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Abstract

The main purpose of this study was to propose and test a model examining the relationship between family characteristics and the impact of frequent travel on family. Nearly 400 business travelers and their spouses were asked to fill the questionnaires. In general, the findings indicate that frequent business travel would have less influence on families with positive family characteristics, namely cohesion, flexibility and communication, than those without. Family's perception regarding frequent business travel was found to have a moderating effect over the relationship between family characteristics and the influence of frequent business travel on the family. The study makes theoretical contributions to the traditional family systems theory, family stress theory, ABCX theory and spillover theory and has practical implications for the government, organization, international human resource managers, frequent business travelers and their families.

Keywords: Influence of business travel, family characteristics, and perception

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**NATIONAL UNIVERSITY OF SINGAPORE
2001**

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Summary

With the integration of Singapore economy with other parts of the world, especially Asia, an increasing number of Singaporean expatriates and frequent business executives go abroad for international assignments. Because the global assignments, which may have a influence on the family, are important for both individuals' career growth and organizations' global success, the knowledge of what influences the success of global assignments is becoming increasingly important. However, up to now, there has been little systematic study regarding the influence of frequent business travel on the family in Singapore. The main purpose of this study was to propose and test a theoretical model examining the relationship between family characteristics and the impact of frequent travel on family.

In addition to demonstrating the applicability of traditional family systems theory, ABCX theory and spillover theory to the case of frequent business travel, we highlight and test for the effects of several distinctive features of frequent business travel on the family, the spillover from frequent business travel on the spouse, children and parents. We do this by: 1) building a theoretical model of the relationship between family characteristics, in terms of family cohesion, flexibility and communication, and the influence of frequent business travel on the family; 2) testing the detailed effects of frequent business travel on the family, and 3) testing the moderating role of perception of frequent business travel over the relationship between family characteristics and the influence of frequent business travel on the family.

More than 2,000 NUS business alumni and their spouses were asked to fill out a new questionnaire developed in this study measuring frequency of business travel, the influence of frequent business travel on the spouses, children and parents, family cohesion, flexibility, communication and perception of business travel. More than 400 business travelers and their spouses returned the questionnaires.

Seven hypotheses were tested using moderated regression analysis. Many of the hypotheses were supported. In general, the findings indicate that frequent business travel would have less influence on families with positive family characteristics, namely cohesion, flexibility and communication, than those without. The more positive the family' perception regarding business travel, the less the influence of frequent business travel on the family. Perception was found to have a moderating effect over the relationship between family characteristics and the influence of frequent business travel on the family.

Complementing and supporting the quantitative analysis, the qualitative results to open-ended questions also showed that the frequent business travel influences the business travelers and their family and that positive family characteristics would help the family members to cope with the stress of absence of travelers.

We close end discussing the theoretical contributions of this study to the traditional family systems theory, family stress theory, ABCX theory and spillover theory. Practical implications for the government, employers, human resource practitioners, frequent travelers and their families are also discussed.

CHAPTER 1: INTRODUCTION

1.1 An Overview

Increased global competition has made it necessary to establish human resource systems that can foster and successfully use individuals' global competence (Caligiuri, Hyland, M, and Joshi, 1998; Shaffer & Harrison, 1998; Adler & Bartholomew, 1992). In the new global economy, mobility (in both the geographical and professional senses) is becoming increasingly important. The use of overseas assignments to develop and explore senior global management talents is common in multinational corporations. Because global assignments, which may have an influence on the family, are important for both the individual's career and growth and organization's global success, the knowledge of what influences the success of global assignments is becoming increasingly vital. Given the strategic importance multinational companies (MNCs) place on global assignments (e.g., international negotiations, the management of overseas branch and development of new market), the failure of international assignments may be harmful to a company's global effort and business (Caligiuri et al., 1998; Shaffer & Harrison, 1998; Gregerson & Balck, 1990; Zeria & Banai, 1985). Zeria and Banai (1985) suggested that the real cost of failure of international executives extends beyond the monetary expense of moving personnel to international assignments.

With the globalisation of Singapore's economy, an increasing number of Singaporean expatriates and frequent business travelers go abroad for international assignments. Such

assignments are important to the success of Singaporean companies because they help build employees' global competence and promote global integration within the organization. Ministry of Manpower of Singapore reported that there were about 150,000 Singaporeans living and working overseas (Straits Times, July 9, 2000). Many past studies (Caligiuri et al., 1998; Shaffer et al., 1998; Fukuda and Chu, 1994) found that family-related problems ranked highest in accounting for why expatriates failed in international assignments. It is not surprising that the family has such a pronounced influence on the outcome of the assignments because the global assignments affect the family as a whole rather than just expatriate (Caligiuri et al., 1999, 1998; Guzzo, Noonan, & Eltron, 1994). The family had both a direct and indirect impact on the adjustment of the expatriate when relocating overseas (Shaffer et al., 1999; Thomas, 1998; Shaffer & Harrison, 1998; Caligiuri, Hyland & Joshi, 1998; Milliken & Martins, 1998; Ward & Chang, 1997; Harvey, 1996, 1995, 1985; Fuchsberg, 1992).

Besides expatriates, there is one other important category of people for international assignments, the frequent business travelers. In this study, the "frequent business traveler" is a Singaporean citizen or permanent resident who travels abroad at least twice every three months or stays at spends least 20% of work time abroad for an assignment (Chia & Yeo, 1999). The Singapore Immigration & Registration Department (SIR) reported that there were 33,000 in 1997 (Straits Times, Dec.11, 1997; cited in Chia and Yeo, 1999) and about 60,000 frequent travelers in 1999 (The Straits Times, 2 March 1999; cited in Chia, 2000; Chia and Yeo, 1999). From this figure, we calculate that the annual rate of increase in frequent business travelers is about 40% between 1997 and 1999. This result reflects a

sharp increase in the number of frequent travelers in Singapore. It is also expected that this trend will continue in the future with the increasing integration of Singapore economy with those of other parts in the world. Singapore's companies that may have major business units, divisions, or projects overseas, again leading to a greater emphasis on travel to those locations. Short-term business travel is an underutilized method for developing some of the skills that are necessary to be a global leader.

1.2 Motivation of the Study

Compared with a large amount of literature on the influence of expatriation on the family, much less is available about the impact of frequent business travel on the family (Chia, 1999; Leung, 1992; Barling, 1990; Rosland, 1984; Denson, 1984; Renshaw, 1976; Culbert and Renshaw, 1972). Chia and Yeo (1999) gave the following reasons, such as the domestic base of frequent business travelers, the less dramatic and vivid absences of travelers and the difficulty for researchers to have access to frequent travelers, for the paucity of literature in frequent business travel. Furthermore, neither the travelers' job titles indicate the global nature of their work nor is there any professional association by which frequent travelers can be easily identified.

The work success and performance of the frequent business traveler depend not on the frequent traveler himself or herself, but also on the frequent traveler's family, i.e, spouse, children or parents. Conversely, frequent business travel may have impact on the family left behind, namely the spouse, parents and children. The Ministry of Community Development and Sports (MCDS) of Singapore seeks to build strong and stable families, the family being basic social unit of Singapore. However, family life cannot be taken for

granted. Effort and attention are needed from all members of a family to build a strong and close-knit family, a fact sometimes overshadowed by busy careers and lifestyles. However, up to now, there is no systematic study regarding the influence of frequent business travel on the family. This study aspires to fill the gap in this area.

1.3 Objective of the Study

The main purpose of this study was to propose and test a theoretical model examining the relationship between family characteristics and the impact of frequent travel on family. In addition to testing the applicability of traditional family system theory and family stress theory to the case of frequent business travel, we highlight and test for the effects of several distinctive features of frequent travel on the family, the spillover from frequent business travel on the spouse, children and parents. Specifically, this study aimed to contribute to the literature on family relations and international human resource management and to human resource practitioners, frequent travelers and their families by (a) understanding the impact of frequent travel on the travelers' spouses, parents and children; (b) providing evidence for the important role of non-work factors, especially the family characteristics, family's perceptions of business travel, on the spillover effects of business travel on the family and (c) providing some theoretical applications for the family systems theory and family stress theory and practical implications for organizations and policymakers.

1.4 Organization of the Study

In Chapter 2, a theoretical model examining the relationship between family characteristics and the influence of business travel on the family is presented and the hypotheses are introduced. This theoretical model is based on family systems theory, ABCX theory and spillover theory. Using these, I formed hypotheses about the influence of frequent business travel on the travelers' family, namely their spouses, children and parents, and the direct and indirect effects of perception of business travel.

In Chapter 3, the research methodology of the study, including sampling framework and analysis technique, is explained.

Chapter 4 presents the principal findings and detailed analyses. Finally, Chapter 5 discusses the important implications for the companies, government and frequent business travelers and their family members. The directions for future research are also discussed.

CHAPTER 2: LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Theoretical Foundations

Based on theories developed in work/family literature, we propose a theoretical model to examine the underlying relationship between the characteristics of the frequent travelers' family and the spillover from travel on the family. Three theoretical perspectives from the work/family literature are included in our model: (a) family systems theory (e.g., McCubbin, 1988; Minuchin, 1974; Hill, 1949); (b) ABCX theory (McCubbin & Patterson, 1982, 1983; Hill, 1949); and (c) spillover theory (e.g., Crouter, 1984; Piotrkowski, 1979; Aldous, 1969).

First, family systems theory (e.g., McCubbin, 1988; Minuchin, 1974; Hill, 1949) is especially relevant in its focus on the family as a system, rather than only looking at individual members in the family. This theory describes the reciprocal nature of the relationship among all family members, as represented by family characteristics (family cohesion, flexibility and communication).

The second theoretical model is the ABCX theory (McCubbin & Patterson, 1982, 1983; Hill, 1949), which is a subset of family systems theory and examines family dynamics as they relate to family adjustment. In this study, I use the model to examine the family dynamics of adjustments to the frequent business travel of one or more family members.

The third theoretical perspective, spillover theory (e.g., Crouter, 1984; Piotrowski, 1979; Aldous, 1969), has been identified as the most recognized theory for examining the work-family interaction (Lambert, 1990). Spillover theory can be used to explore the reciprocal interaction between the frequent business travelers' work and family life. Family systems theory, and ABCX theory and spillover theory, which are explained in greater detail in the following sections, provide different theoretical perspectives for studying the influence of frequent travel on the family and how the family characteristics and perception may mediate this relationship.

2.1.1 Family Systems Theory

Family systems theory (Minuchin, 1974) proposes that families are cultural systems that go through developmental stages, trying to maintain a sense of continuity and equilibrium and to enhance each family member's growth. Within the family system, there are sub-systems of individuals, dyads, and other sub-groups that influence one another. For example, family researchers (Cromwell & Peterson, 1983) have emphasized the importance of examining individual perceptions and dyadic interactions. Furthermore, the functioning of one dyad (e.g., marital) may be related to functioning of other dyads (e.g., parent-child). Marital satisfaction has been associated with parenting style. Maritally dissatisfied couples are less sensitive to the needs of their children (Erel & Burman, 1995; Pratt, Kerig, Cowan, & Cowan, 1992; Jouriles, Pfiffner, & O'Leary, 1988; Dickstein & Parke, 1988; Goldberg & Easterbrooks, 1984). Family functioning is not only related to interactive behavior among family members, but also appears to have consequences for child developmental outcomes. Domains include child temperament, child behavior

problems, academic performance, home environment, attachment, adolescent adjustment, social relationships, marital satisfaction, and medical conditions such as pregnancy (Jouriles et al., 1988; Goldberg & Easterbrooks, 1984; Warning & Patton, 1984). According to Minuchin (1974),

A scheme based on reviewing the family as a system, operating within specific social contexts, has three components. First, the structure of the family is that of an open social-cultural system in transformation. Second, the family undergoes development, moving through a number of stages that require restructuring. Third, the family adapts to change circumstances so as to maintain continuity and enhance the psychological growth of each member. (p. 51)

In this open-system approach, the absence of travelers is a circumstance to which the family must adapt. Healthy adaptation to the frequent business travelers' absence would reestablish functioning that would facilitate psychological growth of each family member. According to this theory, because of the way that the family members are interrelated through alliances and coalitions, any one individual could potentially affect the psychological state of any other family member, disrupting the balance between family members' relationships. The behaviors of family members exert mutual efforts on another.

Viewing the family as a system suggests that there is equilibrium between family members and that each individual can affect the psychological state of other family members (Brett & Stroh, 1995). Family systems theory and the related concept of family equilibrium suggest that the pressures both outside the family and within the family can disturb the equilibrium of the family (Brett & Stroh, 1995). In the context of frequent

business travel, pressures within the family, such as the spouse's maladjustment to the additional household and family responsibilities during the traveler's absence, or outside the family, such as unsatisfactory living conditions and weather at the traveler's destination, can affect the frequent business traveler and thus the equilibrium of the family. Individual family members' adjustment, therefore, will directly affect the family's adjustment as a whole. Thus, family systems theory allows us to consider the family as a unit, with family-unit-level skills, abilities, and characteristics. The proposed model will focus on the family-level system as an antecedent to the influence of frequent travel on the family.

2.1.2 ABCX Theory

In the context of the family system, a theory that examines family dynamics as they relate to family adaptation to stressors such as frequent business travel is the ABCX model (McCubbin & Patterson, 1982, 1983; Hill, 1949). The earliest conceptual foundation has been Hill's (1958; 1949) ABCX family crisis model:

A (the stressor event, the frequent business travel in this study) — interacting with B (the family's crisis-meeting resources, family cohesion, flexibility and communication in this study) interacting with C (the definition the family makes of the event, the perception of frequent travel in this study) produce X (the crisis, the influence of travel on the family). (p. 234)

The model suggests that three factors interact to produce a family's adaptation or adjustment: (A) the stressor, (B) the family's resources or characteristics to cope with the stressor, and (C) the family's perception of the stressor.

In the case of international business travel, Wiggins-Frame and Shehan (1994) suggested that the negative effects of the stressor could be exacerbated by "pile-up demands". These pile-up demands are the life stressors and strains that affect the family "prior to and following a crisis-producing event" (Wiggins-Frame & Shehan, 1994, p.196). Stressors may include the maladjustment of spouse, children and parents and other family members.

According to the ABCX model, it is not the stressor itself but rather the other two factors that will influence the family's adjustment or adaptation. The two other factors are the resources (the "B" factor) available to cope with the stress of the frequent travel and the perceptions (the "C" factor) of the travel (i.e., the stressor). These two factors vary depending on the characteristics of the family as a whole unit (e.g., their communication skills, support of each other, ability to adapt to stressful situations (Wiggins- Frame & Shehan, 1994; Elstehausen, 1990).

Olson, Russell, and Sprenkle (1984) conducted an extensive review of concepts defining family functioning. Through a process of "conceptual clustering of over fifty concepts developed to describe marital and family dynamics" they identified three predominant family characteristics as indicators of family functioning (Olson, Russell, & Sprenkle, 1984, p.60). These three family characteristics are family support (or cohesion), family

adaptability (or flexibility), and family communication. Mathijssen et al. (1997) reported that high cohesion and low adaptability (flexibility) were associated with fewer problems.

Family cohesion. According to Olson et al. (1984), family cohesion was defined as the emotional bonding and the degree of individual autonomy that family members experience. The behavioral result of this family cohesion is the amount of emotional support family members give to one another. There are several elements in this definition: emotional bonding, supportiveness, family boundaries, time and friends, and interest in recreation (Mayard & Olson, 1987). With a healthy level of family cohesion, the family members have the ability to form healthy autonomous bonds with others outside of the family system while still feeling as though they are an integrated part of the family system (Kerig, 1997; Minuchin, 1974). Either too much or too little support is unhealthy for family functioning. When the family is not supportive (cohesive), members tend to ignore each other's needs. When the family is too supportive (cohesive), it is supportive to the point of being stifling, and the family members tend to be overly influenced by each member's problems and concerns. This too causes greater stress and reduced autonomy of the family members.

There are four levels of cohesion ranging from *disengaged* (very low) to *separated* (low to moderate) to *connected* (moderate to high) to *enmeshed* (very high) (see **Figure 1**). It is hypothesized that the central levels of cohesion (separated and connected) make for optimal family functioning. The extremes (disengaged or enmeshed) are generally seen as problematic. In the balanced area (separated and connected), the frequent business traveler

and family members are able to experience and balance these two extremes and able to both independent from and connected to each other. When cohesion levels are very high (enmeshed systems), there is too much consensus within the family and too little independence. At the other extreme (disengaged systems), family members “do their own thing,” with limited attachment or commitment to their family. Balanced family systems (separated and connected types) tend to be more functional. More specifically, a separated relationship has some emotional separateness, but it is not as extreme as the disengaged system. Whereas time apart is more important, there are some times together, some joint decisions and family support. Activities and interests are generally separate, but a few shared. A connected relationship has emotional closeness and loyalty to the relationship. Time together is more important than time to be by oneself. There is an emphasis on togetherness. There are separate friends shared by the family members. Members have shared interests as well as some separate activities.

Conversely, unbalanced levels of cohesion are at extremes (very low or very high). A disengaged relationship often has extreme emotional separateness. There is little involvement among family members, and there is a lot of personal separateness and independence. Individuals often do their own thing. Separate time, space, and interest predominate and members are unable to turn to one another for support and problem solving. In the enmeshed relationship there is an extreme amount of emotional closeness, and loyalty is demanded. Individuals are very dependent on each other and reactive to one another. There is a general lack of personal separateness, and little private space is

permitted. The energy of the individuals is mainly focused inside the marriage or family and there are few external individual friends or interests.

According to this model, very high levels of cohesion (enmeshed) and very low levels of cohesion (disengaged) might cause trouble for the development of family members and their relationships in the long run. On the other hand, moderate (separated and connected) relationships are able to balance being alone versus together in a more functional way. Although there is no absolute best level for any relationship, some may have problems if they function at either extreme of the model for too long.

Family flexibility. The adaptability/flexibility of the family refers to the degree that the family system is flexible and has the ability to change (Maynard & Olson, 1999, 1987). It is the ability of a marital or family system to change its power structure, role relationships and rules in response to situational and developmental stress (Olson, 1986). The elements of this dimension are leadership, control, discipline, and roles and rules. Families need to adapt to the development and changes of the family members (e.g., a child starting school) and extra-familial pressures that influence the family (e.g., the frequent travel or a parent needing to work overtime). A family that is functioning well is able to accommodate the changes while maintaining the family system continuity (Minuchin, 1974). A family that is not functioning well will rigidly try to maintain the status quo despite the fact that its environment is demanding the change.

There are four levels of flexibility ranging from rigid (very low) to structured (low to moderate) to flexible (moderate to high) to chaotic (very high) (See **Figure 1**). As with cohesion, it is hypothesized that central levels of flexibility (structured and flexible) are more conducive to marital and family functioning, with extremes (rigid and chaotic) being the most problematic for families as they move through the family life cycle. Flexibility focuses on family's ability to change leadership, rules and roles. Much of the early application of systems theory to families emphasized the rigidity of the family and its tendency to maintain the status quo and the importance of potential for change was minimized.

Balanced couple and family systems (structured and flexible types) tend to be more functional over time. A *structured relationship* tends to have a somewhat democratic leadership with some negotiations including the children. Roles are stable with some sharing of roles. There are few rule changes with rules firmly enforced. A *flexible relationship* has a democratic leadership with a democratic approach to decision making. Negotiations are open and activities include the children. Roles are shared and there is fluid change when necessary. Rules can be changed according to the individual specific ability.

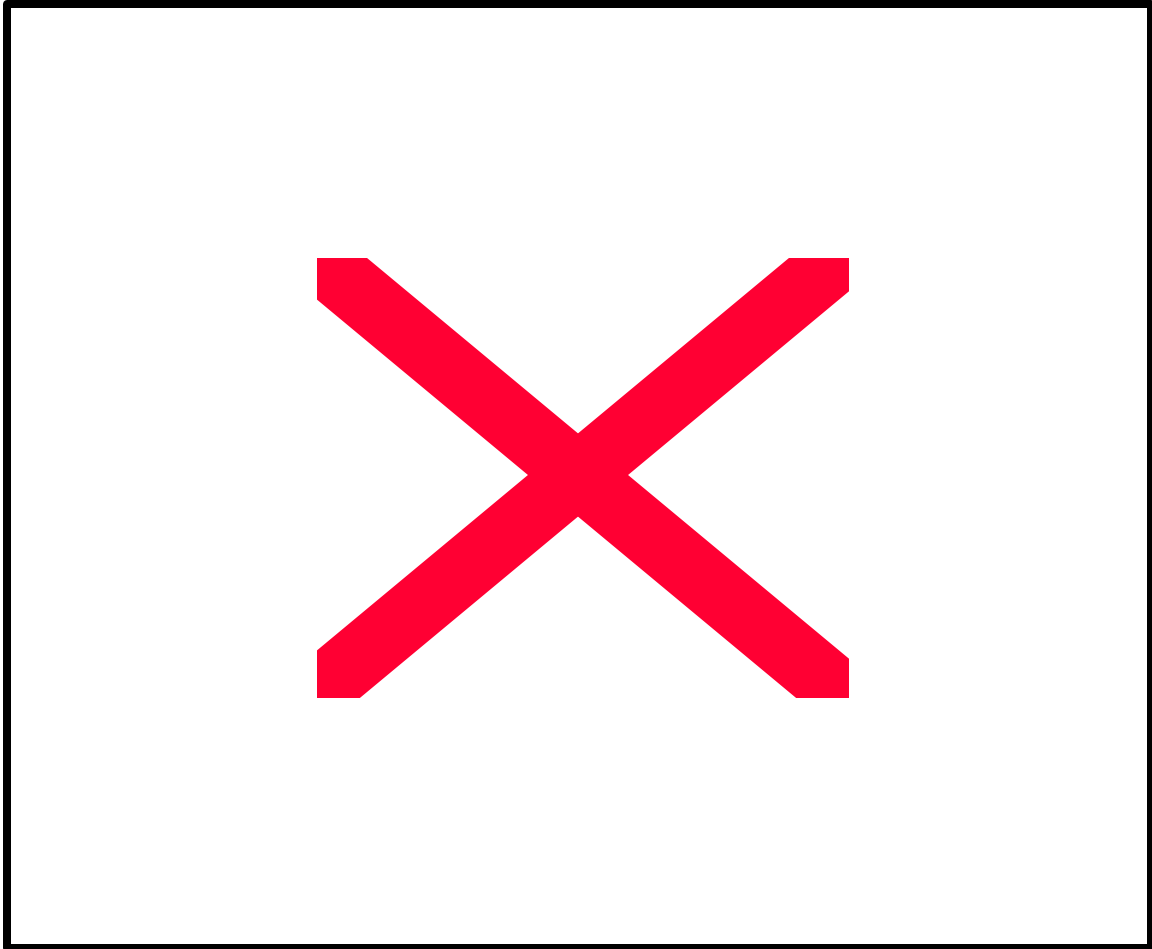
Unbalanced marriages and families tend to be either rigid or chaotic. A *rigid relationship* exists when one individual is in charge and is highly controlling. There tend to be limited negotiations with most decisions imposed by the leader. The roles are strictly defined, and the rules do not change. A *chaotic relationship* has erratic or limited leadership. Decisions

are impulsive and not well thought out. Roles are unclear and often shift from individual to individual.

According to the model, very high levels of flexibility (chaotic) and very low levels of flexibility (rigid) might cause trouble for individual members and their relationship development in the long run. On the other hand, relationships having moderate scores (structured and flexible) are able to balance some change and some stability in a more functional way. Although there is no absolute best level for any relationship, many relationships may have problems if they function at either extreme of the model (rigid and chaotic) for an extended period.

Family communication. According to Olson et al. (1984), “communication” is the third factor that emerges as a predominant theme in the literature on family systems. Effective communication is the characteristic that enables the evolution of the other two attributes of family functioning (cohesion and flexibility). Family communication refers to the ability to exchange opinions, respect different opinions, establish decision-making rules, resolve conflicts, and so on. A healthy level of family communication will help result in effective cohesion and flexibility.

FIGURE 1: Model of Family Characteristics
(Source: Olson 1991)



Family communication is measured by focusing on the family as a group with regard to their listening skills, speaking skills, self-disclosure, clarity, continuity tracking, respect and regard. In terms of listening skills, the focus is on empathy and attentive listening. Speaking skills include speaking for oneself and not speaking for others. Self-disclosure relates to sharing feelings about self and the relationship. Tracking refers to staying on the topic, and respect and regard relate to the effective aspects of the communication.

Perceptions of the stressor ("C" factor). Although frequent business travel is stressful, the family's perceptions of the frequent business travel can greatly influence how stressful (in terms of physical and psychological impact) the travel actually is. In other words, frequent business travel can be viewed either positively or negatively. Positive attitudes toward frequent business travel can help families spend less energy on their anxieties and more energy on positive coping behaviors that would lead to better adjustment (Bullers, 1999; Camp & Ganong, 1997; Wiggins-Frame & Shehan, 1994; Feldman & Tompson, 1993). For example, a family with positive family characteristics may eventually become adjusted to frequent business travel because of its members' positive perceptions of the absence. A family with average family characteristics may "rise to the challenge" of the absence of traveler if its members positively viewed the frequent business travel.

From the family systems' perspective, perception of frequent business travel is an aggregated family phenomenon. Although aggregated at the family level, individual family members can influence the impressions of the family as a whole, that is, negative individuals influence the family negatively, whereas positive individuals influence the family more positively. It is also found that parents' negative attitudes about relocation in military families had a negative effect on their children (Barling, 1990). That is, children of negative parents tend to demonstrate more psychological disturbances than did children of positive parents (Pedersen & Sullivan, 1964).

The perceptions of the traveler' absence, in the case of frequent business travel, may be especially important in the light of some current research. In a study of urban-rural

relocations, individuals were more willing to relocate to areas similar to those in which they were currently residing (Noe & Barbar, 1993). In addition, the distance moved was positively related to overall stress (Munton, 1990). Similarly, in the case of frequent business travel, also the perceptions of developmental level of the destination and distance from home are also likely to be related to the stress caused by frequent business travel.

2.1.3 Spillover Theory

Spillover theory suggests that a working spouse's experiences will carry over into the home; likewise, home experiences can influence a person's work life (Crouter, 1984; Piotrkowski, 1979; Aldous, 1969). It states that the relationship between affective responses in one's work life and family life is reciprocal (Leiter & Durup, 1996; Barnett & Marshall, 1992; Crouter, 1984; Piotrkowski, 1979; Aldous, 1969). Spillover occurs when workers carry their positive or negative emotions and attitudes from their work life into their home life (Kelly & Voydanoff, 1985; Piotrkowski, 1979) and when they carry over emotions and attitudes from their home back to the work environment (Belsky, Perry-Jenkins & Crouter, 1985; Crouter, 1984). Studies examining the influence of work on family assume the centrality of work in setting the conditions of family life (Kanter, 1977). However, spillover theory suggests that family also can have an effect on a worker's performance while on the job (in this study, referring to the performance in business travel). This aspect of spillover is not central to this study.

Next, we examine the likely influence of frequent business travel on the family based on the spillover theory and family systems theory. The discussion focuses on the impact on the whole family, the marital relationship, parent-children relationship and filial responsibility.

2.2 The Influence of Frequent Business Travel on the Family

2.2.1 The Relationship between Frequent Business Travel and Family

The frequent movement of business travelers into and out of the family system has the potential to cause stress for their spouses and other family members. According to family system theory, frequent international business travel of a family member is a change that requires the family to restructure, develop, and adapt. If the families can adequately adapt to the absence of the frequent business travelers, then they will maintain harmony and facilitate each member's psychological growth and absence adjustment. As a system, the family's functioning involves all family members; so one individual member could disrupt the balance of other members' relationships. That is to say, each member's actions affect other members within the family system.

The research on the relationship between work and family has been done for decades and an extensive body of knowledge about work-family conflict exists (e.g., Yang, 2000; Mauno, 1999; Vinokur, 1999; Aryee, 1999; Carlson, 1999; Perlow, 1998; Kossek, 1998; Kim, 1998; Kinnunen, 1998; Wilkie et al., 1998; Kinnunen, Gerris and Vermulst, 1996;

Lechner & Greedon, 1994; Barling, 1990; Barrett & Barnch, 1987; Bothius, 1984; Osmond & Hicks, 1979; Allen & Kenveny, 1979). DeFrank et al. (2000) reported that almost 70 percent of business travelers in the US are married and the majority are between 25 and 44. Nearly 75 percent of married travelers feel it is difficult to be away from home for extended periods. Furthermore, this study also reports that family factors, namely marital status, family status and degree of family support, will influence the performance of frequent business travel.

For frequent business travelers, the most important conflict is inter-role conflict. Inter-role conflict occurs when the frequent traveler experiences pressures arising from the performance of different roles (e.g. spouse, employee, mothers) (Greenhaus and Beutell, 1985). Barling (1990) pointed out there are two different approaches to analyze inter-role conflict. The first approach was historical viewpoint, put forward by Hoiahan and Gilbert (1979a, b), to analyze frequent business travel. If we consider the four different roles that the frequent traveler fulfils, namely spouse, employee, parent and self, there are then six different types of inter-role conflict. These six types of inter-role conflict represent all possible conflicts between each of the individual roles, namely spouse vs. traveler, spouse vs. parent, spouse vs. self, traveler vs. parent, traveler vs. self, and parent vs. self. However, subsequent research has suggested that these six areas of inter-role conflict are highly interrelated (Barling, 1986a; Suchet and Barling, 1986). A second approach to analyze the inter-role conflict considers types of conflict with respect to resources that are strained (Greenhaus and Beutell, 1985). Time-based conflict emerges when the frequent business traveler does not have sufficient time to complete the different roles successfully.

Energy-based conflict occurs when the energy required for successful completion of one role are incompatible with those required for successful completion of another role. The third type of inter-role conflict is psychology-based conflict. This occurs when psychological stresses resulting from stressors cause personal distress that there is considerable interference with other functioning.

It is clear that work and family have mutual influence, which may be positive or negative. Previous researchers have identified the potential effects of work spillover on the family. Crouter et al. (1983) examined a variety of family outcomes, ranging from instrumental leisure and social activities to the affective quality of family interaction. Small and Riley (1990) posited four major non-working roles contexts that could be affected by work spillover, the marital relationship, the parent-children relationship, involvement in leisure activities and household responsibilities. Dohrenwens (1974) reported that the state of stress depends on mediation of situational and personal factors (i.e., aspirations, values, cope abilities and biological vulnerabilities) that constitute the context in which the state occurs. In fact, business travel is part of one's job requirements, so we can imagine that business travel will also have spillover effects on the family.

2.2.2 The influence of Frequent Business Travel on Spouses

Some of the past research has focused on the effect of expatriation on the spouse (Shaffer et al., 1999; Caligiuri et al., 1998; Shaffer & Harrison, 1998). Empirical research findings about the relationship between the amounts of time spent at work and marital solidarity

are mixed. Interviews and qualitative studies of wives of those who travel frequently or are away for extended periods demonstrate that the extreme hours that these husbands spend away from home can result in marital strain and loneliness among wives (e.g., Hunter & Nice, 1978; Renshaw, 1976; Hollowell, 1968). The literature on the effects of family separation on marital functioning can be traced at least to the Second World War (Grossenbacher-Boss et al., 1979). Since that time, two forms of husband-related absence have been noted: absence as a short-term, periodic phenomenon, and long-term absence (typically in the military) (Barling, 1990). Aside from the rhetoric concerning the wife as a “corporate casualty” of her executive husband’s job-related absences (e.g., Seidenberg, 1973), it could be predicted either from an open systems approach (Grossenbacher-Boss et al., 1979) or from role theory, that rapid changes (i.e. husband’s work separations and reunions) would impose demands on the family and marriage that necessitate role readjustment, both at the time of departure and return. Some studies (Culbert & Renshaw, 1976) showed that other aspects of marital functioning would also be threatened by business-related travel (e.g. sexual relationship). A number of reports concerning the relationship between job-related husband absence and marital functioning have been reported within the military context. Frances and Gale (1973) speculate that husband absence places a strain on the family relationship in general and the sexual relationship in particular. However, the extent to which the results of the military sample are generalizable to non-military families might be limited because non-military families are more likely to meet each other than military families.

Over 90% percent of Singaporean women place top priority on being a good wife and mother (Quah, 1999). So a study of the impact of frequent business travel on wives is very important because the majority of frequent travelers are male. Chia (2000,1999) pointed out that spouses of frequent business travelers or absent expatriates often engage in role switching between their own role and that of their spouses. Marital conflict, spouse's depression, stricter maternal control when the father was present, increased stress; emotional distance from children are all possible effects of frequent travel on family (Chia, 2000, 1999; Leung, 1992; Barling, 1990). Paerlamn (1970) and MacIntosh (1968) have written about the dysfunctional responses to the spousal separation, including depression, anxiety and psychosomatic illness. Macintosh (1968) reports that separation tended to be more difficult for the wives of younger, less educated, lower rank men. It is also clear that the frequent business travel places additional burdens on spouses by increasing their responsibilities for the household, children and elderly parents.

Therefore, in this study, it is assumed that the frequent business travelers will face conflict in balancing the frequent business travel with their role as spouses. The effects on their spouses may be positive or negative.

2.2.3. The Influence of Business Travel on Children

The importance of parents on the development of children has been the focus of much research. Deater and Scarr (1996) found gender differences in parenting stress among

dual-earner mothers and fathers arising from differences in men's and women's parenting behaviors. About eighty percent of frequent business travelers in Singapore are male. A number of studies have examined the correlation between father involvement and child outcomes. The research, reviewed by Lamb (1987), Radin and Russell (1983), and Snarey (1993, Chapter 6), is generally supportive of the role of fathers. Father involvement and nurture are positively associated with children's intellectual development; this is particularly true when fathers are interested in children's academic outcomes, assisting with homework, and have high educational expectations for their children. In addition, father involvement and nurture are positively associated with children's social competence, internal locus of control, and the ability to empathize. More generally, authoritative parenting (involving warmth and a moderate degree of control) by both parents is associated with psychological and social adjustment among children (Bullers, 1999; Mathijssen, 1997; Rollins & Thomas, 1979).

Studies of adults yield supporting evidence. In a longitudinal analysis of the Berkeley-Oakland Growth study, Block (1971) showed that well-adjusted men and women generally grew up in families in which fathers were warm and involved. Komarovsky (1976) found that female college students experiencing a high level of strain tended to have unfavorable relationships with their fathers. Snarey (1993), using longitudinal data, demonstrated that paternal involvement during childhood is positively related to adult daughters' and sons' educational and occupational mobility. More recently, researchers at the University of Maryland (NICHD, 2000) determined that children who have fathers in

their lives learn better, have higher self-esteem and show fewer signs of depression than children without fathers.

A second form of evidence comes from studies of father absence. Some research, although limited, suggests that such extensive separations of fathers and their children may have costs. Cohen found those young managerial and professional fathers who traveled frequently or worked long hours did not play significant roles as companions and disciplinarians to their children. At the less extreme end of the separation continuum, in an exploratory analysis, Piotrkowski and Stark (1984) found that the greater number of hours working-class fathers worked regularly, the more symptoms of depression appeared among their school-age children. Several British studies found decreased cognitive performance in children whose fathers were frequently away from home (Shinn, 1978). In a review of the literature, Hetherington, Camara, and Featherman (1983) concluded that children in father-absent families score lower than other children, on average, on a measure of academic achievement cognitive ability. More recent studies have yielded similar results (e.g., Mulkey, Crain, & Harrington, 1992). Other research found a heightened risk of delinquency and deviant behavior (Matsueda & Heimer, 1987; Sampson, 1987; Dornbusch et. al., 1985). In addition, adolescents in father-absent families are more likely to drop out of high school or, if they graduate, less likely to go on to tertiary education (Astone & McLanahan, 1991; Keith & Finlay, 1988; McLanahan, 1985). Not all studies are in agreement, and the difference between groups, even when significant, tends to be small. Nevertheless, these studies suggest that fathers' absence is a factor contributing to the lower well-being and academic attainment of children.

A third type of evidence comes from studies that have interviewed children. This research shows that most young children and adolescents feel close to their fathers, admire their fathers, and frequently mention their fathers as sources of practical help, advice and moral support (Amato, 1987; Rutter, 1979). Furthermore, many children of divorce continue to think of their fathers as key figures in their lives, even when they have little contact with them (Wallerstein & Blakesee, 1989). Crotevant and Cooper (1986), for example, predicted adolescents' developing psychological competence as a function of individuation in family relationship. More recently, Levin and Pitt (1995) demonstrated that fathers have a vital influence on the healthy development of their children.

In summary, much literature shows that children benefit from a high level of father involvement, that some children may be disadvantaged when they do not live with their fathers, and that fathers are psychologically salient figures for most children.

The effect of maternal and paternal employment on the children has been studied for a long time. For example, Etaugh (1974) reviewed 53 studies focusing on maternal employment and child behavior reported between 1963 and 1974. The belief that maternal employment exerts a detrimental effect on children's behavior has been widespread and largely unchallenged. In the case of paternal employment, Marshella et al. (1974) hypothesized that father absence exerts an indirect impact on children through its direct effects on the mother's childbearing attitudes and behaviors. As to the influence of maternal employment on the children, Barling (1990) concluded that the time, energy,

involvement and commitment that are demanded by maternal employment are assumed to detract from the time, energy, involvement and commitment required for successful motherhood. In his research of the influence of maternal employment on adolescent achievement, Paulson (1996) concluded that the adolescents' perceptions of their parents' employment behavior are positively related to positive achievement outcomes. Dreman and Hager (1997) reported that mothers would report that their children had the fewest behavioral problems when they perceived high family cohesion and adaptability.

More recently, a growing body of research suggests that many factors influence the development of psychosocial problems among adolescents. These factors include family structure (Salem et al., 1998; Thomas et al., 1996; Zimmerman et al., 1995), parental support (Salem et al., 1998; Thomas et al., 1996; Taylor, 1996; Zimmerman et al., 1995), parental monitoring (Forehand, 1997; Vazsonyi & Flannery, 1997; Chilcoat et al., 1996; Buchanan et al., 1996). These factors influence adolescent behaviors, such as alcohol and substance use, academic performance. Quah (1999) reported that while a majority of Singapore parents were satisfied with the time they spent with their children, about two-fifths of them wished they had more time to spend with their children. Frequent business probably reduces the time the parents spend with their children, leading to lower satisfaction.

Based on the past findings, we expect that frequent business travelers will have conflict in time, energy and psychological concern in attempting to strike a balance in their frequent business travel and caring about their children.

2.2.4. The Influence of Business Travel on Parents

Business travel is likely to affect the parents of travelers in two ways. First, travelers may be less available to interact with or help their parents. Second, if the travelers have children, their parents may have to help care for them.

Some researchers have studied the filial responsibility expectation of older adult parents (Hanson et al., 1983; Seelbach, 1977,1978, 1981 and 1984). They investigated the extent to which parents expect their children to assist them in times of need. The areas of responsibility examined in these studies involved children living near or sharing their home with their parents, frequency of contact, and provision of various forms of emergency assistance. In the case of Singapore, the Ministry of Community Development states (<http://www.gov.sg/mcd>) that children should reciprocate the care and concern shown by their parents and elders by showing respect and deference to them. The Ministry also identifies the Singapore's family values as love, care, concern, mutual respect, filial responsibility, commitment and communication (cited in Chia, 2000). Quah (1999) reported that a large majority of Singaporeans identified filial piety as the most important value to teach their children and most believed that the onus is on the parents to transmit this value. Most parents also felt that it was the child's filial obligation to support and look after their aged parents. This finding shows that the value of filial piety is strong and healthy. The question is how business travel affects the translation of this value into action.

Other studies (e.g., Gattai & Musatti, 1999) have studied the influence of grandparents' (usually the grandmothers') involvement in grandchildren's care on the grandparents. They pointed out that grandmother's involvement in child-care is also likely to involve a variety of psychological and relational aspects. The research result indicates that in the case of a grandmother involved in her young grandchild's care, the definition of the grandparent's role is always an intense psychological experience, with emotional implications and consequences for the grandmother's relations with other members of the family. Both the relationships with the grandchild and the very fact of caring for her/him seem to play an important part in the life of grandmother. At the emotional level, the relationship with the young grandchild provides an opportunity for a new freedom of expression of affection. The experience of grandchild care thus has considerable significance for the grandmother. In sum, the psychological, emotional and relational dynamics involved in grandmother's child-care appear to be complex. According to the research of M. Jendrek (1993), grandparents who care for their grandchildren report less time to do things for fun and recreation, the need to alter routines and plans, less contact with friends, less privacy, less time to get things done and less time for spouse. However, there has been relatively little empirical research describing parent-child interaction during the child's adulthood (Frank et al., 1988; Hagestad, 1987).

Past research (e.g., Quah, 1999) has focused on how the grandparents can help to care for grandchildren. She pointed out that grandparents and family members account for 21.2 percent of all childcare givers for children under twelve. Her study showed that that some

families find that grandparents can help in families cope with work and family, e.g. families reported having meals at parents and in-laws' homes. More researchers may wish to explore the possible roles that family members, the extended family included, can play in helping married couples cope with stress.

It is expected that the parents of frequent travelers are more likely to provide childcare service to their grandchildren. As noted earlier, a large proportion of Singapore parents who have babies ask grandparents to care for their children. So, it is reasonable to assume that the parents of frequent travelers will be more likely to care for their grandchildren. On the other hand, frequent business travelers are so busy with their business travel that they may not enough time, energy and emotional strength to take care of their parents. Travelers may not be available to provide physical and moral support to their parents, for instance, accompanying them to doctors or easing loneliness. Based on the above analysis, we think that frequent business travelers face psychological, energy and time conflicts between their job and caring for their parents.

2.3 Theoretical Model and Hypotheses

2.3.1. Dependent Variable

In this study, the dependent variable is the influence of frequent business travel on the family, including the marital relationship, the parent-child relationship, the filial responsibility, leisure time and home management. All these five concepts are assessed

by influence from the time-based, energy-based and psychological conflict. The measure of this concept is discussed later.

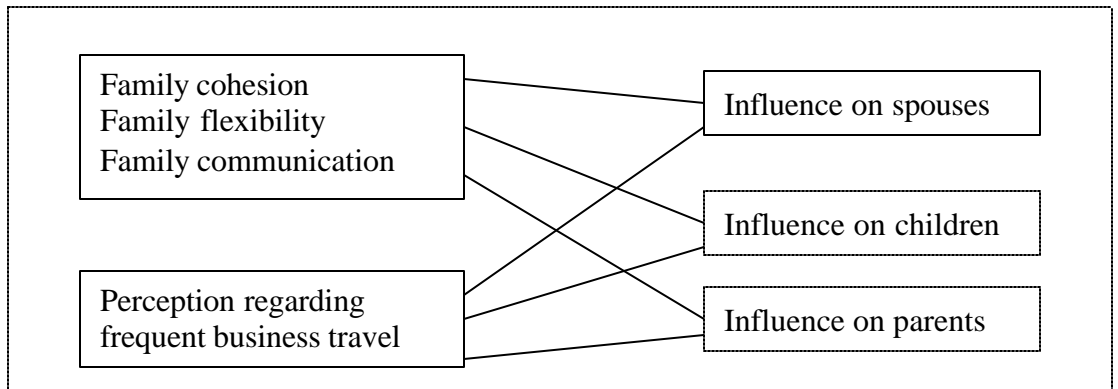
2.3.2. Theoretical model

The model presented in **Figure 2** derived from three theoretical perspectives, namely family systems theory, Double ABCX theory and spillover theory. Figures 2a and 2b graphically depict the connection between family characteristics, perception regarding frequent business travel and the influence of frequent business travel on the family (after the frequency, tenure and other factors have been controlled for) as postulated in this model. In the *direct effects model*, family characteristics and perception of frequent business travel are perceived as having a direct effect on the influence of frequent business travel on family. In the *indirect moderation model*, the perception of frequent business travel impacts the influence of frequent business travel on the family by moderating the relationship between family characteristics and the influence of frequent business travel. According to ABCX theory, these family characteristics will be moderated by the family's perception of the international business travel. Given that this model is based on a family's adaptation to the perceived stressor, the perception of the travel will interact with the family's characteristics. That is, families who perceive frequent business travel as positive require fewer of the positive family characteristics, when compared with those who view the travel as negative, in order to deal with the absence of the frequent traveler. This section of the model on moderated family characteristics (*Figure 2*) is the antecedent (or predictor) of the dependent variable, the influence of frequent business travel on family.

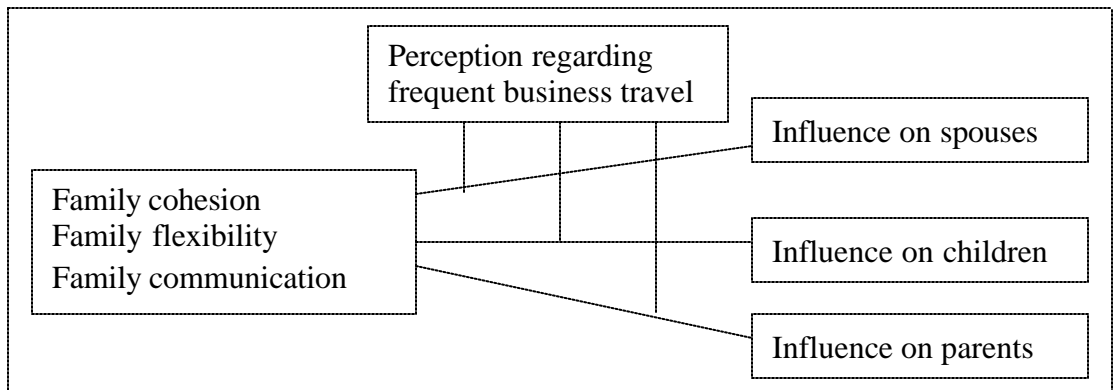
Seven specific hypotheses follow. The first three hypotheses allowed us to test the model regarding the direct effects of family characteristics; the last four hypotheses allowed tests of the direct influence of perception and the indirect moderating effects of perception over the relationship between family characteristics and the influence of business travel on family.

FIGURE 2. Theoretical Model of The Impact of Business Travel on the Family

(2a) The Direct Effects Model



(2b) The Moderation Model



2.3.3. Hypotheses

Hypothesis 1. *The relationship between family cohesion and the influence of frequent business travel is curvilinear.*

Hypothesis 1a. The relationship between family cohesion and the influence of frequent business travel on the spouses is curvilinear, which means that frequent business travel influences the spouses less when family cohesion is at moderate levels.

Hypothesis 1b. The relationship between family cohesion and the influence of frequent business travel on the children is curvilinear, which means that frequent business travel influences the children less when family cohesion is at moderate levels.

Hypothesis 1c. The relationship between family cohesion and the influence of frequent business travel on the parents is curvilinear, which means that frequent business travel influences the parents less when family cohesion is at moderate levels.

Hypothesis 2. *The relationship between family flexibility and the influence of frequent business travel is curvilinear.*

Hypothesis 2a. The relationship between family flexibility and the influence of frequent business travel on the spouses is curvilinear, which means that frequent business travel influences the spouses less when family flexibility is at moderate levels.

Hypothesis 2b. The relationship between family flexibility and the influence of frequent business travel on the children is curvilinear, which means that frequent

business travel influences the children less when family flexibility is at moderate levels.

Hypothesis 2c. The relationship between family flexibility and the influence of frequent business travel on the parents is curvilinear, which means that frequent business travel influences the parents less when family flexibility is at moderate levels.

Hypothesis 3. *The relationship between family communication and the influence of frequent business travel is curvilinear.*

Hypothesis 3a. The relationship between family communication and the influence of frequent business travel on the spouses is curvilinear, which means that frequent business travel influences the spouses less when family communication is at moderate levels.

Hypothesis 3b. The relationship between family communication and the influence of frequent business travel on the children is curvilinear, which means that frequent business travel influences the children less when family communication is at moderate levels.

Hypothesis 3c. The relationship between family communication and the influence of frequent business travel on the parents is curvilinear, which means that frequent business travel influences the parents less when family communication is at moderate levels.

Hypothesis 4. *The more positive the family's perception regarding the influence of frequent business travel, the less frequent business travel influences the family.*

Hypothesis 4a. The more positive the level of perception, the less frequent business travel influences the spouses.

Hypothesis 4b. The more positive the level of perception, the less frequent business travel influences the children.

Hypothesis 4c. The more positive the level of perception, the less frequent business travel influences the parents.

Hypothesis 5. *The relationship between family cohesion and the influence of frequent business travel is moderated by the family's perception regarding the frequent business travel.*

Hypothesis 5a. The relationship between family cohesion and the influence of frequent business travel on the spouses is moderated by the family's perception regarding the frequent business travel.

Hypothesis 5b. The relationship between family cohesion and the influence of frequent business travel on the children is moderated by the perception regarding frequent business travel.

Hypothesis 5c. The relationship between family cohesion and the influence of frequent business travel on the parents is moderated by the family's perception regarding frequent business travel.

Hypothesis 6. *The relationship between family flexibility and the influence of frequent business travel is moderated by the family's perception regarding frequent business travel.*

Hypothesis 6a. The relationship between family flexibility and the influence of frequent business travel on the spouses is moderated by family's perception regarding frequent business travel.

Hypothesis 6b. The relationship between family flexibility and the influence of frequent business travel on the children is moderated by family's perception regarding frequent business travel.

Hypothesis 6c. The relationship between family flexibility and the influence of frequent business travel on the parents is moderated by the family's perception regarding frequent business travel.

Hypothesis 7. The relationship between family communication and the influence of frequent business travel is moderated by family's perception regarding frequent business travel.

Hypothesis 7a. The relationship between family communication and the influence of frequent business travel on the spouses is moderated by family's perception regarding frequent business travel.

Hypothesis 7b. The relationship between family communication and the influence of frequent business travel on the children is moderated by family's perception regarding frequent business travel.

Hypothesis 7c. The relationship between family communication and the influence of frequent business travel on the parents is moderated by family's perception regarding frequent business travel.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Research Instrument

In this study, we used the self-report method. The self-report method is perhaps the most commonly employed clinical and research measurement strategy for the study of relationships (Cromwell, Olson, & Fournier, 1976). Questionnaires have been used primarily to assess whole family functioning, including family stress and coping, marital relationships, and parent-child relationships. Self-report measures are standardized questionnaires that provide information about individual family members' subjective reality or experience, including their perceptions of self and other family members, attitudes regarding family (e.g., roles, values), and satisfaction with family relationships (Huston & Robins, 1982). It requires considerably less training to administer and score questionnaires than observational methods. Thus, self-report methods are often used to assess behaviors not typically displayed in public (Maccoby & Martin, 1983). Finally, self-report methods provide an "insider" view of family relationships (Olson, 1977), and the subjective reality of relationship partners has been demonstrated to be interrelated with their behavioral interaction patterns (Gottman, 1979).

3.2 Sampling Procedures

We administered the survey in early 2001. A diverse sample of 2,000 randomly selected undergraduate business, master of business administration (MBA) and PhD alumni in the Business School of National University of Singapore received surveys at their home addresses. The alumni, who had graduated from 3 to 30 years prior to the date of the study, and their spouses if they had been married, were instructed to complete the surveys and return them directly to the researcher in a postage-paid envelope. Confidentiality of survey responses was ensured to all alumni and respondents. A reminder postcard was mailed three weeks after the initial mailing. As frequent business travelers usually have extremely busy work schedules, a self-administered questionnaire allowed them to complete the survey at their own convenience. This method also made it possible for us to obtain data from travelers' spouses.

Each survey package consisted of a cover letter and two questionnaires: one questionnaire for business travelers (refer to Appendix I), the other for the spouses (refer to Appendix II). Both frequent business travelers and their spouses were encouraged to write their further comments regarding the influence of frequent business travel on the family on the plain page designed specifically for this purpose. The business travelers and their spouses were instructed to complete the surveys independently and not to consult with each other. Self-addressed, postage-paid envelopes were included in the package. In addition, a summary of the findings was offered as an incentive for participation (Dillman, 1978). Respondents who wanted to receive a copy of this summary were asked to fill their address in the back of the envelope.

3.3. Sample Characteristics

Among about 2200 surveys sent, 389 were returned. Using independent sample T test, I did not find significant difference in gender, age, and industry between the respondents and those who did not respond. We excluded those respondents who were not married or did not travel on business, bringing the final sample to 217 business travelers and 159 spouses. The final sample with complete match of both travelers and spouses is 146. The difference between the number of business travelers and that of spouses arose because not all of the spouses returned their questionnaires. Of these 217 business travelers, 66.8% were male and 33.2.4% were female. The fact that sample of business travelers was predominantly male is very likely to be a reflection of the selection policies of companies and employers' perceptions. The majority (68.34%) of business travelers had at least one child and over half had more than one child. Most (80.64%) of the business travelers were between 30 and 40 years old. The majority (76.4%) of spouses had their own career. Almost eighty percent of business travelers had a monthly income over 6,000 Singapore dollars and more than 30% had a monthly income over 10,000 Singapore dollars.

TABLE 1
Characteristics of Business Travelers

CHARACTERISTICS		Frequency	Percentage (%)	Cumulative Percentage (%)
Gender	Male	145	66.82	66.82
	Female	72	33.18	100.00
Number of Children	0	68	31.34	31.34
	1	48	22.12	53.48
	2	76	35.02	88.50
	3	25	11.52	100.0
Citizenship	Singapore citizen	185	85.25	85.25
	Singapore PR	28	12.90	98.15
	Others	4	1.84	100.0
Age	<30	13	5.99	5.99
	30-40	162	74.65	80.64
	>40	42	19.36	100.0
TOTAL		237	100.0	100.0

3.4. Measures for Dependent Variable (The Influence of business travel on the Family)

To reduce common method variance problems with single-source questionnaire data, I collected data from two sources to evaluate the effect of frequent business travel on the family. One was the travelers' self-reported measure and the other was the spouses' assessment. All variables were measured on a five-point Likert scale (the agreement or disagreement of the respondents to the statement), ranging from (1) Strongly Disagree to (5) Strongly Agree.

The items on the influence of frequent business travel on the family were rephrased from the study of spillover of work on the family (Small & Riley, 1990). The influence of frequent business travel was operationalized as a three-dimensional construct (influence on spouses, children and parents). A total 20-item measure of influence on the family was developed. Items were presented as declarative statements and respondents were asked to indicate their agreement with each item.

3.4.1. The influence of business travel on the spouses

The influence of business travel on the spouses was adopted from the five-item Work Version of Work Spillover Scale (Small & Riley, 1990). The answers ranged from “Strongly Disagree” (1) to “Strongly Agree” (5). Examples of the items were “Your travel keeps you from spending time with your spouse” and “Worrying about your business travel is interfering with your relationship with your spouse”. The higher the ratings, the greater the influences of frequent business travel on the spouses. Small and Riley (1990) reported coefficient alphas ranging from 0.75 to 0.93. The alpha for these scales was 0.74 in the sample of business travelers and 0.76 in the sample of spouses.

3.4.2. The influence of business travel on the children

The measure of the influence of frequent business travel on children was adapted from the five-item version of the Work Spillover Scale (Small & Riley, 1990). The answers ranged from “Strongly Disagree” (1) to “Strongly Agree” (5). Examples of the items were “Your

business travel interferes with the amount of time you spend with your child(ren)” And “Because you are often irritable after travel, you are not as good a parent as you would like to be”. The higher the rating, the higher the influence of frequent business travels on the children. Small and Riley (1990) reported coefficient alphas ranging from 0.75 to 0.93. In this study, the alpha value was 0.98 in the sample of business travelers and 0.98 in the sample of spouses.

3.4.3. The influence of business travel on the parents

The measure of the influence of frequent business travel on parent-children relationship was adapted from the five-item version of the Work Spillover Scale (Small & Riley, 1990). Five items were also added to measure travelers’ parents’ emotional responses to their absence. The answers ranged from Strongly Disagree (1) to Strongly Agree (5). Examples of the items were “Your business travel interferes with the amount of time you spend with your parents (including in-laws)” and “Your parents worry about your health and safety when you in travel”. The higher the ratings, the higher the influence of frequent business travels on the parents. Small and Riley (1990) reported coefficient alphas ranging from 0.75 to 0.93. The alpha value was 0.76 in the sample of business travelers and 0.89 in the sample of spouses.

3.5 Measures for Independent Variables

The independent variable family characteristics, namely family cohesion, family flexibility and family communication, are measured with FACESII (Olson et al.1991). The circumplex model of family functioning (Russel, 1979; Sprenkle and Olson, 1978) served as the conceptual basis of the FACES (Family Adaptability and Cohesion Evaluation Scales) that assessed the frequent business travelers and their spouses' perceptions of unity or cohesion within the family. The FACES instrument was recommended as one of several needed to assess a family or marital system (Sawin & Harrigan, 1995). As seen in *Figure 2*, cohesion and adaptability are dual axes, with four ranges on each continuum. The two inner ranges typically indicate high functioning (shown as “balanced”) and the outer two ranges indicate low functioning (shown as “extreme”). The circumplex model consists of a 4×4 matrix with 16 family typologies. Porter (1980) and Bell (1982) developed the prototype of the FACES in order to measure family cohesion and adaptability as required by the circumplex model. The version of the FACES-II that was utilized in this research is a 30-item measure composed of two sub-scales; the cohesion sub-scale consists of 16 items and the adaptability sub-scale, 14 items. The FACES-II was derived from an original list of 90 items through the use of factor analytical procedures. Development of the FACES-II was motivated by the need for a shorter measure with simple sentences and a 5-point response scale that retained empirical reliability as well as construct and discriminant validity. Alpha reliability was high (0.87 for Cohesion; 0.78 for Adaptability; 0.90 for total scale) for FACES II (Olson et. al., 1991). In our study, we edited the measures for three independent variables according to

the functioning of each family characteristic. In this study, respondents' strong agreement to the question was rated as 5 and strong disagreement was rated as 1.

3.5.1 Family Cohesion

The cohesion dimension within the overall family system was adopted from FACES II (Olson et. al, 1983), which covered the following concepts: emotional bonding, family boundaries, coalitions, time, space, friends, decision-making, and interest and recreation. Sample items were: (a) "In your family, it is easy for everyone to express his/her opinion," and (b) "Each family member has input in major family decisions." The answers ranged from Strongly Disagree (1) to Strongly Agree (5). The higher the ratings, the higher the family cohesion. Henry (1994) reported a reliability coefficient of 0.86. In this study, the alpha was 0.76 in the sample of frequent business travelers and 0.87 in the sample of spouses.

3.5.2 Family Flexibility

Family flexibility within the overall family system was adopted from the Family Flexibility Index of FACES II (Olson et. al, 1983), which assessed the frequent business travelers and their spouses' perceptions of their family's ability to changes roles, rules, responsibility, and decision-making patterns to accommodate change. Sample items were (a) "We shift household responsibility from person to person," and (b) " Each family member has input on major family decisions." Henry (1994) reported Cronbach's alpha

coefficient of 0.78. In this study, the alpha was 0.88 in the sample of frequent business travelers and 0.85 in the sample of spouses.

3.5.3 Family Communication

Family communication within the overall family system was adapted from measures of the supportive communication for intimate relationship (Sprecher et al., 1995) and was measured by the following eight items: (a) My family members listen to me when I need someone to talk to; (b) My family members help me to clarify my thoughts; (c) I can state my feelings without my family members' getting defensive; (d) When it comes to having a serious discussion, it seems that my family members and I have little in common (reversed scored); (e) I feel "put-down" in a serious in a serious conversation with my family members; (f) I feel it is useless to discuss something with my family members (reverse scored); (g) My family members and I understand each other completely; and (h) We have an endless number of things to talk about. The higher the score, the higher the family communication. Sprecher et al. (1995) reported a Cronbach's alpha of 0.78. In this study, the alpha was 0.82 in the sample of frequent business travelers and 0.91 in the sample of spouses.

3.6 Measures for Perception of business Travel

Perception of business travel was adapted from earlier questionnaires (Chia, 1999) and measured by the following nine items: (a) I have control over my travel my travel schedules; (b) I see these business trips as a necessary part of my work; (c) It is not a

problem if I cannot go on a scheduled trip because of personal reasons; (d) I enjoy my business trips; (e) I consider the business as part of the perks of my job; (f) I would like to travel more than I do now; (g) Overall, my business-related travels have a positive effect on my job; (h) Overall, my business-related travels have a positive effect on my family life and (i) Overall, my business-related travels have a positive effects on my personal life (e.g. personal health, aspirations, etc.). The questions for the spouses were also designed accordingly. The higher the score, the more positive the perception. In this study, the alpha value was 0.76 in the sample of business travelers and 0.68 in the sample of spouses.

3.7 Measures for Control Variables

Past studies have suggested that certain demographic variables may affect the influence of frequent business travel (e.g., Chia & Yeo, 1999). In this study, these variables were included as control variables. The control variables were frequency of business travel, spousal career status, age of the spouse, age of the business traveler, tenure with organization and years of travel. Age was assessed with an open-ended response format; tenure was measured by asking business travelers to indicate the years they have been working in the company; gender was measured by asking business travelers to indicate whether they were *male (1) or female (0)*; education was measured by having business travelers report their highest level of educational attainment (*1=high school through 5=doctoral degree*); spousal employment status (*0=“spouse not employed,” 1=“spouse employed”*).

3.8 Analysis Techniques

Data analysis was carried out using **SPSS 10.0** for Windows. T-tests were used to test the difference of agreement between frequent business travelers and their spouses regarding the difference of their responses to the same question. Variables were first defined and the data from the respondents were then coded and input into the computer. Data was summarized using descriptive statistics. Moderated regression analysis was used to test all the hypotheses.

CHAPTER FOUR: RESULTS AND ANALYSIS

4.1 Analysis Procedure

In order to eliminate the bias of just collecting data from business travelers, this study collected data from both business travelers and their spouses

4.1.1 Examining the model fit of linear regression

The key to the regression analysis is to check the assumptions of independence of error assumption, normality of the distribution of dependent variables and constant variance. The independence of error assumption was met, as indicated by a Durbin-Watson value of 1.85.

Examining the assumption of normality

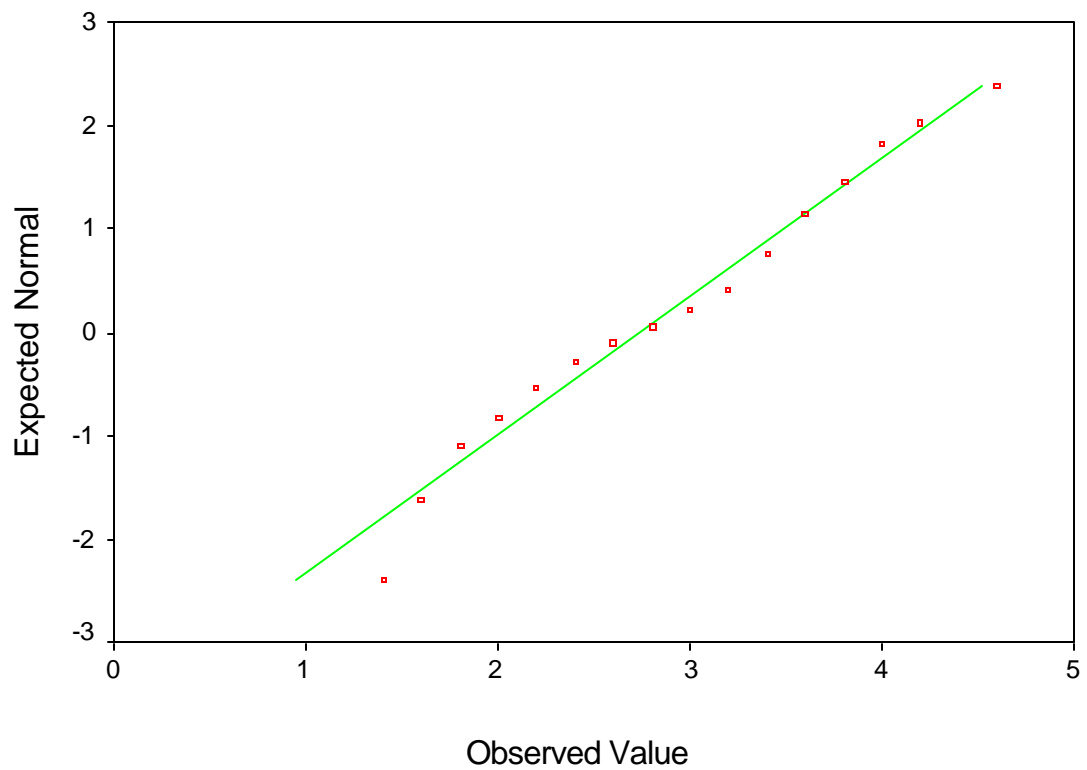
We will use Studentized deleted residuals to look for violations of the regression assumptions because they make it easier to spot unusual points. The Studentized deleted residual for a case is the Studentized residual when the case is excluded from the regression computations. We will refer to Studentized deleted residuals as simply residuals throughout the rest of this paper.

**FIGURE 3. Plot of Studentized Deleted Residuals
(The influence of business travel on the spouses)**

Frequency	Stem & Leaf
3.00	11. 888
18.00	12. 666666666666666666
21.00	13. 44444444444444444444
45.00	14. 1111111111111888888888888888888888888888888888888
12.00	15. 44444444444444
33.00	16. 111111111111111111177777777777777
36.00	17. 3333333333333333888888888888888888888888888888
45.00	18. 4449999999999999
15.00	19. 444444444444444444
6.00	20. 000444
3.00	21. 444

Stem width: .10
Each leaf: 1 case(s)

FIGURE4: Normal Q-Q Plot of the influence on Spouses

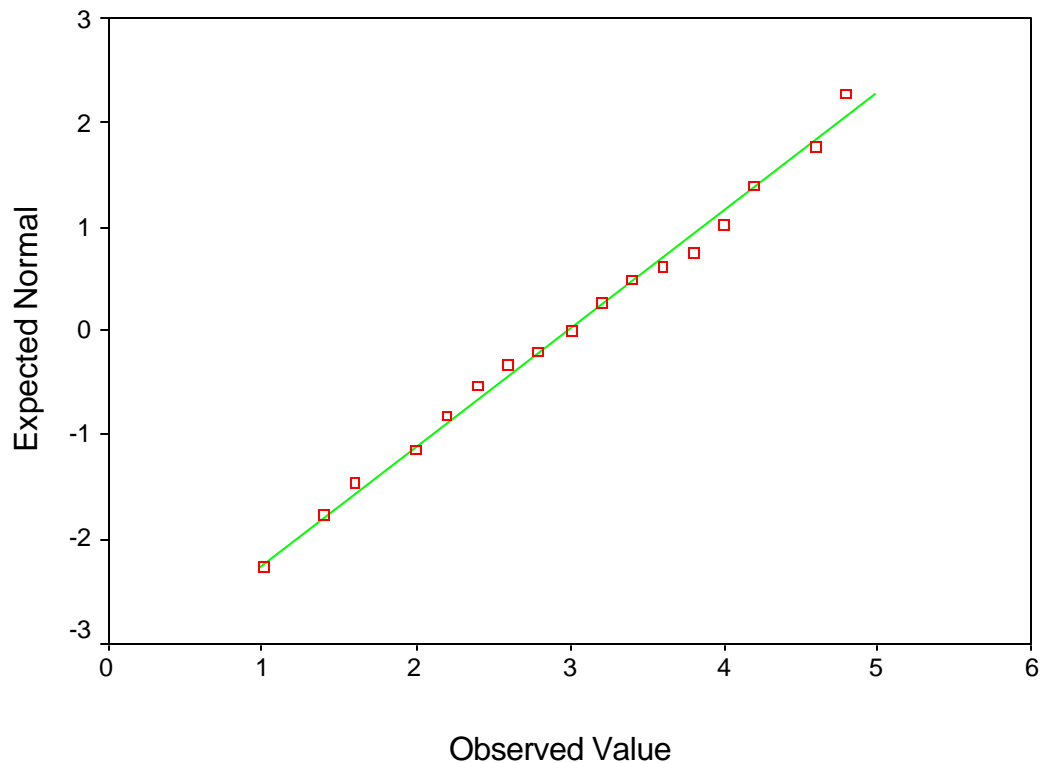


**FIGURE 5. Plot of Studentized Deleted Residuals
(The influence of business travel on the children)**

Frequency	Stem & Leaf
3.00	10. 000
6.00	11. 888888
6.00	12. 666666
.00	13.
27.00	14. 1111111111118888888888888888
15.00	15. 4444444444444444
18.00	16. 11111111777777777
36.00	17. 333333333333333333338888888888888888
15.00	18. 444444444999999
9.00	19. 444444444
24.00	20. 00000000000000004444444444
9.00	21. 444444999

Stem width: .10
Each leaf: 1 case(s)

FIGURE 6: Normal Q-Q Plot of influence on children

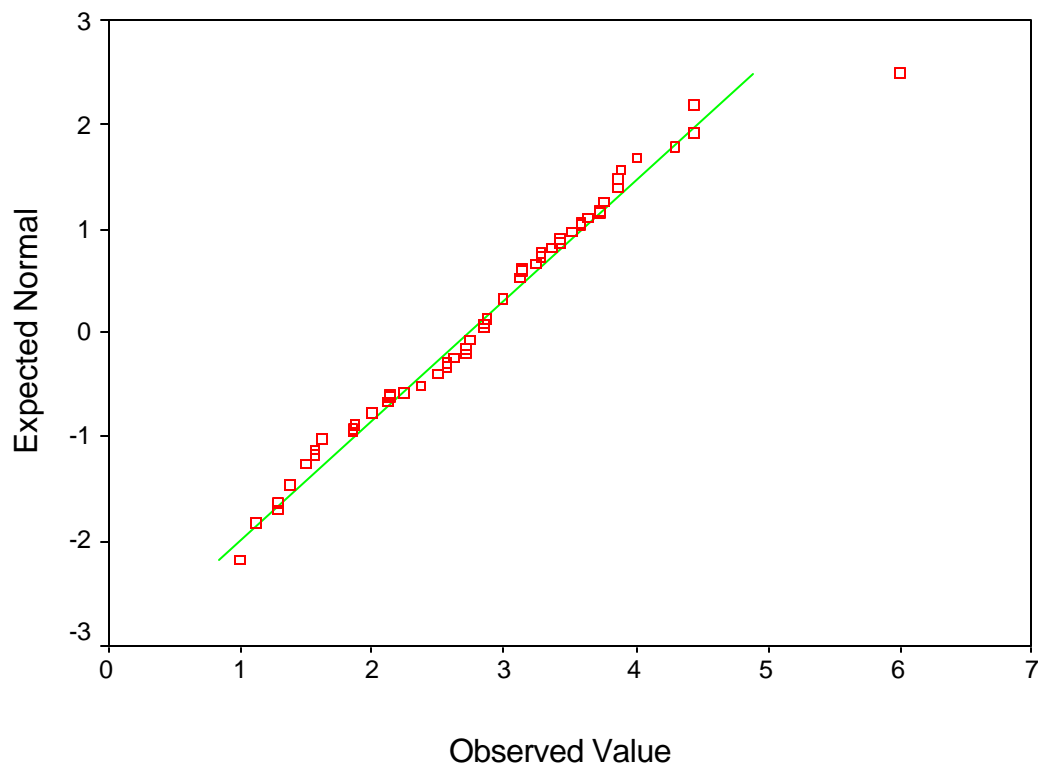


**FIGURE 7. Plot of Studentized Deleted Residuals
(The influence of business travel on the parents)**

Frequency	Stem & Leaf
9.00	10. 0006
12.00	11. 37777
18.00	12. 222555777
9.00	13. 6666
18.00	14. 11115556
21.00	15. 0444888888
48.00	16. 00022244455555559999999
39.00	17. 3333333333333366667
30.00	18. 00011135557778
21.00	19. 023336666
4.00	20. 0&
6.00	21. 000
2.00	Extremes (>=2.45)

Stem width: .10
Each leaf: 2 case(s)
& Denotes fractional leaves.

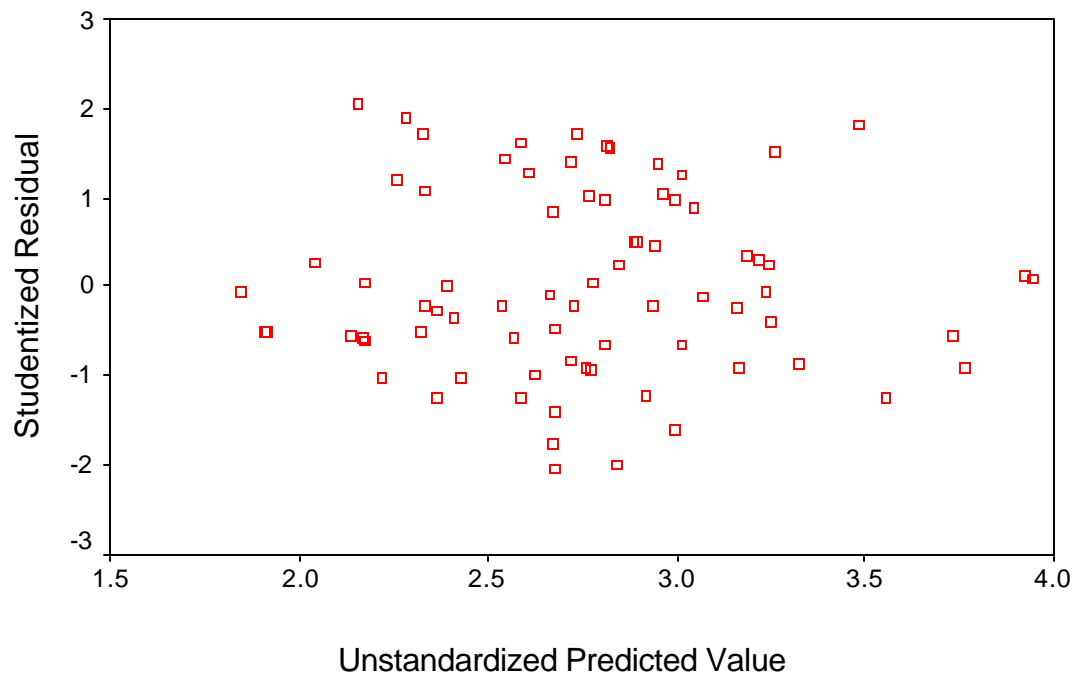
FIGURE 8: Normal Q-Q Plot of influence on parents



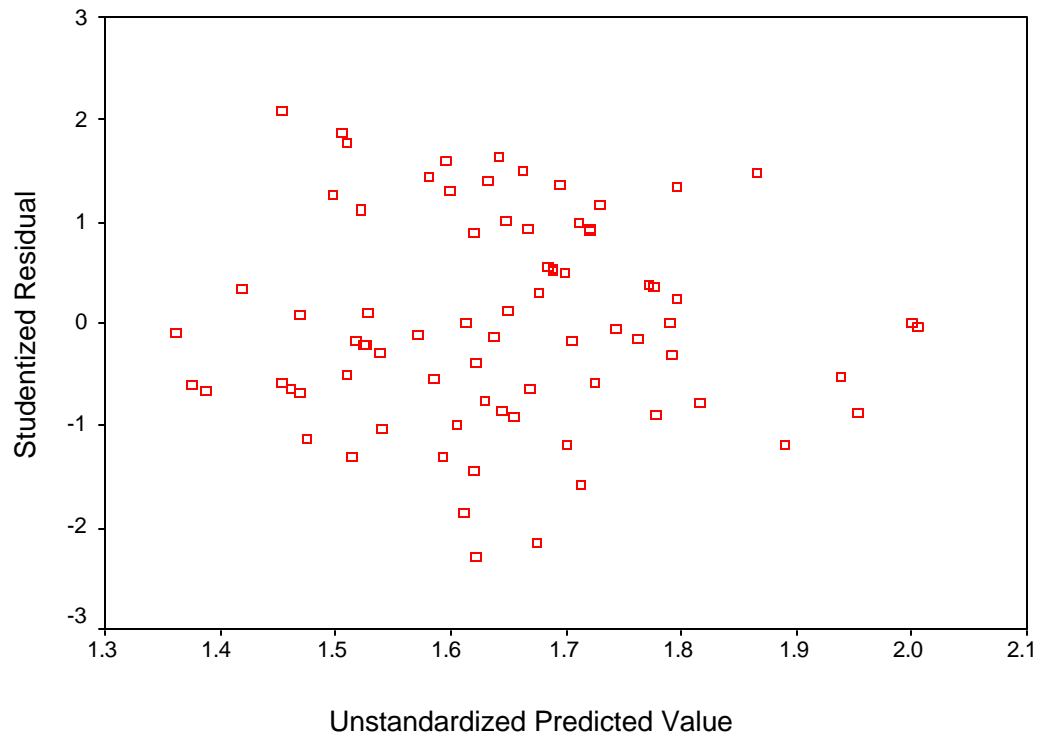
From the stem-and-leaf plot of the residuals of the variables of influence of business travel on the spouses, children and parents in Figure 3, 5 and 7, we see that the shapes of distribution in three figures are symmetric and have a peak. From the Q-Q plots of the residuals of the variables of influence of travel on spouse, children and parents. In Figure 4, 6 and 8, all residuals fall close to the straight line, which shows that they are from a normal distribution. From the above analysis, we know that the dependable variables, square roots of original dependent variables, namely influence on spouses, children and parents, are from a normal population. The assumption of normality is met in this study.

Examining assumption of constant variance

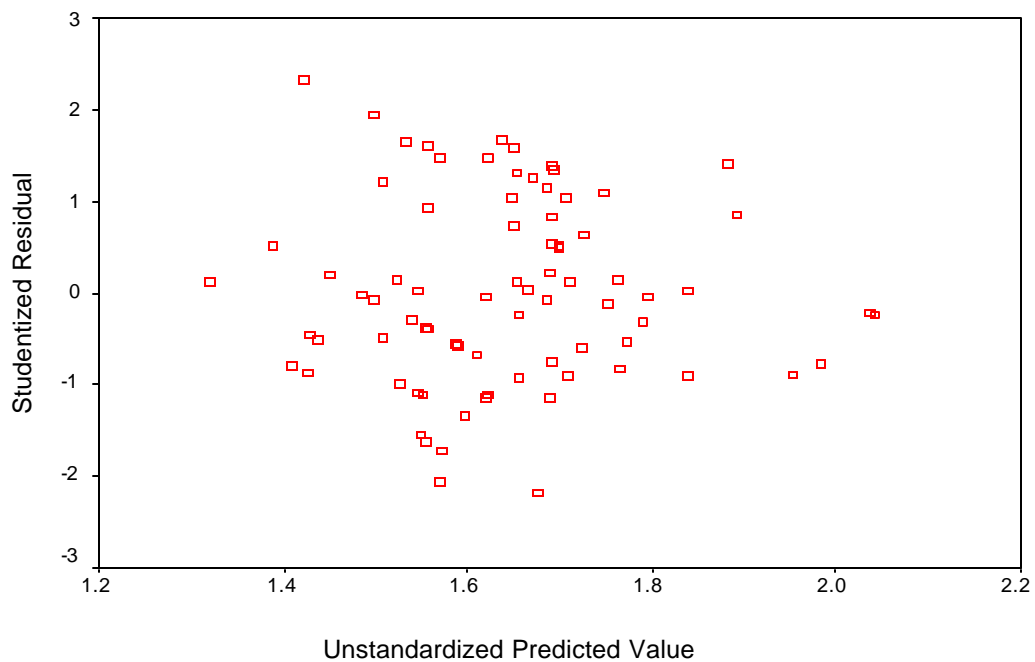
**FIGURE 9: Studentized residuals versus predicted value
(the influence on the spouses)**



**FIGURE 10: Studentized residuals versus predicted value
(The influence on the children)**



**FIGURE 11: Studentized residuals versus predicted value
(The influence on the parents)**



We use scatter plots of residuals to test the constant variance of dependent variables. Figure 9, 10, 11 are the scatter-plots of residuals for impact of business travel on spouses, children and parents. In these figures, most of the residuals fall in a horizontal band around 0. From above, we know that the assumption of constant variance is met.

In sum, all the assumptions of independence of error and homogeneity of variance were met. These point to the appropriateness of OLS regression procedures.

4.2 Tests of hypotheses

In addition to providing descriptive information about the analysis sample, Table 2 presents means, standard deviations and zero-order correlations for the independent, dependent and control variables. We used hierarchical and moderated regression models to examine the hypothesized direct and moderating effects, generating a series of successive models to determine the added value of each step. To examine moderating effects, we generated interaction terms between moderator of interest and perceived influence. In order to test the curvilinear relationships between family cohesion, flexibility and communication and the influence of business travel on the family, we generated the terms of square of family cohesion, square of family flexibility and square of family communication. We can test the curvilinear effects from the difference in the relationship, Moderated regression is considered a relatively conservative method for examining interaction effects, as the interaction terms are tested for significance after all main effects have been entered into the regression equation.

Table 3a and 3b reported the results of the hierarchical and moderated regression models for the influence of business travel on the family members separately for travelers and their spouse. A separate series of regression models was generated for each of the influence of business travel on the family dependent variables (influence on spouse, children and parents). Use of separate models enables us to determine whether there were significant differences of this type. Before interpreting the full-sample equation, we have examined the data for any possible violations of the major assumption of ordinary least squares (OLS) regression. The result of examination showed that all the assumptions were not violated. In order to test the curvilinear relationships, taking family cohesion for example, the coefficients (shown in model 2, in Table 3a & 3b) between the square of family cohesion and the influence of business travel on the family should be expected to be significant. Since the perception of business travel is expected to have a positive moderating effect over the relationships between family cohesion and the influence of the influence of business travel on the family members. So, we expect that the coefficient (shown in model 3 of table 3a and 3b) between the interaction of the square of family cohesion & perception and the influence of business travel would not differ from the coefficient (shown in model 2 of Table 3a and Table 3b) between square of family cohesion and the influence of business travel on family members.

TABLE 2
Descriptive Statistics and Correlations for All Variables ^a

Variable	Mean	S. D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Number of business trips a year	10.08	10.92	1.00																
2. Number of months in traveled per year	2.53	2.67	0.72**	1.00															
3. Average length of travel	1.42	0.65	-0.29**	-0.11*	1.00														
4. Travel outside of Singapore (%)	19.93	21.61	0.61**	0.57**	-0.04	1.00													
5. Tenure (years)	5.38	4.43	-0.09	0.18**	0.20**	.14*	1.00												
6. Impact on spouses	1.64	.230	0.18**	0.03	0.15*	0.20**	-0.09	1.00											
7. Impact on children	1.71	.266	.11	-0.00	0.22**	0.12	-0.13*	.80**	1.00										
8. Impact on parents	1.63	.271	0.18**	-0.09	-0.07	0.06	-0.10	0.47**	0.55**	1.00									
9. Perception of travel	3.31	0.59	-0.12	0.00	-0.00	0.04	0.14*	-0.35**	-0.37**	-0.12*	1.00								
10. Family cohesion	4.02	0.61	-.02	-0.05	-0.24**	-0.07	-0.09	-0.03	-0.09	0.04	-0.07	1.00							
11. Family flexibility	3.98	.73	.09	.016**	-0.17**	0.25**	0.09	0.11	0.12	0.25**	0.04	-0.10	1.00						
12. Family communication	3.88	0.61	-.01	-0.02	-0.05	-0.12	-0.05	-0.11*	-0.18*	-0.05	-0.15*	0.73**	-0.11*	1.00					
13. Gender (1='M', 2='F')	0.65	0.48	-0.21**	0.30**	0.11*	0.10	-0.02	-0.07	-0.13*	-0.02	-0.10	-0.08	0.08	0.10	1.00				
14. Spousal job status (1='Yes', 2='No')	0.76	0.43	-0.22**	-0.44**	0.14*	-0.16*	-0.01	0.06	0.13*	0.10	0.11*	-0.27**	-0.06	-0.25**	-0.41**	1.00			
15. Number of children	1.31	1.05	0.14*	0.23**	-0.14*	0.19**	0.27**	0.01	-.27**	-0.20**	0.04	0.22**	0.06	0.13*	0.30**	-0.37**	1.00		
16. Age	35.96	5.42	0.19*	0.36**	-0.05	0.14**	0.28**	-0.13*	-.24**	-0.19**	0.09	-0.03	0.15*	0.09	0.37**	-0.27**	0.51**	1.00	
17. Salary (thousands S\$)	8.76	2.73	0.29**	0.35**	-0.23**	0.18**	0.01	-.15*	-.28**	-0.29**	0.14*	-0.20**	0.02	0.04	0.25**	-0.17**	0.26**	0.44**	1.00

^a This is the whole sample, including both travelers and their spouse.

For r's in column 7, n=165.

* p<.05

** p<.01-

TABLE 3a (Travelers Sample)
Results of Hierarchical Regression Analysis of Influence of Frequent Business Travel on Family Members ^a

Variable	<u>Influence on spouse</u>			<u>Influence on children</u>			<u>Influence on parents</u>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Control									
Constant	2.27**	2.06**	-14.42**	2.40**	-0.61	-7.80	2.71**	-8.57**	-4.12
Frequency of travel	.32**	0.24**	0.19*	0.24*	0.21 ⁺	-0.01	-0.04	0.22*	0.23*
Total length of travel	-0.26**	-0.21	-0.13	-0.19	-0.14	0.23**	-0.01	-0.04	-0.04
Average length of travel	.24**	0.23**	0.25**	0.32**	0.25*	0.12 ⁺	-0.07	-0.41	-0.03
Time outside Singapore	0.17	0.17**	0.15*	0.07	-0.03	-0.10	-0.07	-0.14 ⁺	-0.15 ⁺
Tenure	-0.08	-0.05	-0.05	-0.13	-0.09	-0.10	-0.03	-0.01	0.00
Gender	-0.10	-0.09	-0.06	-0.03	-0.09	-0.05	0.13 ⁺	0.14 ⁺	0.13 ⁺
Spouse's career status	0.02	0.10	0.11	0.08	0.11	0.09	0.17*	0.21**	0.20**
No of children	0.16*	0.13 ⁺	0.16*	-0.15 ⁺	-0.07	-0.01	-0.12	-0.12	-0.12
Age	-0.08	-0.05	-0.11	-0.02	-0.01	-0.06	-0.06	-0.10	-0.12
Salary	-0.13 ⁺	-0.02	-0.05	-0.25**	-0.21*	-0.37**	-0.39**	-0.34**	-0.36**
Direct Effects									
Cohesion		-0.43	-1.02		3.19**	3.37*		-0.62	-0.35
Cohesion squared		0.69	0.48		2.89*	-3.30*		0.88	1.13
Flexibility		0.80	1.40*		-1.04	-0.37		2.52**	2.55**
Flexibility squared		-0.81	-2.90**		1.03	-1.09		-2.36**	-2.84**
Communication		1.43**	10.43**		-0.43	4.66		2.94	1.56
Communication squared		-1.76**	-10.69**		-0.06	-5.86 ⁺		-3.20**	-2.56
Perception		-0.36**	3.34**		-0.39**	1.02		-0.14*	-1.17
Indirect Effects									
Perception × Cohesion squared			0.87			0.34			-0.53
Perception × Flexibility squared			1.73**			1.69**			0.49
Perception × communication			-13.28**			-7.77 ⁺			1.84
Perception × communication squared			10.22**			6.69 ⁺			-0.69
Adjusted	0.13**	0.29**	0.36**	0.11**	0.30**	0.33**	0.02**	0.02**	0.23**
Δ R ²	0.13**	0.16**	0.06	0.11**	0.19**	0.03**	0.23**	0.23**	0.00**
Model F	4.61**	7.28**	7.12**	4.80**	7.26**	8.67**	6.49**	7.00**	6.09**
^a n = 146 + p<0.10 * p<0.05 ** p<0.01									

TABLE 3b (Spouse Sample)
Results of Hierarchical Regression Analysis of Influence of Frequent Business Travel on Family Members ^a

Variable	<u>Influence on spouse</u>			<u>Influence on children</u>			<u>Influence on parents</u>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Control									
Constant	2.12**	1.96**	-12.32**	1.68**	-0.56	-6.50	2.62**	-5.26**	-3.56
Frequency of travel	.42**	0.22**	0.21*	0.25*	0.15 ⁺	-0.01	-0.05	0.21**	0.18*
Total length of travel	-0.36**	-0.24	-0.13	-0.12	-0.11	0.25**	-0.01	-0.05	-0.04
Average length of travel	.38**	0.34**	0.24**	0.35**	0.27*	0.11 ⁺	-0.03	-0.25	-0.04
Time outside Singapore	0.24	0.15*	0.10*	0.12	-0.03	-0.09	-0.05	-0.14 ⁺	-0.17 ⁺
Tenure	-0.12	-0.09	-0.09	-0.12	-0.09	-0.12	-0.09	-0.03	0.01
Gender	-0.10	-0.12	-0.07	-0.05	-0.09	-0.01	0.11	0.14 ⁺	0.15 ⁺
Spouse's career status	0.02	0.11	0.14	0.09	0.10	0.09	0.13 ⁺	0.24**	0.20**
No of children	0.20**	0.12 ⁺	0.17*	-0.12	-0.07	-0.01	-0.12	-0.10	-0.12
Age	-0.08	-0.07	-0.12	-0.05	-0.01	-0.06	-0.06	-0.10	-0.12
Salary	-0.13 ⁺	-0.06	-0.08	-0.35**	-0.23*	-0.25*	-0.29**	-0.25*	-0.32**
Direct Effects									
Cohesion		-0.32	-0.68		3.19**	3.84*		-0.56	-0.25
Cohesion squared		0.35	0.24		3.01*	-3.30*		0.78	1.01
Flexibility		0.65	1.20*		-0.95	-0.25		2.45**	2.52**
Flexibility squared		-0.74	-2.30*		0.65	-0.68		-2.26*	-2.68**
Communication		1.21**	8.23*		-0.43	4.25		2.94	1.25
Communication squared		-1.36**	-9.25**		-0.06	-5.23 ⁺		-2.50*	-2.25
Perception		-0.26**	-0.36		-0.41**	0.68		-0.15*	-0.85
Indirect Effects									
Perception × Cohesion			0.25			0.20			.24
Perception × Cohesion squared			0.32			0.25			-0.35
Perception × Flexibility squared			1.96*			1.72**			0.25
Perception × communication			-9.03*			-7.36 ⁺			1.56
Perception × communication squared			7.10**			6.25 ⁺			-0.36
Adjusted	0.14**	0.28**	0.33**	0.09**	0.25**	0.28**	0.02**	0.17**	0.18**
Δ R ²	0.14**	0.14**	0.05	0.09**	0.16**	0.03**	0.02**	0.15**	0.01**
Model F	5.61**	6.28**	6.23**	3.98**	5.64**	6.65**	5.45**	6.58**	7.23**

^a n = 146 + p<0.10 * p<0.05 ** p<0.01

4.2.1. Family cohesion and the influence of frequent travel on the family

Hypothesis 1a, 1b and 1c separately suggest that, after factors that relate to the frequency of business travel, years of travel, tenure, time outside Singapore, spousal career status and salary are controlled for, the relationship between family cohesion and the impact of frequent business travel on the spouses, children and parents is curvilinear. Frequency of business travel, length of business travel, percentage of travel outside of Singapore, tenure, gender, spouse's career status, the number of children, age and salary are controlled for in the equation presented as model 1 of the table 3a, 3b, and direct effects associated with family cohesion, flexibility, communication and perception were added to estimate model 2 of the table 3a, 3b. The result did not show find significant relationship between family cohesion and the influence of frequent business travel on the spouses and parents. Thus, Hypothesis 1a and Hypothesis 1c were not supported. However, the coefficient of family cohesion is positive and significant ($p < 0.05$), and the coefficient of family cohesion squared is negative and significant ($p < 0.05$), indicating that both too high and too low levels of family cohesion would increase the influence of frequent business travel on the children. This finding was consistent with Hypothesis 1b.

4.2.2. Family flexibility and the influence of frequent travel on the family

Hypothesis 2a, 2b and 2c state that the relationships between family flexibility and the influence of frequent business travel on spouses, children and parents are curvilinear, which means that frequent business travel influences spouses, children and parents less when family

flexibility is at moderate levels. Frequency of business travel, average length of business travel, percentage of travel outside of Singapore, tenure, gender, spouse's career status, the number of children, age and salary were controlled for in the equation presented as model 1 of the table 3a, 3b, and direct effects associated with family cohesion, flexibility, communication and perception were added to estimate model 2 of the table 3a, 3b. We did not find significant relationships between family flexibility and the influence of business travel on spouses and children, thus both Hypothesis 2a and Hypothesis 2b were not significant. However, consistent with Hypothesis 2c, family flexibility did appear to have a curvilinear relationship with the influence of frequent business on the parents. Thus, Hypothesis 2c was supported.

4.2.3. Family communication and the influence of frequent travel on the family

Hypothesis 3a, 3b and 3c separately suggest that, keeping frequency of business travel, length of business travel, percentage of travel outside of Singapore, tenure, gender, spouse's career status, the number of children, age and salary controlled for, the relationships between family communication and the influence of frequent business travel on spouses, children and parents are curvilinear, which means that frequent business travel influences spouses, children and parents less when family communication is at moderate levels. The coefficients between family communication and the influence of frequent business travel on spouses and parents are both positive and significant ($p < 0.01$), and the coefficients between family communication squared and the influence of frequent business travel on the spouses and

parents are negative and significant ($P < 0.01$). Thus, family communication did appear to have a curvilinear relationship with the influence of frequent business travel on the family members, namely spouses and parents. Thus, both Hypothesis 3a and 3c were supported. However, we did not find the significant curvilinear relationship between family communication and the influence of business travel on children. Thus, Hypothesis 3b was not supported.

4.2.4. Direct effects of perception of business travel on the influence of business travel on the family

Perception of business travel has both direct and indirect effects on the influence of business travel on the family. Hypothesis 4a, 4b and 4c maintain state that the more positive the perception of business travel, the less the impact of business travel on the spouses, children and parents. The coefficients for the relationship between perception and the impact of business travel on spouses ($p < 0.01$), children ($p < 0.01$) and parents ($p < 0.05$) were negative and significant. Thus, Hypothesis 4a, 4b and 4c were supported.

4.2.5. Moderating effects of perception over the relationship between the family characteristics and the impact of business travel on the family

Hypothesis 5a, 5b and 5c posit that the perception of business travelers moderates the relationship of family cohesion and the influence of business travel on spouse, children and parents. Specifically, business travel is supposed to have a less impact on family members when the business is perceived more positively. Thus, we expected the signs of the interaction between family cohesion and perception of frequent business travel and between

family cohesion squared and the perception of frequent business travel would be opposite to those of the main effects of family cohesion and family cohesion squared. In model 3 of Table 3a, 3b, the interaction terms between perception of business travel and family cohesion and between perception of frequent business travel and family cohesion squared were added into the equation. However, the coefficients were not significant across three dependent variables, namely influence on the spouses, children and parents. Thus H5a, H5b and H5c were not supported. This finding indicated that perception of business travel did not have a moderating effect over the relationship between family cohesion and the influence of business travel on the family.

Hypothesis 6a, 6b and 6c maintain that perception of business travel moderates the relationship of family flexibility and the influence of business travel on spouse, children and parents. The interaction terms between perception of business travel and family flexibility and between perception of frequent business travel and family flexibility squared were added into model 3 of Table 3a, 3b. The coefficients for the interaction terms were opposite to the main effects of interaction between perception of business travel and family flexibility and between perception of frequent business travel and family flexibility squared across two dependent variables, namely the influence on the spouses and children, suggesting that the proposed main effects of family flexibility on the impact of business travel on family members are contingent on the perception of business travel. The terms of perception* cohesion and perception * flexibility are not in the table since these two terms were eliminated from the analysis by the SPSS system because of the multi-collinearity between these two terms and others. In order to have a concise understanding, I drew the graph. Taking the family flexibility for example, the equation for the graph is $I = C + aX_1 + b_1X_2 +$

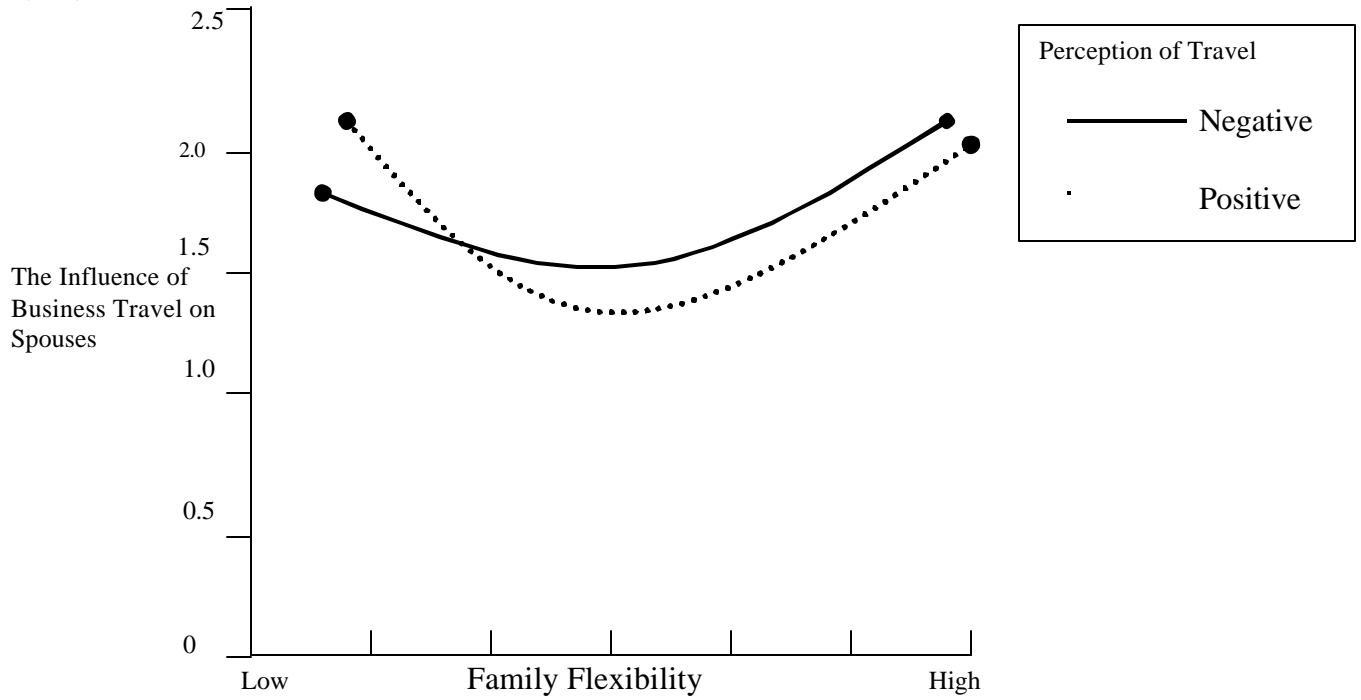
$b_2 * X_2^2 + C_1 X_2 * X_3 + C_2 * \text{square}(X_2) * (X_2)^2$ (C means constant, X1 means perception, X2 means family flexibility, a, b1, b2, c1 and c2 are coefficients). As shown in Figure 12a and 12b, business travel is more likely to have less impact on family members if travelers have a positive perception regarding their business travel. These findings provide support consistent with Hypothesis 6a and 6b. However, we did not find that the interaction between family flexibility and the influence of business travel would have influence on the parents. Thus, Hypothesis 6c was not supported.

Hypothesis 7a, 7b and 7c maintain that perception of business travel moderates the curvilinear relationship of family communication and the influence of business travel on spouse, children and parents. The interaction terms between perception of business travel and family communication and between perception of frequent business travel and family communication squared were added into model 3 of Table 3a, 3b. The coefficients for the interaction terms were opposite to the main effects of interaction between perception of business travel and family communication and between perception of frequent business travel and family communication squared across two dependent variables, namely the influence on the spouses and children, suggesting that the proposed main effects of family communication on the impact of business travel on family members are contingent on the perception of business travel. As shown in Figure 13a and 13b, business travel is more likely to have less impact on the spouses and children if travelers have a positive perception regarding their business travel. These findings provided support consistent with Hypothesis 7a and 7b. However, we did not find that the interaction between family communication and the influence of business travel would have a significant influence on the parents. Thus, Hypothesis 7c was not supported.

FIGURE 12

Moderating Effects of Perception over the Relationship between Family Flexibility and The Influence of Business Travel on the Family

(12a)



(12b)

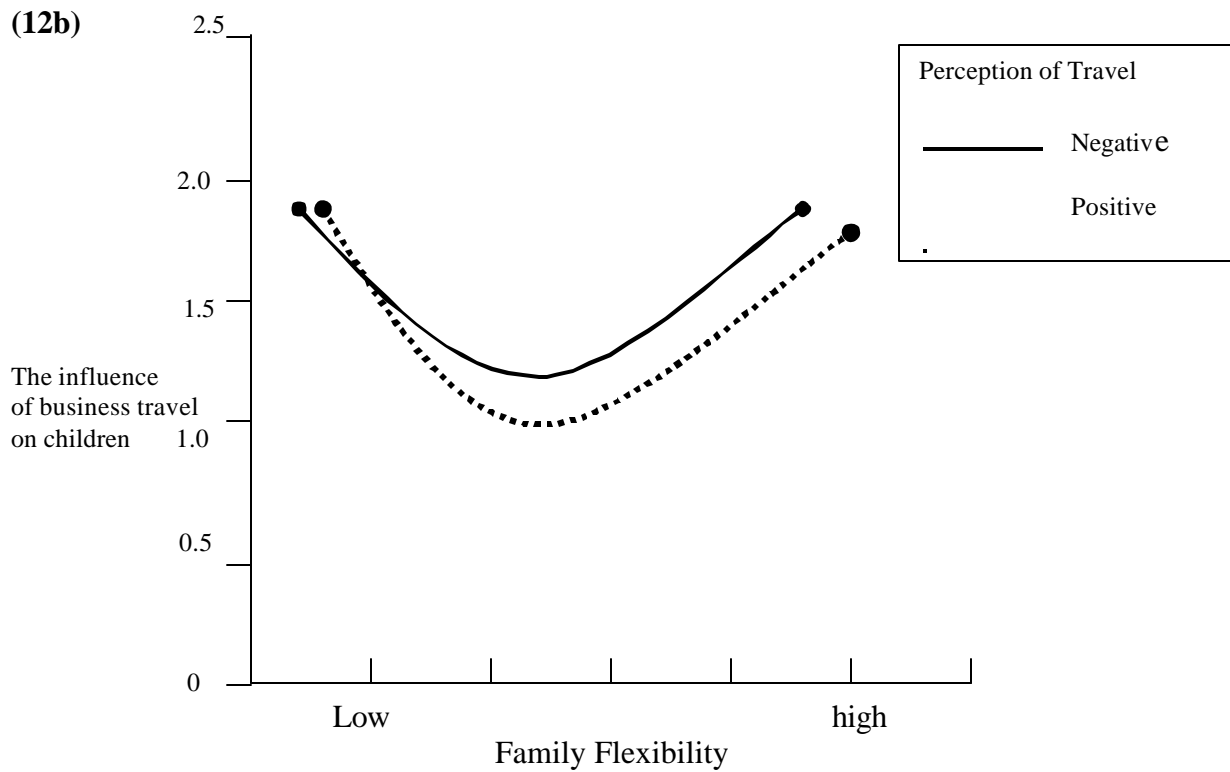
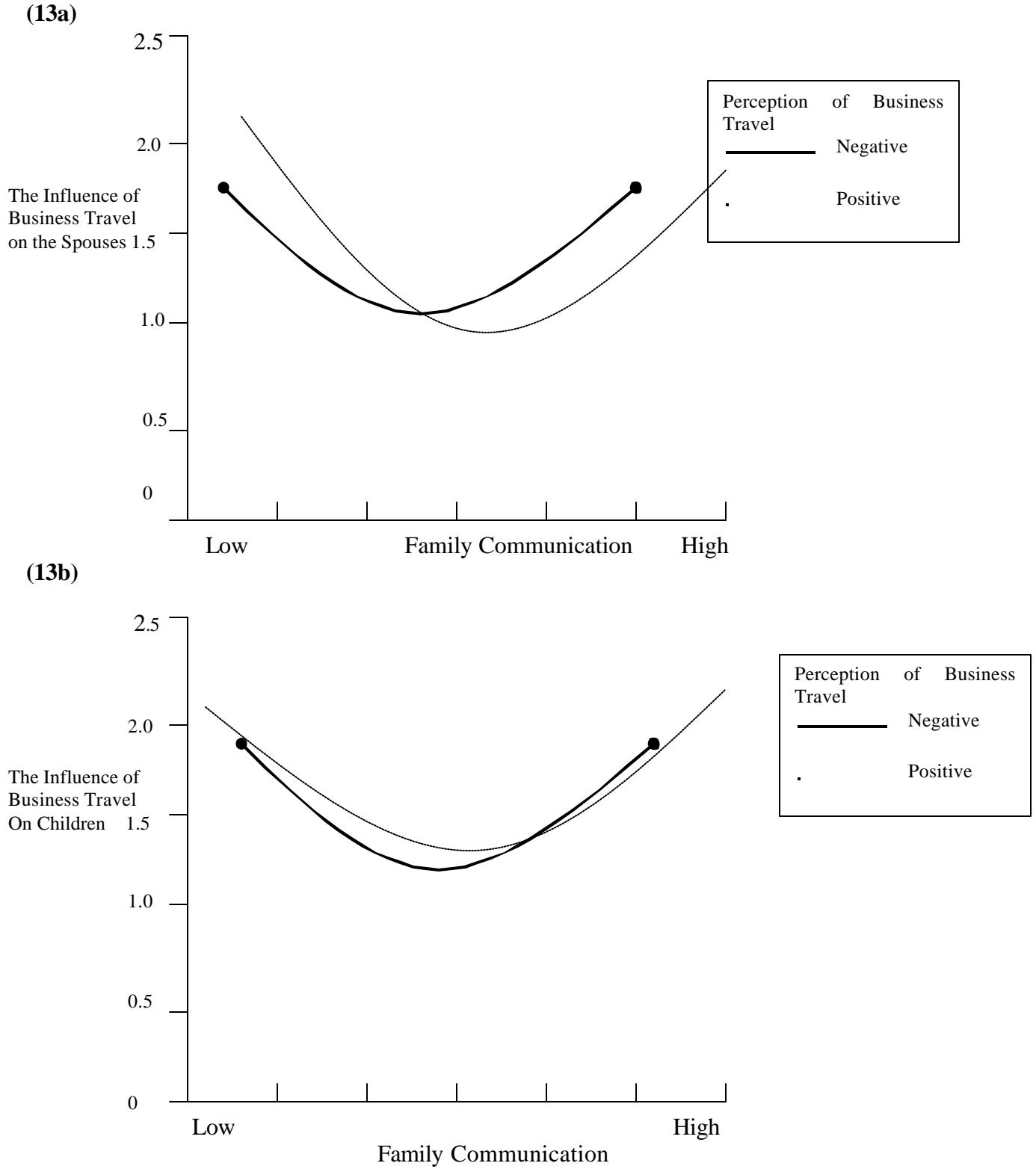


FIGURE 13
Moderating Effects of Perception over the Relationship between Family Communication and The Influence of Business Travel on the Family



4.3 Insights from comments of respondents

At the end of both questionnaires, we asked frequent business travelers and their spouses to comment on the influence of frequent business travel on the spouses, children and parents, governmental and organizational policies. This section presents these specific comments, which include both negative and positive influence of frequent business travel on the family.

4.3.1 The frequency of travel and influence on the family

The following quotations illustrate that moderate frequency of business travel might not have negative impact on the family. However, highly frequent travel will influence the family negatively.

Traveling for jobs assignments at a reasonable percentage (15-20%) enhances or has a positive impact on the family.

Traveling most of the time (more than 40%) even to the most interesting countries for jobs is toiling and has a negative impact on both travelers and family. (People) cannot treat traveling for job as equivalent to a holiday!

There is no doubt that a high frequency of business travel will have impact on the individual and family members negatively.

Absence may make the heart grow fonder for a while, but out of sight out of mind for extended period. Extensive frequent travel will also have negative impact on courting couples.

4.3.2 The positive influence of frequent business travel on the family

Many business travelers added that moderate level of business travel has a positive effect.

One positive aspect of frequent business travel is that you never miss an opportunity to know that your family members are your most important priority.

The wife of one business traveler wrote that:

Definitely business travel is time consuming, exhausting for him (husband) and keeps him away from the family. But he always tries to make up on weekends with the family when returning home. Also when he is on business travel, I get more time for personal work, my own time and myself with my children, which is positive.

Knowledge and experience acquiring from frequent business travel are also regarded as important outcomes of business travel.

Sharing knowledge and experiences on travels with the family increases understanding and curiosity of family members. Also, this experience provides information for planned family holidays. In the area of communication, contact can be maintained via telephone calls, emails, faxes etc. Short trips are less disruptive of family life. Besides, buying gifts from overseas brings some compensation too.

I take photos to show my children the cultural differences between Singapore and the country I travel to.

One positive outcome of business travel is the opportunity of being exposed to different standards of living, which is more often than not, impresses upon us how advanced our (Singapore) economic development is and our comparatively better living standards. For example, if we have seen how Indonesians are living hand-to-mouth everyday, we can appreciate better how fortunate we are, and we can share this with our children and family so that they can appreciate the fact that they do not have to worry about their daily meals (or) getting a job to feed their family.

4.3.3. The negative influence of frequent business travel on the family

One respondent mentioned that the frequent business travel influenced their elderly parents greatly.

I would like to say that I experienced too much stress when my mum was ill during that period and I have to leave that position eventually. Now, there is much mobility amongst young professional families, which means that parents tend to need their children's care, concern and moral support.

As Singapore aims to be a regional center, my brothers and sisters are also positioned overseas in their work. And most of us have ageing parents that makes traveling on the job

very difficult. Most of the jobs require some kind of traveling nowadays. Having day care for parents, especially those in health problems, is my urgent requirement. But, where do we get such help?

The education of children and the anxiety is another concern of business travelers.

At one time, both my wife and I needed to travel. My children have to stop school and stay with my (parents) in-law. I notice my children are spoiled and behave badly.

One of the single biggest influences is the anxiety created in the family for the safety of traveler, especially when travel is to areas where security is not guaranteed.

4.3.4. Ways to reduce the negative influence of frequent business travel on the family

The key to keeping close with your family even when you travel is to make some you never miss an opportunity to let people know they (family members) are your most important priority. We use all kinds of communication: notes, email, voicemail, answering machines, hand phones, daily phone calls to stay in touch with daily details. Even though we are physically far apart, we work to keep our bands strong and connected.

In my opinion, if the frequency of my business travel is high, it would have less opportunity to communicate with my family, but this would not affect my relationship with my family because there are open communications in my family and my family members care for each other from the bottom of our hearts.

4.3.5. Possible roles of government and companies

In addition to providing some theoretical applications for the family systems theory and family stress theory, one of the purposes in this study was to find what kind of role the government could play in dealing with the influence of business travel on the family.

Fortunately, some respondents did propose some interesting points in this important issue.

However, no studies in the west showed such a kind of requirement from the government.

This might demonstrate that Singaporeans were more dependent on the government than westerners do. Some respondents wrote:

Frequently business traveling certainly affects family life. However, this is inevitable for survival as a nation like Singapore. In this case, there are various things that the government can make it easier for this group of people. Some areas where improvement can be made are

- a) National service*
- b) Child care*
- c) Elderly care*
- d) Telecommunications*

One thing I find very appreciative is the family-friendly policies by my employer. For example, we avoid traveling on weekends if possible. Most of our business trips are 3-4 days on average so that I have time to spend with my family on weekends. The second, most importantly, is to have really self-confident, & supportive spouse who gives me the absolute trust and support to pursue what I enjoy to do as a modern career woman.

I hope our government will issue more pro-family incentives for businesswomen like me to allow us to continue contributing to the economy!

In general, our qualitative findings show that too much frequent business travel does affect the family negatively. However, it seems that moderate level of business travel has a positive effect on the family. Findings reflect that family flexibility; cohesion and communication affect the impact of business travel on the family, including spouse, children and parents. It seems that the government may also play a role in helping business travelers to deal with the influence of business travel. .

CHAPTER FIVE: DISCUSSION AND CONCLUSION

5.1 Summary of Findings

The main aim of this study was to determine the effects of family characteristics and perception of business travel on the influence of business travel on the family members, namely spouses, children and parents. Our major findings are that family flexibility directly affects the impact of business travel on parents, that family cohesion has a direct effect on the influence of business travel on the children and that family communication directly affects the influence of business travel on the parents. Perception of business travel directly affects the influence of business travel on spouses, children and parents and indirectly moderates the relationship of family flexibility and the influence of business travel on the family members, including spouses and children, and the relationship between family communication and the influence of business travel on the family members, including spouses and children. However, surprisingly, we did not find that family cohesion was significantly related to the impact of business travel on spouses and parents, nor did we find that perception of business had a moderating effect on the relationship between family cohesion and the influence of business travel on family members, namely spouses, children and parents.

The hypotheses tested in this study were derived mainly from theories developed in the domestic work/family literature in the United States. Three theoretical perspectives formed the foundation for the theoretical model we proposed (which include all the hypothesis): family systems theory (e.g., Hill, 1949; McCubbin & Patterson, 1982; Minuchin, 1974), ABCX theory and spillover theory (e.g., Aldous, 1969; Crouter, 1984; Piotrkowski, 1979).

Hypotheses 1a and 1c, which hypothesize that family cohesion would have a significant curvilinear relationship with the influence of business travel on the spouses and parents were not supported. These findings were not consistent with those of Caligiuri et al. (1998). The possible reasons may be due to the measures and theories were mainly developed and used in the U.S. Past literature suggested that, with a moderate level of family cohesion, the members have better ability to form autonomous bonds with others to cope with the stress from the absence of business travelers. However, in the countries such as Singapore, it is possible that not a moderate but a high level of cohesion is better for family members to cope with stress from business travel. This may be due to the cultural differences in levels of individualism and collectivism. Asians may emphasize more close and cohesive relationships among family members, while Western countries appreciate more individuality and autonomy. Further studies needed to be done to explore this argument. Hypothesis 2b, suggesting that in families with moderate family flexibility the absence of travelers has less influence on the children compared with those families with relatively extreme family flexibility, was supported. This hypothesis suggested that children in those families that possess a moderate family flexibility adjusted better to business travel of family members when compared with those in the families with a relatively extreme family flexibility. These findings show that

children in the families with moderate family flexibility may be more likely to cope with stress stemming from the absence of travelers. Hypothesis 3a and Hypothesis 3c, suggesting that families with moderate family communication have less influence from the absence of travelers on the spouses and parents compared with those families with relatively extreme family communication, were supported. All of the above findings concur with ABCX theory and family systems theory (e.g., Hill, 1949; Minuchin, 1974), for explaining the relationship between family cohesion and family flexibility and the influence of business travel on the family. However, we did not find significant support for H3b regarding the relationship between the moderate family communication and the influence of business travel on the children. Overall, our results suggest that family systems theory and ABCX theory, especially concerning functioning of family flexibility and family communication, developed in western context could also be applicable in Singapore context.

Hypothesis 4a, 4b and 4c were supported. These hypotheses suggested that families that possess a positive perception of business travel adjusted better to the absence of business travelers, which means less impact, when compared with those families with a negative perception of business travel. These results support that families who possess a positive perception of business travel adjusted better to the absence of travelers when compared with those families with a negative perception of the travel. H6a and H6b were also supported. These hypotheses state that the relationships between family flexibility and the influence of business travel on the spouses and children are moderated by the perception of business travelers regarding business travel. H7a and H7b were also supported. These hypotheses state that the relationships between family communication and the influence of business

travel on the spouses and children are moderated by the perception of business travelers regarding business travel. Given that this model is based on a family's adaptation to the perceived stressor, the perception of business travel interacted with the family's characteristics: families that perceived the business travel as "positive" required fewer family coping characteristics when compared with those who viewed the business as "negative," in order to cope with the absence of business travelers. These findings are consistent with ABCX, within family systems theory (e.g., Hill, 1949; Minuchin, 1974), for explaining the process of how business travel influences family members. Consistent with the existing theory, these results suggest that a combination of (A) the stressor the business travel, (B) the family characteristics (e.g., cohesion, flexibility and communication) and (C) the family's perception of business travel, all relate to the influence of business travel on family members. Our findings are also consistent with spillover theory. As spillover theory suggests, we found that business travel influenced the family members. Our test of the overall model provides empirical support for the integration of family systems theory and spillover theory to provide a better understanding of the relationship between family characteristics, the influence of business travel on the family and possible process of family adjustment influence the performance of business travelers, which is not investigated in this study.

5.2 Implications

This study is unique and contributes to the existing theoretical literature in several ways. First, although past studies on business travel have studied the influence of business travel on business travelers (e.g., Chia, 2000), this study tried to find the relationship between family

characteristics and the impact of business travel on the family members, namely spouses, children and parents. Second, most of past studies on the impact of business travel on the family were conducted in the United States and other Western countries. However this study was conducted in Singapore and tested the applicability of Western literature and theories in to a developed Asian country. Third, this study surveyed both travelers and their spouses, which helps to eliminate personal bias during the study.

Our results have unique implications for both researchers and practitioners. Specifically, in terms of research, Caigiuri et al. (1998) and Shaffer et al. (1998) have extensively examined how family characteristics and family structure influence expatriates' decision in international relocation. This study had extended the line of research by considering the influence of family characteristics in the context of business travel. In this study, we found that the more moderate the family flexibility, family communication and perception of business travel, the less impact of business travel on the family members. Our findings about the relationship between family flexibility, communication and the influence of business travel are consistent with traditional theoretical model of family systems and ABCX theory. These findings confirm the past result of studies Caigiuri et al. (1998) and Shaffer et al. (1998). However, we did not find a significant relationship between family cohesion and the impact of business travel on children and parents and found a very marginal influence on spouses. Thus, the applicability of family cohesion and family functioning may be a little different between West and East. According to ABCX theory of Olson et al. (1984), moderate family cohesion is best for family functionality. However, in the East, moderate

family cohesion may not be the best for family functioning. Future studies may be needed to confirm these results.

Given the results of this study, several practical implications can be suggested for multinational organizations sending business travelers abroad for international assignments. Boundaries between work, non-work, and family are no longer as clear or as demarcated as decades ago (Clark, 1996). Our data highlight the importance of HR practitioners addressing non-work-related factors, including those associated with the foreign environment in general as well as the traveler's family. Insofar as we have found that a traveler's family has a strong impact on satisfaction and performance in travel, organizations could do to help the family to cope with the absence of business travelers. Since family flexibility and family communication are significant in influencing the impact of business travel, it will be useful if family members become more aware of family functioning. For example, companies may provide seminars about the importance of family cohesion, communication and flexibility to the family members of frequent business travelers. Companies could provide family members with access to e-mail or other technological advantages such as video-conferencing, enabling them to keep in touch with the frequent travelers. Given the large investment the frequent travelers represent, it seems likely that such programs may justify their costs, through direct and indirect reductions in a traveler's psychological stress and likelihood of assignment failure. The reduction of a traveler's psychological stress may help travelers to outperform than those with more stress. Another practical implication of this study is to develop a variety of programs that would benefit family members at their various stages of development. Past research examining families in the American military suggests that

programs consistent with the family's life cycle are more effective at helping families (e.g., couples, preschool and school children teenage children, newly independent children, and "empty nesters" (McCubbin & Lavee, 1986), Another implication of this study is that multinational organizations should attempt to help their business travelers in providing more organization support to help them to cope with absence of business travelers.

5.3 Limitations and Future Research

A major limitation of this study is that it is cross-sectional in design, resulting in tentative causal conclusion. Thus, many questions remained unanswered. For example, how much change in the degree in influence of frequent travel on the family is caused by the variance in family communication, flexibility and cohesion? How does business travel influence, possibly positively or negatively, family characteristics, namely family cohesion, family flexibility and family communication? Longitudinal studies of business travelers would be very difficult, but are sorely needed. Perhaps structured diary keeping could track the effects of certain variables (e.g., Hackett et al., 1989, cited in Shaffer et al., 1998), as could monthly completion of brief email or internet-based surveys.

Secondly, as with any field study involving survey data, other potential limitations are lack of generalizability and common method variance. For this reason, however, we obtained data from a variety of business travelers in various industries, and from a variety of business travelers (in terms of age, gender and tenure and income level) working in a range of managerial and technical positions. Thus, we are confident our findings are generalizable to

business travelers in Singapore. To address the potential problem of common method variance, we had both spouses and business travelers rating for key variables, family cohesion, flexibility and communication, perception of business travel and impact of business travel on spouse, children and parents, though there is almost no difference between them.

Thirdly, connections between the influence of business travel on the family and the performance and behavior outcome of business travelers remained unexamined. Although performance was not directly measured, this should not undermine the importance of studying the influence from business travel impacts on the success of business travel. Prospective or longitudinal studies, in which the expected duration or task of the business travelers' business travel is measured and observations of performance of business travelers are recorded over the course of business travel, would greatly strengthen this domain of research. We encourage future studies to include direct measures of performance; however, these data may be difficult to collect because most multinational companies do not maintain performance records for their business travelers and it is also difficult to differentiate the performance of routine job or specific travel.

This model was intended to explain only the family-related antecedents to a business traveler's impact of business travel on the family. Other antecedents (i.e., other than the family) should be included in a more comprehensive model predicting the impact of business travel on the family and performance of business travelers in their tasks abroad. For example, successful business travelers tend to share certain personality traits or individual

characteristics (e.g., Spreitzer et al., 1997). These traits and characteristics enable business travelers (a) to be open and receptive to learning new cultures, (b) to handle amounts of stress associated with the ambiguity of their new environments or business travel (Black, 1990). Future studies should examine these and other variables in the context of predicting the influence of business travel on family members and predicting performance of business travel.

A final limitation concerns the measures of the influence of business travel on the family members, including spouses, children and parents. Although our scales did measure the time, energy and psychological conflicts of business travelers, they are not a “rich” operationalization of the amount of the detailed impact and stress encountered by family members of business travelers. More direct measures of time and effort family members spent on dealing with absence of business travelers and the psychological, time and physical conflict family members faced would give us a better idea of how business travel affects families. Additional empirical tests of this theoretical model should be conducted in the future using multi-method ratings of the family characteristics (communication, cohesion, flexibility). In addition to self-report of family members, multiple raters also should be used to gather family-level information to assess the convergence between different sources. For example, clinicians could make professional assessments of the family as a unit, in addition to family members making self-report ratings of their family. Data on the performance of business travelers could also be gathered using a multi-rater approach (e.g., leader ratings, peer ratings and self-ratings). To test the effects of existing family characteristics on the performance of business travelers, a longitudinal design gathering the family characteristics

data prior to frequent business travel and the performance of business travelers after a given time (e.g., half a year) should be used.

5.4 Conclusion

Despite the limitations discussed above, this study suggests that the family characteristics, namely family cohesion, flexibility and communication, explain the variance of the influence of business travel on the family members, including spouses, children and parents. Taken together, the quantitative and qualitative analyses add to the evidence outlined in hypotheses suggesting the relationship between family characteristics and the influence of business travel on the family. The qualitative comments lent support to many of the assertions in quantitative analysis. Generally speaking, both quantitative and qualitative analysis showed that moderate family characteristics, especially family flexibility and family communication, are good for the family members to cope with the stress from the absence of business travelers. It also appears that positive perception of frequent business will reduce the influence of business travel on the family. Moreover, the perception of business travel appears to moderate the relationship between family characteristics, especially family flexibility, and the influence of business travel on the family. However, inconsistent with other past studies, this study did not find significant impact of family cohesion on the influence of business travel on the family and some other arguments, thereby calling into question the universal applicability of some current theories, at least in the context of Singapore.

International mobility has become an important way for both companies and employees to remain competitive. Understanding how family characteristics influence the impact of business travel on the family is not only interesting from an academic perspective, but has practical and policy implications. Given the tremendous impact business travel has on MNCs, travelers' career, and the travelers' families, we believe that there should be further studies of the mutual effects between characteristics of travelers' families and the individual and work-related aspects (e.g., performance, satisfaction) of frequent business travelers.

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Appendix 1:

THE NATIONAL UNIVERSITY of SINGAPORE

Direct phone: 65- 774-7626
E-mail: fbap9444@nus.edu.sg

Department of Management and Organisation
Faculty of Business Administration

Dear NUS Business School Alumni,

With the regionalization and internationalization of the Singapore economy, there are more and more business travelers who go abroad on international assignments. According to the Singapore Immigration & Registration (SIR), there are over 60,000 frequent travelers in Singapore. These business travels could greatly affect the family life of business travelers. However, little is known about how business travel influences the family.

The survey aimed to find out how your work-related travel, if any, influences yourself and your family. Your family is one of a small number in which people are being invited to give their opinion on these important issues. The questionnaire is applicable to you whether or not you travel frequently, because we will be comparing the experiences of those who travel more and those who travel less or not at all. There are two questionnaires. One is for you and the other is for your spouse if you are married. In order that the results will truly reflect the true state of the business travelers in Singapore, it is important that each questionnaire be completed and returned.

You may be assured of complete confidentiality. The envelope has an identification number for mailing purposes only. This is so that we could check your name off of the mailing list when your questionnaire is returned.

The results of this study will be made available to policymakers, academic scholars and interested members of the public. You may receive a summary of results by writing “copy of results required” on the back of envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

We would be glad to answer any question you may have. Please feel free to write, call or email. The telephone number is 774-7626 and email address is fbap9444@nus.edu.sg. We look forward to receiving your completed questionnaires in the earliest time.

Thank you for your precious time and attention.

Sincerely,
Zhu Weichun (MSc Research Scholar)
Dr Audrey Chia (Supervisor in charge)

SECTION A: General Information

In this section, we would ask about the frequency of your business travel.

Q-1. On the average how many business trips do you make in a year?

_____ trips in a year

Q-2. How many months do you spend on business travel in a year?

_____ months in a year.

Q-3. On the average, how long is each of your business trips?

1. Less than 1 week
2. 1 to 2 weeks
3. 2 to 4 weeks
4. More than 4 weeks

Q-4. In an average year, what proportion of your work time is spent *outside* Singapore?

_____ %

Q-5. How long have you worked in your current company?

_____ Years

SECTION B: The Influence of Business Travel on You and Your Family

In this section, statements are given that describe the influence of your business travel on you and your family, including the marital relationship, the parent-child relationship, relationship with your parents. Please circle the number that represents the extent of your agreement or disagreement with each statement.

Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree
1	2	3	4	5

Q-6. First, we would like to know the influence of business travel on your marital relationship.

(If you are not married, please circle **NA** and move to **Q-8**)

	Strongly Disagree		Neutral		Strongly Agree	
6-1. Your travel helps you have a better relationship with your spouse.	1	2	3	4	5	NA
6-2. Your travel keeps you from spending time with your spouse.	1	2	3	4	5	NA
6-3. Worrying about your business travel is interfering with your relationship with your spouse.	1	2	3	4	5	NA
6-4. After business travel, you are often too tired to do things with your spouse.	1	2	3	4	5	NA
6-5. Your marriage suffers because of your business travel.	1	2	3	4	5	NA

Q-7. Second, our concern is about the influence of business travel on your relationship with your child(ren), if any. (If you have no children, please circle **NA** and move to **Q-8**)

	Strongly Disagree		Neutral		Strongly Agree	
7-1. Your business travel makes it hard for you to have a good relationship with your child(ren).	1	2	3	4	5	NA
7-2. Your business travel interferes with the	1	2	3	4	5	NA

amount of time you spend with your child(ren).

- | | | | | | | | |
|------|---|---|---|---|---|---|----|
| 7-3. | Because you are often irritable after travel, you are not as good a parent as you would like to be. | 1 | 2 | 3 | 4 | 5 | NA |
| 7-4. | After business travel, you often do not have the energy to be a good parent. | 1 | 2 | 3 | 4 | 5 | NA |
| 7-5. | You are a better parent because of your business travel. | 1 | 2 | 3 | 4 | 5 | NA |

Q-8. Now, would you please let us know the influence of business travel on your relationship with parents (including in-laws)?

- | | | Strongly
Disagree | Neutral | | | Strongly
Agree | |
|------|---|------------------------------|----------------|---|---|---------------------------|----|
| 8-1. | Your business travel makes it hard for you to have a good relationship with your parents (including in-laws). | 1 | 2 | 3 | 4 | 5 | NA |
| 8-2. | Your business travel interferes with the amount of time you spend with your parents (including in-laws). | 1 | 2 | 3 | 4 | 5 | NA |
| 8-3. | Because you are often irritable after travel, you are not good as a child as you would like to be. | 1 | 2 | 3 | 4 | 5 | NA |
| 8-4. | Your business travel influences your communication with your parents negatively. | 1 | 2 | 3 | 4 | 5 | NA |
| 8-5. | Your business travel makes it difficult for your parents to get your moral support when they need it. | 1 | 2 | 3 | 4 | 5 | NA |
| 8-6. | Your parents worry about your health and safety when you travel. | 1 | 2 | 3 | 4 | 5 | NA |
| 8-7. | When you are away on business travel, your parents feel lonely. | 1 | 2 | 3 | 4 | 5 | NA |
| 8-8. | Your parents have to care for your children when you travel, thus making them physically exhausted. | 1 | 2 | 3 | 4 | 5 | NA |

SECTION C: How do you feel about Your Business Travel?

Q-9. Another important purpose of this study is to learn more about how business travelers in Singapore feel about their business travel. Please circle the number that represents the extent of your agreement or disagreement with each statement.

	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree		
	1	2	3	4	5		
			Strongly Disagree	Neutral	Strongly Agree		
9-1.	You have control over your business travel schedules.	1	2	3	4	5	NA
9-2.	You see these business trips as a necessary part of your work.	1	2	3	4	5	NA
9-3.	It is not a problem if you cannot go on a scheduled trip because of personal reasons.	1	2	3	4	5	NA
9-4.	You enjoy your business trips.	1	2	3	4	5	NA
9-5.	You consider the business trips as part of the perks of your job.	1	2	3	4	5	NA
9-6.	You would like to travel more than you do now.	1	2	3	4	5	NA
9-7.	Overall, your business-related travels have a positive effect on your job.	1	2	3	4	5	NA
9-8.	Overall, your business-related travels have a positive effect on your family life.	1	2	3	4	5	NA
9-9.	Overall, your business-related travels have a positive effect on your personal life (e.g., personal health, aspirations, etc.).	1	2	3	4	5	NA

SECTION D: How Do You Feel About Your Family?

In this section, we would like to find out more about your family characteristics. Please circle the number that represents the extent of your agreement or disagreement with each statement.

Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree
1	2	3	4	5

Q-10. The question is about how your family adapts to changes (Please circle the number).

	Strongly Disagree	Neutral	Strongly Agree
10-1. In your family, it is easy for everyone to express opinions.	1	2	NA
10-2. Each family member has input in major family decisions.	1	2	NA
10-3. Your family members discuss problems and feel good about the solutions.	1	2	NA
10-4. It is easy to know what the rules are in your family.	1	2	NA
10-5. Your family tries new ways of dealing with problems.	1	2	NA
10-6. In your family, everyone shares responsibilities.	1	2	NA

Q-11. The question is about cohesion in your family (Please circle the number).

	Strongly Disagree	Neutral	Strongly Agree
11-1. Your family members are supportive of each other during difficult times.	1	2	NA
11-2. Your family does things together.	1	2	NA
11-3. Family members know each other's close friends.	1	2	NA

11-4.	Family members consult other family members on their decisions.	1	2	3	4	5	NA
11-5.	Family members feel very close to each other.	1	2	3	4	5	NA
11-6.	Family members go along with what the family decides to do.	1	2	3	4	5	NA
11-7.	Family members like to spend their free time with each other.	1	2	3	4	5	NA
11-8.	Family members share interests and hobbies with each other.	1	2	3	4	5	NA

Q-12. The question is about communication in your family (Please circle the number).

		Strongly Disagree		Neutral		Strongly Agree	
12-1.	Your family members listen to you when you need someone to talk to.	1	2	3	4	5	NA
12-2.	Your family members help you to clarify your thoughts.	1	2	3	4	5	NA
12-3.	You can state your feelings without your family members' getting defensive.	1	2	3	4	5	NA
12-4.	You feel it is useless to discuss things with your family members.	1	2	3	4	5	NA
12-5.	Your family members and you understand each other completely.	1	2	3	4	5	NA
12-6.	You and your family member have an endless number of things to talk about.	1	2	3	4	5	NA

SECTION E: DEMOGRAPHICS

Finally, we would like to ask some questions about you for statistical purposes. Please check (✓) the appropriate response or fill in the blank as requested.

Q-13. Your sex. (Circle number of your answer)

1. Male

2. Female

Q-14. Your present marital status. (Circle number)

- 1. Never Married
- 2. Married
- 3. Widowed
- 4. Divorced
- 5. Separated

If you are not married,
please go to the next

If you are widowed,
divorced or separated,
please go to **Q-16** on this
page

Q-15. If you are married, does your spouse work?

- 1. Yes (Occupation _____)
- 2. No

Q-16. **Number of children** you have in each age group. (If none, write "0")

Number of children

- _____ aged 5 and under
- _____ aged 6 to 12
- _____ aged 13 to 18
- _____ aged 19 to 24
- _____ aged 25 and over

Q-17. Do you have help with childcare?

- 1. Yes _____ () from parents (including in-laws)
- _____ () from other family members
- 2. No _____ () from maids
- 3. NA _____ () from others (Specify: _____)

Q-18. Your age: _____ Years

Q-19. What is your gross monthly income from all sources? (Circle number)

1. Less than \$2,000
2. \$2,000 – \$3,999
3. \$4,000 – \$5,999
4. \$6,000 – \$7,999
5. \$8,000 – \$9,999
6. \$10,000 or above
7. NA

Q-20. Which is the highest level of education that you have completed? (Circle number)

1. Bachelor Degree
2. Masters Degree
3. Ph.D. Degree
4. Others (specify) _____

Q-21. What is your nationality? (Circle number)

1. Singaporean citizen
2. Singaporean PR
3. Others (specify) _____

Q-22. What is your ethnic background? (Circle number)

1. Chinese
2. Malay
3. Indian
4. Others (specify) _____

Q-23. What is your religion? (Circle number)

1. Buddhism/Taoism/Shenism
2. Christianity
3. Islam
4. Hinduism
5. Freethinker/Non-believer
6. Others (specify) _____

Is there anything else you would like to tell us about the influence of your business travel on your family? If so, please use this space for that purpose.

Any other comments that you think may help us in future efforts to understand and deal with the impact of business travel on the family will be appreciated.

Your contribution to this effort is very greatly appreciated. If you would like to have a summary of results, please print your name and address on the back of the return envelope (not on the questionnaire). We will see that you receive it.

APPENDIX 2:

THE NATIONAL UNIVERSITY
of SINGAPORE

Direct phone: 65- 774-7626
E-mail: fbap9444@nus.edu.sg

Department of Management and Organisation
Faculty of Business Administration

Dear Participant,

With the regionalization and internationalization of the Singapore economy, there are more and more business travelers who go abroad on international assignments. According to the Singapore Immigration & Registration (SIR), there are over 60,000 frequent travelers in Singapore. These business travels could greatly affect the family life of business travelers. However, little is known about how business travel influences the family.

The survey aimed to find out how your spouse's work-related travel, if any, influences yourself and your family. Your family is one of a small number in which people are being invited to give their opinion on these important issues. In order that the results will truly reflect the true state of the business travelers in Singapore, it is important that each questionnaire be completed and returned.

You may be assured of complete confidentiality. The envelope has an identification number for mailing purposes only. This is so that we could check your name off of the mailing list when your questionnaire is returned.

The results of this study will be made available to policymakers, academic scholars and interested members of the public. You may receive a summary of results by writing "copy of results required" on the back of envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

We would be glad to answer any question you may have. Please feel free to write, call or email. The telephone number is 774-7626 and email address is fbap9444@nus.edu.sg. We look forward to receiving your completed questionnaires in the earliest time.

Thank you for your precious time and attention.

Sincerely,

Zhu Weichun (MSc Research Scholar)
Dr Audrey Chia (Supervisor in charge)

SECTION A: The Influence of Your Spouse's Business Travel on You and Your Family

In this section, statements are given that describe the influence of your spouse's business travel on you and your family, including the marital relationship, the parent-child relationship, relationship with your parents. Please circle the number that represents the extent of your agreement or disagreement with each statement.

Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree
1	2	3	4	5

Q-6. First, we would like to know the influence of your spouse's business travel on your marital relationship.

Strongly Agree		Neutral					Strongly Disagree
6-1. Your spouse's travel helps him/her have a better relationship with you.	1		2	3	4	5	NA
6-2. Your spouse's travel keeps him/her from spending time with you.	1		2	3	4	5	NA
6-3. Your spouse's worrying about business travel is interfering with his/her relationship with you.	1		2	3	4	5	NA
6-4. After business travel, your spouse is often too tired to do things with you.	1		2	3	4	5	NA
6-5. Your marriage suffers because of your spouse's business travel.	1		2	3	4	5	NA

Q-7. Second, our concern is about the influence of your spouse's business travel on your child(ren), if any. (If you have no children, please circle **NA** and move to **Q-8**)

Strongly Agree		Neutral					Strongly Disagree
7-1. Your spouse's business travel makes it hard for him/her to have a good relationship with your child(ren).	1		2	3	4	5	NA
7-2. Your spouse's business travel interferes with the amount of time he/she spends with your child(ren).	1		2	3	4	5	NA
7-3. Because your spouse is often irritable after travel, he/she is not as good a parent as he/she	1		2	3	4	5	NA

would like to be.

- | | | | | | | |
|---|---|---|---|---|---|----|
| 7-4. After business travel, your spouse often does not have the energy to be a good parent. | 1 | 2 | 3 | 4 | 5 | NA |
| 7-5. Your spouse is a better parent because of his/her business travel. | 1 | 2 | 3 | 4 | 5 | NA |

Q-8. Now, would you please let us know the influence of your spouse's business travel on his/her relationship with your parents (including in-laws)?

- | | Strongly Agree | | | | | Neutral | | | | | Strongly Disagree | |
|---|-----------------------|---|---|---|---|----------------|--|--|--|--|--------------------------|--|
| 8-1. Your spouse's business travel makes it hard for him/her to have a good relationship with your parents (including in-laws). | 1 | 2 | 3 | 4 | 5 | NA | | | | | | |
| 8-2. Your spouse's business travel interferes with the amount of time he/she spends with your parents (including in-laws). | 1 | 2 | 3 | 4 | 5 | NA | | | | | | |
| 8-3. Because your spouse is often irritable after travel, he/she is not good as a child as he/she would like to be. | 1 | 2 | 3 | 4 | 5 | NA | | | | | | |
| 8-4. Your spouse's business travel influences his/her communication with your parents negatively. | 1 | 2 | 3 | 4 | 5 | NA | | | | | | |
| 8-6. Your spouse's business travel makes it difficult for your parents to get his/her moral support when they need it. | 1 | 2 | 3 | 4 | 5 | NA | | | | | | |
| 8-7. Your parents worry about your spouse's health and safety when he/she travels. | 1 | 2 | 3 | 4 | 5 | NA | | | | | | |

8-8. When your spouse is on business travel, your parents feel lonely. 1 2 3 4 5 NA

8-9. Your parents have to care for your children when your spouse travels, thus making your parents physically exhausted. 1 2 3 4 5 NA

SECTION B: How do you feel about Your Spouse's Business Travel?

Q-9. Another important purpose of this study is to learn more about how you feel about your spouse's business travel. Please circle the number that represents the extent of your agreement or disagreement with each statement.

	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	
	1	2	3	4	5	
	Strongly Agree		Neutral			Strongly Disagree
9-1. Your spouse has control over his/her business travel schedules.	1	2	3	4	5	NA
9-2. Your spouse sees these business trips as a necessary part of his/her work.	1	2	3	4	5	NA
9-3. It is not a problem if your spouse cannot go on a scheduled trip because of personal reasons.	1	2	3	4	5	NA
9-4. Your spouse enjoys his/her business trips.	1	2	3	4	5	NA
9-5. Your spouse considers the business trips as part of the perks of his/her job.	1	2	3	4	5	NA

9-6. Your spouse would like to travel more than he/she does now.	1	2	3	4	5	NA
9-7. Overall, your spouse’s business-related travels have a positive effect on his/her job.	1	2	3	4	5	NA
9-8. Overall, your spouse’s business-related travels have a positive effect on his/her family life.	1	2	3	4	5	NA
9-9. Overall, your spouse’s business-related travels have a positive effect on his/her personal life (e.g., personal health, aspirations, etc.).	1	2	3	4	5	NA

SECTION C: How Do You Feel About Your Family?

Q-10. The question is about how your family adapts to changes (Please circle the number).

Strongly Agree	Neutral					Strongly Disagree	
10-1. In your family, it is easy for everyone to express opinions.	1	2	3	4	5	NA	
10-2. Each family member has input in major family decisions.	1	2	3	4	5	NA	
10-3. Your family members discuss problems and feel good about the solutions.	1	2	3	4	5	NA	
10-4. It is easy to know what the rules are in your family.	1	2	3	4	5	NA	
10-5. Your family tries new ways of dealing with problems.	1	2	3	4	5	NA	
10-6. In your family, everyone shares responsibilities.	1	2	3	4	5	NA	

Q-11. The question is about cohesion in your family (Please circle the number).

Strongly **Strongly**

Agree	Neutral					Disagree	
11-1. Your family members are supportive of each other during difficult times.	1	2	3	4	5	NA	
11-2. Your family does things together.	1	2	3	4	5	NA	
11-3. Family members know each other's close friends.	1	2	3	4	5	NA	
11-4. Family members consult other family members on their decisions.	1	2	3	4	5	NA	
11-5. Family members feel very close to each other.	1	2	3	4	5	NA	
11-6. Family members go along with what the family decides to do.	1	2	3	4	5	NA	
11-7. Family members like to spend their free time with each other.	1	2	3	4	5	NA	
11-8. Family members share interests and hobbies with each other.	1	2	3	4	5	NA	

Q-12. The question is about communication in your family (Please circle the number).

Strongly Agree	Neutral					Strongly Disagree	
12-1. Your family members listen to you when you need someone to talk to.	1	2	3	4	5	NA	
12-2. Your family members help you to clarify your thoughts.	1	2	3	4	5	NA	
12-3. You can state your feelings without your family members' getting defensive.	1	2	3	4	5	NA	
12-4. You feel it is useful to discuss things with	1	2	3	4	5	NA	

your family members.

12-5. Your family members and you understand each other completely. 1 2 3 4 5 NA

12-6. You and your family member have an endless number of things to talk about. 1 2 3 4 5 NA

SECTION D: DEMOGRAPHICS

Q-13. Your sex. (Circle number of your answer)

- 3. Male
- 4. Female

Q-18. Your age: _____ Years

Q-19. What is your gross monthly income from all sources? (Circle number)

- 1. Less than \$2,000
- 2. \$2,000 – \$3,999
- 3. \$4,000 – \$5,999
- 4. \$6,000 – \$7,999
- 5. \$8,000 – \$9,999
- 5. \$10,000 or above
- 6. NA

Q-20. Which is the highest level of education that you have completed? (Circle number)

- 1. Undergraduate degree
- 2. Master Degree

3. Ph.D. Degree
4. Others (specify) _____

Q-21. What is your nationality? (Circle number)

1. Singaporean citizen
2. Singaporean PR
3. Others (specify) _____

Q-22. What is your ethnic background? (Circle number)

1. Chinese
2. Malay
3. Indian
4. Others (specify) _____

Q-23. What is your religion? (Circle number)

1. Buddhism/Taoism/Shenism
2. Christianity
3. Islam
4. Hinduism
5. Freethinker/Non-believer
6. Others (specify) _____

Is there anything else you would like to tell us about the influence of your spouse's business travel on your family? If so, please use this space for that purpose.

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