



RELATIONSHIP BETWEEN STRESSORS AND
PSYCHOSOMATIC CONDITIONS IN
JAPANESE WIVES RESIDING
IN BANGKOK

KIMIKO TAKEDA

A Thesis Submitted in Partial
Fulfillment of the Requirements
for the Degree of

MASTER OF SCIENCE

Department of Counseling Psychology
ASSUMPTION UNIVERSITY

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RELATIONSHIP BETWEEN STRESSORS AND PSYCHOSOMATIC CONDITIONS IN JAPANESE WIVES RESIDING IN BANGKOK

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103 Pages

AUGUST 1998

The purpose of the study was to find the relationship between stressors and psychosomatic conditions of Japanese wives who are temporarily living in Bangkok due to their husband's overseas assignment. The levels of wives' physical and mental conditions were observed in terms of existence of degree of stressful situations or events such as availability of a Thai maid, availability of a meeting held for wives whose husbands are working for the same company, existence of close Japanese friends, burden of child care, communication fluency in the Thai language, length of hours for a woman herself, satisfactory level of husband-wife relationship and length of stay in Thailand.

The respondents are 315 Japanese wives who are married to Japanese husbands and had at least one child aged 3 or less than 3 years old. The Cornell Medical Index (CMI) was utilized as an instrument to measure psychosomatic conditions.

The findings suggested that:

1. Existence of a maid had negative influence on physical health.
2. Existence of a close Japanese friend had positive influence on mental health.
3. The wives who experienced burden of child as "little" and "very much" had more

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This study examines relationship between stressors and psychosomatic conditions of Japanese wives who have small children and live in Bangkok due to husbands' overseas assignment.

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mental symptoms than the wives who did not experience the burden of child care at all.

4. The wives who had moderately unsatisfactory husband-wife relationship had more physical symptoms than the wives with moderately satisfactory husband-wife relationship.

5. The wives who had moderately unsatisfactory husband-wife relationship had more mental disturbances than the wives who had satisfactory relationship.

These results suggest that lack of support networks in a foreign environment had a crucial impact on the health of the wives.

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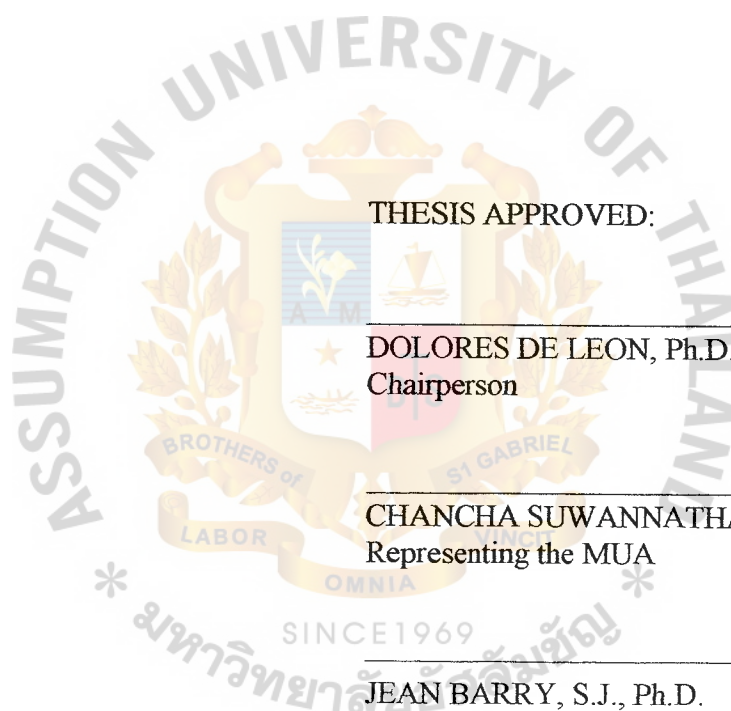
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Kimiko Takada

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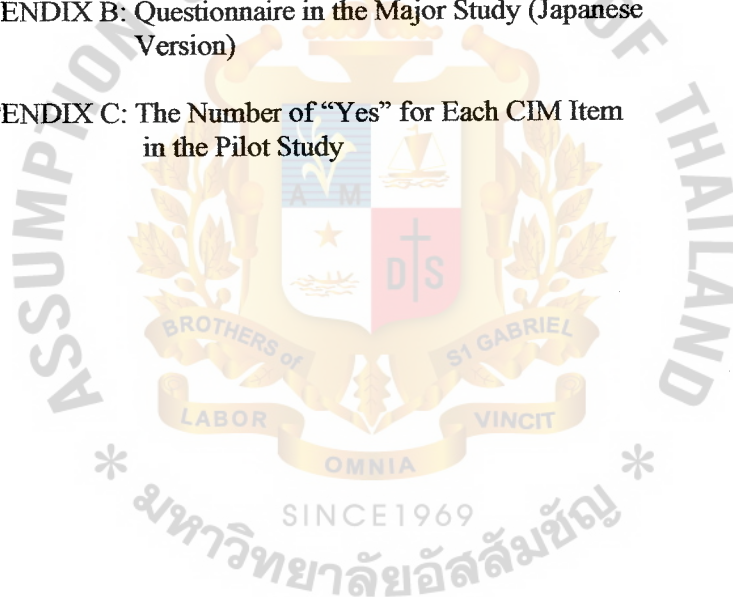
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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

Introduction

The number of Japanese people on overseas assignment has been increasing as the economy has been internationalized and international interaction has been in vigor. As of this year, there are 763,977 Japanese registered at the Japanese Chamber of Commerce overseas all over the world.

About two thirds of this population are Japanese intracompany transferees and their families. Those transferees are called *Chuzaiin* (personnel stationed overseas). They are sent from parent companies in Japan and stay in host countries for approximately 3-7 years.

As the numbers of Japanese sent overseas has increased, the nature of Chuzaiins has changed. In former times, a few Chuzaiins who used to be sent to major cities in host countries, their major role being to search for information, were generally seen as those who were selected as elite employees. However, recently as large number of engineers and workers have been needed for plant exports, employees from a wide range of occupations, working classes and ages have been sent into even smaller cities. This change has initiated researchers towards studying the issues of culture shock and adjustment of Chuzaiins and their families from different and more detailed perspectives. Generalized and stereotyped descriptions do not provide explanations for the whole population any more. There must be specific features relevant to a specific group of the population.

Let us take a group of Chuzaiins' wives as an example. One research on mental health of this group reports that they tend to show neurotic tendencies more frequently than

wives in Japan and they are in more need of support and medical care than their husbands (Munakata, 1994), while another study conversely reports that Japanese wives abroad are adjusted better than the wives in Japan (Ichise, 1989). This inconsistency implies that there probably is a diverse range of factors that affect Japanese wives' mental and physical health.

Among the Japanese wives, those who experience severe stress may be Chuzaiin's wives who have small children. They have to rear children in a foreign environment being cut off from significant others left in Japan. These young wives' husbands are in their prime and expected to take an active part in business, which often leave the wives at home alone with their small children even on weekends. Mother and children are sometimes thrown into stressful situations without physical and mental support from the husband and others. In such a situation, a Thai maid might play a stress-buffering role, who supporting an unskilled young mother might serve as a liaison between the mother and the host society, rather than a stressor which has been discussed in past research (Inamura, 1992).

Such a young wife may experience major life events such as getting married, resigning a job upon transition, and having a baby in a short time. These changes could make them vulnerable to illness (Holmes & Rahe, 1967; cited in Weiten, 1992). Needless to say transition itself causes much stress.

When we talk of stress in an unfamiliar environment, it is necessary to consider characteristics of the environment itself. In Bangkok there is a big Japanese community. The law encouraging the introduction of foreign capital developed by the Thai government in 1962 has seen large numbers of Japanese companies came into the Thai business market. The rapid expansion of Japanese manufacturing companies has contributed to industrialization of the Thai economy (Yoshikawa, 1992). The companies registered at the Japanese Chamber of Commerce in Thailand were 524 in 1988, 953 in 1993, and 1,168 in February in 1998.

There are 23,292 Japanese registered at the Japanese Consular in Thailand in 1997. 19,566 are living in Bangkok, which ranks seventh among cities over the world. About 400 Japanese babies were born in Bangkok in 1997. Ebuchi (1994) says the Japanese community encompassing the Japanese association and Japanese school plays a protective device of cross-cultural adjustment that makes it possible for Japanese people to experience the host culture indirectly. Thus, adjustment to the new life in Thailand also requires one to adjust to life in the Japanese community in Bangkok.

Although Chuzaiin and their families are increasing in the world as well as in Bangkok, most researchers have been interested in studies of Chuzaiins' health or adjustment of children at school age. Very few studies demonstrate statistical data on adjustment of Japanese wives (e.g., Munakata, 1994; Ichise, 1989; Inamura, 1992; Kawai & Fujinawa, 1980; Minoura, 1984), while most studies on Japanese wives use qualitative methods (e.g., Onishi et al., 1990; Onishi, 1987; Kurabayashi, 1995). In many cases the lives of Chuzaiin's wives have been talked about in books in interesting episodes (e.g., Muto, 1985), in that the wives are described as heroines who have no choice about where to stay, and their involvement in stressful human relationships in the closed Japanese community. The researcher, a Chuzaiin's wife is the mother of two children who has spent 9 years living in different countries, is very interested in analyzing the psychology of Japanese wives overseas using statistical methods.

The normal consequence of living in and adjusting to a new culture is the experience of stress caused by both physiological and psychological factors, and may increase both psychosomatic and physical illness from stress-induced reductions in immune system functioning (Winkelman, 1994). In this study, the levels of mental and physical conditions are employed to explain the causes of stress.

Thus, the purpose of this study is to clarify specific factors that affect the psychosomatic health of Japanese women who live in Bangkok during their husbands' overseas assignments and who have a small child/children under three years old.

The findings from this study will serve as fundamental data to other researchers in this field, one which has limited information at the moment. The researcher also expects that the results from this study will serve as cues to understand situations that Japanese Chuzaiin wives are facing and will call the attention of Japanese companies towards not only Chuzaiins' but also their wives' physical and mental health.

Statement of the Problem

This study measures psychosomatic levels among Japanese Chuzaiin wives and seeks to provide answers to the question below:

What factors in daily life affect the physical and mental health of Japanese wives living in Bangkok?

Significance of the Study

There appears to be a significant lack of data on the topic of Japanese wives and the issue of stress, especially stress that is encountered whilst living in a foreign environment. Therefore, the primary purpose of this study is to provide statistical data which demonstrates the relationship between stressors and psychosomatic conditions of Japanese wives temporarily living in Bangkok due to their husband's overseas assignment. Some descriptive information will help us to get a better understanding of these womens' psychology.

With the increasing international business, more and more employees and their families face intercultural adjustment. The temporal residence in the host country needs to be

regarded as a major family investment of money, emotions, and time, from which each member ideally profits (Repass, 1992).

The results of the study are expected not only to provide a contribution to the literature but also to assist Japanese women overseas to adjust and better cope with new environments.

Hypothesis

There are no significant differences between physical conditions and mental conditions of Chuzaiin wives in relation to the following aspects:

- a. availability of a Thai maid
- b. meetings held for wives of husbands who works for the same company
- c. existence of close Japanese friends
- d. burden of child care
- e. communication fluency in the Thai language
- f. length of hours the woman has for herself
- g. husband-wife relationship
- h. length of stay in Thailand
- i. educational background
- j. income

Limitations of the Study

The sampling distribution in the pilot study is limited to Japanese mothers at Takenoko Kindergarten in Bangkok, Thailand.

The sampling distribution in the major study is limited to female members of

Sukusuku-kai (a support network group for Japanese), and Japanese mothers who send their children to one of six kindergartens in Bangkok, Thailand. These are Bangkok Kindergarten, New Bambino Nursery, ABC Playground Nursery and Kindergarten, Baanrak Kindergarten, SP International Kindergarten and Rainbow Kindergarten. These are amongst schools that the researcher has a personal connection with.

All the participants both in the pilot study and the major study are Japanese women married to Japanese husbands who are on overseas assignment at present, and hence temporarily living in Bangkok. All these respondents have at least one child aged 3 or under 3 years old. Those who do not meet these criteria were excluded by the researcher. The group of Japanese women included in this study is not representative of Japanese women residing in Bangkok since it was limited to those who belong to the above network group, schools, and the researcher's personal network.

Definition of Terms

1. Overseas assignment is intracompany transference. Businessmen on this assignment are sent from parent companies in Japan to Thailand to stay and become involved in marketing and trading activities in Thailand. They are supposed to return to Japan after their assignments. Their assignment period is generally 3-7 years (Yamada, 1995).
2. Chuzaiin is a Japanese word which means Japanese personnel stationed overseas or transferees.
3. Wife in this study is operationally defined as a woman who is married to a Japanese husband who is on overseas assignment in Thailand, and therefore stays temporarily in Bangkok and has at least one child aged 3 or less than 3 years old.
4. Small children in this study is operationally defined as children aged 3 or less

than 3 years old.

5. Psychosomatic conditions in this study consist of physical reactions and mental reactions perceived by an individual herself.

6. Stress is a dysfunctional state of a human body. Exposure to a new environment increases psychosomatic reactions that can cause the dysfunction.

7. Stressors are the situations or events that increase psychosomatic reactions.



CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter explores issues of stress, psychosomatic disease and cultural adjustment in relation to Chuzaiin wives.

Stress

The General Adaptation Syndrome

Originally the term stress was used in physics, meaning physical force (or tension) of repulsion occurring inside an object against a pressure from outside, or force that acts on a thing or between parts of a thing and tends to pull or twist it out of shape (Oxford Advanced Learner's Dictionary). The term stress was first adopted in 1936 by Selye who described a series of pathophysiological changes which typically develop in the rat following exposure to noxious stimuli as diverse as physical (heat, cold), chemical (medicine, excessive eating habit), biological (virus, pollen) or psychological stressors (death of spouse, examinations) (Buckingham et al., 1997). The word has been part of our vocabulary ever since.

The general adaptation syndrome (GAS) is Selye's model of the body's stress response, consisting of three stages: alarm, resistance, and exhaustion.

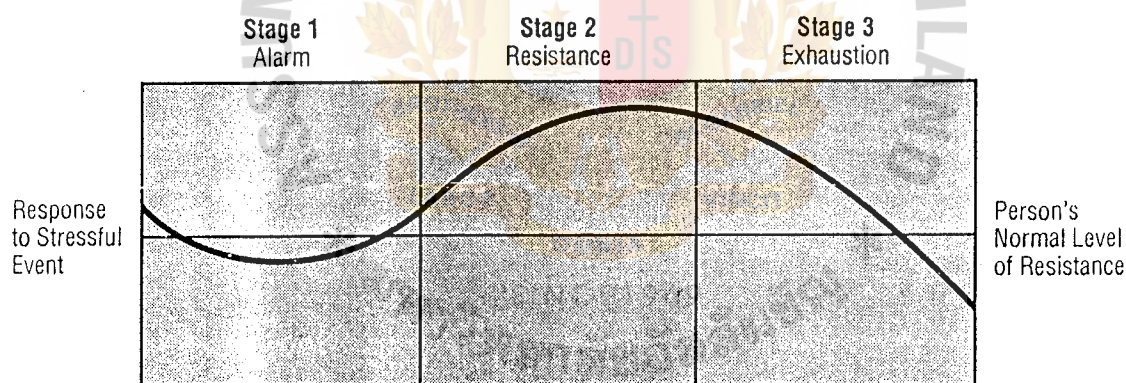
When an organism first recognizes the existence of a threat, the alarm reaction occurs: cortical hormone levels rise and emotional arousal and tension increase.

As stress is prolonged, the organism may progress to the resistance stage: cortical hormones maintain high levels, physiological efforts to deal with stress reach full capacity, and resistance by means of defense mechanisms and coping strategies intensifies.

If the stress continues over a substantial period of time, the organism may enter the stage of exhaustion: resistance to the continuing stress begins to fail. Brain functioning may be hindered by metabolic changes; the immune system becomes much less efficient; and serious illness or disease becomes likely as the body begins to break down.

Selye's theory and research forged a link between stress and physical illness. He demonstrated that physiological arousal that being adaptive can lead to diseases if prolonged. Figure 2.1 shows theoretical model of the general adaptation syndrome.

Fig. 2.1 General Adaptation Syndrome



The Fight-or-Flight Response

Using a concept of homeostasis, first described by Bernard, C. (1813-78), Cannon (1920: cited in Alexander, 1989) explained the organ's reaction to stimuli as the fight-or-flight response: a physiological reaction to threat in which the autonomic nervous system mobilized the organism for attacking (fight) or fleeing (flight) an enemy. The fight-or-flight response is essentially as same as Selye's alarm reaction.

The fight-or-flight response is mediated by the sympathetic division of the autonomic nervous system (ANS). A cat confronting dogs shows an immediate acceleration in its breathing and heart rate and reduction in its digestive processes. The same physiological arousal is also seen in humans.

However, among humans, stresses can not be handled simply through fight-or-flight. Moreover, people's stresses often continue for lengthy periods of time. Although the fight-or-flight response theory appears less adaptive when concerned with the effects of prolonged physical arousal, Cannon was the first researcher who established a link between emotional and physiological reaction.

Scales of Stress

The term stressor is often mixed up with stress. Stressor means external stimuli that causes the organ's internal challenging responses called stress. Stressors can be grouped according to the length they last i.e.: life events as major stressors, and daily hassles as minor events.

Holmes and Rahe (1967) developed the Social Readjustment Rating Scale (SRRS) to measure life change as a form of stress. In their view, positive events such as getting married produce stress because changes can be stressful even when the changes are welcomed. People with higher scores on the SRRS tend to be more vulnerable to many kinds of physical illness and to many types of psychological problems as well (Weiten, 1992).

Lazarus & Folkman (1991) devised a scale to measure stress in the form of daily hassles. The hassles scale were more strongly related to subjects' mental health than scores on a scale that measured major stressful events (Kanner et al., 1981: cited in Weiten, 1992).

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Stress and Personality Aspects on Behavior Patterns

The idea of scaling stressor's intensity lacks an important point: it does not concern aspects of receptors' side such as how they perceive stressors, individual's ability to accept or resist stressors, whether an individual has an appropriate stress coping strategy, availability of social support etc. Recent evidence indicates that there may be a biological or genetic difference in people most susceptible to life's hassles (Carey et al, 1978: cited in Dworetzky, 1991).

Neurotic Character

Among these aspects, an individual's personality is especially critical for psychology studies. Those who cope with stressors poorly are said to have a neurotic character. Generally they have high levels of anxiety, are emotionally unstable, are too sensitive towards stressors resulting from their expected roles, and are therefore over adapted to the environment (Nagata, 1990). For these people with neurotic character, the anxiety is often perceived as mental or physical disturbances.

Alexithymia

Sifneos (1973: cited in Nakagawa 1988a) found that people suffering from psychosomatic diseases have opposite characteristics from the people with neurosis, and called them alexithymia. Alexithymia is characterized by:

1. poor imagination, and inability to verbalize conflicts
2. constriction in experiencing and expressing emotion
3. the description of endless details rather than feelings
4. difficulty in communicating with interviewer

As they hardly sense that they are getting stress from the environment, in many cases from human relationships, they are unable to choose effective stress-coping behavior. They often become overadjusted to their roles as businessmen or housewives. As a result they get more and more overloaded and finally suffer from physical illness such as high blood pressure, ulcers in digestive organs and bronchial asthma (Nagata, 1990).

Type A Pattern

Friedman and Rosenman (1974: cited in Nagata, 1990) divided people into two basic types; Type A and Type B. The Type A pattern is marked by competitive, aggressive, impatient, hostile behavior. Type A's are ambitious, hard-driving perfectionists who are exceedingly time conscious. They speak rapidly and emphatically. They are easily irritated and quick to argue.

The observation which lasted eight and half years evidenced that Type A people had twice as many heart attacks or other forms of coronary heart disease than Type B people.

These studies suggest that there may be a strong relationship between illness and psychological-social stressors explained by personality or behavior patterns. The same point also could be restated that people with a particular personality tend to use a particular stress-coping strategy poorly and thus fail to adjust themselves to the environment.

Stress and Immune System

The link between stress and illness also raises the possibility that stress may undermine immunal functioning. Some studies have related stress to suppressed immunal activity in humans. A study revealed that subjects after 2 to 8 weeks of spouse's death showed low lymphocyte reactivity (Bartrop et al., 1977: cited in Kubo, 1996). Immunal reactions are

multifaceted, but they depend heavily on actions initiated by specialized white blood cells called lymphocytes.

In another study (Kiecolt-Glaser et al., 1984: cited in Weiten, 1992), students provided researchers with blood samples. The sample on the first day of their final exams showed reduced levels of immune activity compared to the sample a month before finals. The result was also correlated with higher scores on the SRRS.

Stress and Psychosomatic Disorder (PSD)

As we have viewed so far, a wealth of evidence shows that stress is closely related to physical health. Psychosomatic Disorder (PSD) is a general syndrome that shows physical symptoms as main symptoms and it is necessary to consider psychological aspects upon diagnosis and treatment (the Japan Psychosomatic Medical Society, 1970). In other words, PSD is a physical illness the causation of which is closely related to psycho-social factors (Nakagawa, 1988a). However, neurosis and depression are not included in PSD. PSD has two categories:

1. Stressogenic or Situational PSD: the illness is caused mainly by stress from the environment. Main symptoms are anxiety and tension.
2. Conflictogenic or Characteristic PSD: the illness is caused by disability of personality development since childhood. An individual is not able to cope effectively with psychological stimuli that normal people would handle. Type A personality and alexithymia are examples. Symptoms tend to be found in specific organs such as the circulatory system (ischemic heart disease, high or low blood pressure), the respiratory system (asthma), digestive organs (ulcers), the internal secretion system (anorexia nervosa, bulimia, diabetes), the nerve system (head aches), the bone and muscular system (rheumatoid arthritis, writer's cramp)

(Nakagawa, 1988b).

Treatment of PSD

It is important to choose the right approach of treatment considering both physical and mental aspects. Possible approaches are as follows:

1. treatment by physicians at a general internal or clinical medicine department depending on the illness
2. medication by psychotropic drugs (e.g., antianxiety drug, anti-depressant)
3. changing one's life style
4. psychotherapy (counseling with various techniques such as biofeedback, family therapy, psychoanalysis, TA, etc.)
5. oriental treatment (yoga, T'ai chi) (Nakagawa, 1988a).

The concept of PSD has proposed a new point of view to the Western modern medical science that had had treated only physical aspects of diseases. PSD has presented a new medical methodology that observes an illness as a part of the whole existence of a patient including personal aspects such as personal history, personality and family, in a relationship wherein both a patient and a doctor are involved.

Difference Between Neurosis and Psychosomatic Disorder

It is not easy to clearly differentiate between neurosis and PSD since both have causes related to psychological aspects. Some important differences are as follows:

1. Neurosis places a great deal of weight on mental symptoms whereas PSD has its

main emphasis on physical symptoms.

2. Neurosis appears as a variety of physical symptoms which shift to other parts of the body from time to time, while PSD shows chronic symptoms in a particular organ which is vulnerable by inheritance.

3. Neurosis causes functional disabilities, in contrast PSD often causes organic disabilities such as ulcers (Ikemi, 1995).

4. In terms of adjustment, neurotic people tend to be maladjusted. On the other hand, people with PSD tend to be overadaptive since they mostly have alexithymia or Type A personality (Nakagawa, 1988a).

Culture Shock as Stress

When we leave home and all the things that are familiar, we encounter many new and confusing situations. These situations naturally create stress; the reaction to this stress is called "culture shock". Culture shock was initially conceptualized by Oberg (1954, 1960: cited in Winkelman, 1994) as "the consequence of strain and anxiety resulting from contact with a new culture and the feeling of loss, confusion, and impotence resulting from loss of accustomed cultural cues and social rules" such as language, climate, religion, food, social structures like transportation system, and absence of close human ties.

Living in and adjusting to a new culture is the experience of stress caused by both physiological and psychological factors (Winkelman, 1994). In a psychosomatic interaction, psychological states affect the body and its physiological reactions, which in turn, increases feeling of stress, anxiety, depression, uneasiness, and so on. Cultural shock resulting in an increased concern with illness, a sense of feeling physically ill, a preoccupation with symptoms, minor pains, and discomfort (Kohls, 1979; Rhinesmith, 1985: cited in Winkelman,

1994), may increase both psychosomatic and physical illness from stress-induced reductions in the immune system functioning. However, these reactions are normal.

Kohls suggested that the major and severe symptoms of cultural shock may include withdrawal and excessive sleeping, compulsive eating and drinking, excessive irritability and hostility, marital and family tensions and conflicts, loss of work effectiveness, and unaccountable episodes of crying. Ebuchi (1974: cited in Hoshino, 1980) analyzes cultural shock of Japanese people as that arising from foreign environment where the former behavior system is not available, and where they feel as if the host culture rejects them, which causes confusion and emotional instability, and results in psychosomatic symptoms such as poor appetite, unexpected toothaches and thumping of the heart, insomnia, excessive irritability, unusual behavior, increase in drinking, and longing for Japanese foods. In general, low appetite, fatigue, insomnia or excessive sleep, headache, stomach aches, stiffing shoulders and neck, getting excessively angry about minor irritations, and altered menstrual periods are common symptoms that people experience in new culture, although the degree of cultural shock and the symptoms are different from person to person.

Many other research also reports the close relationship between cross-cultural transition and psychosomatic reactions (e.g., Ebuchi, 1994; Onishi, 1992; Munakata, 1994; Noda et al, 1990; Takahashi, et al., 1991; Yuh & Fukada, 1996).

Wives and Cross-Cultural Transition

The husbands move to a foreign country for their new assignment. But how does an international transition change the life of the wives? How do the wives find the meaning of their life in the host country?

Structureless Role

In an international move, wives have the most difficult role of any family member. Whereas employees have the organization and job structure that continue from the home to the new country, and children have the continuity and routine of school, wives often leave behind many of the most important aspects of their lives, including their friends and activities (Adler, 1997) and not because of her own reasons but her husband's reasons (Sakabe & Honda, 1988). In the case that the spouse is a housewife, she has no social structure that can help her be socialized in a foreign country (Minoura, 1984). She feels abandoned, ignored, and isolated. As a result, she has to create a meaningful life in an unfamiliar surrounding on her own.

Situational Gaps Between Husbands and Wives

In a new country, husbands and wives have respectively different experiences in daily life. The husbands are stimulated by the challenge of working in a new job assignment generally in the most internationally cosmopolitan strata of society: he meets people who speak English (Adler, 1997). As an expatriate employee, he may be overworked spending longer and longer time at office with the satisfaction of contributing and being an important member of an international team.

On the other hand, their wives in their daily circumstances meet much less cosmopolitan people such as sales-persons, maids, and taxi drivers who do not speak English nor the wives' own language. In developing countries, it is often a case that these local people have low educational backgrounds, which makes the situation for the wives more difficult. Although a husband immediately gets support from co-workers at office, a wife often is left alone in her home world. Normally a Japanese wife hesitates to call her husbands at his office even she has daily problems, for fear of disturbing her husband. A wife has to confront the

problems on her own. The following episode accurately describes a Japanese wife's experience in the initial few months in a foreign country (Tamura, 1993:1050-1051).

“A Chuzaiin wife in her thirties suffers from the thumping heart and difficulty of breathing because of tension. She often has these symptoms during daytime when she is alone at home but never in the evening and on weekends when her husband and family are with her at home. The loneliness is so severe that she can not help calling someone. Talking on the phone makes her feel at ease.”

Passive Motivation

The wives' struggle for a meaningful life may end in failure when the wife has passive motivation, which is the biggest factor that sometimes causes psychic diseases (Onishi et al., 1990). Decision of moving is mostly made by a husband as subtle pressures discourage open discussion of the pros and cons of the international move. The husband often feels he would disappoint the company if he did not accept; his wife feels she would disappoint her husband if she shows resentment. The husband often feels he would hinder his career by saying no; his wife feels reluctant to disagree (Adler, 1997). Actually most wives complain that husbands did not discuss about transition with the wives prior to departure (Onishi, 1990). Wives' reluctant attitudes towards an international move later on affects adjustment in the new country.

Support Services in the Home Country and the Host Country

Japanese companies pay less attention to assist the wives upon transition than husbands and children. In 1987, a mere 26.8% out of 600 companies assisted Chuzaiin wives by giving orientation courses before moving (Fukunaga, 1988). The remaining 73% of

Japanese wives had to seek strategies for a new life by themselves.

In foreign countries, mental health support in Japanese language is available in only 5 cities; Paris, London, Boston, New York and Vancouver (Noda, 1998). The number of Japanese wives who asked advice from Samaritans telephone counseling service in London was the highest among all Japanese caller groups during the 2 years since 1989 (Tamura, 1993). A number of evidences point to Japanese housewives overseas who are in serious need of support. Noda (1988) claims that Japanese companies should pay more attention to needs of mental support services for Japanese as minorities in foreign countries and financially assist psychiatrists and counselors who are currently working on low budgets.

Symptoms of Illness of Japanese Wives Abroad

How does a new environment affect Japanese wives' health? Munakata (1994) reported that 43% of Chuzaiin wives in major areas all over the world showed neurotic tendencies. Compared to the number of wives in major cities in Japan, the above percentage was significantly larger by 16%. Of Chuzaiin wives, 45% complained that their shoulders were always stiff and 30% complained that they easily get tired. About 60% of wives answered that they had stayed ill in bed for up to 10 days a year. This percentage was significantly larger than that of husbands.

However, there is also contradictory evidence that Chuzaiin wives had better health than wives in Japan (Ichise, 1989). As all the subjects included in this survey was Chuzaiin wives at the former Bank of Tokyo (current Tokyo Mitsubishi Bank), there may be other reasons specific to this sample.

Factors Affecting Cultural Shock and Adjustment

It is natural that researchers are interested in factors that promote or hinder cross-cultural adjustment. Hoshino (1980) reviewed past studies and suggested that there were two major factors: cultural-environmental factors and individual factors. He says culture shock is a dynamic process wherein a number of variables interact. The cultural-environmental factors include living environment in the host culture such as climate and food, and the individual factors include language ability, personality, personal history, age, and so on.

Likewise, Watanabe (1990; cited in Watanabe, 1992) suggested three major factors after reviewing related studies. These are:

1. biological factors;
 - a. age
 - b. degree of difference of people's physical appearance in one's own and the host country
 - c. degree of people's view on gender difference (e.g., role expectation)
2. social structural factors;
 - a. ability of an individual to use more than one language
 - b. degree of both similarity and complementarity of values and norms
 - c. availability of key persons who interpret the host culture
3. individual factors;
 - a. availability of cultural interpreter, mediator, role model
 - b. quantity and quality of feedback
 - c. whether problem solving skills in one's own culture are

similar to that of the host culture

Watanabe concludes that individual's cross-cultural experience is varied and unique depending on which factors are included in a situation the individual is facing. He says that it is impossible to discuss two different groups such as students studying abroad and businessmen on overseas assignment in the same way because every individual has different personal aspects and each group experiences different aspects of the host culture.

A psychiatrist, Akiyama (1998) states that an individual's background and experience before going abroad are also influential in terms of the degree of adjustment in the host country. Those who have low motivation like businessman's wives and children may suffer from poor adjustment and tend to experience psychiatric problems. People who are maladjusted to the home culture, also have a high risk of maladjustment to the host culture.

Stressors for Some Specific Groups

For the Japanese Youth Overseas Volunteers of JICA, factors such as language, relationship to local people and Japanese people in the host country were ranked more highly than other factors such as climate, living styles and anxiety caused by poor medical facilities in the host country (Takahashi, 1991). The study suggests that factors related to human relation are apt to be perceived as stressors.

Chinese students studying in Japan were asked in a survey about factors that affected their mental and physical health (Yuh & Fukada, 1996). The results revealed that interpersonal factors, and academic factors had influence on depression, and that the above two factors plus financial factors were significantly influential on their somatic complains but health/living factors and environmental factors showed no effects.

The two studies suggest that factors affect to health and emotions are related to

individual's needs and goal in the host country. In the both studies, human relations are important but environmental factors are not very important.

Stressors Specific to Chuzaiin Wives

Some research studies provide us with specific factors that cause disturbances of Chuzaiin wives in the host country.

Availability of Support Networks

In one study, wherein Chuzaiin wives showed significantly higher percentage of neurosis and depression than wives in Japan (Munakata, 1994), the first group were more devoid of mental support networks compared to the latter group.

Social support is especially vital for mothers who rear their children in a foreign environment. A study which included immigrant families with at least one elementary-school-aged child in the United States revealed that maternal support buffered the association between family stress and boy child problems (Short & Johnston, 1997).

Although having close friends from the same culture is basic to establish a personal support network, the closed small Japanese community makes it difficult to do so (Tamura, 1993). Tamura says that people seldom open their mind to other Japanese being afraid of being the subject of rumors.

Maid

A maid is a big headache for wives in developing countries. In South East Asia, the Middle East, and South and Central America, having a maid is a "must" because of some economic and cultural reasons in the host countries; employment of a maid promotes job

opportunities, life styles require a maid, and having a maid demonstrates a high standard of one's economic status (Fukunaga, 1990).

Inamura (1992) explains why having a maid causes stress for Japanese wives. These reasons are language, wives' inexperience of having a maid, maid's low education, differences in cultural and often religious values on manners and customs. Communication with a maid in the host language is not easy. That the Japanese society is homogeneous without social classes makes it difficult for Chuzaiin wives to understand how to manage a maid. They are either too kind or too strict to a maid. Low educational background of a maid causes difficulties that do not occur in Japan, too. The wives have to teach a maid from a to z about daily routines such as how to use different cloths, one for a table and the other for the floor. Japanese wives hardly understand why a maid never apologizes even she is wrong (Muto, 1994). When these trivial things heap up day by day, it naturally causes stress and even psychiatric illness in the worst case.

Husband-Wife Relationship

Noda et al. (1990) studied immigrant Japanese housewives in Canada to determine whether family factors were associated with poor adjustment, and in particular with depressive symptoms. The only factor which affected the degree of adjustment was communication with the spouse.

Among telephone calls to Samaritans Japanese line made by Japanese callers in London during the year of 1990, 18.9% concerned husband-wife affairs, which was ranked the number two of all the consultation (Tamura, 1993). Fukunaga (1988) who worked for WISH the Japanese connection in New York as a counselor reports that more and more callers ask advice on husband-wife problems. A half of the calls was from either of those Japanese

husbands and wives who wanted to divorce.

In the host country where support networks are not available as much as in the home country, husband-wife relationship is expected to be such a relationship that a husband and a wife complement to each other. In cases where the relationship does not function like a good partnership, distrust between two may easily end in divorce (Tamura: 1993, Muto: 1985). The relationship between social support network and spouse support in relation to stress was studied by Simons et al. (1993). The study found that social network support could not compensate for low spouse support, however, that spouse support was a more powerful determinant of quality of parenting when social network support was low.

Each culture has different gender role orientation which may have an impact on gender role identity of foreigners. Japanese who experience Western culture have an opportunity to open their eyes to gender role differences. Chuzaiin wives in the United States noted differences in American husband and wife relations such as "American husbands help wives with housework" and "there is more equality between men and women." (Repass, 1992) Minoura (1984) reports that in American culture wives are more involved in husbands' business because of the emphasis on "couples" in the society. These differences and changes of gender roles are experienced in every foreign culture although levels of difference and changes are varied. This results in ambiguity and confusion about a wife's social position and new roles inconsistent with previously held self-concepts.

The Host Language

Minoura (1984) found that wives' levels of English-speaking ability affected their attitude towards overseas assignments in the US. A wife who was not willing to follow her husband to the US generally had a low level of English speaking ability. The study also found

that there was a positive Spearman's correlation between English speaking ability and whether the wife was adaptive to events and things in daily life in the host country.

Ninety seven Japanese Chuzaiin wives were asked if they were able to find assistance upon their arrival to the United States in terms of communication and living requirements (Repass, 1992). Almost a half, 46% answered that they successfully received help which was mostly given by other Japanese rather than Americans. The study reports that language is the number one problem and creates a barrier which causes inability to communicate with the American people.

The same finding is reported by Short and Johnston (1997). Immigrant mothers in the United States who indicated more support reported significantly higher English language proficiency than less supported counterparts.

Thus ability to converse in the host language widens its range of support network not only in the one's community but also in the host society.

Educational Background

In the same study by Minoura (1984), Chuzaiin wives in the US with higher educational background showed a positive correlation with a higher ability to adapt to a new daily environment.

For contrast, although subjects included both Chuzaiin wives and their spouses, a study done by Munakata (1994) in Asia, Oceania, North America, South and Central America, Africa, East and West Europe, and the Mideast found that those with an educational background higher than junior college, showed poorer mental health.

Phases of Culture Shock

The stages of cultural shock and its resolution have been differentiated in a variety of ways, typically emphasizing four phases or stages (Winkelman, 1994).

1. The honeymoon or tourist phase
2. The crises or cultural shock phase
3. The adjustment, reorientation, and gradual recovery phase
4. The adaptation, resolution, or acculturation phase

These phases are both sequential and cyclic. The shift from crises to adjustment and adaptation can be repeated as an individual encounters new crises, requiring additional adjustments.

Although the theoretical model of cultural shock proposes some cues to understand how people get adjusted to a new culture, there are a few studies that give clear numerical data showing when people become most vulnerable in a new environment. A study on overseas adjustment of Japanese Youth Overseas Volunteers sent by JICA (Takahashi et al., 1991) reports 70% of 162 male subjects experienced psychosomatic disturbances during the first 6 months of 2 years of a full assignment term. Most of those who returned to Japan in the middle of the assignment in a previous survey (Takahashi et al., 1990) also experienced psychosomatic disturbances during the same period, too. In this research, therefore, the first 6 months was a clinically important period wherein people are at higher risk of getting psychosomatic diseases.

Inamura (1991) differentiates the stages of cultural shock in terms of passage of time. He did a survey research on overseas Japanese in three countries: Europe and America, South East Asia, and South America. Both physical and mental subjective conditions were checked as the time passed. There were 5 stages, namely:

1. emigrant stage
2. maladjustment stage (frustrated stage)
3. incomplete adjustment stage (giving-up stage)
4. adjustment stage
5. re-maladjustment stage (homesick stage)

The process of adjustment was not exactly the same in the three countries. In South East Asia, 1409 subjects were included in the survey. Their health conditions became lowest during the first 1/2 to 1 year. In the other two countries, the first 6 months were most severe for people. This period was named maladjustment stage, the second stage of adjustment. In this stage, people experience frustration. During 4 to 5 years after transition, subjects in all the three countries again experienced poor health and their feelings also took a negative turn. Inamura called this period re-maladjustment stage wherein people get tired by the routine in daily life, and they miss their homeland.

In another survey (Munakata, 1994), Chuzaiins and their families who had stayed abroad for 6 months to a year showed the poorest health conditions.

These studies suggest that people are vulnerable during the first year, with the level of wellness most jeopardized during the first 6 months to a year, with another cycle of vulnerability which appears after 4 or 5 years after transition.

Time Needed for Japanese Wives' Adjustment

Japanese husbands, wives and children in major cities in South East Asia including Bangkok were asked when they felt themselves to be adjusted to the new environment (Ebuchi, 1994). Firstly, 19.1% of the husbands, 9.3% of the wives and 14.4% of the children answered that they felt so within 1 month. In contrast, 18.5% of the husband, 30.3% of the wives and

children answered that they felt so within 5 months. This demonstrates that wives needed longer time than their husbands and children for adjustment.

Other Factors That Affect Young Mother's Stress

Life Cycle and Young Wives

Women's twenties and thirties are challenging time. They experience many life changes such as getting married, delivery, raising a child. Compared to their husbands, wives face much more mental and physical strains during this life cycle. These strains are greatly amplified by moving abroad and living away from home.

Delivery and raising a child induce physical changes in internal secretions and social and psychological changes of a gender role as a mother as well (Ozaki, et. al., 1990). Many mothers suffer from various degrees of depression after giving birth and experience confusion about their identity. Terry et al. (1996) evidenced utility of a stress-coping model of postpartum depression that had significant effects on levels of stress and depressive symptomatology. Further, Crnic et al. (1983) found that mothers with greater social support and less stress reported more pleasure in their parenting roles. However, again the question of how one gets support in a foreign environment comes up.

"A Three-Year-Old-Child-Myth"

In Japan where people still believe in "a three-year-old-child-myth" conveying that mothers should be home with their child until the child becomes three years old, the discrepancy between ideal self as a mother and real self as an educated woman is great (Ohinata, 1988). As Japanese wives overseas generally have a higher education background than local Japanese wives (Minoura, 1984; Sato et al., 1986), delivery and child rearing may

affect to a woman's psychological well-being substantially.

Stress and Free Time

To have free time is one of the most popular ways of coping with stress. In a study that developed a new measure of health-related perceived quality of life, 2810 adults ranked free time as one of major factors that had an influence on the quality of life (Ruis et al., 1993). Of 1095 American undergraduate students in academic training program, 86% reported that one of their top stressors is lack of free time (Everly et al., 1994). One more study using the Self-rating Anxiety Scale (SAS) and a life events checklist³ evidenced that less free time were actually one of the most common stressful experience for Chinese students during the previous 12 months (Liu et al., 1997).

Sanik (1993) found that the allocation of time for child care by parents of a 4 to 5 months old first baby, was not related to stress level. This study suggest that child rearing can not be discussed in the same way as working or studying in terms of its relation to stress.

The Japanese Communities Overseas

Shibusawa (1994) states that as more and more international interactions take place, and as development of modern information systems such as satellite broadcasting and facsimile has been expanded, the nature of experience overseas has been changed. Living overseas does not always require adjustment to the host culture, nor result in assimilation.

According to Ebuchi (1994), the Japanese community in Bangkok is "a colony" of Japan. Centered by the Japanese school and the Japanese Association, the community functions as such a cultural shock buffer that the members can avoid direct contact with the host culture. These studies suggest that communication ability in the host language may not be

as important as it was thought to be although host language has been considered to be a key factor in cross-cultural adjustment.

On the contrary, we must take specific negative factors of the Japanese community into account. Some studies (Kawai & Fujinawa, 1980; Inamura, 1992) suggest that network among the community is so close that sometimes the group dynamics in the community turn out to be stressors for the community members. For the wives, frequent contact with other Japanese women from the same company a woman's husband working for, is one of such stressful factors. "Many large Japanese corporations where a substantial number of Chuzaiin are working, regularly hold meetings for wives. The purpose of these meetings is not only to strengthen solidarity among wives of Chuzaiin working for the same company and to assist newcomers but also to guide them to behave properly as Chuzaiin's wives. Sometimes, the message of this instruction implies 'never impair the name of the company' or 'never humiliate your husbands'" (Yamada, 1995: p100).

One study revealed that Japanese sojourners stay within their own network rather than making host friends (Okazaki, 1991). If so, adjustment for Japanese overseas may equal to adjustment to the Japanese community culture but not to the host culture.

CHAPTER III

METHODOLOGY

This study focuses on influence of stressors on psychosomatic conditions. A descriptive research design is used in this survey study. The survey study consists of two steps: the pilot study and the major study.

The objective of the pilot study is to eliminate unrelated items from the CMI (Cornell Medical Index). The objective of the major study is to measure the influence of stressors on physical and mental conditions using CMI items selected in the pilot.

Pilot Study

The purpose of the pilot study is to eliminate CMI items which are not statistically important for the sample.

Participants

The participants in the pilot study are mothers of children at Takenoko Kindergarten in Bangkok, Thailand. Those who answered 70 sets of questionnaires in the Japanese language and had children aged 3 or less than 3 years old were selected by teachers at the kindergarten.

Instrument

A close-ended questionnaire to gather demographic data and the Cornell Medical Index (CMI) to obtain basic data were used in the pilot study.

Part 1: Personal Data Inventory

This instrument was devised for 2 purposes:

1. to eliminate subjects who do not meet the following criteria:
 - a. The subject is Japanese.
 - b. Her husband is Japanese.
 - c. The subject is temporarily in Bangkok because of her husband's overseas assignment.
 - d. The subject has at least one child aged 3 or less than 3 years old.
2. to gather demographic data such as:
 - a. the subject's age
 - b. the number of children
 - c. ages of each child

The personal inventory for English is shown in Appendix A and for Japanese is shown in Appendix B.

Part 2: Cornell Medical Index

The participants' physical and mental health conditions are measured by Cornell Medical Index-Health Questionnaire (CMI), which was originally invented by Brodman, Erdmann and Wolff in Cornell University, New York. The test is self-administered by an outpatient at hospital to check her physical and mental subjective symptoms. It takes 20 to 30 minutes to answer the questionnaire. CMI was introduced to Japan in 1957 (Kanehisa & Fukamachi, 1976). Sixteen additional items for men and eighteen for women were included in the Japanese version. The major advantages of CMI are:

1. The questions do not employ technical terms nor difficult expressions. The CMI

is available to a wide range of clients of any intelligence level.

2. It enables an examiner to collect extensive information covering both physical and mental health experienced by a client, in a short time.

3. Question items on physical health are placed prior to mental health. The test is named "Health Inventory". All of these eliminate a subject's anxiety towards the test.

4. Scaled scores on a chart make it possible to gauge the level of mental disturbance in an instant.

The original Japanese CMI for women consists of 162 questions on physical health and 51 questions on mental health which are categorized into maladjustment, depression, anxiety and so on as shown in Table 3.1.

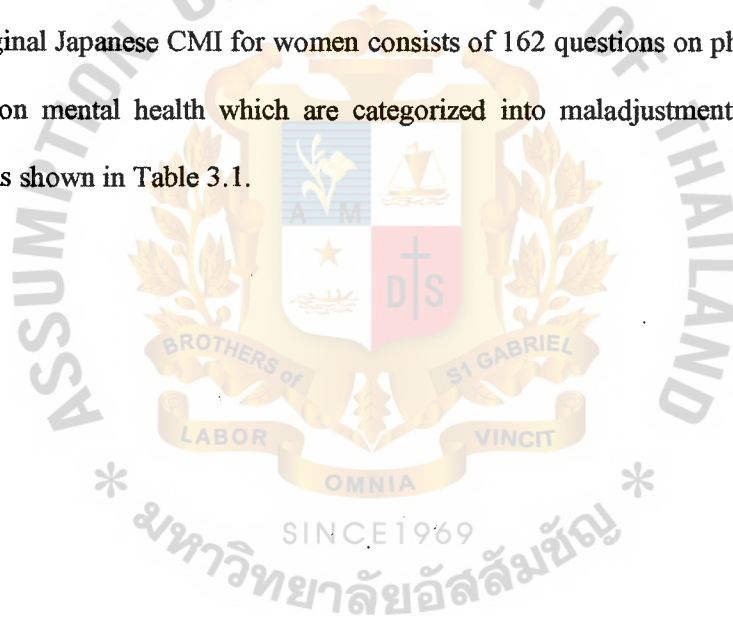


Table 3.1. Contents of Questions in CMI

| | Section | Contents of Questions | Number of Questions for Women in Original Japanese Version |
|--------------------------|---------|-----------------------|--|
| Items on Physical Health | A | Eyes and noses | 10 |
| | B | Respiratory system | 21 |
| | C | Heart cardiac system | 14 |
| | D | Digestive organs | 28 |
| | E | Muscle and frame | 10 |
| | F | Skin | 9 |
| | G | Nervous system | 19 |
| | H | Urinary and genital | 13 |
| | I | Tiredness | 7 |
| | J | Frequency of sickness | 9 |
| | K | Medical history | 15 |
| | L | Habits | 7 |
| Items on Mental Health | M | Maladjustment | 12 |
| | N | Depression | 6 |
| | O | Anxiety | 9 |
| | P | Sensitivity | 6 |
| | Q | Anger | 9 |
| | R | Tension | 9 |
| | | Total | 213 |

The CMI is widely used not only by psychiatrists but also by internists to diagnose PSD (Fukamachi, 1996).

Administration

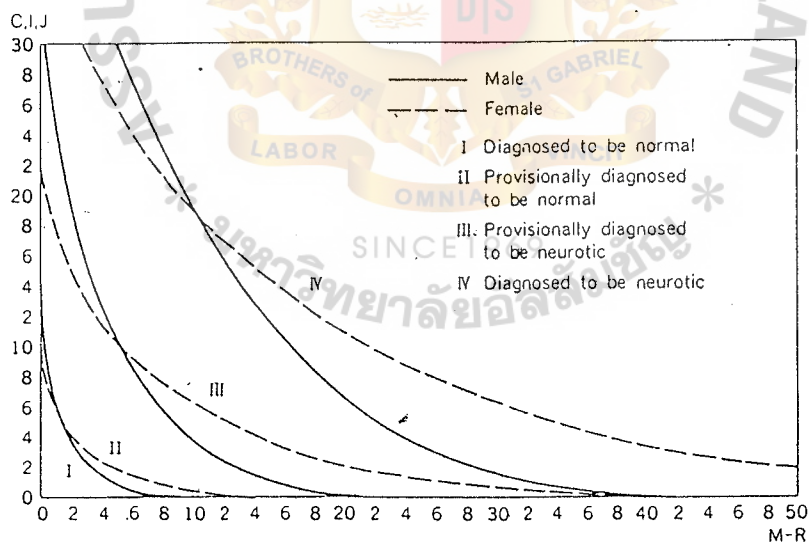
The CMI is self-administered. Respondents are instructed to circle either “yes” or “no” for each question to check if she has subjective symptoms at present. It takes about 20 to

30 minutes to fill out.

Scoring

CMI is used as a scale to measure neurotic tendency. Each “yes” gets 1 point. The accumulated scores of C, I and J sections (physical symptoms) are converted into Y values, while accumulated scores of M to R sections (mental symptoms) are converted into X values. A subject is diagnosed according to in which area her X and Y are plotted in the diagnosis chart shown as Figure 3.1.

Figure 3.1 CMI Diagnosis Chart



A subject is diagnosed to be normal mentally when her score is plotted in the area I, where the null hypothesis that she is neurotic is rejected with an alpha level of .05.

In the present study, however, CMI was used as a scale to measure stress level. The

total number of yes was counted for each item and the items that were not significantly important with an alpha level of .01, were eliminated.

Reliability

The reliability of CMI has been studied by internists and psychiatrists. Kanehisa and Fukamachi (1972) reviewed these studies and concluded that at least 75% to 80 % of outpatients with neurosis could be screened only by CMI. Moreover, among the three tests of CMI, Yatabe-Guilford Personality Test (YG) and Manifest Anxiety Scale (MAS), CMI has high reliability in that there is the least probability that a normal subject is diagnosed as neurotic and highest probability that a neurotic subject is diagnosed as neurotic.

On the contrary, Konishi (1984) reviewed CMI data of 5916 subjects and reported that only 15 % of subjects who fall in the IV area (diagnosed to be neurotic) were in need of psychiatric care. Further more, Agari (1989) explains that schizophrenics fall in I or II area as they are less aware of their subjective symptoms and accordingly subjects who fall in the I or the II area are not always normal.

The CMI is often combined with YG in Japan. Combination of the two tests reduces the possibility of non-neurotic subjects being diagnosed as neurotic. CMI and YG Test are used most frequently tests in hospitals in Japan (Kuboki, 1988).

After the present pilot study, internal consistency of the CMI was estimated by Cronbach's coefficient. The Cronbach alpha score obtained was 0.9146.

Distribution and Collection

70 sets of CMI questionnaire in the Japanese language were distributed by teachers on March 2, 1988 at Takenoko Kindergarten, and were returned to the kindergarten by

respondents by March 11.

A total of 48 valid responses yielded a response rate of 68.6 %. Among 55 questionnaires that had been collected, 3 incomplete questionnaires were eliminated. Another 4 questionnaires were also excluded because respondents did not meet the criteria.

After collecting data, the numbers of “yes” for each item were obtained as shown in Appendix C. Unimportant question items of CMI were statistically eliminated with an alpha level of .01 using z score ($z > -2.58$, $p < .01$, one-tailed), and 8 items on physical health and 4 on mental health were selected.

Major Study

The objective of the major study is to measure influence of stressors on physical and mental health respectively.

Participants

For the major study, the researcher asked the cooperation of Bangkok Sucusuku-kai, a support network group. The Bangkok Sucusuku-kai has various kinds of meetings and support activities for Japanese wives who are pregnant and/or mothers of babies and children. The group is organized under the auspices of Japanese Association and managed by Japanese wife volunteers. An abstract from the Pamphlet of Sucusuku-kai which was translated into English by the researcher can be seen in Appendix A.

Originally, the sample was to be taken only from Sucusuku-kai. However, as the questionnaires were to be sent back by mail to the researcher, low response rate was expected. Therefore, the researcher asked the cooperation of 6 kindergartens in Bangkok. These are Bangkok Kindergarten, New Bambino Nursery, ABC Playground Nursery and Kindergarten,

Baanrak Kindergarten, SP International Kindergarten, and Rainbow Kindergarten.

Other Japanese wives among the researcher's personal network were also invited to participate in the study.

Consequently, the participants were taken from 3 sources.

Instrument

Questionnaire in the major study has 2 parts. The first part is personal data inventory. The second part consists of two sections: a list of stressors (independent variables) and selected CMI items (dependent variables). The questionnaire for English is found in Appendix A and for Japanese in Appendix B.

Part 1: Personal Data Inventory

The same inventory used in the pilot study was employed in order to eliminate respondents who did not meet the criteria and to target the particular sample.

Part 2-1: Stressors (Independent Variables)

The researcher herself, then, listed down some stressors taking into account everyday lives of Japanese wives in Bangkok. Major factors were chosen and their rationale presented below:

- a. availability of a Thai maid: It is controversial whether having a maid promotes or hinders one's adjustment. A maid helps the wives with household, on the other hand she may be a trouble maker.
- b. meetings held for wives of husbands who works for the same company: It is also uncertain whether this factor encourages the wives to establish support networks.

A husbands' position at an organization often shadows his wife causing sensitive human relations among wives from the same company their husbands are working for (Muto, 1994).

- c. existence of close Japanese friends: It is natural that close friends from the same culture positively assist one's adjustment. However, finding such friends may be troublesome for new comers and finding close friends that one can open her mind to may be even difficult in the closed Japanese community.
- d. burden of child care: Rearing children in a foreign environment which offers limited support network may cause much stress for mothers with less experience.
- e. communication fluency in the Thai language: Language ability predicts degree of better adjustment. However, if a woman stays within her own network rather than having interaction with local people, the host language may not influence her wellness.
- f. length of hours the woman has for herself: Although free time is perceived as a popular stress-coping strategy, it may not be true for parents of children (Sanik, 1993).
- g. husband-wife relationship: In a foreign environment with limited support network, husband-wife relationship is of crucial importance. If a woman perceives the relationship to be satisfactory, she would have less physical and mental problems.
- h. length of stay in Thailand: People get used to unfamiliar surroundings as the time passes. However, some studies report that staying in the host country for many years causes stress (Inamura, 1992).

Part 2-2: Selected CMI Items (Dependent Variables)

This part includes 8 items on physical health and 4 items on mental health, which had more than 16 “yes” in the pilot study and appeared more frequently with an alpha level of .01. The number of “yes” for each item is found in Appendix C. To make for more clarity, the question style of each item was changed. “Does criticism always upset you?” which was answered by “yes” or “no”, for example, was changed to “Does criticism upset you?” with 4 multiple choices ranging from “never” to “often”. These items are as follows:

a. Items on physical health

- a-1. Do you have pains in your throat and swollen tonsils?
- a-2. Do you suffer from heavy chest cold?
- a-3. Do you eat sweets or other food between meals?
- a-4. Are your shoulders and neck stiff?
- a-5. Are your menstrual periods painful?
- a-6. Do you feel weak or sick with your periods?
- a-7. Do you get spells of complete exhaustion or fatigue?
- a-8. Do you dream at night?

b. Items on mental health

- b-1. Is it hard for you to make up your mind?
- b-2. Do you wish you had someone at your side to advise you?
- b-3. Does criticism upset you?
- b-4. Do you do things on sudden impulse?

Administration

The questionnaire used in the major study is self-administered. The respondents were told that the data would be statistically analyzed as a whole and that private information

would never be disclosed. To be strictly confidential, they were instructed to put the questionnaire into an attached envelope when it was returned.

Data Collection

The data in the major study was collected in three ways:

1. To the members of Sucusuku-kai, the questionnaire was distributed by mail enclosed with the newsletter of Sucusuku-kai on April 20, 1998. The respondents were asked to send back the questionnaire to the researcher using the stamped addressed envelope attached to the questionnaire. Three hundred and forty sets of questionnaire were sent to all members of Sucusuku-kai.
2. At 6 schools namely Bangkok Kindergarten, New Bambino Nursery, ABC Playground Nursery and Kindergarten, Baanrak Kindergarten, SP International Kindergarten and Rainbow Kindergarten, 549 sets of questionnaires were directly distributed by teachers. The questionnaires were returned to the teachers after being filled out.
3. Other respondents were selected among the researcher's personal network. Some of them received the questionnaire directly from the researcher, others indirectly from the third person who mediated between the respondents and the researcher. Some questionnaires were returned by mail and others were handed back directly to the researcher or indirectly through the mediators. Fifty-seven sets of questionnaire were thus distributed in this group.

All of the distribution of the questionnaire and collection of the data for the major study were done during a period of April 20 and May 12, 1998. The number of total respondents is shown in Table 3.2.

Table 3.2 Respondents from Three Sources

| Source | Total Distributed Questionnaires | Total Returned Questionnaires | Total Completed Questionnaires |
|-------------------|----------------------------------|-------------------------------|--------------------------------|
| Sukusuku-kai | 340 | 110 | 88 (25.9%) |
| Bangkok | 106 | 81 | 36 (34.0%) |
| New Bambino | 127 | 89 | 49 (38.6%) |
| ABC | 49 | 44 | 17 (34.7%) |
| Baanrak | 31 | 25 | 14 (45.2%) |
| SP | 141 | 92 | 48 (34.0%) |
| Rainbow | 95 | 56 | 38 (40.0%) |
| Personal Network | 57 | 26 | 25 (43.9%) |
| Total Respondents | 946 | 523 | 315 (33.3%) |

Limitations of the Major Study

The major study needed to be altered for reasons stated below:

The first change was that two independent variables namely educational background and income were eliminated from the questionnaire because of strong rejection from both the Japanese Association and Sukusuku-kai.

A key towards understanding the rejection of the above questions is found in the Japanese culture. Topics on educational background are normally carefully avoided in

conversation among Japanese until they become close to each other. And if people become intimate, they never talk of their income.

Human relations in Japan are based on “vertical” or superior-subordinate relationships between the people involved (Nakane, 1989). Nakane sees the superior-subordinate structure of the Japanese society not only shapes attitudes and behavior but also overshadows everything else: character, personality, profession, ability, and accomplishment. The basis for ranking individuals vertically is educational background and economic success (De Mente, 1989). Japanese in general believe in an egalitarianism that they are all equal in potential ability at birth and that everyone can succeed only if one makes an effort. Ranking people based on their ability is so difficult that organizations rank businessmen based on seniority and educational background as an objective and fair scale minimizing to evaluate their ability and skills (Nakane, 1989). Organizations in turn, are also ranked by people. Income is the most evident index by which to rank a businessman and his family in the social strata. Unlike Western people whose individual skills and ability mark one’s individual identity, Japanese see personal performance as a means for securing one’s place in the social environment, which in turn substantiates moral character and appropriateness to the milieu (White, 1987). Talking about educational background and income is viewed as a lack of morality which goes against maintaining harmony in human relationships. Thus, the researcher eliminated the above questions from the questionnaire being afraid that including the items would result in a low respondent rate.

The second change was that two dependent variables (selected CMI items) on physical conditions were eliminated. These are:

1. Are your menstrual periods painful?

2. Do you feel weak or sick with your periods?

As a high percentage of the participants were pregnant and/or had small children who still needed to be breastfed, it was obvious that they did not have menstrual periods. The researcher concluded that the data from these two items might not reflect current subjective symptoms of the participants and therefore did not include them in analysis. Thus, the remaining 6 items on physical conditions were analyzed.

Scoring

Independent Variables

Whether a subject has a Thai maid, whether there is wives' meeting, and whether she has Japanese close friends were coded as 0=no and 1=yes. Other independent variables were coded according to number put to each choice. For example, an answer of "1. not at all" to the question, "How much does child care burden you in daily life?" was coded as 1. Similarly, "2. a little" and "3. very much" were coded as 2 and 3 respectively.

Dependent Variables

Each dependent variable ranged from "never" to "often" received a score of 1 to 4 respectively. The higher the score was, the more disturbance of health it posed. Accumulated scores of 6 items on physical health (No. 9 to 16 except No. 13 and 14 on the questionnaire) represented the first dependent variables, the physical conditions. Similarly, the second dependent variable, the mental conditions were scored from 4 items on mental health (No. 17 to 20 on the questionnaire).

Data from the Open-Ended Question

Information obtained from the question No. 21 was used as data to support the findings that arose from the statistical analysis.

Statistical Analysis

The collected data were statistically analyzed by using the following formulae:

1. Mean and Standard Deviation were obtained to examine the distribution of the population samples, and determine the degree of physical conditions and mental conditions as subjects were grouped according to independent variables.
2. T-test was used to find significant differences between each of the following 3 independent variables, and each of the 2 dependent variables; physical conditions and mental conditions. There are 6 such combinations.
 - a. availability of a Thai maid and physical conditions
 - b. availability of a Thai maid and mental conditions
 - c. availability of a meeting held for wives and physical conditions
 - d. availability of a meeting held for wives and mental conditions
 - e. existence of close Japanese friends and physical conditions
 - f. existence of close Japanese friends and mental conditions
3. One way ANOVA was used to determine if there were significance differences between means of physical or mental conditions and each of the following independent variables.
 - a. burden of child care
 - b. communication fluency in the Thai language
 - c. length of hours a woman has for herself
 - d. husband-wife relationship

e. length of stay in Thailand

Scheffe testing method was employed to find any significant comparison after the ANOVA showed significant differences.

An alpha level of .05 was used for all the statistical tests in the major study. All the results are presented and discussed in Chapter IV.



CHAPTER IV

PRESENTATION OF FINDINGS

The results from the major study are presented and then statistically analyzed in this chapter. An alpha level of .05 was used for all statistical tests.

Results

Table 4.1 Sample Characteristics in the Pilot Study and the Major Study

| Factors | Pilot Study (N=48) | | Major Study (N=315) | |
|------------------------|--------------------|------|---------------------|------|
| | Mean | SD | Mean | SD |
| Wife's age | 32.17 | 2.75 | 32.91 | 3.12 |
| The number of children | 1.5 | 0.29 | 1.85 | 0.74 |

Table 4.1 shows that the samples in the two studies have almost equal characteristics although means of both wives' age and the number of children in the major study are slightly higher with larger SDs than in the pilot study. Wives' age ranged from 27 to 38 with mean of 32.17 in the pilot study, and 24 to 43 with mean of 32.91 in the major study. The number of children ranged from 1 to 2 with mean of 1.5 in the pilot study and 1 to 4 with mean of 1.85 in the major study.

A numerical compilation of the responses from the sample in relation to the open-ended question, "Are there any other feelings that you experience in your daily life?" is shown in the Table 4.2 below. As it was free to answer the question, the total number of responses was 204.

Table 4.2 Frequencies and Percentages in Each Sub-Item

N = 315

| Sub-Items | Frequency | Percentage |
|--|-----------|------------|
| <u>A. Availability of a maid</u> | | |
| 1. Yes | 270 | 86.26 |
| 2. No | 43 | 13.74 |
| Total | 313 | |
| <u>B. Availability of a wives' meeting</u> | | |
| 1. Yes | 202 | 64.13 |
| 2. No | 113 | 35.87 |
| Total | 315 | |
| <u>C. Existence of a close friend</u> | | |
| 1. Yes | 244 | 77.46 |
| 2. No | 71 | 22.54 |
| Total | 315 | |
| <u>D. Burden of child care</u> | | |
| 1. Not at all | 70 | 22.22 |
| 2. A little | 226 | 71.75 |
| 3. Very much | 19 | 6.03 |
| Total | 315 | |
| <u>E. Communication difficulty</u> | | |
| 1. Not at all | 17 | 5.40 |
| 2. A little | 220 | 69.84 |
| 3. Very much | 78 | 24.76 |
| Total | 315 | |

F. Length of free time

| | | |
|----------------------|-----|-------|
| 1. No time | 9 | 2.87 |
| 2. Less than 1 hour | 51 | 16.24 |
| 3. 1-3 hours | 146 | 46.50 |
| 4. 3-5 hours | 78 | 24.84 |
| 5. More than 5 hours | 30 | 9.55 |
| Total | 314 | |

G. Husband-wife relationship

| | | |
|------------------------------|-----|-------|
| 1. Satisfactory | 57 | 18.09 |
| 2. Moderately satisfactory | 174 | 55.24 |
| 3. Moderately unsatisfactory | 69 | 21.90 |
| 4. Unsatisfactory | 15 | 4.76 |
| Total | 315 | |

H. Length of stay in Thailand

| | | |
|-----------------------|-----|-------|
| 1. Less than 6 months | 26 | 8.25 |
| 2. 6 months - 1 year | 35 | 11.11 |
| 3. 1-3 years | 159 | 50.48 |
| 4. 3-5 years | 68 | 21.59 |
| 5. More than 5 years | 27 | 8.57 |
| Total | 315 | |

Frequencies and percentages in accordance to sub-items are presented in Table 4.2.

Asked if they had a Thai maid, 270 (86.26%) subjects answered that they did. Nevertheless, despite the fact that they all have small children, 43 (13.74%) did not have a maid.

About two-thirds, 202 women (64.13%) had meetings for wives whose husbands were working for the same company, whereas others 113 (35.87%) had no such meetings.

Over three-quarters of the sample, 244 (77.46%) say that they have close Japanese friends but 71 (22.54%) did not.

Child care burdens did not pose a major problem to the majority of mothers with 226 (71.75%), followed by 70 (22.22%) who answered “not at all”. Only 19 (6.03%) of the mothers answered that they were burdened by child care.

Over two-thirds of the sample, 220 (69.84%) wives experienced a little difficulty in communicating in Thai, and for 78 (24.76%) wives communication in the Thai language was very difficult. Only 17 (5.40%) wives experienced no problem in communication in Thai.

Few wives had no time for themselves. A mere 9 (2.87%) women had busy days without free time, whereas almost half of the women, 146 (46.50%) had more than 1 to 3 hours of free time. Other 51 (16.24%) had less than one hour, 78 (24.84%) had more than 3 hours to less than 5 hours and 30 (9.55%) had more than 5 hours. Despite having small children, most of the women in the sample had time for themselves.

When asked how they felt about their current marital relationship, 57 (18.09%) wives answered “satisfactory,” 174 (55.24%) answered “moderately satisfactory,” 69 (21.90%) answered “moderately unsatisfactory” and 15 (4.76%) answered “unsatisfactory.” Hence, the majority of the wives (73.33%) are satisfied with their current husband-wife relationship overall.

In surveying the length of stay in Thailand, the largest group, 159 (50.48%) had stayed for more than a year to 3 years followed by the second group, 68 (21.59%) who had been in Thailand for 3 to 5 years. Other 26 (8.25%) had been for less than 6 months, 35 (11.11%) for more than six months to less than a year and 27 (8.57%) for over 5 years.

Table 4.3 Summary of Responses in the Open-Ended Question

N=204

| Contents of Responses | Number of Responses (Including Multiple Responses) | Percentage |
|---|---|------------|
| <u>Negative Expressions</u> | | |
| <u>1. Regarding Children</u> | | |
| Inconvenience faced in going out with children | 56 | 27.5% |
| No place to go out or play with children | 45 | 22.1% |
| <u>2. Personal</u> | | |
| Complains on one's husband | 24 | 11.8% |
| Anxiety about poor health | 21 | 10.3% |
| Difficulty in terms of human relation with other Japanese people | 20 | 9.8% |
| Temporal friendship | 6 | 2.9% |
| No time for herself | 3 | 1.5% |
| <u>3. Environmental</u> | | |
| Poor environment (air pollution, traffic jams, poor sanitation)/Its influence on health | 38 | 18.6% |
| Language problems | 14 | 6.9% |
| Difficulty with a maid | 12 | 5.9% |
| Thai climate/food is unfamiliar | 10 | 4.9% |

| | | |
|--|----|-------|
| Difficulty in getting Japanese products | 7 | 3.4% |
| Less chances to get in touch with local culture/people | 5 | 2.5% |
| Difficulty in accepting local people's behavior or ideas | 4 | 2.0% |
| Cannot tell directions when one goes out | 4 | 2.0% |
| <u>4. Others</u> | | |
| Role ambiguity | 7 | 3.4% |
| Things are expensive/Financial problems | 6 | 2.9% |
| Anxiety about adjustment back in Japan | 5 | 2.5% |
| <u>Positive Expressions</u> | | |
| Enjoying life, Thai people are kind, Food is delicious, etc. | 30 | 14.7% |

Data from the open-ended questions were summarized in Table 4.3. It seems that the respondents were greatly concerned about inconvenience faced in going out with children because of transportation problems, lack of places for children to play, poor environment conditions and its influence on mental and physical health especially for the children, and actual experience of poor health.

Statistical Analysis

Table 4.4 shows frequencies, means and standard deviations of physical and mental conditions for each sub-item. The higher the means are, the poorer physical and mental

conditions the subjects experience.

Table 4.4 Means and Standard Deviations of Physical and Mental Conditions for Each Sub-

Item

N = 315

| | | <u>Physical Conditions</u> | | <u>Mental Conditions</u> | |
|--|-----------|----------------------------|-----|--------------------------|-----|
| | Frequency | Mean | SD | Mean | SD |
| <u>A. Availability of a maid</u> | | | | | |
| 1. Yes | 270 | 2.90 | .42 | 2.74 | .51 |
| 2. No | 43 | 2.62 | .48 | 2.69 | .56 |
| Total | 313 | | | | |
| <u>B. Availability of a wives' meeting</u> | | | | | |
| 1. Yes | 202 | 2.88 | .44 | 2.75 | .51 |
| 2. No | 113 | 2.83 | .45 | 2.70 | .54 |
| Total | 315 | | | | |
| <u>C. Existence of a close Japanese friend</u> | | | | | |
| 1. Yes | 244 | 2.87 | .44 | 2.68 | .52 |
| 2. No | 71 | 2.85 | .44 | 2.92 | .49 |
| Total | 315 | | | | |
| <u>D. Burden of child care</u> | | | | | |
| 1. Not at all | 70 | 2.80 | .49 | 2.50 | .54 |
| 2. A little | 226 | 2.86 | .43 | 2.79 | .50 |
| 3. Very much | 19 | 3.08 | .33 | 2.93 | .42 |
| Total | 315 | | | | |

E. Communication difficulty

| | | | | | |
|---------------|-----|------|-----|------|-----|
| 1. Not at all | 17 | 2.87 | .38 | 2.61 | .42 |
| 2. A little | 220 | 2.87 | .44 | 2.73 | .54 |
| 3. Very much | 78 | 2.84 | .47 | 2.77 | .49 |
| Total | 315 | | | | |

F. Length of free time

| | | | | | |
|----------------------|-----|------|-----|------|-----|
| 1. No time | 9 | 2.96 | .45 | 2.86 | .73 |
| 2. Less than 1 hour | 51 | 2.93 | .50 | 2.70 | .55 |
| 3. 1-3 hours | 146 | 2.86 | .43 | 2.76 | .49 |
| 4. 3-5 hours | 78 | 2.83 | .47 | 2.72 | .55 |
| 5. More than 5 hours | 30 | 2.81 | .32 | 2.66 | .48 |
| Total | 314 | | | | |

G. Husband-wife relationship

| | | | | | |
|------------------------------|-----|------|-----|------|-----|
| 1. Satisfactory | 57 | 2.81 | .46 | 2.56 | .55 |
| 2. Moderately satisfactory | 174 | 2.81 | .44 | 2.74 | .49 |
| 3. Moderately unsatisfactory | 69 | 3.00 | .41 | 2.87 | .52 |
| 4. Unsatisfactory | 15 | 3.09 | .32 | 2.68 | .66 |
| Total | 315 | | | | |

H. Length of stay in Thailand

| | | | | | |
|-----------------------|-----|------|-----|------|-----|
| 1. Less than 6 months | 26 | 2.82 | .46 | 2.83 | .46 |
| 2. 6 months - 1 year | 35 | 2.80 | .39 | 2.71 | .45 |
| 3. 1-3 years | 159 | 2.84 | .47 | 2.71 | .54 |
| 4. 3-5 years | 68 | 2.97 | .41 | 2.69 | .53 |
| 5. More than 5 years | 27 | 2.86 | .35 | 2.89 | .53 |
| Total | 315 | | | | |

Table 4.5 Comparison of Mean Scores of Physical Conditions Relative to Availability of a Maid

| | Frequency | Mean | SD | t Value |
|-------------|-----------|------|-----|---------|
| Have a maid | 270 | 2.90 | .42 | 3.97* |
| No maid | 43 | 2.62 | .48 | |

* $t(311) = 3.97, p < .05$

A t-test was performed to compare the mean values of physical conditions of two groups: those who have a Thai maid and those who do not (Table 4.5). The results revealed that there was statistical difference between the two groups with a significance level of .05 rejecting the null hypothesis and accepting that the wives who had maids experienced poorer physical conditions than the wives who did not have maids.

Table 4.6 Comparison of Mean Scores of Mental Conditions Relative to Availability of a Maid

| | Frequency | Mean | SD | t Value |
|-------------|-----------|------|-----|---------|
| Have a maid | 270 | 2.74 | .51 | .59 |
| No maid | 43 | 2.69 | .56 | |

$t(311) = .59, p > .05$

A t-test was performed to compare the mean values of mental conditions between two groups: the wives who had a Thai maid and those who did not, yielded no significant difference and therefore failed to reject the null hypothesis (Table 4.6).

Table 4.7 Comparison of Mean Scores of Physical Conditions Relative to Availability of a Wives' Meeting

| | Frequency | Mean | SD | t Value |
|----------------|-----------|------|-----|---------|
| Have a meeting | 202 | 2.88 | .44 | .96 |
| No meeting | 113 | 2.83 | .45 | |

$t(311) = .96, p > .05$

A t-test was performed to analyze the mean values of physical conditions between the two groups: those who had a meeting for wives whose husbands were working for the same company and those who did not (Table 4.7). The analysis failed to find significant differences of the means of physical conditions between the groups.

Table 4.8 Comparison of Mean Scores of Mental Conditions Relative to Availability of a Wives' Meeting

| | Frequency | Mean | SD | t Value |
|----------------|-----------|------|-----|---------|
| Have a meeting | 202 | 2.75 | .51 | .81 |
| No meeting | 113 | 2.70 | .54 | |

$t(313) = .81, p > .05$

A t-test was performed to analyze the mean values of mental conditions between the two groups: those who had a meeting for wives whose husbands were working for the same company and those who did not (Table 4.8). The analysis failed to find significant differences of the men of mental conditions between the groups.

Table 4.9 Comparison of Mean Scores of Physical Conditions Relative to Existence of a Close Japanese Friend

| | Frequency | Mean | SD | t Value |
|------------------------------|-----------|------|-----|---------|
| Have a close Japanese friend | 244 | 2.87 | .44 | .034 |
| No friend | 71 | 2.85 | .44 | |

$t(313) = .034, p > .05$

In order to find the difference in the means of physical conditions between two groups: those who had close Japanese friends that the respondents could talk frankly and confidentially to, and those who did not, a t-test was performed. The results presented in Table 4.9 revealed that there was no significant difference in the means of physical conditions between two groups, thus rejecting the null hypothesis.

Table 4.10 Comparison of Mean Scores of Mental Conditions Relative to Existence of a Close Japanese Friend

| | Frequency | Mean | SD | t Value |
|------------------------------|-----------|------|-----|---------|
| Have a close Japanese friend | 244 | 2.68 | .52 | 3.48* |
| No friend | 71 | 2.92 | .49 | |

* $t(313) = 3.48, p < .05$

In order to find the difference in the means of mental conditions between two groups: those who had close Japanese friends that the respondents could talk frankly and confidentially to, and those who did not, a t-test was performed. The results presented in Table 4.10 revealed that there was a difference between two groups with significance $\alpha=.05$ therefore the null hypothesis was accepted. The wives who had no close Japanese friend experienced lower mental conditions than the wives who had such a friend.

Table 4.11 Relationship Between Means of Physical Conditions and Degrees of Burden of Child Care Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 2 | 1.14 | .57 | 2.97 |
| Within Groups | 312 | 60.12 | .19 | |

$F(2, 312) = 2.97, p > .05$

The subjects were grouped into three according to their respective answers to the question: "How much does child care burden you?" An F test one-way ANOVA was employed to determine whether any differences would be found from a comparison of the mean values of physical conditions. The results reported in Table 4.11 yielded no significant difference among the means.

Table 4.12 Relationship Between Means of Mental Conditions and Degrees of Burden of Child Care Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 2 | 5.18 | 2.59 | 10.08* |
| Within Groups | 312 | 80.12 | .26 | |

* $F(2, 312) = 10.08, p < .05$

The subjects were grouped into three according to their respective answers to the question: "How much does child care burden you?" An F test one-way ANOVA was employed to determine whether any differences would be found from a comparison of the mean value of mental condition. The results reported in Table 4.12 revealed that there were significant differences.

Table 4.13 Multiple Comparisons of Means of Mental Conditions and Degrees of Burden of Child Care

| | Means | Not at all | A little | Very much |
|------------|-------|------------|----------|-----------|
| Not at all | 2.50 | | | |
| A little | 2.79 | * | | |
| Very much | 2.93 | * | | |

* $p < .05$

It was evidenced that there were significant differences among the means of mental conditions when the respondents were grouped according to the degrees of burden of child care. Multiple comparisons using Scheffe test were performed to determine which combinations of groups had differences (Table 4.13). The results yielded significant differences at alpha level of .05 showing that:

1. The mothers who experienced some burden of child care had more mental symptoms than the mothers who did not experience a burden at all.
2. The mothers who experienced a heavy burden of child care had more mental

symptoms than the mothers who did not experience the burden of child care at all.

Table 4.14 Relationship Between Means of Physical Conditions and Degrees of Communication Fluency in Thai Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 2 | .07 | .04 | .19 |
| Within Groups | 312 | 61.18 | .20 | |

$F(2, 312) = .19, p > .05$

The subjects were grouped into three according to their respective answers to the question: "Do you feel difficulty in communicating in Thai in daily life?" An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of physical conditions. The results reported in Table 4.14 yielded no significant difference among the means.

Table 4.15 Relationship Between Means of Mental Conditions and Degrees of Communication Fluency in Thai Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 2 | .39 | .20 | .72 |
| Within Groups | 312 | 84.91 | .27 | |

$F(2, 312) = .72, p > .05$

The subjects were grouped into three according to their respective answers to the question: “Do you feel difficulty in communicating in Thai in daily life?” An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of mental conditions. The results reported in Table 4.15 yielded no significant difference among the means.

Table 4.16 Relationship Between Means of Physical Conditions and Length of Free Time Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 4 | .48 | .12 | .62 |
| Within Groups | 309 | 60.68 | .20 | |

$F(4, 309) = .62, p > .05$

The subjects were grouped into five according to their respective answers to the question: "How many hours in a day do you have for yourself on weekdays?" An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of physical conditions. The results reported in Table 4.16 yielded no significant difference among the means.

Table 4.17 Relationship Between Means of Mental Conditions and Length of Free Time Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 4 | .46 | .11 | .42 |
| Within Groups | 309 | .57 | .27 | |

$F(4, 309) = .42, p > .05$

The subjects were grouped into five according to their respective answers to the question: "How many hours in a day do you have for yourself on weekdays?" An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of mental conditions. The results reported in Table 4.17 yielded no significant difference among the means.

Table 4.18 Relationship Between Means of Physical Conditions and Satisfactory Levels of Husband-Wife Relationship Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 3 | 2.73 | .91 | 4.84* |
| Within Groups | 311 | 58.53 | .19 | |

*F (3, 311) = 4.84, $p < .05$

The subjects were grouped into four according to their respective answers to the question: "How do you feel about the current relationship between your husband and you?" An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of physical conditions. The results reported in Table 4.18 yielded significant differences.

Table 4.19 Multiple Comparisons of Means of Physical Conditions and Satisfactory Levels of Husband-Wife Relationship

| | Means | Satisfactory | Moderately satisfactory | Moderately unsatisfactory | Unsatisfactory |
|------------------------------|-------|--------------|----------------------------|------------------------------|----------------|
| Satisfactory | 2.81 | | | | |
| Moderately satisfactory | 2.80 | | | | |
| Moderately unsatisfactory | 3.00 | | * | | |
| Unsatisfactory | 3.00 | | | | |

* $p < .05$

We found that there were significant differences among the means of physical conditions when the respondents were grouped according to satisfactory level of husband-wife relationship. Multiple comparisons using Scheffe test were performed to determine which combinations of groups had significant differences (Table 4.19). The results revealed that the wives who were moderately unsatisfied with their current husband-wife relationship experienced more physical symptoms than those who were moderately satisfied.

Table 4.20 Relationship Between Means of Mental Conditions and Satisfactory Levels of Husband-Wife Relationship Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 3 | 2.94 | .98 | 3.70* |
| Within Groups | 311 | 82.36 | .26 | |

*F (3, 311) = 3.70, $p < .05$

The subjects were grouped into four according to their respective answers to the question: "How do you feel about the current relationship between your husband and you?"

An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of mental conditions. The results reported in Table 4.20 yielded significant differences among the means.

Table 4.21 Multiple Comparisons of Means of Mental Conditions and Satisfactory Levels of Husband-Wife Relationship

| | Means | Satisfactory | Moderately Satisfactory | Moderately Unsatisfactory | Unsatisfactory |
|---------------------------|-------|--------------|-------------------------|---------------------------|----------------|
| Satisfactory | 2.56 | | | | |
| Moderately Satisfactory | 2.74 | | | | |
| Moderately Unsatisfactory | 2.86 | * | | | |
| Unsatisfactory | 2.68 | | | | |

* $p < .05$

We found that there were significant differences among the means of mental conditions when the respondents were grouped according to satisfactory level of husband-wife relationship. Multiple comparisons using Scheffe test were performed to determine which combinations of groups had significant differences (Table 4.21). The results revealed that the wives who were moderately unsatisfied with their current husband-wife relationship experienced more mental symptoms than those who were satisfied.

Table 4.22 Relationship Between Means of Physical Conditions and Length of Stay in Thailand Using ANOVA

| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 4 | 1.14 | .28 | 1.47 |
| Within Groups | 310 | 60.12 | .19 | |

$F(4, 310) = 1.47, p > .05$

The subjects were grouped into five according to their respective answers to the question: "How long have you been in Thailand?" An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of physical conditions. The results reported in Table 4.22 yielded no significant difference among the means.

Table 4.23 Relationship Between Means of Mental Conditions and Length of Stay in Thailand Using ANOVA

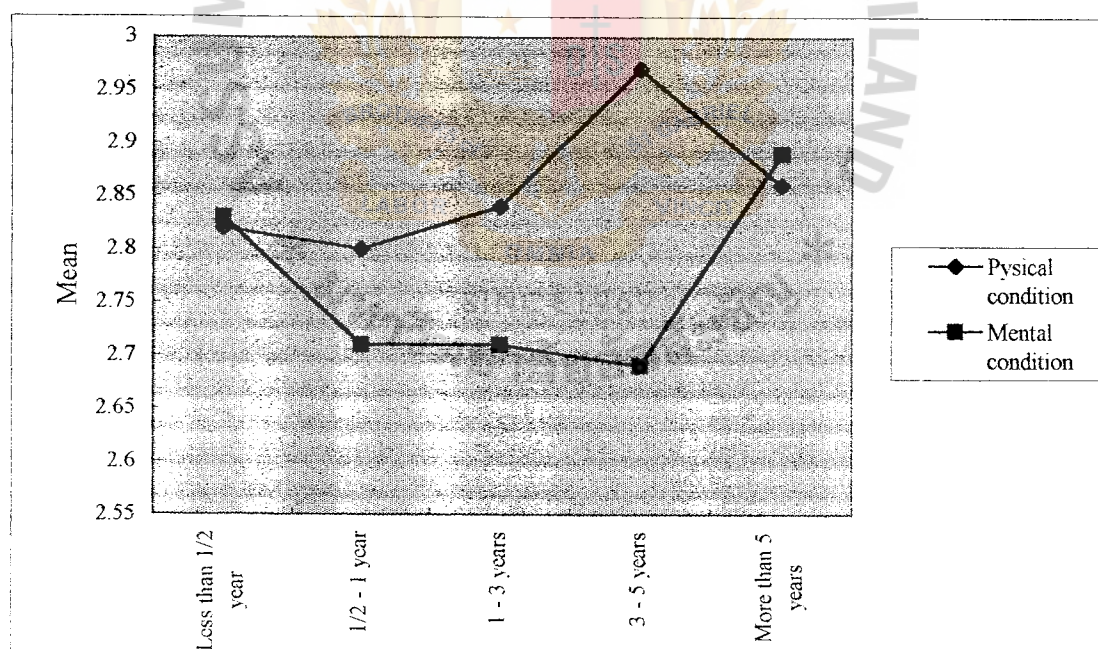
| Source of Variable | df | Sum of Squares | Mean Squares | F Value |
|--------------------|-----|----------------|--------------|---------|
| Between Groups | 4 | 1.13 | .28 | 1.04 |
| Within Groups | 310 | 84.17 | .27 | |

$F(4, 310) = 1.04, p > .05$

The subjects were grouped into five according to their respective answers to the question: "How long have you been in Thailand?" An F test one-way ANOVA was employed to determine whether any differences would be found by a comparison of the mean values of mental conditions. The results reported in Table 4.23 yielded no significant difference among the means.

The changes of physical and mental conditions in accordance with the length of stay in Thailand are illustrated in a line graph as presented in Figure 4.1.

Figure 4.1 Changes of Physical and Mental Conditions in Accordance to the Length of Stay in Thailand



CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Summary of the Research

The Purpose

The purpose of this study was to find the relationship between stressors and psychosomatic conditions of Japanese wives temporarily living in Bangkok due to the husband's overseas assignment, rearing a small child/children in a foreign environment.

Subjects

The study included 315 Japanese women from a Japanese support network group, 6 kindergartens and the researcher's personal network. All of the subjects were married to a Japanese husband who is temporarily in Thailand for his overseas assignment, and rearing at least one child aged three or less than three years old.

Instruments

The questionnaire had two parts. The first part was conducted to gather demographic data and to eliminate inappropriate respondents.

The second part contained questions on 8 stressors and selected CMI items. Originally 10 questions on stressors were to be included, but questions on educational background and household income were eliminated in consideration of Japanese cultural sensitivity to such kind of questions. Moreover, 2 CMI items on menstruation were also eliminated because many subjects were either pregnant or breastfeeding and therefore had no

menstrual periods.

Independent Variables

The independent variables were existence or degrees of stressful situations or events caused by the following:

- a. availability of a Thai maid
- b. availability of a meeting for wives whose husbands are working for the same company
- c. existence of close Japanese friends
- d. burden of child care
- e. communication fluency in the Thai language
- f. length of hours a woman has for herself
- g. satisfactory level of husband-wife relationship
- h. length of stay in Thailand

Dependent Variables

There were two dependent variables. These were:

1. physical conditions
2. mental conditions

Hypothesis

There is no significant difference of the physical conditions and the mental conditions in accordance to the stressful situations or events mentioned.

Summary of the Findings

The following significant differences were found at .05 level.

1. The subjects who had a Thai maid were reported to have more physical health disturbances than the subjects without a maid.
2. The subjects who had no close Japanese friend were reported to have more mental health disturbances than subjects with close Japanese friends.
3. The subjects who experienced “little” and “very much” in terms of the burden of child care were reported to have more mental symptoms than the subjects who did not experience a burden at all.
4. The subjects who had moderately unsatisfactory husband-wife relationship were reported to have more physical symptoms than the subjects with moderately satisfactory husband-wife relationship.
5. The subjects who had moderately unsatisfactory husband-wife relationship were reported to have more mental disturbances than the subjects who had satisfactory relationship.

Discussion

Although researchers have examined Chuzaiins and their families' adjustment to foreign culture, this study is the first one that focused on wives in Thailand and investigated the relationships between the major stressors and physical and mental health. The findings from the study are discussed with qualitative data obtained from the open-ended question (No.21) cited in the questionnaire. Total number of respondents in the major study was 315. The total responses to question No.21 numbered 204.

The research results revealed that women who had a Thai maid had poorer physical

health ($M = 2.90$, $SD = .42$) than women who did not ($M = 2.62$, $SD = .48$), $t(311) = 3.97$, $p < .05$. However, no significant difference was found between the two groups when their mental health conditions (have a maid; $M = 2.74$, $SD = .51$) (no maid; $M = 2.69$, $SD = .56$) were compared, $t(311) = .59$, $p > .05$. Although people employ a maid in order to reduce their physical load, why does having a maid have a negative effect on physical health and no influence on mental health? As no previous study postulates a clear answer to this, we look into the qualitative data from question No.21. Among the 27 respondents who wrote about a maid, over half (15) of the respondents commented positively about having a maid and most of them said that they could get free time and relief because of a maid. Another 12 respondents gave negative comments. They complained about the difficulty of managing a maid because they never had such an experience before, communication problems with a maid arose often and misunderstandings were caused by cultural differences. Despite these obstacles, they seemed keen in their desire to employ a maid. One woman wrote, "It is not proper to bring a child to a meeting held for wives by the company my husband is working for as well as a meeting held for mothers at the kindergarten. A maid is a necessity for those who have small children. But I feel as if my maid has too much influence on my children and I cannot discipline her. My do-nothing attitude has made the maid arrogant." Another woman said, "I can not leave my children with a maid when I go out. She makes a wry face if I ask her to look after my children." These wives' reserved attitudes towards a maid may make them reluctant to ask the maid to do minor household chores. Hence in some cases, a maid may not be a physical help as they had expected.

Another possible explanation is that maids are employed more on a part time basis rather than on a full time basis. The wives may have to do household chores that the maid left behind. In this case, mental symptoms may not be experienced as much as physical symptoms.

However, further study is needed to validate this assumption.

Japanese people generally dislike having someone from outside inside their homes. They rigorously discriminate between *uchi* (inside) from *soto* (outside) (Nakane, 1967). People in the group one belongs to or in one's family (including one's extended family) are called *uchi no mono* (people inside) and they share the same identity as family members. On the other hand, *soto no mono* (people outside) are treated coolly. The outside people are never allowed to join the group without a reason. It seems that some wives do not have maids because of the above reason. The wives who have maids may regard their maids as a *soto no mono* whom the wives always have to keep an eye on, which causes a lot of tension.

Furthermore, whether having a maid causes stress or not also largely depends on how they perceive the relationship between the maid and themselves. Asking only about availability of a maid might fail to reveal the whole truth.

As hypothesized, among those who had a meeting for wives and those who did not, there was no difference in the physical conditions (have a meeting; $M = 2.88$, $SD = .44$, no meeting; $M = 2.83$, $SD = .45$), $t(313) = .96$, $p > .05$, and mental conditions (have a meeting; $M = 2.75$, $SD = .51$, no meeting; $M = 2.70$, $SD = .54$), $t(313) = .81$, $p > .05$. Although such meetings pressure the wives to become a good corporate wife and a mother (Yamada, 1995) by framing wives' behavior with many dos and don'ts, this may also promote wives' adjustment by providing them with a clear role and a temporal goal of life in Thailand where the wives tend to be isolated with a structureless role (Adler, 1997). An identity as a member of the company may foster a feeling of togetherness with their husbands and afford the wife an identity of a group member. Moreover, emphasis on being a good wife and a mother may work positively for those who are rearing children. Yamada (1995) in her study on what

factors promote an egalitarian gender role orientation of Chuzaiin wives in the United States, found that the presence of children negatively affected egalitarianism and instead promoted the traditional role as a mother and a wife. These meetings may also have an effect on encouraging wives to take their traditional roles more seriously.

In addition, the meetings also provide the wives with opportunities to get to know people. It gives social support network and information to young mothers who are unskilled in child rearing and tend to lack support in a foreign environment. One respondent wrote that she could manage to rear her children in a foreign country because she could learn it from senior women in the same company her husband was working for. Some companies which hold meetings for wives, also offer a car that enables the wives to go out easily with their children. Availability of a family car will reduce stress in terms of the wives' mental health.

Although the meeting for the wives has many advantages for your mothers, it may have disadvantages, too. The study results revealed that no significant differences exist between levels of psychosomatic conditions in terms of availability of the meetings, meaning that the advantages and the disadvantages might cancel each other. One respondent complained about the disadvantage of the meetings saying that strong emphasis on the seniority system made her feel annoyed about everything related to the company. And the present study has revealed that availability of the meetings cause a situation that the wives had to employ a maid so they could leave their children at home, and that the maid had a negative effect on wives' physical health.

The research evidence suggests that the wives who have Japanese friends whom they can open up to, and reveal what they have on their minds ($M = 2.87$, $SD = .44$), have just as many physical symptoms as the women without such friends ($M = 2.85$, $SD = .44$), $t(13)$

$= .034$, $p > .05$, but have less mental symptoms ($M = 2.68$, $SD = .52$) than their counterparts ($M = 2.92$, $SD = .49$), $t(313) = 3.48$, $p < .05$. A close Japanese friend is an important predictor of Japanese wives' mental health. Tamura (1993), a counselor at Samaritans in New York, analyzed the contents of consultations by the Japanese and concluded that people who were at high risk in terms of mental health did not have sufficient social support networks which included husband-wife relationship, friends and neighbors. The result from the present study supports this conclusion.

The researcher believes that transportation problem is one of the biggest obstacles for them to make friends. The existence of children also makes it difficult for the wives to go out. Actually many women complained about the difficulty in moving around in Bangkok by public transportation systems accompanying their children. As a result they stay in a small world around them and they have less opportunity to get to know people from the outside world.

Almost a quarter (22.5%, 71 out of 315) has no close Japanese friend. Although it is obvious that having friends is generally good for us, what makes some people hesitate to do so? About one-tenth (9.8%, 20) respondents answering question No. 21, said that they felt uncomfortable about human relations in the Japanese community. They were also afraid of being gossiped in the small close community or in the same apartment where they live.

A few respondents wrote that it was hard to keep friendships in Thailand where Japanese people stayed temporarily. The sad feeling of loss of a friend due to transfer results in some women's hesitance in making close friends. The findings support that it would be better for Japanese women to go out and to meet people on their own when they stay overseas.

The results from the present study suggest that degrees of burden of child care have

an influence on mothers' mental health, $F(2, 312) = 10.08$, $p < .05$, but not on their physical health, $F(2, 312) = 2.97$, $p > .05$. Kojima (1992) emphasizes the importance of social support for child rearing. According to Kojima, social support consists of mental support, physical support and informational support. Among these support, mental support from a spouse plays the most important role in a nuclear family. It reduces mother's anxiety, buffers negative influence of mother's stress on a child and promotes mother's mental health. Kojima states that the social link that the mother has established before childbirth becomes the base of the social network that she can turn to with advantage for child rearing. In a foreign environment, the former social link forged in Japan is not available. All Chuzaiin families live as a nuclear family. The importance of support from the husband thus becomes greater in foreign countries.

The qualitative data give some more explanations. More than ten percent (24 out of 204) complained that their husbands do not spend enough time at home with their family because of work on weekdays and golf on weekends, and that the husbands have less holidays in manufacturing companies. The wives say that Saturdays and Sundays without a husband are most dreadful for them as they have to spend all day long with their children at home. Some of the couples even live separately because their husband's job site is located in a remote region. Thus, international assignment changes a husband's working style which in turn changes the wife's life style in such a way that a wife spends more time with her child and a husband spends less time with his family. It is natural that this situation causes a wife's great stress.

Another possible explanation that can be provided by the data is that wives' concern for their children's health is great. More than one-fifth (45 out of 204) claims that there are few places that children can safely play around as they do in Japan. Other 11.8% (24 out of 204) are worried about the influence of the poor environment like air pollution and hot weather, on their and their families' health, and some of them were concerned especially about

its influence on the child's physical and mental health. In addition, 5.4% (11 out of 204) had observed children's illness after they had moved to Thailand. The great concern for child's health and the likelihood of illness may affect a mother's mental health. Those who answered that they did not have any burden of child care "at all" may have less degree of concern than those who answered "a little" and "very much" ($p < .05$, see Table 4.13).

The research result suggests that levels of communication fluency in the Thai language do not have an influence on both physical health, $F(2, 312) = .19$, $p > .05$ and mental health, $F(2, 312) = .72$, $p > .05$. This result support Ebuchi's (1994) theoretical model that people tend to stay in the Japanese community. The findings from the previous research by Minoura (1984) observed a positive correlation between the host language ability and the adjustment in the United States may be replaced by Repass' (1992) findings that Japanese Chuzaiin wives got more support from other Japanese wives than from local people.

Length of hours a woman has for herself had no effect on both physical health, $F(4, 309) = .62$, $p > .05$, and mental health, $F(4, 309) = .42$, $p > .05$. However, the results (see "F" in Table 4.4) showed a slight tendency that the less time the women had, the more mental and physical symptoms they experienced although no significant difference was found. Even if they cannot find time for themselves, they may get satisfaction from child rearing or by doing household work. As Sanik (1993) has found, allocation of several hours for child care may not necessarily result in stressful situation for mothers of young children.

It appears that the point is not in the amount of free time they have, but how they spend their free time. One woman says she has too much time to kill. As explained earlier life in Bangkok tends to shut up mothers of small children at home, hence having too much free

time could be a stressor in such a situation.

The specific question dealt with free time on weekdays, but spending weekends seems to be more dreadful for some respondents. In the open-ended question, some of the wives said that they hated weekends because their husbands often went playing golf or working, leaving the wives with children. Compared to the weekly schedule in Japan where they had two days off on Saturdays and Sundays, weekly cycles with only one day off in manufacturing companies in Thailand are stressful for the wives. One wife illustrates: "As weekends are coming, I get more and more depressed." For the women in the present study, therefore the amount of time spent with their spouses may be more important than time for themselves.

Satisfactory levels of husband-wife relationship were found to influence both physical health, $F(3, 311) = 4.84$, $p < .05$, and mental health, $F(3, 311) = 3.70$, $p < .05$. The subjects who felt somehow unsatisfied with the relationship have more physical and mental symptoms than those who anyhow had satisfactory relationship ($p < .05$, see Table 4.1^a and Table 4.21). It was the only factor wherein statistical analysis showed significant differences in both the physical and mental health levels. It seems that husband-wife relationship is much more crucial compared to other factors in the present study.

More than one-tenth (11.8%, 24 out of 204) women mentioned their dissatisfactions with their husbands in the open-ended question. The common complaints were about husbands' coming back home late on weekdays and playing golf on weekends. These complaints were mostly related to husband's low involvement in parenting. One wife says, "I cannot find a reason why I have to be in Bangkok as my husband is often away from home."

One study (McIntosh et al., 1994) found that lack of time to spend with one's

spouse/partner was found to be a greater strain for female law students than for male students. In spending time with a spouse, women get more relief than men. The same is possibly true for parents. Kojima (1992: pp. 31) states that "A parent needs someone nearby not only to consult on one's stress, anxiety, and depressed feelings but also to share one's pleasure of parenting. Even if a father is a poor caretaker and homemaker, his positive attitudes towards partnership is meaningful for a mother." Thus, lack of time on the part of husbands to spend with their families would be perceived as lack of concern for their wives and children by the wives. The previous finding that the burden of child care influenced the wives' mental health may have its source in the lack of emotional support from husbands. The influence of the satisfactory levels of the husband-wife relationship on both of the physical and the mental health would mean that a good partnership is vital especially for the wives because of a shortage in social support networks and the limited means of transportation. The presence of a close Japanese friend reduces subjects' mental disturbances probably for the same reasons. When emotional wellness is concerned relative to child rearing, the presence of a maid may not be important because she can not offer emotional support and that may explain why no evidence was found for the claim that presence of a maid affected wives' mental health level.

Although the past studies found that the length of stay could explain adjustment to a foreign environment (Inamura, 1992; Takahashi et al, 1990, 1991), the present study found no significant differences among physical conditions, $F(4, 310) = 1.47, p > .05$, and mental conditions, $F(4, 310) = 1.04, p > .05$, in accordance with the length of stay. However, when the data in the present study were illustrated with the use of a line graph (see Figure 4.1), it is observable that the changes of physical conditions show different curves from mental conditions in accordance with the passage of time. Physical health levels do not show obvious

changes until 3 years after transition but it gets worse between 3 to 5 years. Mental condition which is poor at the beginning, gets better in a half year but again becomes worse after 5 years. These findings are close to Inamura's (1992) findings in South East Asia. He called this period the re-maladjustment stage in which people experience poor health for the second time and whereby feelings also took a negative turn.

Conclusion

The study evidenced that wives' satisfaction with their marital relationship promoted both wives' physical and mental health. The burden of child care and the absence of close Japanese friends were found to lower wives' mental health level. The presence of a Thai maid lowered wives' physical health level. Availability of a meeting for wives, communication fluency in the Thai language, length of time for a woman herself, and length of stay in Thailand had no influence on wives' health.

The findings implied that the factors related to child care and human relation to significant others such as a husband, close Japanese friends and a maid were important for wives' health, and that other factors not directly related to child care were not important. The implications of these research findings suggest that the shortage of social support for parenting was critical for the wives, that the absence of support from key persons hindered wives' mental health, and that especially the husband-wife relationship had such a strong impact that affected both the physical and the mental health because a good partnership with the husband was vital for child rearing in a foreign environment. Presence of a maid did not affect wives' mental health probably because the maid was not perceived as a source of moral support.

Recommendations

1. A further study is recommended to find a reason why the presence of a maid influences on the wives' physical health but not on mental health. To find if cultural value on having a maid influences women's physical health, comparative study involving women from other races such as Koreans could be conducted.

2. To find whether the absence of support networks affect the wives' health, comparison of health level of wives with a child to that of wives without a child could be done in a future study.

3. To find more evidences that the wives' health was hindered by an environment with less support networks, a further study should compare those who have more support networks and those who have poor ones.

4. To find whether the type of support network that a wife receives has an impact on the wives' health, a further study focusing on quality of support such as amount of information, degree of husband's involvement in parenting and household work, range of human network could be recommended.

Recommendations Based on the Present Study

1. The study found that good partnership between a husband and a wife is crucial for better adjustment. To achieve that, it is recommended that corporate culture that puts "work first" must change, so that husbands and wives can set aside enough time for family.

2. The findings from the present study suggest that overseas assignment period should be less than 3 years.

3. Japanese sponsoring companies are recommended to offer orientation to Chuzaiin wives before and after transition for better adjustment in the host country.

4. The results recommend Chuzaiin wives to go out and meet people on their own in order to get wide range of support network which is advantageous for child rearing.



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APPENDIX A

Questionnaire in the Major Study (English Version)

(Part 1: Personal Data Inventory)

I. Please answer the following questions.

1. Are you Japanese? Yes No
2. Is your husband Japanese? Yes No
3. Are you temporarily in Bangkok
because of your husband's assignment? Yes No
4. How old are you? () years old
5. How old are your children?
() years old () years old () years old () years old

(Part 2: Independent Variables and Dependent Variables)

II. Please read the following questions and place the number of the answer which describes you most appropriately in the brackets.

1. Do you have a Thai maid? 1. yes
2. no
()
2. Is there a meeting held for wives
of husbands who work for the
same company? () 1. yes
2. no
3. Do you have any Japanese
acquaintances in Bangkok
that you can frankly tell what
is on your mind? () 1. yes
2. no
4. How much does child care
burden you in daily life?
() 1. not at all
2. a little
3. very much
5. Do you feel difficulty in
communicating in Thai in
daily life? () 1. not at all
2. a little
3. very much

6. How many hours a day do you have for yourself on weekdays?
()
1. I don't have any at all.
 2. less than 1 hour
 3. more than 1 hour less than 3 hours
 4. more than 3 hours less than 5 hours
 5. more than 5 hours
7. How do you feel about the current relationship between your husband and you? ()
1. satisfactory
 2. moderately satisfactory
 3. moderately unsatisfactory
 4. unsatisfactory
8. How long have you been in Thailand?
()
1. less than 6 months
 2. more than 6 months less than 1 year
 3. more than 1 year less than 3 years
 4. more than 3 years less than 5 years
 5. more than 5 years
9. Do you have pains in your throat and swollen tonsils?
()
1. never
 2. rarely
 3. sometimes
 4. often
10. Do you suffer from heavy chest cold?
()
1. never
 2. rarely
 3. sometimes
 4. often
11. Do you eat sweets or other food between meals?
()
1. never
 2. rarely
 3. sometimes
 4. often
12. Are your shoulders and neck stiff?
()
1. never
 2. rarely
 3. sometimes
 4. often
13. Are your menstrual periods painful?
()
1. never
 2. rarely
 3. sometimes
 4. often
14. Do you feel weak or sick with your periods?
()
1. never
 2. rarely
 3. sometimes
 4. often

15. Do you get spells of complete exhaustion or fatigue?
()
1. never
2. rarely
3. sometimes
4. often
16. Do you dream at night?
()
1. never
2. rarely
3. sometimes
4. often
17. Is it hard for you to make up your mind?
()
1. never
2. rarely
3. sometimes
4. often
18. Do you wish you had someone at your side to advise you?
()
1. never
2. rarely
3. sometimes
4. often
19. Does criticism upset you?
()
1. never
2. rarely
3. sometimes
4. often
20. Do you do things on sudden impulse?
()
1. never
2. rarely
3. sometimes
4. often
21. Are there any other feelings that you experience in your daily life? Please describe here if any.

Would you kindly check if each question is answered?

I really appreciate your kind cooperation. I wish happiness and health in Thailand.

Abstract from Pamphlet of the Sucusuku-kai (English Translation)

What is Sucusuku-kai?

The Bangkok Sucusuku-kai is a society run by Japanese mother volunteers' initiative. We intend to fulfill a wide range of needs from Japanese women who are pregnant or mothers of infants, by holding meetings with various purposes and giving support services. In April 1996, the Sucusuku-kai was re-organized as a membership society under the auspices of the Japanese Association in order to improve its activities.

In April 1995, all the sub-groups of the Sucusuku-kai such as the maternity meeting, childbirth preparation, breastfeeding, infant activities, which had been separately run, were consolidated into the Sucusuku-kai. In September of the same year, the Bangkok children library opened under the auspices of the Japanese Association. The consolidation has realized mutual understanding among the members across the sub-groups and is geared towards meeting the needs of the every group. It brought about new sub-groups such as "a tea party for those who want a baby" and a "maternity yoga lesson," too. Besides these activities and programs, we are also ready to give an advice on breastfeeding before and after childbirth and information on screening of innate metabolism disorder and nerve cell tumor. The new member system under the Japanese Association brought about by financial support from the Association, ensures that all members are provided information regularly.

The Prenatal & Child Health Records written in Japanese with English and Thai translations is available at the Sucusuku-kai. It is edited in accordance with "The Record for Mother and Baby" generally distributed by municipalities in Japan. The record is useful for those who are going to deliver in Thailand as well as in Japan.

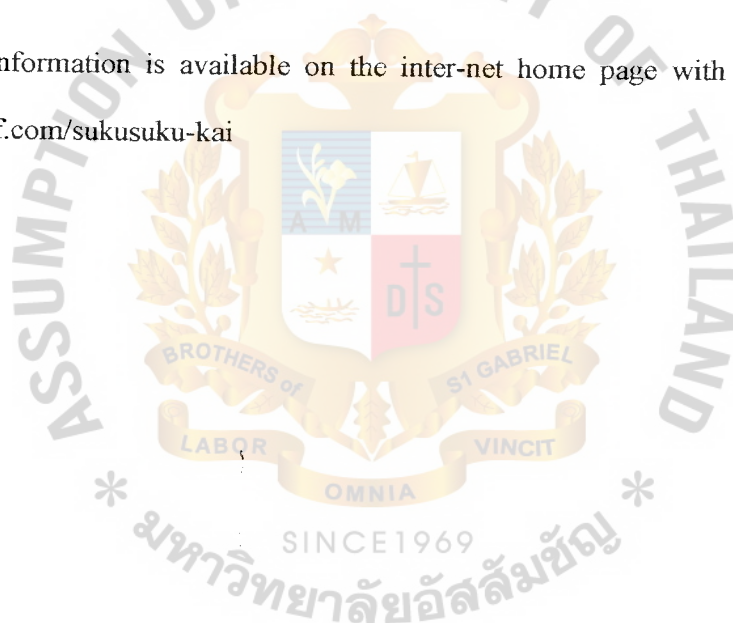
Moreover, information on medical service and preventive injection schedule for infants in Thailand is available even in Japan through our branch.

Thus, our primary goal is to reduce anxiety of Japanese parents who are going to give birth and rear a baby in Thailand and to support their daily life.

A part of our profit is donated to SHARE (Services for the Health in Asian & African Regions), an NGO that works with HIV/AIDS people.

We expect you not only to join our various programs but also to help us as a volunteer member. We believe that your volunteer work at the Sukusuku-kai will enrich your life in Thailand.

Further information is available on the inter-net home page with URL address:
<http://www.palmleaf.com/sukusuku-kai>



6. 一日のうちで自分の自由になる時間が
平日ではどのくらいありますか ()
1. まったくない
 2. 1時間未満
 3. 1時間以上—3時間未満
 4. 3時間以上—5時間未満
 5. 5時間以上
7. 現在のあなたとご主人との関係について、
あなたはどのように感じていらっしゃる
ますか ()
1. たいへん満足している
 2. まあまあ満足している
 3. やや不満だ
 4. 不満だ
8. タイにどのくらい滞在していらっしゃる
ますか ()
1. 半年未満
 2. 半年以上—1年未満
 3. 1年以上—3年未満
 4. 3年以上—5年未満
 5. 5年以上
9. のどが痛んだり、扁桃腺がはれたりする
ことがありますか ()
1. まったくない
 2. めったにない
 3. ときどきある
 4. よくある
10. かぜをひくと、せきがつづいてなおりに
いですか ()
1. まったくない
 2. めったにない
 3. ときどきある
 4. よくある
11. 甘いものやその他の間食をよくしますか ()
1. まったくしない
 2. めったにしない
 3. ときどきする
 4. よくする
12. 肩や首筋がこりますか ()
1. まったくない
 2. めったにない
 3. ときどきある
 4. よくある
13. 月経痛がありますか ()
1. まったくない
 2. めったにない
 3. ときどきある
 4. よくある

14. 月経のときには気分がいらいらして
神経質になりますか ()
1. まったくない
2. めったにない
3. ときどきある
4. よくある
15. 疲れ果ててぐったりなることがありますか
()
1. まったくない
2. めったにない
3. ときどきある
4. よくある
16. 夜、夢をみますか ()
1. まったくない
2. めったにない
3. ときどきある
4. よくある
17. 決心がつかねることがありますか
()
1. まったくない
2. めったにない
3. ときどきある
4. よくある
18. そばに相談あいてがほしいと思いますか
()
1. まったく思わない
2. めったに思わない
3. ときどきそう思う
4. よくそう思う
19. 人から批判されると心を乱されますか
()
1. まったくない
2. めったにない
3. ときどきある
4. よくある
20. 何かしようと思ったらいてもたっても
いられなくなりますか ()
1. まったくない
2. めったにない
3. ときどきある
4. よくある
21. バンコクの生活で、この他にもどんなことを感じていらっしゃいますか。日常生活
中でお困りのことなど、よろしければお聞かせください。(自由記述です。)

おそれいりますが、記入漏れがないかどうか、もう一度お確かめください。

このたびはご協力いただきまして、誠にありがとうございました。タイでのご生活が健康で
お幸せでありますようお祈り申し上げます。

APPENDIX C

The Number of “Yes” for Each CMI Item in the Pilot Study

| Items | The Number of Yes | | | | |
|----------|-------------------|----------|----|----------|----|
| A | | 26 | 0 | 51 | 23 |
| 1 | 4 | 27 | 12 | 52 | 9 |
| 2 | 14 | 28 | 1 | 53 | 7 |
| 3 | 0 | 29 | 1 | 54 | 0 |
| 4 | 2 | 30 | 1 | 55 | 5 |
| 5 | 3 | 31 | 0 | 56 | 3 |
| 6 | 3 | C | | 57 | 4 |
| 7 | 4 | 32 | 1 | 58 | 9 |
| 8 | 0 | 33 | 9 | 59 | 5 |
| 9 | 0 | 34 | 2 | 60 | 1 |
| 10 | 0 | 35 | 1 | 61 | 0 |
| B | | 36 | 1 | 62 | 2 |
| 11 | 8 | 37 | 1 | 63 | 5 |
| 12 | 6 | 38 | 1 | 64 | 3 |
| 13 | 10 | 39 | 1 | 65 | 5 |
| 14 | 3 | 40 | 0 | 66 | 3 |
| 15 | 2 | 41 | 1 | 67 | 0 |
| 16 | 0 | 42 | 14 | 68 | 2 |
| 17 | 8 | 43 | 3 | 69 | 0 |
| 18 | 17 | 44 | 0 | 70 | 5 |
| 19 | 19 | 45 | 3 | 71 | 13 |
| 20 | 7 | D | | 72 | 1 |
| 21 | 12 | 46 | 0 | 73 | 1 |
| 22 | 11 | 47 | 2 | E | |
| 23 | 0 | 48 | 0 | 74 | 0 |
| 24 | 1 | 49 | 1 | 75 | 1 |
| 25 | 4 | 50 | 1 | 76 | 0 |

| Items | The Number of Yes | | | | |
|----------|----------------------|-------------------|----|----------|----|
| 77 | 0 | 105 | 1 | J | |
| 78 | 30 | 106 | 2 | 132 | 3 |
| 79 | 1 | 107 | 0 | 133 | 1 |
| 80 | 1 | 108 | 1 | 134 | 1 |
| 81 | 9 | 109 | 0 | 135 | 1 |
| 82 | 4 | 110 | 0 | 136 | 0 |
| 83 | 0 | 111 | 1 | 137 | 0 |
| F | | H (women) | | 138 | 3 |
| 84 | 6 | 112 | 16 | 139 | 0 |
| 85 | 3 | 113 | 9 | 140 | 0 |
| 86 | 6 | 114 | 10 | K | |
| 87 | 4 | 115 | 3 | 141 | 1 |
| 88 | 3 | 116 | 1 | 142 | 0 |
| 89 | 4 | 117 | 23 | 143 | 0 |
| 90 | 4 | 118 | 5 | 144 | 2 |
| 91 | 3 | 119 | 14 | 145 | 1 |
| 92 | 12 | (both sex) | | 146 | 1 |
| G | | 120 | 15 | 147 | 1 |
| 93 | 12 | 121 | 11 | 148 | 0 |
| 94 | 10 | 122 | 0 | 149 | 1 |
| 95 | 4 | 123 | 1 | 150 | 5 |
| 96 | 3 | 124 | 3 | 151 | 3 |
| 97 | 0 | I | | 152 | 0 |
| 98 | 0 | 125 | 19 | 153 | 2 |
| 99 | 3 | 126 | 6 | 154 | 1 |
| 100 | 1 | 127 | 4 | 155 | 0 |
| 101 | 0 | 128 | 8 | L | |
| 102 | 0 | 129 | 0 | 156 | 11 |
| 103 | 4 | 130 | 0 | 157 | 17 |
| 104 | 0 | 131 | 0 | 158 | 11 |

| Items | The Number of Yes | | | | |
|----------|----------------------|----------|----|-----|---|
| 159 | 11 | 186 | 0 | 213 | 1 |
| 160 | 1 | 187 | 0 | | |
| 161 | 10 | 188 | 0 | | |
| 162 | 0 | 189 | 0 | | |
| M | | P | | | |
| 163 | 5 | 190 | 4 | | |
| 164 | 3 | 191 | 2 | | |
| 165 | 2 | 192 | 7 | | |
| 166 | 15 | 193 | 20 | | |
| 167 | 7 | 194 | 1 | | |
| 168 | 0 | 195 | 4 | | |
| 169 | 6 | Q | | | |
| 170 | 5 | 196 | 5 | | |
| 171 | 17 | 197 | 17 | | |
| 172 | 26 | 198 | 15 | | |
| 173 | 5 | 199 | 1 | | |
| 174 | 1 | 200 | 12 | | |
| N | | 201 | 9 | | |
| 175 | 5 | 202 | 6 | | |
| 176 | 0 | 203 | 6 | | |
| 177 | 3 | 204 | 8 | | |
| 178 | 1 | R | | | |
| 179 | 0 | 205 | 0 | | |
| 180 | 0 | 206 | 0 | | |
| O | | 207 | 4 | | |
| 181 | 3 | 208 | 12 | | |
| 182 | 0 | 209 | 12 | | |
| 183 | 9 | 210 | 2 | | |
| 184 | 2 | 211 | 1 | | |
| 185 | 3 | 212 | 1 | | |

Cronbach alpha: 0.9146

