

## **Causal Relation Analysis and Indices of Midlife Crisis of Employed, Married Thai Women**

*Ungsinun Intarakamhang*

*Chemba Raghavan*

*Oraphin Choochom*

*Ashara Sucaromana*

### **Introduction**

The positive and negative effects of globalization have been widely documented in recent research (Milanovic, 2005). In Thailand, some of these include increasing disease rate, unhealthy lifestyle factors and decreasing quality time with children (Department of Mental Health, 1999). Further, families sometimes tend to use emotion – focused coping and violence to deal with everyday stressors (Archavanitkul, 2001). At the macro level, the size of the average family has decreased from 4.4 persons/household in 1990 to 3.5 persons/household in 2002. Divorce is increasing from 4.64 couples/1,000 households in 1996 to 5.39 couples / 1,000 households in 2001 and increasing number of female headed households (National Statistical Office, 2003).

Women play several roles in Thai society. They continue to be principally responsible for childcare and housework. In addition, women working outside the homes tend to have the same responsibilities as men in their work contexts. In June 2004, 71% of Thai people surveyed were working outside the homes. So it is likely that a great majority of female workers among these are currently holding positions of power in society (Office of Women's Affairs and Family Development, 2004).

Despite a modest increase in overall status and number of powerful positions, employed Thai women continue to be plagued by work-related stressors and crises. For example, there is also evidence for poor safety conditions for working women. Cases of rape, sexual coercion, threats to women's bodies and lives have been extensively documented in research (Jacobson, 1986; Thoits, 1995 and Chanchamlha, 2001). In a clinical case study of 100 women, Kongsakon (2004) found that 92% of women had been sexually harassed, threatened or violated by men in public places or even on the

buses. Women dared not disclose such incidents due to fear of loss of face. This was found to have directly impacted their mental condition and work. Moreover, Thai women are socialized to be patient and not act like men. These crises of life are therefore not immediately resolvable. Recommendations include efforts to increase self-esteem in these women. The need for empowering Thai women thus becomes clear. A first step towards such empowerment is to assess women's own perceptions of their midlife crises.

Therefore, this study seeks to identify women's perception of their crises, their perceptions of the causes of these crises and systematically modeling the relationship between the perceived cause and the observed crises.

### **Objectives of the research**

1. To study perceptions of life crises of married Thai women working outside their homes.
2. To analyze perceived indices of life crises of employed, married Thai women.
3. To build and develop a causal relationship model of life crises of the participants in 3 sectors of work ; the government sector, the state enterprise sector and the private sector.
4. To study interactions between personal and societal variables to the overall life crises of married Thai women in all 3 groups.

### **Data and Methods**

This study is a causal relation research using explanatory research methodology. Participants in this study are married Thai women between 35-55 years of age and working outside their homes in the government, state enterprise and private sectors in Bangkok Metropolis and periphery area. The sample consisted of 1,375 married Thai women between 35-55 years of age who have at least 1 child. The sample came from 12 organizations.

The government sector sample group of 367 participants were employed in the Ministries of Education, Transportation and Communication, and Public Health.

---

The state enterprise sector sample group consisted of 534 participants working in the Communication Authority of Thailand, Metropolitan Electricity Authority, Metropolitan Waterworks Authority, Transportation Department, Housing Authorities of Thailand.

The private sector sample group of 474 participants were employed in the private hospital, immovable property companies, commercial banks and newspapers such as Thai Rath, Bang Muang and the Nation.

The sample was selected by using the rules of proportion of 20:1 between the sample and number of parameters or variables (Wiratchai, 1999). There are 18 observable variables applied in this research and the sample group estimation is 360 participants/group.

### **Operational definition of variables**

The 2 proposed latent variables were :- self-perception of life crisis and impact on individual life crisis.

**1. Self-perception of life crisis** refers to participants' perceptions of situation that they view as dangerous or as perceived threat against physical, mental, emotional, self image or life goal. The observable aspects of this latent variable are:

1.1 Stress indicator feelings of discomfort, disfavor, dissatisfaction, indecisiveness expressed by bodily or emotional imbalance.

1.2 Emotion oriented coping which is operational as a focus on emotional adjustment and no actual change of situation, adjustment in thinking process and use of mental mechanisms, expressed by emotional control or trying to strong calm.

1.3 Adaptation refers to participants' satisfaction with living environments, colleagues, relaxation.

**2. Impact on individual life crisis** refers to behaviors toward the family and work that result from stress and disability to cope with the problem, disability to adapt, or to maintain balance resulting in loss of self-esteem and have changed their behavior towards work and family in either a negative and a positive direction. The observable aspects of this latent variable are:

2.1 Loss of self-esteem where the participant knows that she is unable to cope with problem, but is unable to adapt herself to suitably overcome the crisis resulting in dissatisfaction and negative feeling about herself and lose her motivation to face her current challenges.

2.2 Violence towards self and others or a tendency to engage in verbal or bodily aggressively or act dangerously towards herself and others.

2.3 Impact on work refers to the extent to which work low effectiveness is reduced due to boredom, bodily or mental exhaustion.

These latent variables are further classified into 4 factors :-

1. **Personal factor** refers to participants' personality characteristic and perceptions of situations in the past that were seen as dangerous or threatening her. These include:

1.1 Neuroticism refers to sensitive emotion, depression tendency to be easily upset and emotional, stubborn, high excitability and negativity view.

1.2 Experience in life loss refers to the frequency occurrence of situation that participants perceive to be dangerous to them.

2. **Family factor** refers to perceptions of family members their emotions, love and obligation and warmth. More specifically, these include:

2.1 Responsibility in family refers to perceptions of the degree to which she is responsible to family members and housework.

2.2 Marital relationship refers to the feelings toward her spouse eg. perceived extent of warmth, love, closeness and mutuality.

2.3 Family support refers to perceptions of support from all relatives (other than spouse). It includes mental, emotional, informational and material, such as encouragement, capital and advice in helping to face challenges.

2.4 Commitment to Buddhism within family refers to participation in religious rites and rituals with family members and shared religious ideologies.

3. **Working factor** refers to perceptions of stressful, threatening and dangerous situation in the work context. Specific aspects of this factor include:

3.1 Workload refers to the extent to which participants work evaluate their work as requiring much effort, high focus, high responsibility or work overload.

3.2 Job promotion refers to perceptions of job security, career progress, salary promotion, qualification promotion, development of knowledge and ability and welfare.

3.3 Job ambiguity refers to the extent of clarity that participants feel in understanding the work context and values, clarity of policy, hierarchic structure, ability of colleagues, job responsibility, fairness in work and resolution of work conflict.

3.4 Colleague and boss support refers to assistance in work, such as, emotional and social support, material and informational resources from supervisors and colleagues.

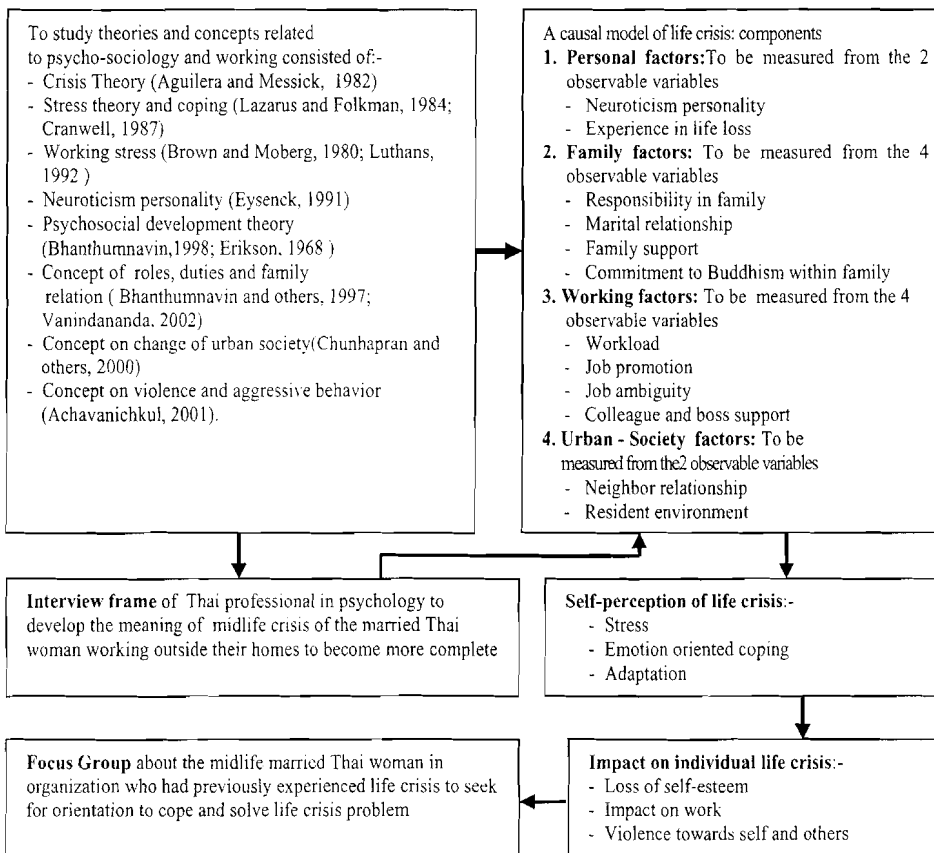
**4. Urban-society factor** refers to specific conditions unique to working in an urban context such as housing, neighborhoods etc. Specifically, these include the following aspects:

4.1 Residential environment refers to perceptions of community where she is residing availability of recreational resources, pollution, security, communication, and crowding.

4.2 Neighbor relationship refers to availability of social and emotional networks within the residential context: mutual friendship among neighbors, lack of violence, lack of conflict.

Theoretical scope of study is summarized in figure 1 below.

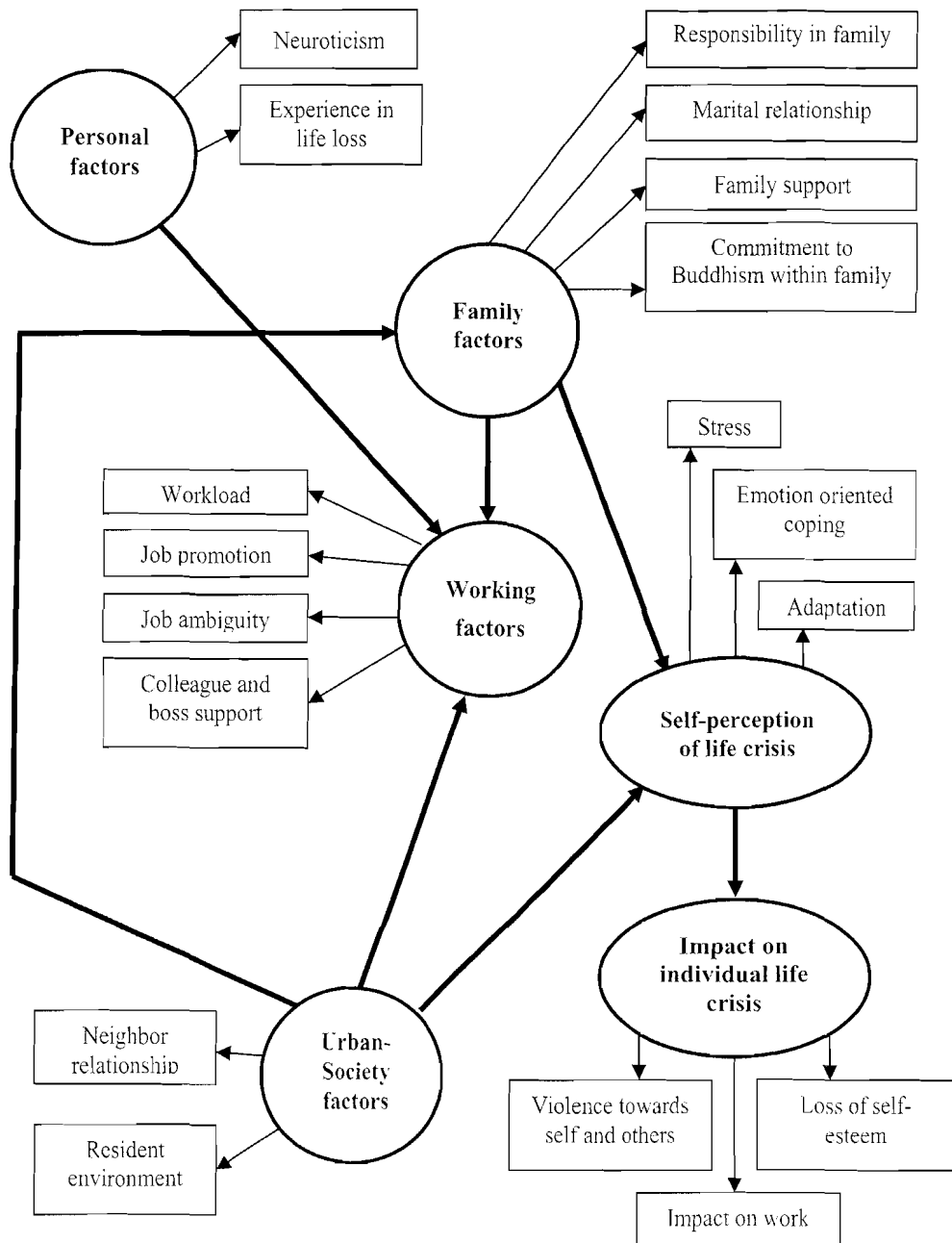
**Figure 1**  
**Theoretical framework guiding research**



### Research hypothesis

1. Personal factors, family factors, working factors and urban-society factors will have independent effects on perceived midlife crises across all groups and within each sample group.
2. Stress, emotion oriented coping and adaptation will be independent indices in the self- perceptions of life crises in this sample.
3. Participants with low family income, high neuroticism, and high responsibility in family will have life crises higher than participants with high family income, low neuroticism and less responsibility in family.
4. Participants from smaller families, high neuroticism and less family support will have higher life crises than participants from larger families, low neuroticism and high family support.
5. Participants with high neuroticism, less family support and less support from colleagues and boss will have higher life crises than participants with low neuroticism, high family support and high support from colleagues and boss.
6. Participants with high neuroticism, low commitment to Buddhism within family and high ambiguity work will have higher life crises than participants with low neuroticism, high commitment to Buddhism within family and low ambiguity work.
7. Participants who spend less time cohabiting with husband, perceive low quality of marital relationship and low neighbor relationship will have life crises higher than participants who spend more time cohabiting with their husbands, high quality of marital relationship and high neighbor relationship.

**Figure 2**  
**The hypothesized causal relationship model of midlife crisis in Thai women**



## Research procedures and Measures

The procedures included interviews of professional specialists and experts in the field. The interviews focused on obtaining qualitative information on the meaning of underlying factors of life crises of the participants. A 244 item questionnaire with 6 subscales (overall Cronbach's alpha = 0.7646-0.9531) was also administered. The 6 subscales were :

1. Demographic, personality and experience in life loss: 33 items total, consisting of demographic information 10 items, neurotic personality 11 items, (reliability of 0.8529) and experience in life loss 12 items (reliability of 0.8501).

2. Perception and behavior in family: 52 items total, consisting of responsibility in family 9 items, marital relationship 15 items, family support 15 items and commitment to Buddhism within family 13 items (reliabilities 0.8376, 0.9441, 0.9531 and 0.9034 respectively).

3. Perception and behavior in working: 49 items total, consisting of workload 14 items, job promotion 11 items, job ambiguity 11 items and colleague and boss support 13 items (reliabilities 0.8362, 0.8727, 0.8897 and 0.9017 respectively).

4. Perception to life in urban-society: 19 items total, consisting of residential environment 10 items and neighbor relationship 9 items (reliabilities 0.8971 and 0.9085 respectively).

5. Self-perception of life crisis: 42 items total, consisting of stress 17 items, emotion oriented coping 10 items and adaptation 15 items (reliabilities 0.9296, 0.7646 and 0.8710 respectively).

6. Impact on individual life crisis: 49 items total, consisting of loss of self-esteem 17 items, impact on work 12 items and violence towards self and others 20 items (reliabilities 0.9309, 0.8497 and 0.9111 respectively).

### Statistics used in data analysis

The interviews were analyzed using thematic and content analysis. The questionnaires were analyzed using standard LISREL analysis techniques (P-value, df, RMR, RMSEA, GFI, CFI) and other parameter and nonparametric statistics (three way-ANOVA, descriptive statistics).



## Results

Results from the study revealed the direct and indirect relationships among the latent variables.

Overall results for the all groups.

Figure 3 indicates the path of influence of the 4 independent variables (personal factors, working factors, family factors and urban-society factors) on the 2 dependent variables (self-perception of life crisis and impact on individual life crisis).

Overall, the direct effects on self-perception of life crisis were from working factors and urban-society factors. Personal and family factors had indirect effects on self-perception of life crisis. None of the independent variables had a direct effect on impact on individual life crisis. Urban-society factors influenced family factors.

Results within the government sector.

Figure 4 indicates that the direct effects on self-perception of life crisis were from working factors and urban-society factors. Personal and family factors had indirect effects on self-perception of life crisis. None of the independent variables had a direct effect on impact on individual life crisis.

Results within the state enterprise sector.

Figure 5 indicates that the direct effects on self-perception of life crisis were from family factors and working factors. Personal, family, and urban-society factors had indirect effects on self-perception of life crisis. Personal factors had a direct effect on impact on individual life crisis.

Results within the private sector.

Figure 6 indicates that the direct effects on self-perception of life crisis were from family factors and working factors. Personal, family, and urban-society factors had indirect effects on self-perception of life crisis. Personal factors had a direct effect on impact on individual life crisis.

**Figure 3**  
Overall results from the model of midlife crisis across all groups

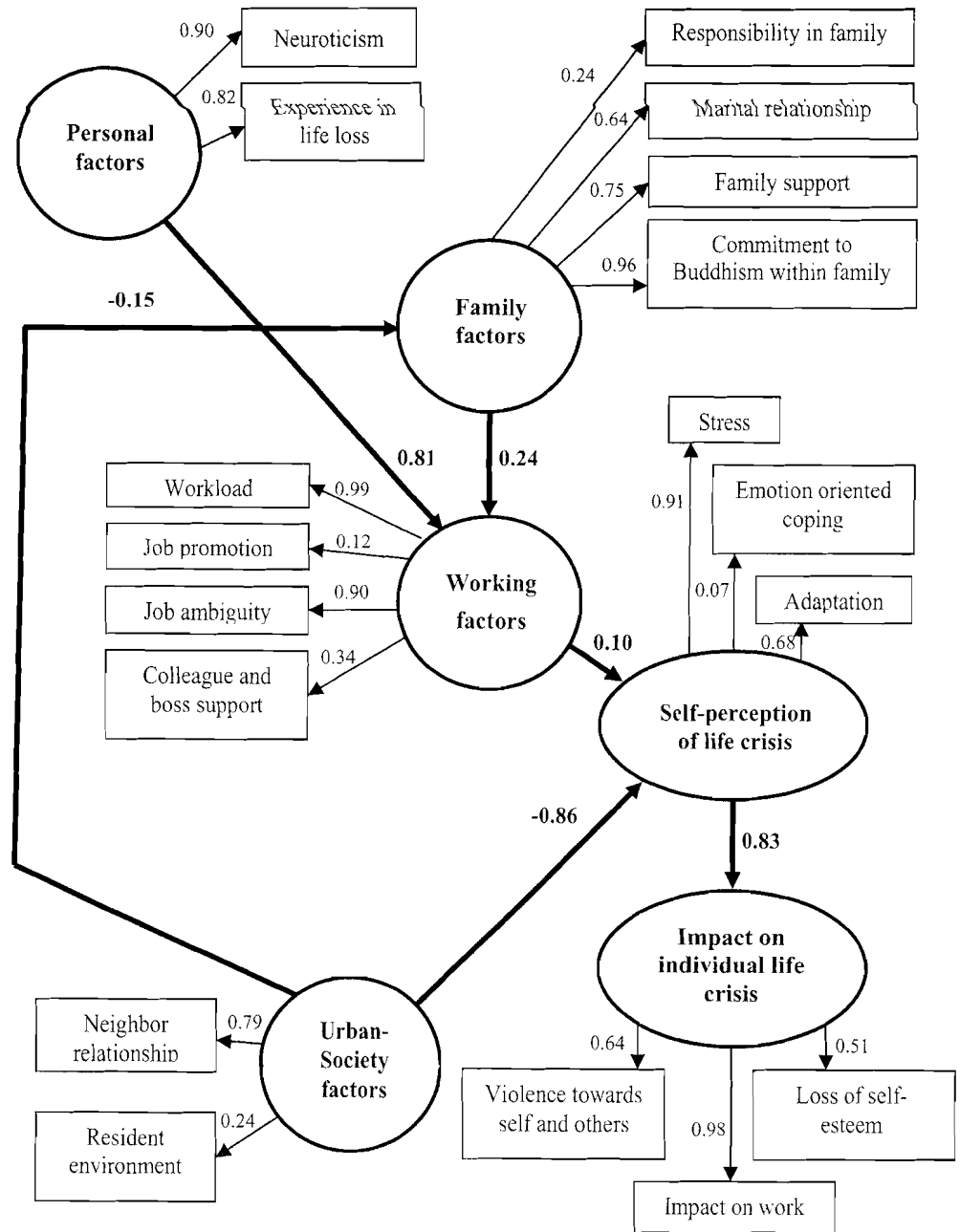
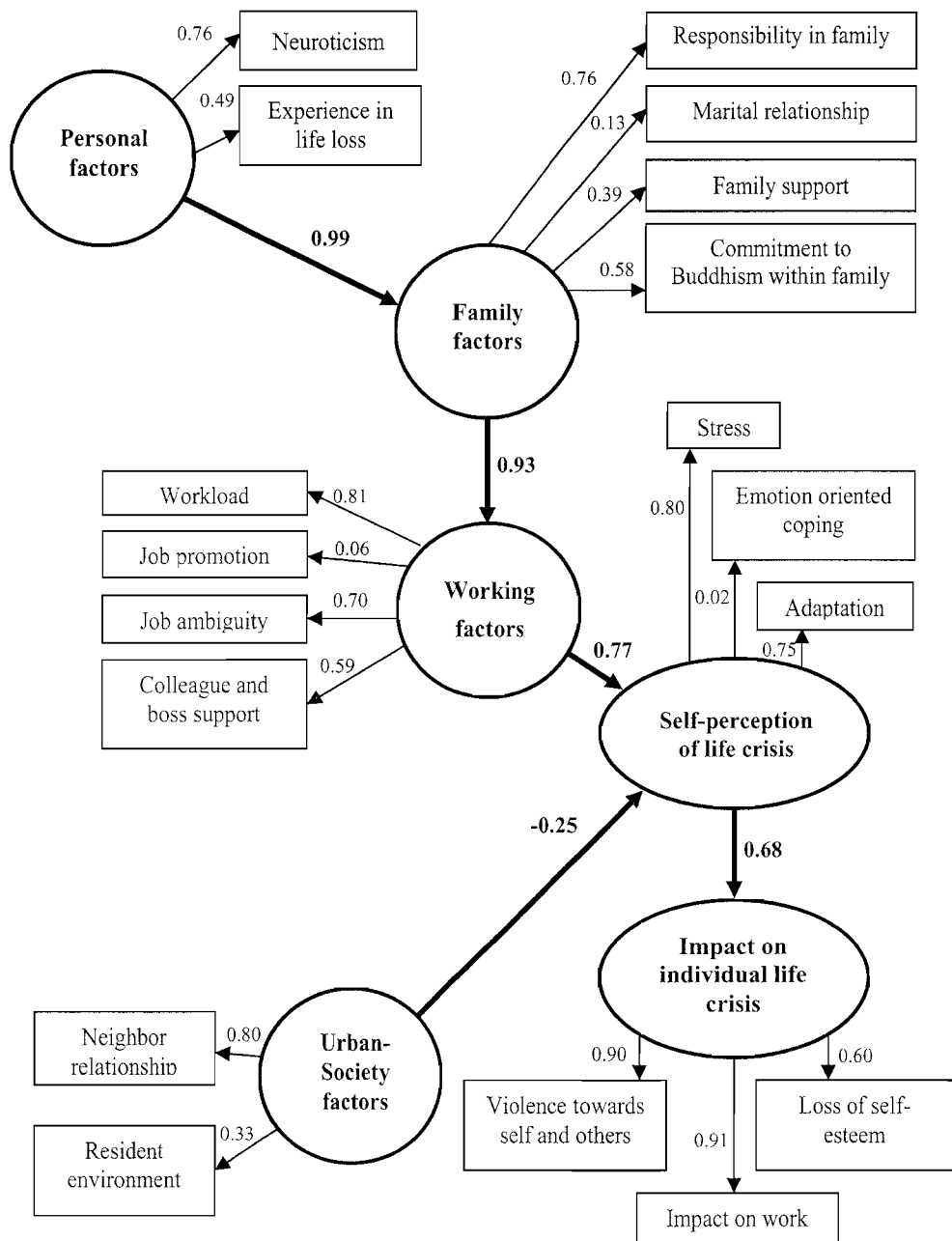


Figure 4

Causal relationship model of midlife crisis in the sample from the government sector



**Figure 5**  
Causal relationship model of midlife crisis in the sample from the state enterprise sector

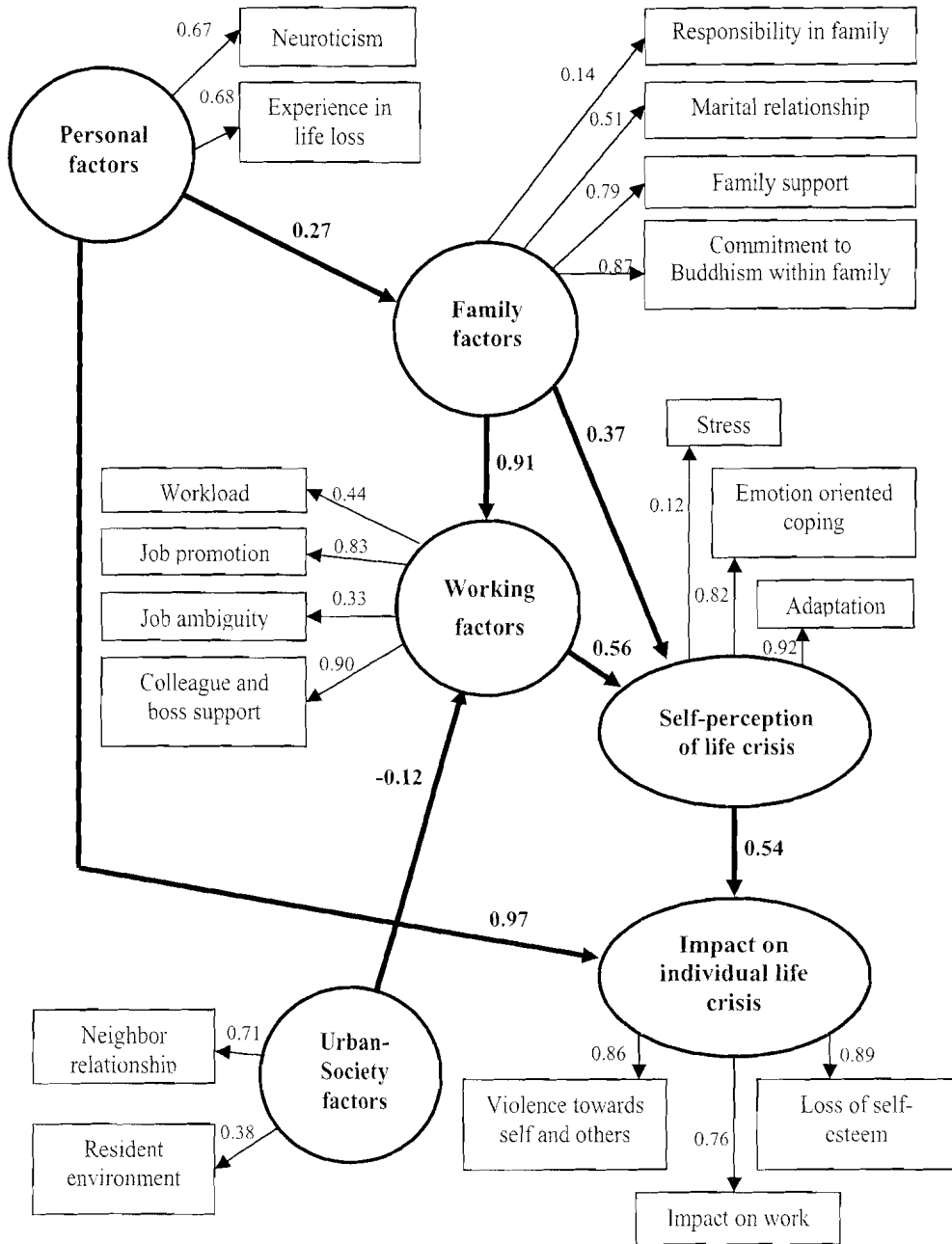
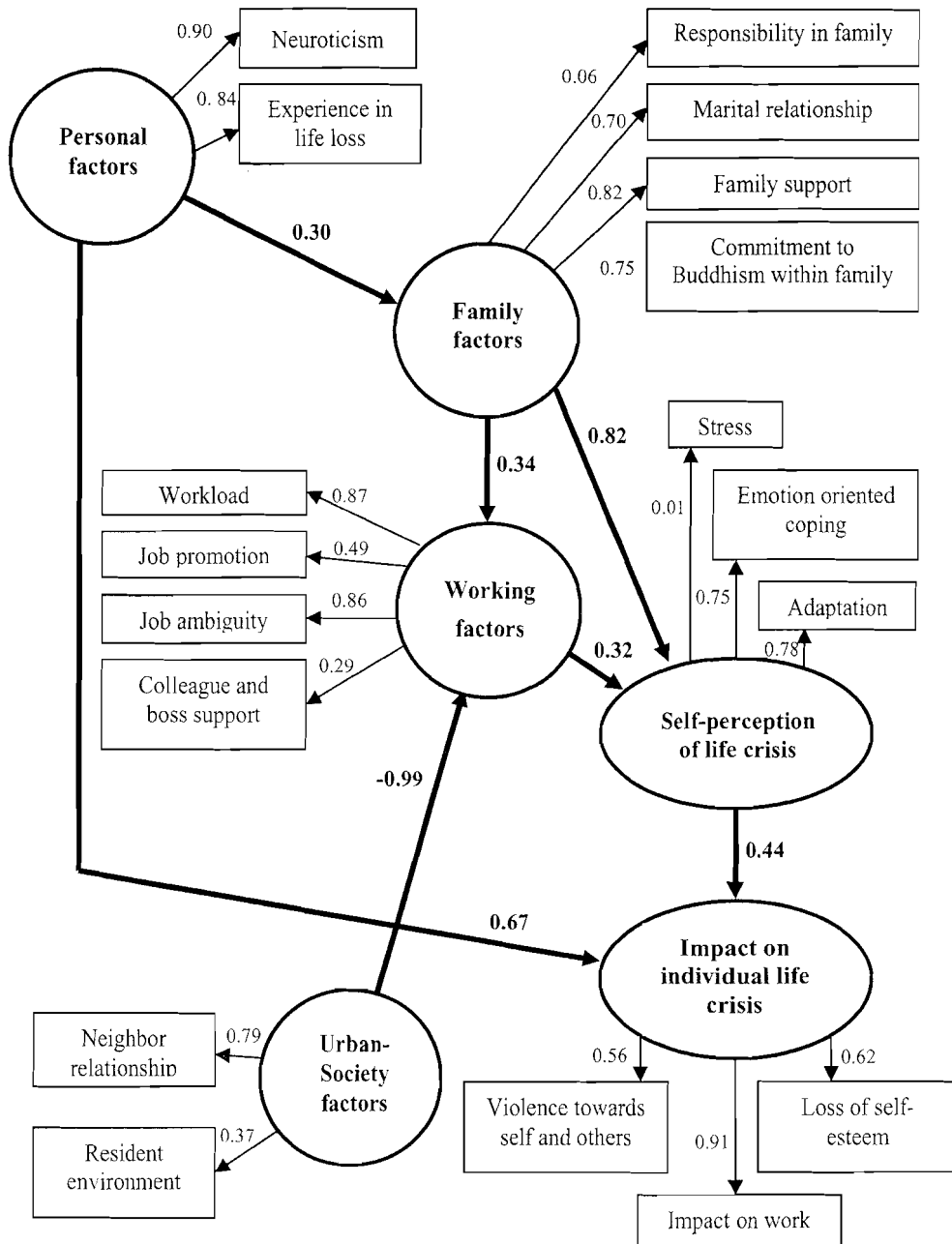


Figure 6

Causal relationship model of midlife crisis in the sample from the private sector



## Summary of Results

1. All 4 factors, namely, personal, family, working and urban-society have direct and indirect influences on 2 dependent variables, namely, perception of life crisis and impact on individual life crisis. Thus, the hypothesis 1 was supported.

2. Stress (13%), emotion oriented coping (95%), and adaptation (99%) emerged as indices to measure dependent variable 1, *life crisis*. Loss of self-esteem, impact on work and violence toward self and others were found to have high percentage of prediction of dependent variable 2, *impact on individual life crisis* (79%, 75% and 81% respectively). Thus, the hypothesis 2 was supported.

3. Results indicate that the hypothesized model is consistent with the data of all 3 sample groups. For dependent variable 1, *crisis*, the model accounts for 89% of overall groups, 95 % of the variance in the government sector group, 84% in the state-enterprise sector group, and 80% in the private sector group. For dependent variable 2, *impact on individual life crisis*, the model accounts for 69%, 46%, 92%, and 62% respectively, which is consistent with the hypothesis 1.

4. The causal relationship model of *overall* is moderately consistent with the hypothesis model indicated by the values of chi-square = 1393.15, p-value = 0.00, df = 54, GFI = 0.90, AGFI = 0.68, CFI = 0.95, RMR = 0.15 and RMSEA = 0.13.

5. The data from *the government sector* are moderately consistent with the hypothesis model as indicated by the values of chi-square = 954.91, p-value = 0.00, df = 10., GFI = 0.78, AGFI = 0.63, CFI = 0.88, RMR = 0.098 and RMSEA = 0.150.

6. The data from *the state enterprise sector* are again moderately consistent with the hypothesis model as indicated by the values of chi-square = 1029.92, p-value = 0.00, df = 106, GFI = 0.82, AGFI = 0.71, CFI = 0.91, RMR = 0.13 and RMSEA = 0.12.

7. The data from *the private sector* are moderately consistent with hypothesis model as indicated by the values of chi-square = 1165.92, p-value = 0.00, df = 103, GFI = 0.79, AGFI = 0.64, CFI = 0.87, RMR = 0.19 and RMSEA = 0.14.

8. High neuroticism found to have an impact on life crises when :
- a) families had lower income
  - b) lower family support
  - c) lower commitment to Buddhism within family
  - d) lower colleague and boss support
  - e) higher job ambiguity
  - f) fewer family members

9. Surprisingly, ANOVA indicated that lower cohabitation period with husband ( $F=0.047$ ,  $P=0.828$ ,  $N=1,375$ ) was not significantly related to perceived crises. Thus hypothesis 7 was not supported. However, perceived lower marital relationships and lower neighbor relationships ( $F = 10.459$ ,  $p < 0.001$ ,  $N=1,375$ ) had an impact on perceived crises.

## Discussion

The independent variables in the causal model were found to have both direct and indirect influences on overall perception of life crisis. In the government sector, we found that only *urban-society factors* and *working factors* have direct influences on life crisis (high levels of  $-0.25$  and  $0.77$  respectively). In other words, the women in the sample perceived that their crises mainly strained from inferior neighbor relationships, residing in unfavorable communities, having too much work load, lack of job promotion, job ambiguity and less colleague and boss support. In the state enterprise and the private sectors results suggest that *family factors* and *working factors* have direct influence on perceived life crisis (high levels at  $0.37$  and  $0.56$  respectively in group of women working in the state enterprise) and ( $0.82$  and  $0.32$  respectively in group of women working in the private sector). These results echo data from Mussess and Conger (Mussess and Conger, cited in Srinui, 2002:73) about family background. Their research found that the happy families support their efficiency of work and lowered perceived crises. In addition, our data support Piphatyothapong (2001:102)'s study on the life-satisfaction of married bank employees. Data from this study suggested that dual roles as employee and spouse contributed to increased conflict about working. Similarly, in a study of nurses, Kreethong (Kreethong, cited in Wongnakhon, 2003:9) argued that married nurses perceived higher quality of life when employed than single nurses, probably due to social support from their spouses assist in stress reduction. Florence, Lutzen and Alexius (Florence, Lutzen and Alexius, cited in Pongamphai, 2003:60-62) found that women who had been supported by their families were better able to cope with problems and adapt to stress than women who had not been supported by their families.

In addition, upon consideration the influence in terms of causal relation of life crisis, it is found that *family factors* have higher overall impact on perceived crises than other factors ( $0.72$ ,  $0.88$  and  $0.93$  respectively). Family factors are directly influenced by personal factors as measured by neuroticism and experience in life loss in the past. Both variables are formal mental characteristics of individuals. This finding supports Julgathappa (1991:11)'s research that indicates stability of personality as

being a significant factor in coping with stress related to work. For experience in life loss in the past, Fuller and Schaller (Fuller and Schaller, cited in Kotprathum, 2003:25) contend that individuals who have had past experience to solve problems shall successfully cope with problems in the present due to increased self-confidence and self-esteem. In our study, urban society factors also directly influenced working factors both in the state enterprise and private sectors. Our data again support studies indicate that working environment and residential environment that are too narrow, unsafe, noisy, improper public utilities, no rest area, no good relations with neighbors are all causes of working stress (Somprasit, 2001:128; Boonliam, 2000 and Pol-asa, 2000:53-56).

The correlations between high neuroticism and responsibility in family, less family support and less colleague and boss support shall impact higher life crisis which supports hypotheses 4 to 6. The multidimensional nature of workplace-stress is captured by our findings: While personality factors such as neuroticism were identified as accelerating stress when faced with unfavorable situations Eysenck (1970:59-60), and stable personalities have negative relation with stress (Chaijandee, 1998:117), our model suggests that personality factors alone do not play a significant role in perception of crises. Like Chanpuelksa (1994:34)'s study that indicates that neuroticism is usually related to limited social participation, our study suggests that personality factors may also co-exist with limited life satisfaction, lack of support from family and work contexts. Good relationships with colleagues is seen as a key ingredient in lowering stress in work (Phrayai, 2004: 61-64; Mansawathapaibool, 2004: 69 and Phaertuan, 2000:123-124). Again, several studies argue that a person who is well supported by family can reduce stress, is better able to cope with problems and shows greater self-adaptation than persons lacking in such support (Pipatanayotapong, 2001:102; Sawadeemongkol, 2004:60; Kusuma Na Ayuthya and Somnarin, 1997:20; Shek, 1995: 45-56 and Florence, Lutzen and Alexius, 1994:266-273 ).

High neuroticism, low commitment to Buddhism within family and high job ambiguity influenced the life crisis. The results again support the hypothesis. Aspects of commitment to Buddhism include regular visits to Buddhist temples, meditation participation in situations and activities. Such activities inherently promote stress reduction through increased health benefits through social support. Some persons usually use Buddhism practice to reduce their stress and use emotion oriented coping in problem-solving. Lazarus and Folkman (1984:141-225) argued that women typically use such methods to cope with stress as a way to reduce stress without change in actual



situation, use mental mechanisms to change new *meaning* of situation. Our survey data on coping and management of crisis indicate that most Thai women groups used emotion oriented coping by behavioral methods, such as, exercise, tour and recreation, watching movies or listening to music, etc. Second on our list is using Buddhism practice to calm down by meditation, prayer, visiting temples to practice Dharma, reading Dharma books and avoiding thinking about serious problems, etc. Therefore, it seems reasonable to assume that several factors outlined in our study may present a complex cocktail of causes in the perception of crises.

Surprisingly and contrary to our hypothesis. There was no systematic relationship between low duration of cohabitation period and perceived crises. This may be due to the fact that women perceive quality of relationship as being more than actual duration. In other words, prolonged cohabitation does not necessary translate into good marital relationships. According to the women in our sample. These findings that favor quality rather than duration of marriage, good neighbors and friends find support in other studies that show. Friendships with others, good family relationships, low conflict within family, good relationships with colleagues the determination fight are significant variable in work-family balance (Srinui, 2002:73; Pipatanayotapong, 2001:102 and Srisook, 1999:131).

### Recommendation

1. A key implication of all findings is that women perceive a.) a good working atmosphere (defined as good colleagues and a good boss, good working relationships), b.) familial support (defined as support of extended family members, a good quality of marital interaction rather than duration), c.) high commitment to spirituality (defined as engaging in Buddhist practices and to enhance a sense of calm) d.) urban society factors as key to crisis reduction. Therefore, in assisting women and providing help with crisis-management, we suggest that personnel departments in work contexts pay more interest and encourage, support and provide clear details of work assignments, assign appropriate and situation-sensitive workload, accounting for dual roles of family and work, and provide assistance either in the form of flex-time working arrangements or specific financial compensations (eg. maid-assistance, nanny and sitter-allowances etc.), or a combination of such factors. In addition, the government should establish specific government departments to provide consultation and suggestions specifically targeting *midlife* crises of women.

2. It is interesting to note that social support appears to be defined by the women in our sample on a broader spectrum than merely increased time with spouse: a more global view of crisis management. This finding merits further investigation on how some other aspects (quality of relationships, division of labor, financial support, and social support networks, to name a few) might impact perception and management of midlife crises.

3. Since the women in our sample emphasize the importance of spirituality in their mental health and emotional well-being, we contend that the work contexts could benefit greatly from increasing the use of such program and training sessions.

4. Other variables that may impact crises include responsibility in families, financial problems, boredom, emotional exhaustion, conflict in work and family, pressure from family, expectation in work, good physical and mental health. It is our hope that these factors will be increasingly incorporated in a gender-sensitive fashion, as employers in all three sectors design programs for the well-being of their employees.

### Acknowledgements

The research was financially supported by the Thailand Research Fund. We really appreciate the valuable advice and guidance of Asst. Prof. Wiladlak Chauwanlee, Ph.D., Director of Behavior Science Research Institute, Srinakharinwirote University and Assoc. Prof. Ngamta Vanindananda, Faculty Member.

### References

- Archavanitkul, Kritaya. 2001. *The effect of domestic violence on women*. Bangkok: The Institute for Population and social, Mahidol University. (in Thai)
- Aguilera, D. C. and Messick, J. M. 1982. *Crisis intervention*. Siant Louis : CV.Mosby Co., 63-64.
- Baruch, G. K. and Barnett, R. 1996. Role quality, multiple role involvement, and psychological well-being in midlife women. *Journal of Personality and Social Psychology*. 51(3): 578-585.
- Bhanthumnavin, Duangduen and others. 1997. *Belief and buddhism commitment of Thai: socialization and quality of life*. Bangkok: Faculty of Social Development, NIDA. (in Thai)

- Bhanthumnavin, Duangduen. 1998. *Psychosocial development theory of Erikson*. Bangkok: Faculty of Social Development, NIDA. (in Thai)
- Bird, Gloria W. and Melville, Keith. 1994. *Families and intimate relationships*. USA: McGraw-Hill, Inc., 351-371.
- Boonliam, Warin. 2000. *Prevalence rate of stress from working and psychosocial factors of worker in the alkaline battery factory*. Master's thesis, Chulalongkorn University, Bangkok. (in Thai)
- Brown, W. B. and Moberg, D. J. 1980. *Organization theory and management : A macro approach*. New York: John Wiley & Sons .
- Buaphet, Apornthip. 2004. Result of management program and stress in working of industrial employee in Songkhla Province. *Mental Health Magazine of Thailand*. 12 (2): 61-70. (in Thai)
- Chaijandee, Watchara. 1998. *Variables related to stress in practical teaching of orientation lecturer of nursing college attaché to Phra Borom Ratcha Chanok, Ministry of Public Health*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Chamjitchuen, Santichai. 2004. *Crisis intervention*. Retrieved September 11, 2004, Available: <http://www.mahidol.ac.th/mahidol/ra/rapc/crisis.html> .(in Thai)
- Chancharmlha, Tipsuda. 2001. *The relationship between psycho-social characteristics of caregivers and social support behavior to AIDS infected persons*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Chanpuelksa, Prapis. 1994. *Relationship Between personality, social engagement and life satisfaction of Thai elderly in Bangkok*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Chunhapran, Paungphen and others. 2000. *Coping of single parent women in urban area Bangkok Metropolitan*. Research report, Chulalongkorn University, Bangkok, Thailand. (in Thai)
- Cranwell Ward. 1987. *Managing stress*. Aldershot, Hants: Grawer.
- Department of Mental Health. 1999. *Crisis coping by counseling*. Bangkok: The Ministry of Public Health Press. (in Thai)
- Dewe, Phillip. 1991. Primary appraisal, secondary appraisal and coping : Their role in stressful work encounters. *Journal of Occupational Psychology*. 6(4): 331-351.

- Erikson, E. H. 1968. *Identity youth and crisis*. New York: Norton.
- Eysenck, H. J. 1970. *The structure of human personality*. London: 3<sup>rd</sup> ed., Methuen.
- \_\_\_\_\_. 1991. Neuroticism, anxiety, and depression. *Psychological Inquiry*, 2(1): 75-76.
- Florence, M., Lutzen, K. and Alexius, B. 1994. Adaptation of heterosexuality, infected HIV positive women. *Health Care for Women International*, 15: 265-273.
- Jacobson, D. E. 1986. Types and timing of social support. *Journal of Health and Social Behavior*, 27: 250-264.
- Julgathappa, Sudabai. 1991. *Dark risk from stress*. Bangkok: Saimrat, November. (in Thai)
- Koeske, G. F., Kirt, S. A. and Koeske, R. D. 1993. Coping with job stress : Which strategies work best?. *Journal of Occupational and Organizational Psychology*, 6(6): 319-331.
- Kongsakon, Ronnachai. 2004. *The clinical case study report*. Bangkok: Psychiatry department, Ramathibordi Hospital. (in Thai)
- Kotprathum, Karanpich. 2003. *Family adaptation in case of family member is seriously hurt on the head according to the family crisis theory of Hill*. Master's thesis, Khon Kaen University, Khon Kaen province. (in Thai)
- Kusuma Na Ayuthya, Sasima. and Somnarin, Oratai. 1997. *Family support and coping behavior in AIDS patients*. Bangkok: Research report, Mahidol University. (in Thai)
- Lazarus, R. S. and Folkman, S. 1984. *Stress appraisal and coping*. New York: Springer Publishing Company.
- Luthans, F. 1992. *Organizational behavior*. NJ: Mc Graw-Hil.
- Mansawathapaiboon, Nawarat. 2004. *Factors of stress in working of nurses, Siriraj Hospital*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Matthews, L. S., Conger, R. D. and Wickrama, K. A. S.. 1996. Work- family conflict and marital quality mediating processes. *Social Psychology Quarterly*, 59(1): 62-79.
- Milanovic, Branko. 2005. Can we discern the effect of globalization on income distribution? Evidence from household surveys. *World Bank Economic Review*, 19(1): 21-44.
- National Statistical Office. 2003. *Report of social statistic*. Bangkok: Standardized Statistic Group, Policy and Statistical Techniques Bureau. (in Thai)

- Office of Women's Affairs and Family Development. 2004. *Policy and strategy of family institute development 2004-2013*. Bangkok. (in Thai)
- Oles, P. K. 1999. Towards a psychological model of midlife crisis. *Psychol Rep.* 3(2): 1059-1069.
- Phaertuan, Jiraporn. 2000. *Stress and job satisfaction of nurses in hospital of medical office*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Phinpradit, Neon and others. 2003. *Socio-psychology indicator of working behavior of police officer attached to provincial police regional 4*. Bangkok: Office of National Research Committee. (in Thai)
- Phrayai, Naruemol. 2004. *The study of stress and cause of stress in working of daily nurse in Bangkok*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Pipatanayotapong, Thanimkan. 2001. *Psychological factor related to the life satisfaction of married employee of the bank*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Pol-asa, Trichada. 2000. *Stress of guidance teacher, public secondary school in Roi-Ed province*. Independent study, Maha Sarakham University. (in Thai)
- Pongamphai, Watinee. 2003. *Social support of family and social support of clinic and adaptation of menopause women*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Sampson, L. B. 1993. Employment, family and perceptions of marital quality among husbands and wives. *Journal of Family Issues.* 14(2): 189-212.
- Sawadeemongkol, Nuttanich. 2004. *Factors of stress in working of administrators in pre-primary school, Office of the Private Education Commission. Master's thesis, Burapha University, Choburi province*. (in Thai)
- Shaefer, M. T. and Olson, D. H. 1981. Assessing intimacy: The PAIR inventory. *Journal of Marital and Family Therapy.* 7: 47-60.
- Shek, D. T. L. 1995. Marital quality and psychological well-being of married adults in a Chinese context. *Journal of Genetic Psychology.* 156(1): 45-56.
- Shek, D. T. L. 1996. Midlife crisis in Chinese men and women. *Journal of Psychology.* 130(1): 109-119.

- Simachokdee, Withoon. 1995. *Industrial organization psychology: HR management and productivity promotion*. Bangkok: Duangkamol Samai Co., Ltd. (in Thai)
- Social Development and Human Security, Ministry. 2005. *Social Report, Family Report 2004*. (2): 3-18. (in Thai)
- Sornprasit, Theraporn. 2001. *Factors related to stress of practice officer in factory: Case study in Medline Product, company*. Master's thesis, NIDA, Bangkok. (in Thai)
- Srinui, Phinthip. 2002. *Factors influenced to boredom in working of nurse at psychiatric hospital in Bangkok*. Master's thesis, Srinakharinwirot University, Bangkok. (in Thai)
- Srisook, Marakot. 1999. *Related women, men to economic security of women in Thai family*. Doctoral dissertation, Srinakharinwirot University, Bangkok. (in Thai)
- Thoits, P.A. 1995. Stress, coping and social support processes: where are we ? What next?. *Journal of Health and Social Behavior*. Extra Issue, 53-79.
- Vanindananda, Ngamta. 2002. *An analysis of marital quality indicators in Thai families: Antecedents and consequences*. Bangkok: Behavioral Science Research Institute, Srinakharinwirot University. (in Thai)
- Voydanoff, P. and Donnelly, B. W. 1998. Parents risk and protective factors as predictors of parental well-being and behavior. *Journal of Marriage and the Family*. (60): 344-355.
- Wiersma, Uco J. 1990. Gender differences in job attribute preferences: work-home role conflict and job level as mediating variables. *Journal of Occupational Psychology*. 6(3): 231-243.
- Wiratchai, Nonglak. 1999. *Lisrel model – analytical statistic for research*. Bangkok: 3<sup>rd</sup> edition. Chulalongkorn University Press. (in Thai)
- Wisaspong, Wanphen. 1997. *Social transfer and human development*. Bangkok: Behavioral Science Research Institute, Srinakharinwirot University. (in Thai)
- Wongnakhon, Kritika. 2003. *Working life quality and commitment to the organization of active nurse: Case study of Phraphutthabat hospital, Saraburi Province*. Bangkok: Srinakharinwirot University. (in Thai)