CHAPTER II

LITERATURE REVIEW

This research focuses on studying relationship between body image satisfaction and disordered eating behavior. This chapter review relevant materials which can be used to fulfill the study, which consists of four major parts as follows:

1. Concept of body image
2. Eating disorders
3. Association of body image and dieting behaviors.
4. Studies in Thailand

2.1 Body Image

2.1.1 Definitions

Body image is the way in which we feel about our bodies. People with a positive body image often feel comfortable and confident in their own bodies. People with a negative body image usually feel uncomfortable and lack confidence about their body as the result of a low self esteem.

In earlier studies, self-esteem was considered primarily as a unidimensional personality construct (Janis & Fields, 1959; Coopersmith, 1967). In the later time, a hierarchical approach has been taken whereby global self-esteem is dependent on a number of lower-order dimensions, which include, among other constructs, body esteem (Shavelson, Hubner & Stanton, 1976).

Body image is the manner in which people view their bodies and the mental representations that they have of them. It forms an integral part of their body esteem and overall self-worth (Cash, 1996). Body image is therefore seen to be a multidimensional construct broadly describing internal, subjective representations of physical appearance and bodily experience (Cash & Pruzinsky, 1990). Thompson, Prenner and Altabe (1990) commented that body image is viewed and measured as a multidimensional construct. They believe that a useful way to conceptualize body image is through the use of an umbrella term for body image, that encompasses perceptions, cognitions, affects, and behaviors related to body image. It is can be noted that, behaviors relating to body image are an added variable and are described as being that which embodies behaviors related to appearance, namely eating and exercise.

2.1.2 The Influence of Media on Body Image

Perceptions of female bodies are filtered through a number of normative images presented in the media. These 'public' and normative body images define ideals of beauty, health and fitness (McDermott, 1996). Some prescribe current ideals of sexual attractiveness while others prescribe body shape and sizes, which are optimal for health,

or describe typical or 'average' humans. Objective indices of normal or healthy ranges often fail to influence how people judge their own bodies. People tend to be much more influenced by the values of extreme subgroups, such as fashion models and sports people (McDermott, 1996). There is no doubt that the influence of the media and the way in which it idolizes models and sports people affect the average person's view of what is attractive and ideal in society. These groups are a small percentage of the general population and yet the general population wants to be like the 'elite' in the population. The media is largely responsible for people's poor body image as the ideal is often too high for people to obtain and thus many choose unhealthy eating behaviors and habits as the sustainable options.

From early childhood, boys and girls are exposed to representations of body stereotypes through many psychosocial influences. Dolls, movie stars, models, dancers and sporting heroes represent a glamorous association with particular body types. For example Barbie is considered by its manufacturers as an 'aspirational role model' for girls (Pedersen & Markee, 1991).

The media has been accused of perpetuating different standards of attractiveness for men and women (Markula, 1995). Women portrayed in television are slimmer than men (Markula, 1995). Female movie stars and magazine models have progressively become thinner (Silverstein et al., 1986). Investigation of television role models revealed that 69 percent of the females were rated as thin compared to 18 percent of the males (Silverstein, et al., 1986).

Brenner and Cunningham (1992) reported that the heights of a sample of New York fashion models were significantly (9%) greater than those of average young women, their weights were significantly (16%) lower than average. A disconcerting 73 percent of them were below the lower limits of recommended age matched weight. A significant shift to a thinner ideal has been traced through the changes in mass, hip girth, and bust-to-waist ratio of centerfolds and beauty-pageant contestants (Garner, Garfinkel, Schwartz & Thompson, 1980). By 1988, this index of women's 'ideal' body weight was 13-19 percent below that expected for age and height (Wiseman, Gray, Mosimann & Aherns, 1992). A significant rise in the proportion of diet, exercise and diet/exercise articles was found, and from 1981, the number of exercise features surpassed the number of diet articles. Diet and exercise are disproportionately promoted to women as a means of achieving an ideal that has progressively become thinner (Silverstein et al., 1986). The ratio of diet food advertisements in 48 issues of women and men's magazines was 63:1 (Silverstein et al., 1986). Women believe that dieting is the way in which they will lose weight and become more attractive and acceptable within a society (Markula, 1995). Women forget, however, that a healthy eating plan and exercise is a more effective way of losing weight than dieting alone (Silverstein et al., 1986). The ration of diet food advertisements as is mentioned above to be 63:1, which is proof that there is a need for this type of article. It is unlikely that magazines will ever decrease their articles on dieting and exercise, as women will continue to buy the magazines and experiment with suggested diets and exercise programs in an attempt to improve their body images.

In essence, Markula (1995) believes that the ideals that the media express are contradictory: firm but shapely, fit but sexy, strong but thin, which causes unnecessary confusion and inward strife for people. These ideals are seen to be those of the 'elite' population, being models and sports people. People are not easily able to attain this ideal, which does cause 'confusion and inward strife for individuals', allowing them to believe that they can become the 'ideal': something that most people will never attain.

2.2 Eating Disorders

According to the International Classification of Disease – 10th Edition (ICD-10) (WHO, 1992), eating disorders are divided into three major types: (1) compulsive overeating, (2) anorexia nervosa, and (3) bulimia nervosa. Eating disorders are mental disorders characterized by clinical disturbances in body image and eating behaviors (APA, 2000). Every year, millions of people in western countries are afflicted by serious and sometimes life-threatening eating disorders (Crowther et al., 1992; Fairburn et al., 1993; Gordon, 1990; Hoek, 1995; Shisslak, Crago, 1995). The vast majority (more than 90 percent) of those suffered by eating disorders are adolescent and young adult women (Hsu, 1996; Gidwani, 1997; Gilchrist, 1998; Hay, 1998; National Association of Anorexia Nervosa and Associated Disorders [ANAD], 2000). The consequences of eating disorders can be severe. For example, between 5-20% of individuals who struggle with anorexia nervosa eventually die. The probabilities of death increase within that range

depend on the length of the condition (Zerbe, 1995). Sullivan (1995) also found the mortality rate among people with anorexia (at 5.6% per decade) to be about 12 times higher than the mortality rate of females aged 15-24 in the general population. Herzog and Copeland (1985) stated that eating disorders usually persist into adulthood and often is among the highest death rates of any mental disorders. Moreover, a study of a group of college students found that 21.6% of females classified with eating disorders while in college were still found to have eating disorders when re-studied 10 years later (Heatherton et al., 1997). Keel et al. (1999) also found that out of those who suffered from anorexia or bulimia in their study, about half had a full recovery, 30% had a partial recovery, and 20% had no substantial improvement. Given such findings, the World Health Organization suggested in the WHO European Ministerial Conference 2005 at Helsinki, Finland, that eating disorders must be considered as disorders with lifelong consequences (WHO, 2005).

Most of the research conducted have claimed that patients with eating disorders have mostly been women living in affluent Western countries, with few cases being seen outside Western countries. However, recently, eating disorders have increasingly been reported in non-Western countries as well, for example in the Middle East, the People's Republic of China, Japan, Malaysia, Hong Kong, and Singapore (Gunewardene et al., 2001; Al-Adawi et al., 2002; Huon et al., 2002). Makino et al. (2004) found that prevalence rates in female subjects for bulimia nervosa ranged from 0.3% to 7.3% in Western countries while ranging from 0.46% to 3.2% in non-Western countries. In sum, these recent studies suggest that there is also a prevalence of eating disorders in non-

Western countries in the range of many Western countries (although the more extreme Western countries may still show a much higher prevalence). In Thailand, there has been little research conducted or statistical evidence found on a national population level regarding the prevalence of these disorders. However, there have been several anorexia nervosa cases reported on an individual basis since the middle of 1970s (Inkatanuwat & Thanapoom, 1975; Pramote Chaowasilp, 1982; Nongpanga Limsuwan & Sorayut Vasiknanonte, 1983; Manote Lotrakul, 1999).

2.2.1 Anorexia nervosa

Anorexia nervosa symptoms are characterized by body image distortion and the intense fear of gaining weight, resulting in body weight that is at least 15% below that expected for age and height. There are many physical complications associated with anorexia nervosa including; cardiac problems, amenorrhea, constipation, muscle cramps, fainting, hormone abnormalities, left ventricular shrinkage of the heart and osteoporosis.

The American Psychiatric Association (APA, 2000) has devised diagnostic nomenclature (DSM-IV criteria) to assist in the treatment and management of people with this condition. The following clinical features may lead to physicians to a diagnosis of anorexia nervosa if all of them present.

- Refusal to maintain body weight over a minimal normal weight for age and height, for example, weight loss leading to maintenance of body weight less than 85

percent of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85 percent of that expected.

- Intense fear of gaining weight or becoming fat, even though underweight.
- Disturbance in the way in which one's body weight, size, or shape is experienced; undue influence of body weight or shape on self- evaluation, or denial of the seriousness of the current low body weight.
- In postmenarcheal females, amenorrhea, that is, the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhoea if her periods occur, only following hormone administration, for example, estrogen).

2.2.2 Bulimia nervosa

Bulimia nervosa is characterized by undue personal focus on body shape or weight and recurrent episodes of uncontrollable binge eating. The binge eating is followed by inappropriate compensatory behavior undertaken to prevent weight gain. Behavior may include excessive exercise, self-induced vomiting, use of laxatives or diuretics, strict bingeing or fasting (APA, 2000).

Physical complications associated with bulimia nervosa include enlarged parotid glands, erosion of tooth enamel and increased cavities, inflammation and tears in the esophagus, potential heart and kidney problems, sluggish bowel functioning and dehydration.

The followings are DSM-IV Diagnostic Criteria for Bulimia Nervosa:

- Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
    - Eating, in a discrete period of time (e.g. within any 2 hour period), and amount of food that is definitely larger than most would eat during a similar period of time and under similar circumstances
    - A sense of lack of control over eating during the episode (e.g. a feeling that one cannot stop eating or control what or how much one is eating).
- Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self- induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercise.
- The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for three months.
- Self-evaluation is unduly influenced by body shape and weight.
- The disturbance does not occur exclusively during episodes of anorexia nervosa.

2.2.3 Prevalence

The prevalence of anorexia nervosa in adolescent and young adult females is approximately 0.5-1.0%. The rate for individuals who are considered subthreshold for the disorder (that is, displaying some symptoms but not clinically diagnosed as suffering from eating disorder) is believed to be higher. A prevalence of 1-3% for bulimia nervosa is reported for adolescent and young adult females. Rate for men are on tenth of the rate for women (APA, 2000). Eating disorders must be seen as disorders with lifelong

consequences (WHO, 2005). Heatherton et al. (1997) found that college students found that 21.6% of females with eating disorders still met the clinical criteria 10 years later.

2.3 Influence of Body Image on Dieting Behavior

It is no longer a debatable point that regular physical activity participation confers a number of physiological and psychological benefits, such as reduced risk of cardiovascular disease, osteoporosis and hypertension (Bouchard, Shepard & Stephens, 1993). Clearly, public attention is highly focused on matters of fitness and well-being but what is problematic is the marketing of fitness and health. Instead it has placed an overemphasis on the benefits of exercise in pursuit of physical perfection as the pre-eminent manifestation of sexual attractiveness. Indeed, there is good evidence that women exercise more for the sake of appearance than for the health-related benefits of physical activity (Garner et al., 1985).

The relation between body satisfaction and physical activity is likely to be influenced by a number of factors including individual differences in personality characteristics and motivation (Cash & Pruzinsky, 1990). Most importantly, the relationship is surely a dynamic rather than static one. For example, there is little doubt that for many women, involvement in an exercise program may, at the onset, produce a number of important biologic reinforcements like improved muscle tone, increased cardiovascular endurance and perhaps even a reduction in body weight and percentage

body fat (Cash & Pruzinsky, 1990). Together these factors may, at least in the short term, enhance one's body image (Cash & Hicks, 1990). However, assiduous involvement in an exercise regimen can also have certain negative consequences, particularly among the emotionally susceptible, the highly critical, or fiercely competitive females (Cash & Pruzinsky, 1990).

Survey research has suggested that there is an "epidemic" of dieting among White adolescent females (Rosen and Gross 1987) with estimates that as many as 60-80% of girls are dieting at any given time (Berg 1992). Killen et al. (1986) studied 1,728 tenth-grade students to assess their attitudes about eating, dieting, weight control, and frequency of purging. They found that 13 percent of the students had purging behavior, and female purgers outnumbered male purgers 2 to 1. Male purgers were significantly heavier than male nonpurgers and had significantly greater skin-fold thicknesses and weight/height2 ratios. Both male and female purgers felt guiltier after eating large amounts of food, counted calories more often, dieted more frequently, and exercised less than nonpurgers. Methods used in purging included self-induced vomiting (10.6%), using weight loss medications (8.3%), laxatives (6.8%), and diuretics (3.6%). Storz and Greene (1983) found that 83% of White adolescent girls they surveyed wanted to lose weight, though 62% were in the normal weight range for their height and gender. Neumark-Sztainer et al. (1995) studied population included 341 tenth grade girls, mostly native-born, from three public high schools in Jerusalem, Israel. They found that 17 percent of the population was obese, however a much larger percentage expressed dissatisfaction

with their body weights and shapes. Dieting for weight loss was common with 74% reporting past dieting and 47% reporting present dieting.

2.4 Studied in Thailand

Awareness of eating disorder among adolescents and adults is increasing worldwide as well as in Thailand. Researchers have paid more attention on eating disorder behavior and obesity prevalence towards body image satisfaction during the past decade. Dissatisfaction with weight and body shapes is a contributor to the growing incidence of adolescent eating disorders. The study of body image and gender differences among Thai adolescent and young adults living in Bangkok, from a sampling group of 64 women and men, by Chulanee Thainthai found that Thai women viewed the tall, thin, and proportionate body as an ideal attractive women body image in spite of, Thai men prefer women who were not too thin. Whole Thai men viewed the tall, strong and firm body as an idea male body image. Unlike women who use methods that focus on food restriction, men use sport and exercise to fix their problematic body parts. The study also showed that Thai women felt pressure from Thai society to be thin and beautiful and felt obligated to maintain their body to be accepted by others. This researcher (Chulanee Thainthai, 2004) also found in the recent research on 36 Thai adolescents in High School and University in Bangkok that factors influencing Body Image satisfaction are; (1) Change in Thai adolescent perspective on capitalism that perfect body image can be

obtained by investment, (2) Development in advance medical technology such as face and body "make-over" surgery, therapy and exercise machines, and (3) Media influencing on desired body image such as model and actor in TV, magazine and advertisement. It was found that Thai female adolescent viewed the tall at height 168-175 cm, thin without fat, and proportionate body of indifference in breast-waist-hip periphery as an ideal attractive women body image while Thai male adolescent viewed the tall at height 175-189 cm, strong and proportionate body which is not necessary for muscular as an idea male body image. Like Thai men, Thai male adolescent prefer women body image not too thin and prefer healthy looking body. The other interesting point is they also prefer certain complexion of white as feeling of innocent, pure and childish. On the other hand, Thai female adolescent focused on characteristic and personality, rather than body image

Somsong Somkhuanhet (1998) investigated status of bodyweight of persons perceived overweight, and self weight reduction. The sample consisted of 200 persons, 100 males and 100 females who perceived themselves as overweight and used self weight reduction method, age between 15-59 years old, in Bangkok. She found that 49.0% thought that being overweight results in a loss of beauty and personality, 39.5% used diet control and exercise for self weight reduction, 43.0% wanted to lose weight for beauty more than health. While, Anusorn Gunta (2002) examined body image satisfaction and use of food products and/or drugs for weight control among adolescent women aged between 15 – 17 years old in Chiang Mai. She found that the adolescent women who used weight control drugs had significantly lower body image satisfaction than those who

did not use neither food products nor drugs ($p < .05$) whereas the adolescent women who used only food products had no different level of body image satisfaction when compare to the other two groups.

Women's body image of beauty in Thai society changed with time as a result of a case study of Miss Thailand contest on a process of changes of women's body image of beauty in the Thai society during 1634 to 1994. The 2 majors factors influencing changes in perception of body image is; (1) The influence of standards of beauty based on past and present beauty contest standards as well as publicity and social activities, and (2) standards of beauty in Thai society influenced by trend setters who are related to competition organizers, general public, fashion designers and advertising media (Angkaret Boontongluan, 1996).

Titawee Kaewpornsawan (1994) surveyed 226 female students aged 12-19 using Eating Attitudes test. She found that 20 respondents (8.96%) scored above the diagnostic threshold on a Thai version of the 40-item version of the Eating Attitudes Test (EAT-40). Subsequent diagnostic interviews of high EAT scoring and low BMI subjects revealed several subjects with partial eating disorder syndromes. Piangchai S. Jennings et al. (2006) examined eating disorder attitudes and psychopathology among female university students in Australia and Thailand. Participants were 110 Caucasian Australians, 130 Asian Australians and 101 Thais in Thailand. They used the Eating Attitudes Test (EAT) and the Eating Disorders Inventory (EDI) as instruments. They found that Eating disorder attitudes and psychopathology scores in the Thai group were found to be highest. That

the Thai group had the highest scores in susceptibility to developing an eating disorder and eating disorder psychopathology may be partially explained in socio-cultural terms, with pressure to be thin more extreme in Thailand than in Australia. The evidence suggested that unhealthy eating disorder psychopathology is not limited to Western societies but is already present in Thai and other Asian societies.