Occ- asionally (03)	Infre- quently (02)	Very infer- quently (01)
I thought about work-related concerns during my personal time. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spoke to colleagues about work matters during my personal time. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stopped in the middle of my personal activities to address a work concern. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I took care of work-related business during my personal time. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought about personal concerns when I was working. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was contacted by people from my personal life while I was working. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stopped in the middle of my work to address a personal concern. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I took care of personal business while I was working. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 Many thanks for your participation in Day 1 of the Daily Event Study!

Submit completed survey (1)