



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong
Research Online

University of Wollongong in Dubai - Papers

University of Wollongong in Dubai

2009

A conflict between professional vs. domestic life? Understanding the use of ICT in teleworking for balance in work and family units

Nafishah Othman

Shafiz Affendi Mohd Yusef

University of Wollongong, shafiz@uow.edu.au

Wan Rozaini Sheik Osman

Publication Details

Othman, N., Yusef, S. Affendi Mohd . & Osman, W. Rozaini Sheik . 2009, 'A conflict between professional vs. domestic life? Understanding the use of ICT in teleworking for balance in work and family units', *Journal of Computer and Information Science*, vol. 2, no. 2, pp. 3-15.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:
research-pubs@uow.edu.au



A Conflict between Professional vs. Domestic Life?
Understanding the Use of ICT in Teleworking for Balance
in Work and Family Units

Nafishah Othman

Graduate Department of Information Technology, Universiti Utara Malaysia
06010 UUM Sintok, Malaysia

Tel: 60-4-928-4728 E-mail: nafishah@uum.edu.my

Shafiz Affendi Mohd Yusof (Corresponding author)

Graduate Department of Information Technology, Universiti Utara Malaysia
06010 UUM Sintok, Malaysia

Tel: 60-4-928-4727 E-mail: shafiz@uum.edu.my

Wan Rozaini Sheik Osman

Graduate Department of Information Technology, Universiti Utara Malaysia
06010 UUM Sintok, Malaysia

Tel: 60-4-928-4746 E-mail: rozai174@uum.edu.my

Abstract

The advancement of information and communication technologies such as personal computers, the Internet and mobile phones has enabled people to work any time and anywhere. Teleworking, the practice of setting up home offices for employees with appropriate resources for computing and communication, is one example of this new flexibility. Teleworking brings new challenges as well as benefits, and a variety of studies have examined the impact of teleworking in terms of costs and benefits. A major attraction for teleworkers is the control it allows them over the way they structure their work and lives. However, the intrusion of work into the home blurs the boundaries between work and home life and may result in conflict between work and family. This work-family conflict is a direct result of the mutual incompatibility between the demands of work and family roles (Akdere, 2006). The aim of this research is to study the work-family balance of Malaysian teleworkers by exploring the nature of interactions between work and family activities, in order to get a better understanding of the experience of teleworkers in balancing their work and family life. This study will use the work-family border theory (Clark, 2000) to describe the phenomenon, and to explain how individuals manage and negotiate the work and family spheres and the borders between them in order to attain balance.

Keywords: Teleworking, Work-family balance, Work-family border theory, Boundary theory

1. Introduction

It has been stated that long working hours deprive individuals of the time that they should spend with their families (Ammons & Markham, 2004). Work-family conflict also occurs when individuals have to perform multiple roles (e.g. worker, spouse, parent, and neighbor) at the same time (Carlson et al., 2000); therefore, individuals have difficulty establishing their multiple roles when working from home. The use of ICT has increased the permeability of work-family boundaries because these technologies make individuals accessible any time and anywhere; as a result the boundaries of work and family increasingly blur (Lewis & Cooper, 1999; Nippert-Eng, 1996). This can promote conditions such as overwork and isolation, which may lead to greater stress on individuals and families (Baines & Gelder, 2003; Chelsey, 2005). Conversely, individuals may spend more and more time on housework activities which may have a negative impact on their job performance (Ahrentzen, 1990; Ashforth, Kreiner, & Fugate, 2000; Golden, Veiga, & Simsek, 2006; Kossek, Lautsch, & Eaton, 2006; Olson-Buchanan & Boswell, 2006).

Distraction from family members often occurs while working at home because others assume that the teleworker is available to visit, run family errands and do household activities (eHomemakers, 2003). Children especially do not perceive a dividing line between work and play when they see their parents at home all the time (Tan-Solano & Kleiner, 2001). Each of these conflicting roles places demands on time, energy and commitment, which eventually results in work-family conflict (Edwards & Rothabard, 2000). Bringing work home can also interfere with home life if it becomes difficult to set aside work and focus on family activities (Desrochers, Hilton, & Larwood, 2005).

To find strategies to minimize the problem of blurring boundaries some researchers have focused on the structure of work in time and space (Ahrentzen, 1990; Salazar, 2001). Individuals are advised to work only at certain times to prevent home becoming a workplace, and only at certain places in the house to avoid interference from family members (Ahrentzen, 1990; Salazar, 2001). Sample strategies include having a separate room for office use only, or using a kitchen table as work desk only when no one else is home, or working with the door closed, phone off and not checking e-mail while working (Kossek, Noe, & DeMarr, 1999; Nippert-Eng, 1996). However, there is a greater potential for work-family boundaries to erode and for interruptions to take place, due to the difficulty of shifting the roles between work and family particularly when the shift is needed in an unexpected timeframe (Ashforth et al., 2000). For example, conflicting roles may arise when a person is required to engage in longer working hours to finish up an assignment, but at the same time he or she also needs to attend to the family needs. When these conflicting issues cannot be resolved, the merging of roles, space, and time can cause disruption to both work and family life (Mahmood, 2002). Therefore, finding ways in which individuals can successfully manage the boundary is essential in order to achieve work-family balance.

Researchers have identified conflicts between paid work and family roles as a major problem for teleworkers (Felstead & Jewson, 2000). Since work is done in the home, teleworkers have difficulty separating their work and family activities, which sometimes may be problematic. Conflict arises when teleworkers have to fulfill the demands of work (e.g. completing a task) and family obligations (e.g. taking care of sick children or children with disabilities) at the same time (Carlson, Kacmar, & Williams, 2000; eHomemakers, 2003). Balancing multiple roles has become a critical challenge to many working individuals (Akdere, 2006). Dowse & Underwood (2001) believed that failure to balance these roles may result in serious and undesired life events such as marriage breakdowns, social problems and ill health. Further, there is evidence that when employees experience conflict between work and family roles, they also report experiencing greater job dissatisfaction and fatigue and lower life satisfaction (Edwards & Rothabard, 2000; Frone, Russel, & Cooper, 1992).

Promoting teleworking as a solution to the work-family balance should be done carefully, as it may intensify the challenges rather than reduce them if the individual is unable to successfully balance the demands of work and family (eHomemakers, 2003). Thatcher & Zhu (2006) argue that to be a successful teleworker, individuals must have the appropriate personal qualities that allow them to manage and negotiate conflicting work and family activities in order to attain balance. The term "work-family balance" refers to individual having control over when, where and how they work, leading them to be able to enjoy an optimal quality of life as well as family (The Work Foundation, 2005).

The general aim of this research is to study the work-family balance of Malaysian teleworkers by exploring the nature of interactions between work and family activities, in order to get a better understanding of the experience of teleworkers in balancing their work and family life. Both work and family are central to our lives (Akdere, 2006); therefore, it is important for men and women to harmonize their working life and family life, especially for those who are working from home (Tan-Solano & Kleiner, 2001), and for family life practitioners to be able to offer effective strategies to teleworkers (Wiley, Branscomb, & Wang, 2007). Finding the balance can help the teleworker's well-being as well as his or her work outcomes (Standen, Lamond, & Daniels, 1999). Perhaps one of the widely adopted methods for attaining work-family balance is through managing the boundary between work and family activities (Ahrentzen, 1990; Clark, 2000; Hall & Richter, 1988; Kowalski & Swanson, 2005; Matthews, 2007).

Specifically, the purpose of this study is to investigate how teleworkers manage and negotiate the border between work and family activities in order to attain work-family balance. Hence, the research questions of this study are:

- a. What are the factors that influence teleworkers in managing the border between work and family domains so as to attain balance?
- b. Why do these factors influence teleworker in managing the border between work and family domains so as to attain balance?
- c. How do teleworkers manage the border between work and family domains so as to attain work-family balance?

In this study, we will use a qualitative method by focusing on a single case study. With a single case study, this study is able to offer in-depth descriptions and explanations obtained from teleworkers who have had experiences in this form of flexible work structure. Furthermore, by using a case study method, it will allow us to retain the holistic and meaningful characteristics of real-life events – such as individual life cycles, organizational relations, and the maturation of

industries (Yin, 2003). A case study method is also able to offer a rich depiction of the teleworking and hence helps to understand what underlines the workers' relationship, interpretations, and behaviors when dealing with conflicts between work and family. For the source of data, we plan to collect data based on three types of techniques such as personal interviews, online open-ended questions, and discussion forums. Then, on a continuous basis, we will use the interpretive analysis technique to analyze the data. Consequently, we will end the data collection process when the categories emerge becomes saturated.

2. Managing the Boundaries between Work and Family in Organizations

2.1 What is Telework?

Ellison (1999) stated that the definitions of teleworking are many and varied. They are dynamic, as they reflect the changes that take place in society and technology, and often encompass a number of different styles of work. For example, it includes people working at home (such as programmers), people working from home (such as salespeople), and people working at work centres (such as telecottages and satellite offices) (Ellison, 1999). Other terms commonly used in place of teleworking are telecommuting, networking, remote working, flexible working, electronic homeworking and e-work (Avellino, 2005; Baruch & Smith, 2002; Gray, Hodson, & Gordon, 1993; Wilson & Greenhill, 2004).

The term "telecommuting" was originally coined to refer to the use of ICT to replace transportation (Nilles, 1994). Gray et al. (1993) reported that some researchers use the terms telework and telecommuting interchangeably, under the assumption that "telework" is preferred by Europeans and "telecommuting" is more popular in the United States. Others distinguish between the two (Gray et al., 1993). For example, Nilles (1998) defines teleworking as "any form of substitution of information technologies (such as telecommunications and computers) for work-related travel; moving the work to the workers instead of moving the workers to work". He defines telecommuting more specifically as periodic work out of the principal office, one or more days per week either at home, at a client's site, or in a telework center. He also asserts that telecommuting is a form of teleworking whereby all telecommuters are teleworkers but not all teleworkers are telecommuters (JALA International Inc, 1997).

Telecommuting according to Mokhtarian & Solomon (1994) is defined as using technology to work at home or at another location during regular working hours, instead of commuting to the workplace. It may be part-time or full-time, and need not exclusively involve computers. Mann et al. (2000) suggest that telework covers a whole range of different working patterns, including full time at home working for one company, part time at home working for one or several companies, full time at home but visiting the office for meetings or other occasional needs, or part or full time at remote or satellite sites. Avellino (2005) defined teleworkers as those home-workers who use personal computers (PCs) and/or the internet or mobile phone during their work. She goes further to conclude that telecommuting emphasizes reduction of work-related travel, whereas telework more broadly emphasizes the flexibility to work anywhere and any time.

In this study, telework is defined as working from home on a full-time basis using information and communications technology (ICT) tools in performing paid work (Baruch, 2000; Nilles, 1994; Vora & Mahmasani, 2002). This definition captures a wide range of activities, including workers that are home-based, outsourced, self-employed, employed directly by a company, or freelance or mobile teleworkers (Qvortrup, 1998). For purposes of this study, we will use the terms telework, teleworking and telecommuting interchangeably.

2.2 Why Telework?

The research findings regarding the effect of telework on family life issues (such as quality of work and non-work life, and balancing work and family life) have been inconsistent (Bailey & Kurland, 2002; Sinha & Monroe, 2006). For example, Rau & Hyland (2002) suggested that teleworking can reduce work-family conflict where it provides individuals with the opportunity to fulfill the demands of both work and family life. Other studies however have reported that greater conflicts arise when an individual teleworks, because of the additional demands resulting from greater family proximity and accessibility (e.g., Igbaria & Guimaraes, 1999; Kurland & Bailey, 1999). Furthermore, Hill et al. (1998) found that teleworking has no effect on work-family balance. Due to these inconsistencies, Sinha & Monroe (2006) suggest that there is a need for further investigation on balance issues among the teleworkers.

Evidence from the literature on teleworking has shown that it is not the ideal solution for work-family balance (Baruch, 2000; Duxbury, Higgins, & Mills, 1992; Hill et al., 1998; Jamal, 2007; Kurland & Bailey, 1999). Although teleworkers are satisfied with the flexibility and control of working at home, they struggle to deal with blurred boundaries between work and home life – i.e, teleworking individuals have greater difficulty in separating work and family activities (Desrochers, Hilton, & Larwood, 2005; eHomemakers, 2003; Hill et al., 1998; Igbaria & Guimaraes, 1999; Sullivan & Lewis, 2001; Tietze & Musson, 2005). Teleworking removes the physical separation between work and family roles, thus making it potentially more difficult to maintain a boundary between these roles as a result, individuals tend to work longer hours and may experience greater stress which could result work-family imbalance (Desrochers et al., 2005).

Teleworking's benefits for the community may be in the form of tangible benefits such as alleviating the number of vehicles on the road (Harpaz, 2002) and consequently reducing pollution and oil consumption (Mills et al., 2001). Other societal benefits include less noise pollution, less potential for accidents, less strain on public transportations system, and increasing the ability of organizations to hire employees with special needs (Harpaz, 2002). Rural communities also view telecommuting not only as a potential strategy for economic development but one that is environmentally friendly (Mills et al., 2001). Table 1 summarizes the benefits and limitations of teleworking.

(Insert Table 1)

3. Applying a Theoretical Framework: Work-Family Border Theory (Clark, 2000)

This study employs the theory of work-family borders as its theoretical framework. According to Desrochers & Sargeant (2004), work-family border theory (Clark, 2000) and boundary theory (Ashforth, 2000) each contribute to the study of work-family linkages by describing the conditions under which varying degrees of work-family integration are likely to improve or diminish individual well-being. Both theories address how people construct, maintain, negotiate and cross boundaries or borders, and how people draw the lines of demarcation between work and family (Clark, 2000). Another similarity in both theories is the extent of integration or segmentation as indicated primarily by two characteristics: flexibility and permeability. When two or more domains are highly flexible and permeable with respect to one another, they are said to be integrated. Boundary theory and work-family border theory also share a similar view that, in addition to flexibility and permeability, the extent of work-family integration depends on how similar these domains are to each other (Desrochers & Sargeant, 2004).

However, the two theories differ on the nature of that relationship and its implications for work-family balance. Ashforth et al. (2000) propose that the difference or contrast between roles is part of what determines how clear or how thick the boundary is between one domain and another, which in turn influences the likelihood of work-family conflict (Desrochers et al., 2005). Matthews (2007) states that this theory tends to focus on transitions within an organizational context, although it also makes reference to transitions between organizational roles and non-organizational roles (e.g., retirement transition, transition between work roles and family roles). However, Clark (2000) believes that the clarity or strength of the work-family border is separate from the similarity of role domains, and that these two factors interact to influence work-family balance. The theory is primarily focused on the way people transition between the work and family domains (Matthews 2007).

Work-family border theory is different from boundary theory in that its definition of borders encompasses not only psychological categories but also those tangible boundaries that divide time, place and people associated with work versus family (Desrochers et al., 2005). Clark (2000) in her research tries to understand the process of work-family conflict. She identifies one of the shortcomings of the earlier approaches as their lack of predictive ability, and suggests that these theories offered little guidance in either predicting work-family conflict or solving problems that arise in trying to balance work and family responsibilities.

Work-family border theory attempts to explain how individuals manage and negotiate the work and family spheres and the borders between them in order to attain balance (Clark, 2000). This theory was designed to remedy the criticism and gaps of previous theories on work and family (Akdere, 2006) by dividing the boundaries within the employees' life. The theory addresses how domain integration and segmentation, border creation and management, border-crosser behavior, and relationships between border-crossers and others at work and at home influence work-family balance. Employees in turn are seen as "border-crossers" making continuous, daily transitions between their work and family lives. For some individuals, the transition (border-crossing) may be slight, as where for example language and customs are highly similar in both domains. For others, the language and behavior expected in the work domain are very different from what is expected in the family domain, and thus a more extreme transition is required. The outcome of this theory is the concept of work-family balance, which refers to "satisfaction and good functioning at work and at home, with a minimum of role conflict" (Clark, 2000). This theory built upon role theory and has strong potential for further elucidating work and family conflict processes between the family and the workplace (Bellavia & Frone, 2005).

The central concepts of the work-family border theory are 1) the work and home domains; 2) the borders between work and home; 3) the border-crosser; and 4) the border-keepers and other important domain members. Each of these concepts will be explained in the following sub-sections. Figure 2-1 illustrates the work-family border theory of Clark (2000).

(Insert Figure 2-1)

3.1 The Work and Home Domains

Clark identifies work and home as two different domains which are associated with different rules, thought patterns and behavior. The differences between work and home can be classified in two different ways: differences in value ends and differences in value means (Rokeach, 1973 as cited in Clark, 2000). Work primarily satisfies the ends of providing an income and giving a sense of accomplishment, while home life satisfies the ends of attaining close relationships and

personal. Responsibility and capability were ranked as the most important means to achieve desired ends at work, while being loving and giving were ranked the most important means to achieve happiness at home (Clark & Farmer, 1998 as cited in Clark 2000). Because of the differences in domains, individuals often manage to integrate both work and home to some degree (Clark, 2000). Nippert-Eng (1996) explained the way people deal with differences between the two domains on a continuum, with integration at on one end and segmentation on the other.

3.2 *The Borders between Work and Family*

According to border theory, each of a person's roles takes place within a specific domain of life, and these domains are separated by borders, lines of demarcation that may be physical, temporal, or psychological (Clark, 2000). Physical borders define where domain-relevant behavior takes place, such as the walls of a workplace or the walls of a home (Clark, 2000). Ahrentzen (1990) discovered that much of the literature on role conflict boundaries examines controlling and setting time schedules, but rarely considers space. She found that 69% of workspaces were used exclusively for work; when a room was not exclusive, the equipment and furniture typically marked the boundaries.

A temporal border refers to a set of work hours that divide when work is done from and when family responsibilities start (Hill et al., 1998). Common examples of temporal boundaries are rituals such as kissing one's spouse good-bye, or turning on the computer and checking voice-mail messages can form the temporal boundaries that begin the day. Turning off the ringer to the office phone line or locking the door to the home office, mark the end of the day (Hill et al., 1988).

Psychological borders are rules created by individuals that dictate when thinking patterns, behavior patterns and emotions are considered appropriate for one domain (e.g. work) but not the other (Clark, 2000). Individuals used physical and temporal borders to determine the rules that make up psychological borders. Psychological borders are created as an enactment which "a process in which individuals take elements given in their environments and organize them in a way that makes sense" (Weick, 1979 as cited in Clark 2000).

3.3 *Permeability*

Hall & Richter (1998) define permeability as the degree to which psychological or behavioral aspects of one role or domain may enter another. For example, an individual may have an office at home whose physical doors and walls create a sort of border around his or her work. However, the border may be highly permeable because family members are accustomed to frequently entering and talking with the individual while at work (Clark, 2000).

3.4 *Flexibility*

Boundary flexibility is the extent to which a border may contract or expand depending on the demands of one domain or another (Clark, 2000). For example, if individuals are free to work any hours they choose, the temporal border separating work and family is flexible (Clark, 2000). Flexibility is the degree to which the spatial and temporal boundaries are pliable that is the extent to which a border may contract or expand, depending on the demands of one domain or the other (Hall & Richter, 1988). In other words, boundary flexibility is the degree to which an individual is willing and able to move from one domain (i.e., the work domain) to another domain (i.e., the family domain) to meet demands in that domain (Matthews, 2007).

Ashforth et al. (2000) indicated that 'a role with flexible boundaries can be enacted in various settings and at various times'. Mental or physical boundaries may need to be put in place. If individuals may work in any location they choose, the physical border is flexible. Similarly, when the psychological border is flexible, then an individual can think about work when at home and home when at work. Ideas, insights, and emotions flow between domains more easily when the psychological border is flexible (Clark, 2000). Therefore, flexibility refer to the ability of individuals to control over the conditions of work and family domains include having autonomy to decide how the work or house chores is to be done.

Hill et al. (2001) studied the conditions wherein spillover between the work and family domains might occur and how the two domains can impact work-family balance in terms of work flexibility. There are strong correlation between perceived work flexibility and work-family balance in his finding. Individuals with perceived work flexibility have more favorable work-family balance. They are also being able to work longer hours before they feel that their work-family balance has been compromised.

3.5 *Blending*

Blending occurs when high levels of permeability and flexibility exist within borders (Clark, 2000), and two domains overlap. The area around the presupposed border is no longer exclusive of one domain or the other, but blends both work and family, creating a borderland which cannot be exclusively called either domain. For example, psychological blending occurs when a person uses their personal or family experience in their work, or uses their work experience to enrich their home life.

3.6 Strength

The strength of the border can be determined by the combination of permeability, flexibility and blending. Borders that are very impermeable, inflexible and do not allow blending are strong. Conversely, borders that allow permeations, are flexible, and facilitate blending are weak. The ideal degree of border strength depends on the differences between the domains (Clark, 2000). Lambert et al. (2006) suggest that in certain situations, weak borders between work and family domains can be more beneficial in promoting balance, whereas in other situations, strong borders may be more beneficial.

3.7 The Border-Crosser

Border-crosser refers to individuals or workers who make frequent transitions between work and family domains. Border-crossers can be described based on the degree to which they are peripheral or central participants in either domain (Lave & Wegner, 1991 as cited in Clark, 2000). The central participants in a domain (i.e., those who have influence in that domain because of their competence, affiliation with central members within the domain, and internationalization of the domain's culture and values) have a good ability to control the border with the other domain and, consequently, to attain a good balance between work and family. Mean while the elements of peripheral participation are contrast to the elements of central participation.

3.8 The Border-Keepers and Other Important Domain Members.

A final element of this theory involves border keepers and other domain members. Border-keepers refer to some domain members who are especially influential in defining the domain and border (e.g. spouses, supervisor etc). Other domain members may be influential in defining the domain and border, but not have power over the border-crosser (Clark, 2000). Border-keepers and other domain members play an important role in the border-crosser's ability to manage the domains and borders (Clark, 2000). Many researchers point out the existence of blurred boundaries from psychosocial factors such as the spillover of stress from work to family and situational factors such as the scheduling of home work and its location within the household (Golden et al., 2006; Hill et al., 2001; Moen & Sweet, 2002). Moreover, researchers have treated work and family life independently (Clark, 2000).

4. Developing a Conceptual Model of Managing Boundary between Work and Family

In this paper, we will use the terms "boundary" and "border" interchangeably. Based on the literature, only a few studies have examined home workers' perceptions of a blurred boundary between work and family roles; these are Ahrentzen (1990), Hill et al. (1996), Nippert-Eng (1996), and Desrochers et al. (2005). Guest (2002) suggested that the analysis of borders can illuminate the extent to which individuals are in control of issues determining balance. Such analysis opens to examination the nature of borders, their permeability, the ease with which they can be managed or moved, or so on, and allows for analysis of physical and psychological controls. This view is consistent with what Zedeck (1992) argued and is at the heart of the issue of work-family balance: the way individuals shape the scope and parameters of work and family activities, create personal meaning, and manage the relationships between families and their jobs. Igbaria & Guimaraes (1999) believe that one of the critical factors for successful teleworking is establishing clear boundaries between work and family.

Kirchmeyer (2000) views living a balanced life as achieving satisfying experiences in all life domains; doing so requires personal resources such as energy, time, and commitment to be well distributed across domains. This is similar to Clark's views on work-family balance, since she defines it as satisfaction and good functioning at work and at home with a minimum of role conflict (Clark, 2000). According to Kofodimos (1993), balance refers to a satisfying, healthy, and productive life that includes work, play, and love.

All these definitions of balance share two important elements. First is the notion of equality, or near-equality, between experiences in the work role and experiences in the family role (Reiter, 2007). Clark (2000), Kirchmeyer (2000), and Kofodimos (1993) imply similarly high levels of satisfaction, functioning, health, or effectiveness across multiple roles.

Second, the definitions of work-family balance implicitly consider two components of equality: inputs and outcomes. The inputs are the personal resources (Kirchmeyer, 2000) that are applied to each role. According to Kirchmeyer (2000), to be balanced is to approach each role – work and family – with an approximately equal level of attention, time, involvement, or commitment. Balance can be positive or negative; positive balance suggests an equally high level of attention, time, involvement, or commitment, whereas negative balance refers to an equally low level of attention, time, involvement, or commitment. These inputs reflect an individual's level of role engagement in terms of time devoted to each role or psychological involvement in each role. It is difficult to imagine a balanced individual who is substantially more or less engaged in the work role than in the family role. The other component of balance is the resultant outcomes that are experienced in work and family roles. One outcome frequently included in definitions of balance is satisfaction (Clark, 2000; Kirchmeyer, 2000; Kofodimos, 1993). Again, balance can be positive or negative; positive balance implies an equally high level of satisfaction with work and family roles, and negative balance suggests an equally low level of satisfaction with each role (Kirchmeyer, 2000).

Kowalski & Swanson (2005) suggest that in order to create boundaries between work and family, the teleworker can adopt strategies such as dedicating a specific space in the home for work, establishing morning rituals at home to mark the transition to a workday (e.g. dressing up as if going into the office), making dependent care arrangements for pre-school children and elderly parents, and educating family, friends, and neighbors about the telework arrangement so they know not to interrupt him during working hours. Kossek et al. (2006) stated that for professional workers to really have control over how and when they telework while also managing family demands, they may need to have a formal boundary management strategy, defined as a set of principles used to organize and separate role demands and expectations into specific realms of home (e.g. dependent care giving) and work (i.e. doing one's job) (Kossek et al., 1999).

Based on the literature review and the theoretical lens of Clark's work-family theory, we developed a conceptual framework to guide the study as shown in Figure 3-1. The study's objective is to examine the work-family balance among teleworkers achieved through the management of the border between work and home domains. The framework represents the proposed relationships among the constructs of interest in the study based on work-family border theory. The theory states that work and family are two different domains which influence each other, and that these domains are determined by borders, lines of demarcation that show the point at which domain-relevant behavior begins or ends. This border can take three forms: physical, temporal, and psychological, and can be controlled through adjusting their permeability, flexibility, blending and strength. The objective of the study is to design a border management strategy to enable individuals to attain work-family balance. Work-family balance in this study refers to individuals having a good functioning control over where, when and how they work, which in turn enables them to meet the competing demands of work and family life. A good work-family balance is achieved when an individual is able to manage their work and at the same time accomplish family satisfaction.

We will explore the strategies or practices used by the teleworker in managing physical, temporal and psychological borders. As such, we need to understand issues like where and when work and non-work activities take place, if there are borders enacted between them and how permeable and flexible these borders are. Each of the characteristics of the borders will be examined in order to answer the research questions set in this study.

(Insert Figure 3-1)

This study aims to develop a model for boundary management for teleworkers to assist them in balancing their work and family life. In particular, the research will explore how teleworkers develop their strategies for balancing work and family demands based on Clark's (2000) work-family border theory. By using Clark's theoretical lens, we hope to explain how individuals manage and negotiate the work and family spheres and the borders between them in order to attain balance. Furthermore, this theory addresses how these boundaries divide times, places and peoples that are associated with work versus family.

5. Implications

This study is expected to yield several implications. First, exploring current practices or strategies used by teleworkers will help organizations understand the consequences of new ways of working, and will enable individuals and interested parties (e.g. self-employed people) to explore innovative ways to achieve both business and personal goals. The findings from this study will contribute to the development of strategies to help individuals develop their skills in managing boundaries between work and family life.

Effective methods for managing the boundary between the two spheres could help individuals who are struggling to create harmony in the contexts of work and family life, and may strengthen and enhance their business achievement. A positive work-life environment has a positive impact on the development of this country through enhancing individuals' participation in economic activities. For example, studies have shown that through teleworking organizations can structure their operations to cut costs, maximize resources and improve productivity, develop pools of professional candidates who were physically inaccessible in the past, and by hiring workers under various contractual arrangements, including overseas employees, can offer a better quality of work and many financial benefits (Butler et al., 2007; Crandal & Gao, 2005; Gibson et al., 2002; Harpaz, 2002).

Second, providing a systematic solution means that individuals do not have to make constant choices about how to work and how to cope with the difficulties of integrating their life. This study integrates the theory and research in the examination of the role of boundary management in balancing teleworkers' work and life roles; therefore, this study contributes to the theoretical explanations of boundary management in balancing work and family, and to the understanding of the work and family issues among teleworkers.

Third, working and parenting arrangements may create further opportunities for employers, government and other related parties to make good policy decisions regarding the implementation of teleworking, and to design programs to help families find harmony between work and family life. For example, this study could be used to help shape a housing policy that promotes economic wellbeing through the development of innovative housing.

In the context of Malaysia, teleworking is a relatively new concept compared to other developed countries like the US, UK and many more. It is thus crucial for employers to change their mindset and accept that employees need not be physically present at their place of work. The goal is to improve both workplace performance and work-family life; this can be achieved only through strong support from management, in tandem with positive and effective changes in workgroup practices.

It is appealing to anticipate that teleworking will be an alternative work option for Malaysian workers, especially women, the disabled, unemployed and retired workers, remote workers, and entrepreneurs, and will allow them to generate income without creating any family and personal problems (Ministry of Women Family and Community Development, 2004). In addition, this study also contribute to creating meaningful work experiences for individuals who telework. Since teleworking is a key component of the information society, it is important for Malaysians to adapt to the changes in working styles brought about by globalization and technological advancements.

6. Conclusion

It is appealing to anticipate that teleworking will be an alternative work option for Malaysian workers, especially women, the disabled, unemployed and retired workers, remote workers, and entrepreneurs, and will allow them to generate income without creating any family and personal problems (Ministry of Women Family and Community Development, 2004). In addition, this study also contribute to creating meaningful work experiences for individuals who telework. Since teleworking is a key component of the information society, it is important for Malaysians to adapt to the changes in working styles brought about by globalization and technological advancements.

In summary, teleworking has both positive and negative impacts on teleworkers. While work and family roles often enhance one another, managing work and family demands is also a serious concern for many teleworkers. Although teleworking provides individuals with the freedom and flexibility to do their work at any time and anywhere, for some teleworkers this may give rise to work-family conflict due to the blurring of the boundaries between work and home life. This blurring makes it difficult to distinguish the work role from the family role and may lead to feelings of stress, anger, and burnout. In order to maintain the health and success of individuals and families, understanding and encouraging work-family balance is important. Different people will balance their home and work lives in different ways depending on what they value and their personal circumstances.

References

- Ahrentzen, S. (1990). Managing Conflict By Managing Boundaries. How Professional Homeworkers Cops With Multiple Roles At Home. *Environment & Behaviour*, 22(6), 723-752.
- Akdere, M. (2006). Improving Quality of Work-Life: Implications For Human Resources. *The Business Review, Cambridge*, 6(1), 173-177.
- Ammons, S.K., & Markham, W.T. (2004). Working At Home: Experiences of Skilled White Collar Workers. *Sociological Spectrum*, 24(24), 191-238.
- Ashforth, B.E Keiner, G.E.,& Fugate, M. (2000).All In A Day's Work: Boundaries And Micro Role Transitions. *Academy of Management Review*,25(3),472-491.
- Avellino, M. (2005). *An Enabling Framework For Telework. Research project for The Employment and Training Corporation, Hal Far*. Retrieved May 15, 2007, from http://scholar.google.com/scholar?hlen&q=cache:EMeYsVPr_oJ:etc.gov.mt/docs/An%2520Enabling%2520%Framework%2520for%2520Telework.htm
- Bailey, D. E., & Kurland, N. B. (2002). A Review of Telework Research: Findings, New Directions, And Lessons for The Study of The Study of Modern Work. *Journal of Organizational Behavior*, 23, 383-400.
- Baines, S., & Gelder, U. (2003). What Is Family Friendly about the Workplace In The home? The Case Of Self-Employed Parents And Their Children. *New Technology, Work and Employment*, 18(3), 223-234
- Baruch, Y., (2000). Teleworking: Benefits and Managers. *New Technology Work and Employment*, 15(1), 34-48.
- Baruch, Y., & Smith I. (2002). The Legal Aspect Of Teleworking. *Human Resources Management Journal*, 12(3), 61-75.
- Bellavia, G.M., & Frone M.R (2005). Work-Family Conflict. In J. Barling, E. K. Kelloway & M.R. Frone (Eds.), *Handbook of Work Stress*. Thousand Oaks, London, New Delhi: SAGE Publications.
- Butler, E. S., Aashiem, C., & Williams, S. (2007). Does Telecommuting Improve Productivity? *Communication of ACM*, 50(4), 101-103.
- Carlson, D. S., Kacmar, K.M, & Williams, I. J. (2000). Construction and Initial Validation of A Multidimensional Measure Of Work-Family Conflict. *Journal of Vocational Behavior*, 56, 249-276

- Chelsey, N. (2005). Blurring Boundaries? Linking Technology Use, Spillover, Individual Distress, and Family satisfaction. *Journal of marriage and Family*, 67, 1237-1248.
- Clark, S. C. (2000). Work/Family Border Theory: A New Theory Of Work/Family Balance. *Human Relations*, 53(6), 747-770.
- Crandal, W. R., & Gao, L. (2005). An Update On Telecommuting: Review And Prospect For Emerging Issues. *S.A.M. Advanced Management Journal*, 70(3), 30-37.
- 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.
- Descroches, S., & Sargeant, L. D. (2004). Boundary/Border Theory And Work-Family Integration. *Organization Management Journal*, 1(1), 40-48.
- Dowse, S., & Underwood, J. (2001). *Work Life Balance of IT Managers: Finding Time for a Life*, Paper presented at the Twelfth Australian Conference on Information Systems. Retrieved May 21, 2007, from <http://staff.it.uts.edu.au/~jim/publications/ACIS2001dowse.pdf>
- Duxbury, L.E., Higgins, C.A. and Mills, S. (1992). After-hours telecommuting and work-family conflict: A comparative analysis, *Information Systems Research*, 3(2) 1992, 173--190.
- Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms Linking Work And Family: Clarifying The Relationship Between Work And Family Constructs. *Academy of Management Review*, 25(1), 178-199.
- eHomemakers. (2003). *A Study on How Gender Dynamics Affect Teleworkers' Performance in Malaysia: e-Homemakers Malaysia*.
- Ellison, N. B. (1999). Social Impacts: New Perspectives on Telework. *Social Science Computer Review*, 17(3), 338-356.
- Felstead, A., Jewson, N. (2000). *In Work, At Home. Towards an understanding of Home working*: Routledge, Taylor & Francis Group, UK.
- Frone, M. R., Russel, M., & Cooper, M. L. (1992). Prevalence of Work-Family Conflict: Are Work And Family Boundaries Asymmetrically Permeable? *Journal of Organizational Behavior*. 13, 723- 729.
- Gibson, J. W., Blackwell, C. W., Dominics, P., & Demerath, N. (2002). Telecommuting in the 21st Century and A Leadership Model Which Will Work. *The Journal of Leadership Studies*. 8(4), 75-86.
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's Differential Impact on work-Family Conflicts: Is There No Place Like Home? *Journal of Applied Psychology*, 91(6), 1340 -1350.
- Gray, M., Hodson, N., & Gordon, G. (1993). *Teleworking Explained*. Chichester: John Wiley & Sons.
- Guest, D. E. (2002). Perspectives on the Study of Work-life Balance. *Social Science Information*, 41(2), 255-279.
- Hall, D. T., & Richter, J. (1998). Balancing Work Life And Home Life: What Can Organization Do To Help? *The Academy of Management Executive*, 2(3), 213-223.
- Harpaz, I. (2002). Advantages and Disadvantages of Telecommuting For The Individual, Organization and Society, *Work Study*, 51(2), 74-80.
- Hill, E. J., Ferris, M. S., & Weitzman, M. (2001). Finding An Extra Day a Week: The Positive Influence Of Perceived Job Flexibility On Work And Family Life Balance. *Family Relations*, 50(1), 49-58.
- Hill, E. J., Miller, B. C., & Weiner, S. P. (1998). Influences of the Virtual Office on Aspects of Work and Work/Life Balance. *Personnel Psychology*, 51(3), 667-683.
- Hill, E. J., Hawkins, A. J., & Miller, B. C. (1996). Work And Family In The Virtual Office Perceived Influences Of Mobile Telework. *Organizational Behavior and Human Performance*, 32, 198-215.
- Igbaria, M., & Guimaraes, T. (1999). Exploring Differences in Employee Turnover Intentions and Its Determinants Among Telecommuters and Non-Telecommuters. *Journal of Management Information Systems*, 16(1), 147-164.
- JALA International Inc. (1997) *Some Common – and Not so Common-Telework/Telecommuting Question and Jack Nile's Answers and Comments*. Retrieved October 20, 2000, from <http://www.jala.com/faq.htm>
- Jamal, M. M. (2007). Teleworking in the U.S. Federal Government: *Factors Influencing Federal Employees' Participation*. Unpublished PhD, George Washington University, Washington.
- Kirchmeyer, C. (2000). Work-life Initiatives: Greed or benevolence regarding workers' time? In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in Organizational Behaviour* (pp. 79-93). Chichester, UK: Wiley.

- Kofodimos, J. (1993). *Balancing Act: How Managers Can Integrate Successful Careers and Fulfilling Personal Lives*. San Francisco : Jossey-Bass.
- Kossek, E. E., Lautsch, B. A., & Eaton S. C. (2006). Telecommuting, Control, And Boundary Management: Correlates of Policy Used And Practice, Job Control, And Work-Family Effectiveness. *Journal of Vocational Behavioral*, 68 347-367.
- 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.
- Kowalski, K. B., & Swanson, J. A. (2005). Critical Success Factors In Developing Teleworking Programs. *Benchmarking An International Journal*, 12(3), 236-249.
- Kurland, N. B., & Bailey, D. E. (1999). Telework: The Advantages and Challenges Of Working Here, Anywhere And Anytime. *Organizational Dynamics*, 28(2), 53-68.
- Lambert, C. H., Kass, S. J., Piotrowski, C., & Vodanovich, D. J. (2006). Impact Factors on Work-Family Balance: Initial Support for Border Theory *Organization Development Journal*, 24(2), 64-75.
- Lewis, S., & Cooper, C. L. (1999). The Work- Family Research Agenda in Changing Contexts. *Journal of Occupational Health Psychology*, 4(4), 382-393.
- Mahmood, A. N. (2002). *Work and Home Boundaries: Sociospatial Analysis of Women's Live Work Environments*. Unpublished PhD. University of Wisconsin-Milwaukee.
- Mann, S., Varey, R., & Button, W. (2000). An Exploration Of The Emotional Impact Of Tele-Working Via Computer Mediated Communication. *Journal of Managerial Psychology*, 15(7), 668-690
- Matthews, R. A. (2007). *Work- Family Boundary Management Practices in a Dyadic Context: Crossover Effect of Work-Family Conflict*. Unpublished PhD, University of Connecticut.
- Mills, J. E., Wong-ellison, C., Werner, W., & Clay, J. M. (2001). Employer Liability for Telecommuting Employees. *Cornell Hotel and Restaurant administration Quarterly*, 42, 28-59.
- Ministry of Women Family and Community Development. (2004). *Speech by Dato' Seri Shahrizat Abdul Jalil, Ministry of Women Family and Community Development, in conjunction with the closing ceremony of the Home Office Dialogue*. retrieved May 7, 2007, from http://www.kpwk.gov.my/new_index.php?page=speech_content&speech_groupid=10&year=2004&speechId=262&lang=eng.
- Moen, P., & Sweet, S. (2002). Two Careers, One Employer: Couples Working for the Same Corporation. *Journal of Vocational Behaviour*, 61(3), 446-483.
- Mokhtarian, P. L., & Solomon, I. (1994). Modeling the Choice Of Telecommuting: Setting The Context. *Environment and Planning*, 26, 749-766.
- Nilles, J. M. (1994). *Making Telecommuting Happen*. New York: Van Nostrand Reinhold.
- Nilles, J. M. (1998). *Managing Telework: Strategies For Managing The Virtual Workforce*. New York: John Wiley & Sons.
- Nippert- Eng, C.E. (1996). *Home and Work*. Chicago: The University of Chicago Press.
- Olson Buchanan, J. B. & Boswell, W. R. (2006). Blurring Boundaries: Correlates of Integration And Segmentation Between Work And Nonwork. *Journal of Vocational Behavioral*, 68, 432-445.
- Qvortup, L. (1998). From Teleworking to Networking: Definitions and Trends. In P.J. Jackson & J. M. Van der Wielan (Eds.), *Teleworking: International Perspectives from telecommuting to virtual organisation* (pp.21-39): Routledge, UK.
- Rau, B. L., & Hyland, M. A. (2002). Role Conflict And Flexible Work Arrangements: The Effects On Applicant Attraction. *Personnel Psychology*, 55(1) 111-136.
- Reiter, N. (2007). Work Life Balance: What DO You Mean? The Ethical Ideology Underpinning Appropriate Application. *Journal of Applied Behavioral Science*, 43(2), 273.
- Salazar, C. (2001). Building Boundaries and Negotiating Work at Home. *ACM*, 162-170.
- Sinha, S. M., & Monroe, R. W. (2006). Telecommuting's Past and Future: A Literature Review And Research Agenda. *Business Process Management Journal*, 12(4), 455- 482.
- Standen, P., Lamond, D., & Daniels K. (1999). The Home As A Workplace: Work-Family Interaction And Psychological Well-Being In Telework. *Journal of Occupational Health Psychology*, 4(4), 368-381.

- Sullivan, C., & Lewis S. (2001). Home-Based Telework, Gender, And The Synchronization of Work and Family: Perspective of Teleworkers and Their Con-residents. *Gender, Work & Organization*, 8(2), 123-145.
- Tan-Solano, M., & Kleiner, B. H. (2001). Effects of Telecommuting On Organisational Behaviour. *Management Research News*, 24(3/4), 123-128.
- Thatcher, M. B. S., & Zhu, X. (2006). Changing Identities in a Changing Workplace: Identification, Identity Enactment, Self- Verification, And Telecommuting. *Academy of Management Review*, 31(4), 1076-1088.
- The Work Foundation. (2005). Work Life Balance-Introduction. Retrieved March 22, 2007, from <http://www.employersforwork-lifebalance.org.uk/work/definition.htm>
- Tietze, S., & Musson, G. (2005). Recasting the Home-Work Relationship: A Case of Mutual Adjustment? *Organization studies*, 26(9), 1331-1352.
- Vora, V. P., & Mahmasani, H. S. (2002). *Development and Implementation of a Telecommuting Evaluation Framework, and Modelling the Executive Telecommuting Adoption Process* (Technical Report No. SWUT/02/167505-1): Center for Transportation Research, University of Texas at Austin.
- Wiley, A. T., Branscomb, K., & Wang, Y. Z. (2007). Intentional Harmony In The Lives Of Working Parents: Program Development And Evaluation. *Family Relations*, 56(July), 318-328.
- Wilson, M., & Greenhill, A. (2004). Gender and Teleworking Identities in The Risk Society: A Research Agenda. *New Technology, Work & Employment*, 19(3), 207- 221.
- Yin, R. K. (2003). *Case Study Research Design and Methods* (3ed.). New York: SAGE Publications
- Zedeck, S. (1992). *Work, Families and Organizations*. San Francisco: Jossey-Bass Publishers.

Table 1. Benefits and Limitations of Teleworking

Adopted from Crandall, & Gao (2005)

	Benefits	Limitations
Individual	<ul style="list-style-type: none"> • Higher job satisfaction • Higher organizational commitment • Less pressure • Better time management • Reduced travel time • Balance work and home life • Distraction-free environment • Less involvement in office politics • Suitable for homebound employees 	<ul style="list-style-type: none"> • Feelings of isolation from the work culture • Lack of promotional opportunities • Losing out on the assignment of good projects • Dissatisfaction with peer relationships • Less influence over the people and events at work • Work-family conflict • Harder to take sick day
Organizational	<ul style="list-style-type: none"> • Increased productivity • Lower costs • Less office space needed • Reduced absenteeism • Lower turnover • Do not have to have all employees in one location (natural disaster or terrorist consideration) • Increased recruitment options • Able to adapt to virtual organization 	<ul style="list-style-type: none"> • More difficult to supervise • Assessment concerns • Special logistics requirements • Sensitive information could be compromised • Goes against the concept of teamwork • Loss of control over health and safety • Lack of infrastructure support (secretary, etc.)
Society	<ul style="list-style-type: none"> • Less traffic • Less pollution • Conserve oil • Support the local and rural communities 	<ul style="list-style-type: none"> • Fosters individualistic mentality • Fewer face-to-face relationships

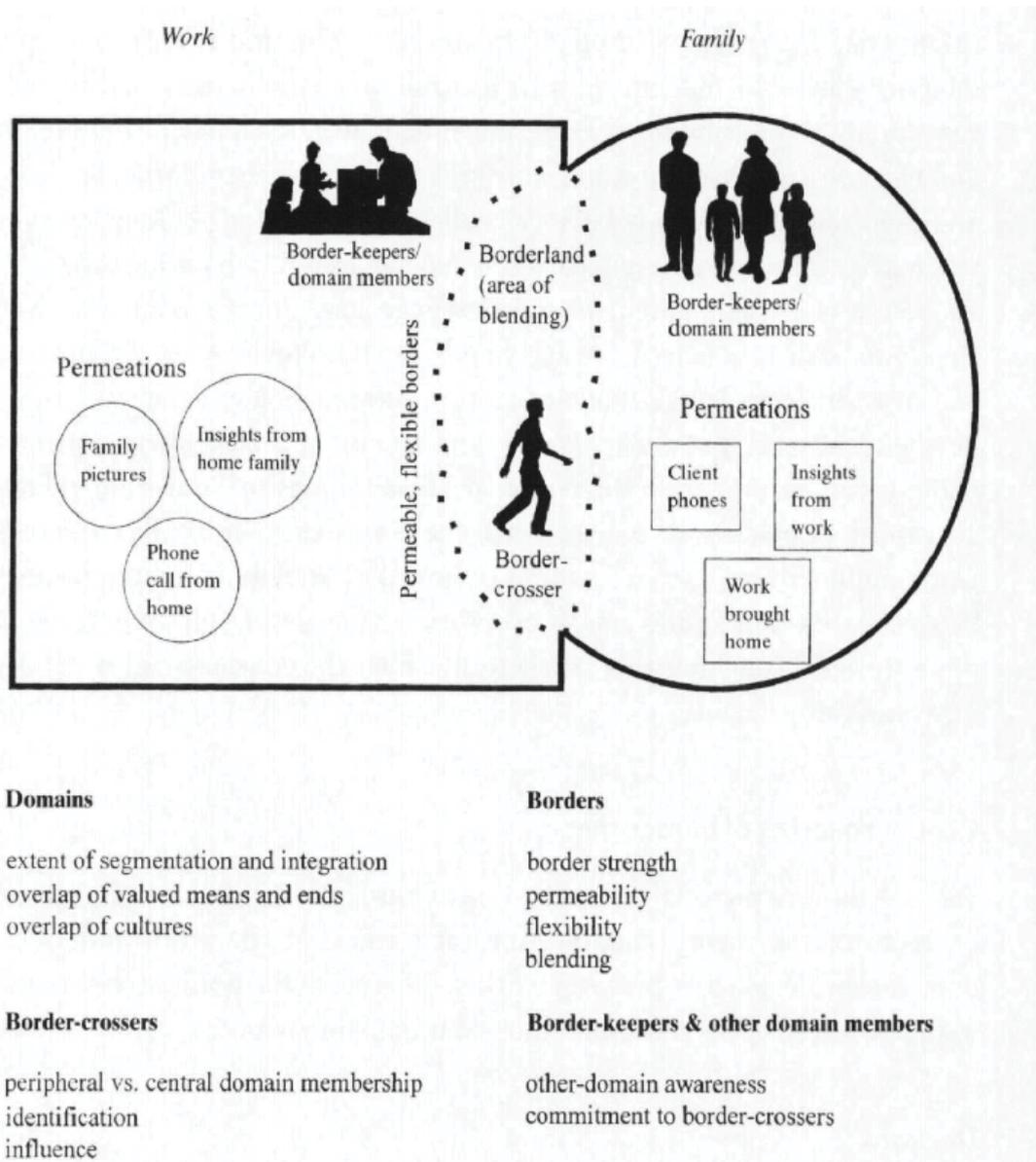


Figure 2-1. Work-family border theory (Clark, 2000)

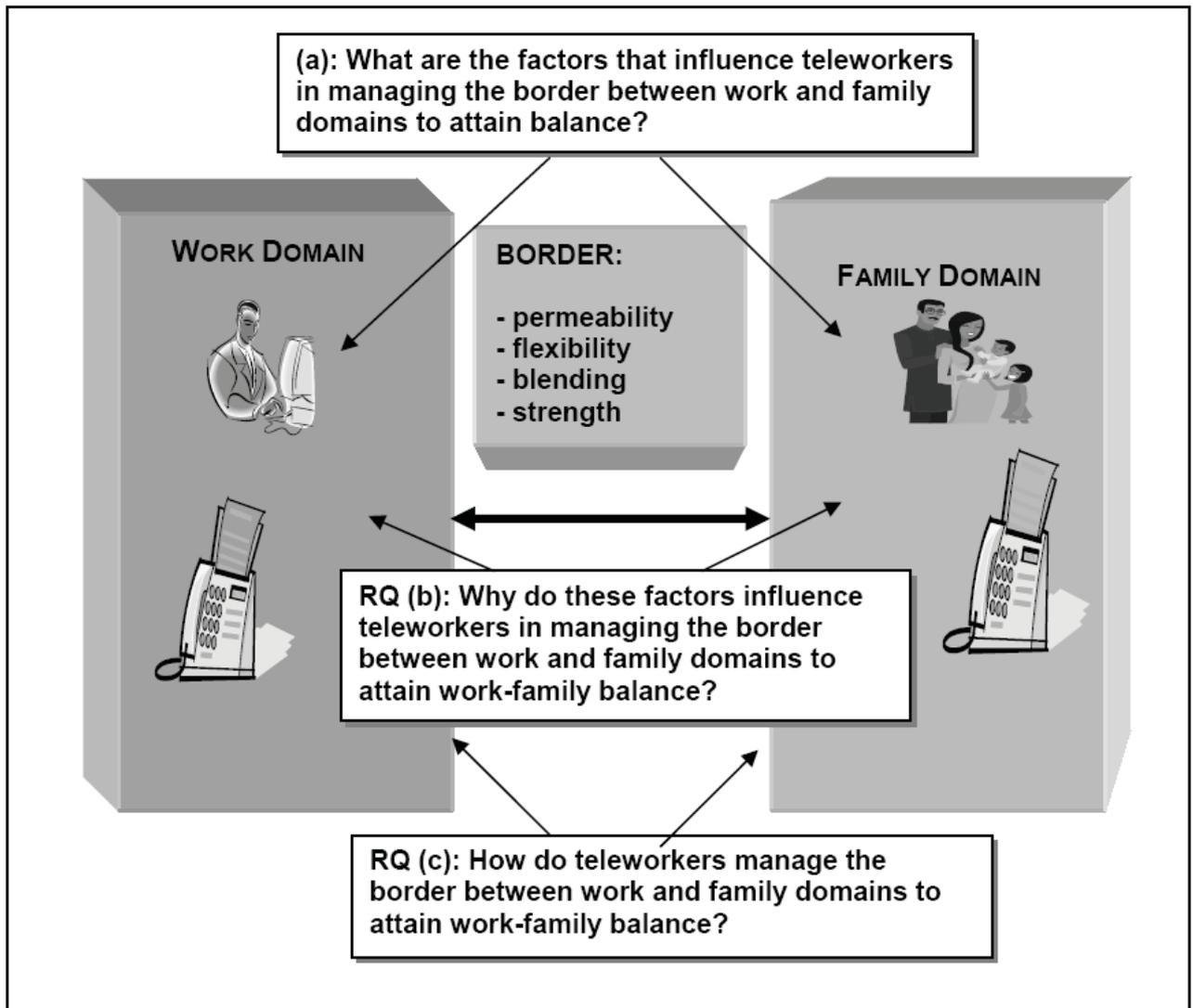


Figure 3-1. A Conceptual Framework of the Study