CHAPTER 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The literature reviews for this study included COPD and its impacts on patients, self-concept, family support, and relationship between family support and self-concept. Also the conceptual framework for the study was provided.

COPD and its impacts on patients

COPD is the disease characterized by airflow obstruction, air trapping, hyperinflation, and impaired gas exchange, resulting in a syndrome of shortness of breath, cough, sputum production, and possibly wheezing (Weilitz & Sciver, 1996). According to Johnson (1988) and Weilitz and Sciver (1996), chronic bronchitis, emphysema, and adult asthma are included in COPD. Because of structural changes in the terminal bronchioles and decreased elastic recoil on expiration, the elastic recoil of the lung is unable to force the air out. The client must work harder to exhale, the work of breathing is increased (Monahan & Neighbors, 1998). Severe hypoxemia and hypercapnia are the typical characteristics of the disease which can result in many complications (Monahan & Neighbors, 1998). Kinsman, Fernandez, Schocket, Dirks, and Covino (1983) found that dyspnea, fatigue, sleep difficulties, and congestion were the physical symptoms experienced most frequently by COPD

patients. Poor exercise tolerance, loss of appetite, and loss of weight were also found (Monahan & Neighbors, 1998). COPD, therefore, affected all areas of life, including work and home life, physical and sexual aspects of marriage, child rearing, and dependent needs (Hanson, 1982). Not only physiological effect, but psychosocial problems are also reported. Irritability, anxiety, and helplessness-hopelessness were common psychological responses to the disease. Patients with COPD were notably depressed and anxious about their conditions (Prigatano, Wright, & Levin, 1984; Kaplan, Eakin, & Ries, 1993). Furthermore, the constant shortness of breath, fatigue, and limitation of activity may cause retirement from employment, limitation of social activities, and feelings of social isolation (Harkness & Dincher, 1996).

Economic problems may also be found in COPD patients. It has been known that COPD has been enormously costly to individual, family and society. The economic costs for COPD in the United States in 1984 were very high. Approximately $15 billion were spent each year for healthcare costs, missed work time, and lost wages (Kaplan, Atkins, & Timms, 1984). Having to be early retired also contributes to financial strains (Sexton, 1990). So, COPD patients are always financial dependent.

In summary, COPD has been shown to have many impacts on patients' physical, psychological, social, and economic functioning; and all the impacts or limitations reflect that

patients' self-concept is more likely to be changed because of COPD.

Self-concept

Definition of self-concept

Self-concept is defined as the "composite of beliefs and feelings that a person holds about self at a given time" (Driever, 1976 cited in Roy & Andrews, 1999). Burns (1979) defined self-concept as a composite image of what an individual thinks he/she is, what he/she thinks he/she can achieve, what he/she thinks others think of him/her, and what he/she would like to be. According to Rosenberg, self-concept is "the totality of the individual's thoughts and feels with reference to himself or herself as an object" (Rosenberg and Kaplan, 1982). Fuller and Schaller-Ayers (1994) similarly defined self-concept as how a person views or defines himself or herself at a given time and can often be reflected in answers to such questions as "Who am I? What am I?"

In the Roy Adaptation Model (Roy & Andrews, 1999), the individual aspect of the self-concept mode is viewed as having two subareas, the physical self and the personal self. The physical self includes two components, body sensation and body image. It includes the person's appraisal of physical being, including physical attributes, functioning, sexuality, health and illness states, and appearance. Body sensation applies to the ability to feel and to experience oneself as a physical being. Body image

applies to how one views oneself physically and one's appearance. The personal self is viewed as having three components: self-consistency, self-ideal, and moral-ethical-spiritual self. Self-consistency refers to an organized system of ideas about self. Lecky (1961 cited in Roy & Andrews, 1999) identified that through the need for self-consistency, the person strives to maintain a coherent self-organization and avoid disequilibrium. Self-ideal relates to what one would like to be or is capable of doing. The moral-ethical-spiritual self includes the belief system and an evaluation of which one is in relation to the universe.

Self-concept is formed from internal perceptions and perceptions of others' reactions and directs the person's behavior. According to symbolic interactionism, self-concept evolves from infancy through old age. One of the most influential factors is the kind of interactions one has with others, such as parents, siblings, peers, authority figures, and the general sociocultural milieu. In other words, one often becomes what others expect (Fuller & Schaller-Ayers, 1994). Self-concept is a reflection of one's perceptions about how one appears to others. Self-perceptions consisting of what the person believes others think of him or her becomes firmly embedded in the overall self-concept. Close relationships with others promote self-concept by fostering feelings of importance and desirability. Medical concerns, illnesses, physical disabilities, or disfigurements might be the threats to self-concept (Fuller & Schaller-Ayers, 1994). If self-concept is threatened and defenses are not

sufficient, stress increases and the person may experience personality disorganization, a loss of control, and a sense of powerlessness and helplessness (Fuller & Schaller-Ayers, 1994). In contrary, if self-concept is positive, the healthy personality will be formed.

Self-concept of COPD patients

As previously mentioned, the COPD patients experience many physiological, psychological, and socioeconomic difficulties (McSweeny & Labuhn, 1990). Physical limitations lead to dependence, thereby low self-esteem. Depression and anxiety were identified as both the cause and effect of the use of denial, depression, and isolation to minimize psychological activation (Dudley, Glaser, Jorgenson & Logan, 1980). Helplessness-hopelessness was also common psychological responses to COPD (Kinsman, Fernandez, Schocket, Dirks, and Covino, 1983). These problems are known to affect self-concept negatively. Furthermore, social isolation and financial dependency also lead to low self-esteem and low self-worth. In a word, patients with COPD are most likely to experience negative self-concept.

Measurement of self-concept

Several instruments have been used to measure self-concept. Piers and Harris's Self-concept Scale contains 80 items, which are used to measure self-concept of children aged 6 to 16 (Piers & Harris, 1969). Sears' Self-concept Inventory evaluates changes of self-concept resulting from intervention programs consisted of 48 items (Sears, 1963

cited in Shavelson, Hubner & Stanton, 1976). Fitts' Tennessee Self-concept Scale consists of 100 items, measuring five dimensions' self (physical, moral-ethical, personal, family, and social) (Fitts, 1965). A 20-items semantic meaning differential scale was also developed by Osgood et al which monitors subjective changes in psychologic status (Osgood, Suci, & Tannenbaum, 1957 cited in Kersten, 1990). Rosenberg's (1982) Self-esteem Scale is another instrument developed but measures only a part of self-concept.

In 1998, a Self-concept Scale (SCS) was developed by Li (1998) to measure self-concept of schizophrenic patients in Chengdu, China. The SCS was intended to measure the extent to which the composite of beliefs and feelings that one holds about oneself at a given time based on the Roy's Adaptation Model. It was proved to be homogeneous (the content validity index is .84) and its reliability was considered as acceptable with Cronbach's alpha of .88.

In conclusion, self-concept is defined as the composite of beliefs and feelings that a person holds about self at a given time. According to Roy (1999), the individual aspect of the self-concept mode is viewed as having two subareas, the physical self and the personal self. Patients with COPD experience negative self-concept. Many instruments to measure self-concept have been developed. Among all instruments, Self-concept Scale developed by Li(1998) based on Roy's Adaptation Model is mostly fit for this study.

Factors affecting self-concept

There are many factors affecting self-concept which can be called stimuli. According to Buck (1984) and Roy (1991), there are six general categories of stimuli including growth and development, learning, reactions of others, perception, maturational crises, and coping strategies. In growth and development, age and degree of physical development are considered to influence one's self-concept as ability change and control of bodily function change. Through learning, one's self-concept is affected by social expectations and values as well as those of significant others. Interaction with significant others can influence the individual's perception of self. If there is a conflict in the age-defined developmental stage and associated maturational tasks or maturational crises, the individual's self-concept may be changed. Roy (1999) viewed coping strategies as "the ways the person functions to maintain integrity in everyday life and in times of stress." Disruption of the ways or other routines might threaten the person's sense of self.

Since COPD is a chronic disease with progressive course and frequent exacerbation (Sexton & Munro, 1988), it makes patients change in body function, perception of self, and role. The longer of duration of illness is, the more severe the patient is (Lee, Graydon & Ross, 1991). Severe disease makes patients be more dependent on family members, which results in lower self-worth. Frequent exacerbation needs frequent hospitalization and more money for treatment

of the disease. Since COPD usually impacts individuals in their 50s which is thought to be the peak of their production, COPD patients have to be retired earlier and change their roles from income-winners to the family dependent. The dependency can result in more negative self-concept. Therefore, frequency of hospitalization and duration of being diagnosed, which can be considered as severity of disease, may negatively related to COPD patients' self-concept.

Family support

Definition of family support

Family support can be defined terminologically or syntactically as social support from family. According to Cobb (1976), family support is similarly defined as social support, except the source of support is specified to family. He mentioned that social support is information leading the person to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligations. Later on he provided another definition of social support by using four key words, love, esteem, security, and appraisal, which could be viewed a four different kind of support potentially available from others (Cobb, 1982).

Kaplan, Cassel, and Gore (1977, cited in Heitzmann & Kaplan, 1988) defined social support as the "metness" or gratification of an individual's basic social needs such as approval, esteem, succor, and belonging. Other definitions

of social support have been mentioned. Craven and Wellman (1973) proposed that social support might be tangible, in the form of money or other types of assistance. Social support, based on Weiss's model of relational function (cited in Brandt & Weinert, 1981), is the perceived support composed of five dimensions. The five dimensions are provision for attachment/intimacy, social integration, that is being an integral part of a group, opportunity for nurturant behavior, reassurance of worth as an individual and in role accomplishments, and the availability of informational, emotional, and material help. Attachment/intimacy refers to a sense of security and love. Social integration is the sharing of concerns, information, and ideas among the social participants. Opportunity for nurturance refers to opportunity for taking responsibility for the well being of another. Obtaining informational and tangible help can modify the health behavior and easily adapt to the stressful situations.

Weinert (1988) followed the definition of Weiss's. House and Kahn (1985) viewed social support as emotional, instrumental, informational and appraisal assistance. Cutrona (cited in Hutchison, 1999) added a fifth dimension, social integration, to combine structural (network) and functional (types of resources) characteristics of support. Heitzmann and Kaplan (1988) stressed that social support include both tangible components, such as financial assistance and physical aid, and intangible components as encouragement and guidance.

According to Phillips (1991), social support resources are composed of subsystems, systems, and suprasystems. The subsystems consist of dyadic or triadic relationships, which are characterized by intense mutual interdependence between the person and significant others, who can be human or companion animals. Systems are composed of the interrelationships of the persons and a more or less organized group, which can be the persons' family unit or a social service agency. Systems contain subsystems and are embedded in suprasystems which contain those social support systems within a large community. So, family is the basic unit of society and is regarded as one part of social network, the concept of family support is, therefore, often discussed within the context of social support (Danielson, Hamel-Bissell & Winstead-Fry, 1993). Family is a group of two or more individuals usually living in close geographic proximity; having close emotional bonds; and meeting affectional, socioeconomic, sexual, and socialization needs of the family group or the wider social systems (Jassak, 1992). Family members normally include husband, wife, sibling, father, mother, and others depend on family types, which can be extended a nuclear family. Family is the most important resource of social supportive resources.

Based on the idea of Phillips's system of social support and the completed view in aspects of social support, family support in this study will be defined as perceived social support in five dimensions among intimacy, social integration, nurturance, worth, and assistance fulfilled by

family members including parents, siblings, spouse, children and close relatives.

Significance of family support

A large body of data suggests that social support might have impacts on physical and psychological health through its stress-mediating or stress-buffering role (Heizmann & Kaplan, 1988). Cobb (1976) pointed out that social support facilitates coping with crisis and adaptation to change. Social support may reduce the amount of medication required, accelerate recovery, and facilitate compliance with prescribed medical regimens. Social support, as from family, therefore, appears to protect people in crisis from a wide range of health problems (Caldwell, 1988). Receiving support may influence health through enhanced motivation to perform health related behaviors, suppression of neuroendocrine responses, and enhanced immune function (Cohen, 1988).

Family support was found to be associated with less depression, less anxiety, and better family functioning (Lee & Kang, 1991; Primomo, Yates, & Woods, 1990). In close relations, individuals may provide help because they feel as if the events are happening to them (Hobfoll & Vaux, 1993). A study of social support for those families in which one of the married partners has a long-term health problem showed that family support acted as a buffering or intervening variable for stressful life events (Brandt & Weinert, 1981). The loss of supportive family relationships increased the risk of mortality and morbidity (Caldwell, 1988). Among

other dimensions of social support, emotional support encourages a person to sustain, redouble, or renew coping efforts that increase the likelihood of stress management or mastery, while informational support may affect adaptation outcome by suggesting alternative solutions to a problem or help a person reappraise a situation in the direction of stress reduction (Schaefer et al., 1981).

As reviewed previously, COPD patients perceive decreased function of lung, changed lifestyle, becoming dependent on others physically, psychologically, socioeconomically, may result in negative self-concept. They need others especially family members to help them to adapt the disease. Informational, emotional, and material helps may reduce the amount of medication required, facilitate compliance with prescribed medical regiments, make the patient seek and perform behaviors to promote rehabilitation. Furthermore, being attached and mutually nurtured, being valued as an integral part of a family may improve their self-worth, self-esteem. The family support, therefore, is necessary for COPD patients.

Measurement of family support

Since family support is defined as the social support received from family, it can be measured by the instruments that measure social support. There are many instruments for measuring social support. The Norbeck Social Support Questionnaire (NSSQ) (Norbeck, Lindsey, & Carrieri, 1981) was developed concerning with functional properties of social support such as affect, affirmation, and aid. The

Schaefer, Coyne, and Lazarus (1981) Social Support Questionnaire (SSQ) was designed to measure tangible support. The Perceived Social Support from Family (PSS-Fa) Scale developed by Procidano and Heller (1983) was intended to measure the extent to which an individual perceives that his /her needs for support, information, and feedback are fulfilled by family. The Inventory of Socially Supportive Behaviors (ISSB) (Barrera, 1981a) is used to measure the frequency with which the persons are the recipients of supportive actions. Barrera (1981a) also developed the Arizona Social Support Interview Schedule (ASSIS) to measure six categories of social support: material aid, physical assistance, intimate interaction, guidance, feedback, and positive social interaction.

Brandt and Weinert (1981) developed the Personal Resource Questionnaire (PRQ) based on Weiss's relational function model and revised it two times (Weinert, 1988). Two parts are included in PRQ. Part 1 of the PRQ intends to measure the person's supportive resources, the satisfaction with these resources, and whether or not there is a confidant. Part 2 of the PRQ85 uses to measure the person's perceived level of social support in five underlying dimensions: intimacy, social integration, nurturance, worth, and assistance. The nurturance subscale items are designed to measure the support a person provides to younger people; whereas the intimacy, social integration, worth, and assistance subscale measure support received from others. Brandt and Weinert (1981) pointed out that that PRQ-Part2 is

a stronger predictor of family functioning outcome than PRQ-Part1. The estimate of the internal consistency, Cronbach alpha, of .89 for the total scale of PRQ85-Part2 was reported by Muhlenkamp (1985 cited in Weinert, 1988) in the studying among the elderly. The content validity was also assured. The PRQ85-Part2 has been used to measure social support in many groups such as adults aged 30 to 37 years (Weinert & Brandt, 1987), older adults and family (Muhlenkamp, 1985 cited in Weinert, 1988), maternal discipline (Brandt, 1984), Chinese COPD Patients (Yan, 1997). It will be used to measure family support of COPD patients in this study.

Factors affecting family support

Lots of factors affect family support such as number of family members, educational level of patients and family members, relationships among family members, family economic status, and interaction between patients and their family members. Normally more family members may share more tasks to help the patient; so, the patient may get higher perceived family support. Educational level contributes to cognitive ability that facilitates realistic stress perception and problem-solving skills (Turk & Kerns, 1985). Higher educational level may help the patients and their family members all understand the disease well, seek more information together to stabilize the disease. Therefore, the patients could perceive more supports from their family members. Close relationship between family members can provide a sense of security.

Frequency of hospitalization and duration of diagnosis as indicators of severity of disease seem to influence the interaction between patients and their family members. The more severe and long lasting the illness, the greater the potential for family disruption (Turk & Kerns, 1985). Frequent hospitalization needs family members provide more money for treatment with the disease. Family members need to spend more time to care the patient and seek information to control the patient's symptoms. At the same time, family members need to gain more money for the medical regimens. Conflict results in between care time and work time of the family members. In this condition, family members may also feel more stress to cope with, further, withdrawing is caused. Thus, the patients may perceive lower support from family members. Therefore, all the factors mentioned above may impact the level of support from family members. Among the factors, frequency of hospitalization and duration of diagnosis may be important and negatively related to family support.

Relationship between family support and self-concept

The relationship between family support and self-concept in COPD patients has not been found in the literature review, but the study in children with leukemia was reported. South (1995) used a convenience sample of 17 school age children with leukemia to study the relationship between social support and self-concept. South found that there was a strong positive relationship between social

support and self-concept of school age children with leukemia.

COPD is a condition that incapacitates a person physically, psychologically, and socioeconomicly (Taylor, Gleason & Grady, 1995). All of the incapacitates result in negative self-concept in COPD patients. Family support may provide family members the chance to express their thoughts and feelings freely, and increase their feelings of self-confidence, self-esteem, and feeling of control and autonomy (Willian, O'Sullivan, Snodgess & Love, 1995). Chaitchik and associates (1992) stated that spouse support might be helpful to restore self-esteem and sense of acceptance, to increase hope and enhance motivation for coping. A study on oxygen-dependent COPD patients (Lee, Graydon & Ross, 1991) showed that COPD patients' experienced symptoms positively related to duration of illness and negatively related to psychological well-being and social support.

According to Dimond and Jones (1983) based on Weiss's concept of social support, attachment can provide a sense of security and place. A lack of attachment results in emotional isolation and loneliness. Absence of social integration introduces social isolation; opportunity for nurturance gives an individual a sense of being needed, loss of the opportunity may give rise a sense of meaninglessness in life; reassurance of worth gives oneself a sense of useful; lack of guidance may result in hopelessness. Because hopelessness, uselessness, low self worth, and isolation reflect negative self-concept, low level of family support

may result in negative self-concept. So, family support may positively related to self-concept.

Summary

COPD and its impacts on patients' physical, psychological, and socioeconomic aspects have been reviewed, the definitions, measurement and influence factors of self-concept and family support, how COPD influence patients' self-concept, the benefits of family support, and the relationships between family support and self-concept, frequency of hospitalization, duration of diagnosis and self-concept, frequency of hospitalization, duration of diagnosis and family support have also been reviewed. COPD affects patients with many limitations, resulting in negative self-concept in COPD patients. Family support was reviewed from social support perspective, except the source especially on family. The definition of support of Weiss, Brandt and Weinert and self-concept from Roy' Adaptation Model were reviewed.

Conceptual framework

The conceptual framework of this study is derived from the Roy adaptation model (1999) and the concept of social support of Weiss (1974, cited in Brandt and Weinert, 1981) and Brandt and Weinert (1981).

According to Roy (1999), humans are holistic adaptive systems constantly responding to focal, contextual, and residual stimuli from both the internal and external

environment with internal coping process (the cognator and regulator), acting to maintain adaptation in the four adaptive modes: physiological mode, self-concept, role function and the interdependence modes. The self-concept includes physical-self and personal self. Physical self deals with body sensation and body image. Body sensation refers to the ability to feel and experience oneself as a physical being. Body image applies to how one views oneself physically and one's appearances. The personal self encompasses self-consistency, self-ideal, and the moral-ethical-spiritual self. Self-consistency is the continuity of oneself over time. The self-ideal is what one expects of self what one wants to accomplish. The moral-ethical-spiritual self involves spiritual values, the goodness of personal lives.

COPD is the disease that causes physical, psychological, and socioeconomic limitations. It is conceptualized as a focal stimulus to the individual to which that he/she has to cope. Considering self-concept which is one of the four modes of adaptation, all common physical changes experienced by COPD patients (Monahan & Neighbors, 1998) can be the input or stimuli into the human system from which responses in self-concept mode can be found: including changes in body image and body sensation, feeling of uselessness and worthlessness, changes in self-ideal, moral-ethnical-spiritual-self, as well as self-consistency. Therefore, COPD as focal stimuli can cause a response in self-concept mode, which support from other

people are needed. Similar to Weiss's idea, Brandt and Weinert proposed five dimensions of support including intimacy, social integration, nurturance, worth, and assistance. All dimensions of support from family member can be the input into the system and can affect patient's self-concept. Therefore it is a contextual stimulus. Frequency of hospitalization and duration of being diagnosed as the indicators of severity of the disease may be the input and can influence both self-concept and family support (See Figure 1).

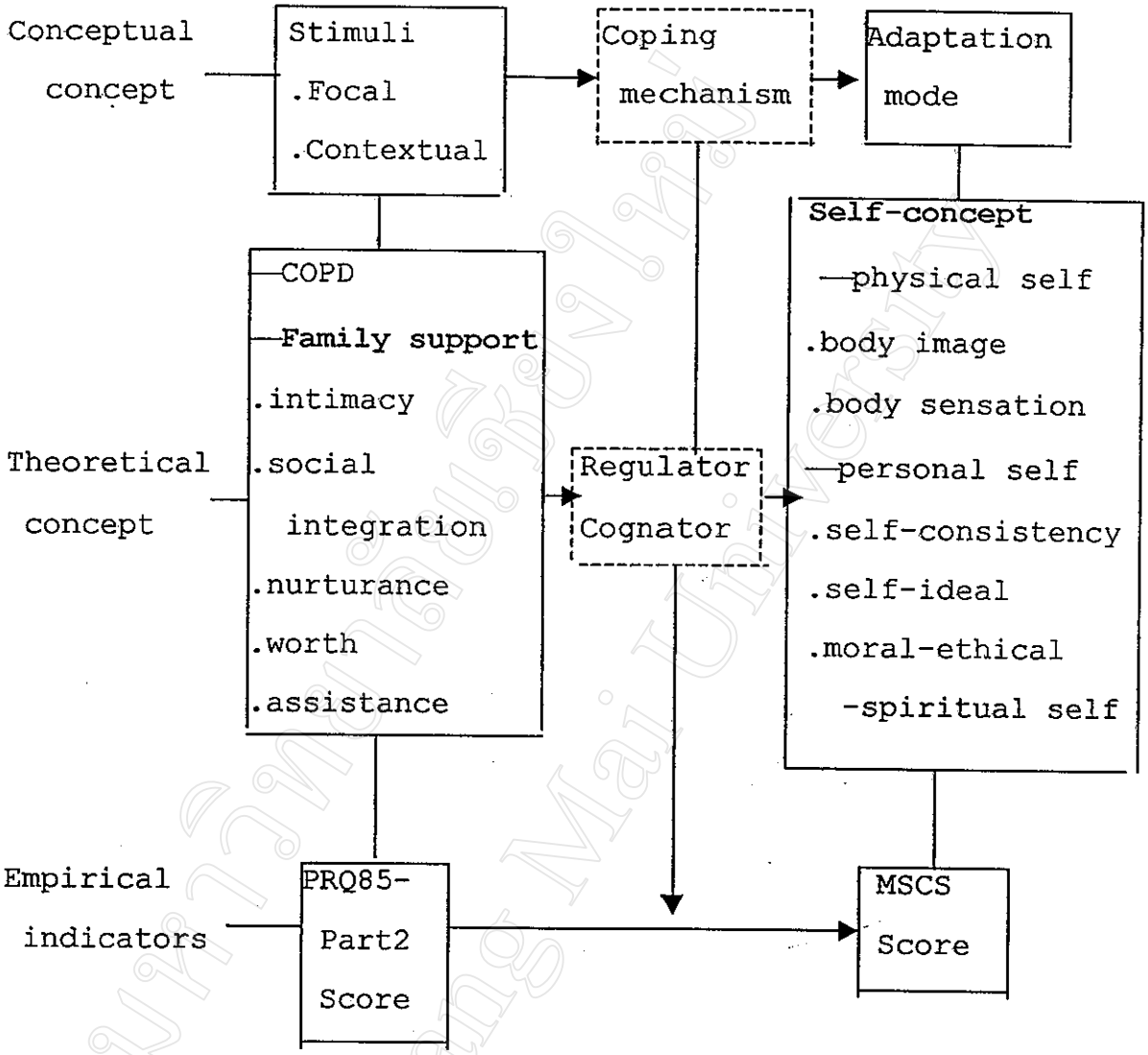

Figure 1: A conceptual framework for the study