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UNIVERSITY OF ALBERTA

THE PROPENSITY FOR EATING DISORDERS AMONG JUNIOR HIGH SCHOOL MALES AND FEMALES

BY

JUDITH CAROL LAVERTY

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements for the degree of Masters of Education in Sociology of Education

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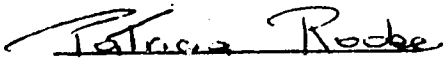

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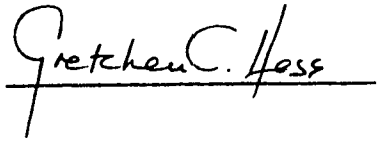

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Abstract

This thesis surveys historical, psychosocial, and medical aspects of Eating Disorders. The intent of the thesis was to determine the incidence of eating disorders among adolescents in public schools. The literature shows adolescents to be the primary age of onset for eating disorders. It also shows that eating disorders are predominantly a problem among females.

Data was gathered by use the Eating Disorders Inventory (EDI). The EDI is a self report type questionnaire that measures that provides standardized subscale sores on eight dimensions that are relevant to eating disorders. The EDI was administered to a sample of junior high school students. This school to be surveyed was designated by the school board.

The data revealed that 6% of the females and none of the males had a high propensity towards eating disordered.

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CHAPTER 1

Introduction

The intent of this thesis is to assess the incidence of eating disorders in adolescents. While there is substantial literature on eating disorders, estimates of incidence are often based on extrapolations from clinical samples rather than the general population. A search of the literature revealed few studies of "normal" populations and none in Alberta.

The literature review also includes an overview of the medical and psychosocial perspectives on eating disorders. Phenomena such as eating disorders do not suddenly appear at a specific time in history. For this reason a brief history of eating disorders has been included. This history will add to the explanation of the origins of eating disorders.

There are three recognized eating disorders which are Anorexia Nervosa, Bulimia Nervosa, and Binge Eating. Anorexia is characterized by an abhorrent fear of fat and weight gain. Bulimia is more difficult to define. It involves a rapid ingestion of food followed by the over whelming need to purge the excess food by way of vomiting, laxatives, and or excessive exercise. Binge eating is characterized by uncontrolled eating which is not linked to physical hunger or nutritional needs.

Estimates of the prevalence of eating disorders in North America as cited in the literature range from 5% to 20 % of the population (Cantrel and Ellis, 1991, p.53; Dardis and Hofland, 1990, p. 35). This phenomenon is experienced mainly by females, however males are not excluded. Usually when males are involved in an eating disorder, it is related to athletic activities. The inconsistent range of incidence is accounted for by the fact that most of the data collected are from clinical aggregates.

As members in society, women become potential receptors to be manipulated by the internalizations of the societies values. Some women may become locked into the society and act in accordance with what is expected of them. This society values a thin female body as the ideal type. Thus some women may try to manipulate themselves to meet the current criteria for thinness in an effort to receive rewards from society and avoid the constraints. It is clear that non-thin women do not receive the rewards of society, though their behavior need not be interpreted as challenging the societies values. North Americans have been socialized through the interaction of the media, fashion and competition for attention based on external properties. Fat is negative, hence constraints are placed on fat people. Thinness is positive, so that thin people are rewarded. With these rewards and constraints in place, it is difficult to accept any other perception of peoples' size and shape.

The eating disordered individual is a person who has taken this desire for rewards to an extreme. Eventually they loose track of their original goal, usually due to ill health. There could be a definite conflict between biological reality and social standards.

Social perceptions of thinness and fatness must change at the societal level before expecting a change at the personal level. However, change is painstakingly slow and to promise utopian conditions under which people can be entirely free of social restraints would be naive. Anti-social and self-centred impulses can be either redirected or even channelled to serve the public good. Even weightism itself as a prejudice or discriminatory constraint may disappear over time. Social philosophies and aesthetic perceptions may modify, perhaps becoming more in tune with natural bodily needs rather than social conformity.

The social world is complex. We learn how to cope with it in many different ways, some more acceptable than others. Using alcohol is an example. The use and acceptance of alcohol in our society becomes convoluted. Most people would think that a few drinks at the end of a hard days work is justified. It is when the alcohol is abused and affects the person's life that it becomes a problem. Many coping mechanisms, when used in moderation are acceptable and even considered a valued trait in our society, could be listed. When any trait becomes excessive and therefore visible, it can cause harm to the individual. While Orbach (1978) formally describes food abuse as a coping mechanism used mainly by women the question remains: "Why women and why food?" (p. xiv). This study postulates that the availability of food combined with various forms of negative socialization of the female child results in the development of a coping mechanism, abusing food. This can become a lifelong coping mechanism. The development of a coping mechanism by a young child may occur as a result of insufficient socialization by her parents. For example, a toddler may be told not to cry, or that she has no reason to cry, or to just stop crying. Inside, the toddler knows that at this moment she wants to cry, but the message she is receiving does not match with the way she feels. This can be confusing. As a result the child develops a coping mechanism that takes attention away from those feelings. These coping mechanisms work, so it is not a surprise that they are used throughout life. One may ask what the relationship between this observation and why women consistently turn to food as a coping mechanism.

Firstly, food has gender implications for the female sex because it is readily available. Women are usually surrounded by food through the gathering and preparing of it. If the food is not used in excess, the behavior is acceptable to those around her. A fictional example may be

useful at this point: A popular television situation comedy where four senior women live together. When they have problems, they always eat cheesecake. The cheesecake displaces anxiety by acting as a "reliever of all stresses" for these women. What is noteworthy however is that they do not use this displacement or coping mechanism excessively. This makes it clear that they are not eating disordered. Women find it easier than men to turn to food instead of dealing with an emotional change because of their gender-constructed domestic situations. Due to negative socialization in their young developmental stages, a girl might be without tools to deal with the various stresses at later stages.

When the use of food as a coping mechanism becomes excessive, women in Western societies may become vulnerable to one or more eating disorders. Moreover, when the societal ideal of femininity is thinness, using this coping mechanism makes it impossible to reach the ideal. Failure to achieve this ideal may result in greater use of the self-defeating coping mechanism. The over eater may begin to feel hopeless and unable to stop bingeing. Excess weight may continue to be added to her body, driving her further and further from the ideal. A second scenario may involve anorexia nervosa. In order to achieve the desired appearance, the woman may cope by denying the body food altogether. A third scenario involves bulimia. The woman may devise ways to overeat and quickly rid herself of the food. There are many possible scenarios, but the above three are most representative of eating disorders.

To reap social rewards and compete in North American society, a healthy self esteem appears to be a prerequisite. It is fair to note that the range of body types in the past had little difference from the range of body types that we know today, that is to say that on the evolutionary scale the human body has not changed. What has changed is the perception of the female form hence "ideal type" of woman that others try to replicate. Fashion and the existence of the "ideal woman" serves to oppress women. In our society women -more than men- are valued according to their appearance or sexual desirability. A woman is socialized to view her body as a lure for men, and fashion dictates the appearance of her body. Her need to comply with social expectations leads her to impose upon herself painful, debilitating, and degrading styles. This symbolizes some women's oppression, and consumes such a vast amount of their life that they have little time for other more serious pursuits. Chernin (1981) refers to the unease that women feel toward their bodies as "the greatest suffering women in [North] America today" (p. 19).

The irony of women's efforts to achieve the ideal body is that once they have "created" a body that conforms to society standards, (after a great struggle against nature) it cannot be left alone to its own desires. It must

be perpetually shaped and monitored. If this is not done the body will revert to its' original size and shape. To compound the ongoing struggle, women, who continue to be the most important purchasers of food, are presented with a vast choice in order to prepare food wisely for their families health and welfare. At the very time they are seemingly surrounded by food, they do not allow themselves to eat it, because they are bombarded by images of slimness, advice on how to eat sensibly, on how to lose weight, and have a happy life (Orbach, 1978, p. xvii). Indeed one might speculate that in modern society obsession and preoccupation with the body is on the increase. Late twentieth century Western societies continue to be obsessed with the size and shape of women's bodies. This constitutes judgments about peoples' worth, rather than merely an observation about the varieties of body shapes as an objective reality. The valorization of individual worth is equated with the ratio of body fat tissue to lean body tissue (Orbach, 1978, p. xvii).

The "ideal woman" is extremely thin and represented by women in the media, models or movie actresses. Wolfe (1990) says that the number of women that naturally conform to these images approximate 5% of all women (p. 185). The film, The Famine Within, notes that in a modelling agency a natural model who conforms to all the right proportions is one in about 40,000 women (National Film Board, 1989). Anti dieting advocates do not recommend obesity as the ideal. What is deemed as normal is a variety of body types rather than one ideal. (Chernin, 1981, p.28).

Research Question:

This survey of attitudes and behaviors about eating disorders provides an empirical foundation on which more theoretical discussions of the genesis of eating disorders may rest This research is guided by the question: Is there evidence that a propensity for eating disorders exist in adolescents in secondary schools in Edmonton?

In any study of the problem of eating disorders one must establish from the literature where the largest incidence for the age of onset of eating disorders occurs. It appears that junior high schools, which accommodate 12 year old children, best represent this population. The literature indicated that the greatest incidence of eating disorders was in females. However it is necessary to include males in this research to see if that is case for this group. For this reason, the survey was administered to both adolescent males and females in secondary schools in Edmonton. The instrument of analysis which tested for the existence of the problem was the Eating Disorders Inventory.

Thesis Outline

Chapter Two offers a literature review which looks at the historical explanations, psychosocial and medical factors of eating disorders.

Chapter Three shows the methodology used in this thesis. Chapter Four consists of the Data Analysis. Chapter Five is the concluding chapter for this thesis.

CHAPTER 2

Literature Review

Most women are aware of the relentless pursuit of thinness. They can list the previous attempts they have made to conform to the right shape, size and weight. Most can also report that none of these attempts truly worked permanently. Often they do not even work temporarily. What they do not understand is why they had wanted their bodies to be so right. Why is the drive to look a certain way so powerful that women succeed in losing weight many times, only to gain it all back? Why are women so plagued by their body size and shape? The following literature review will attempt to explain why women are susceptible to these compulsions.

I. Characteristics of Eating Disorders

The characteristics of eating disorders often have a great deal of overlap. Depending on which specific eating disorder one is interested in, there is a need to extract the appropriate characteristics.

Anorexia Nervosa is a syndrome characterized by an intense fear of gaining weight. The reported incidence is 5-10% of the population; 95% of the patients who are diagnosed are female (Dardis and Hofland, 1990, p. 85). The diagnostic criteria for Anorexia Nervosa is

> A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to makes expected weight gain during period of growth, leading to body weight less than 85% of that expected).
> B. Intense fear of gaining weight or becoming fat, even though underweight.
> C. Disturbance in the way in which one's body weight 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.
> D. In postmenarcheal females, amenorrhoea, i.e., the absence of at least three consecutive menstrual cycles (p. 544-545).

The "restrictor" anorexic uses only caloric restriction to control weight, while the "bulimic" anorexic combines caloric restriction with various purging behaviors (laxatives, diuretics, self induced vomiting etc.) to control weight.

Because anorexia is generally considered a psychiatric disorder, the pathophysiologic manifestations of the syndrome can easily be ignored. However, it is generally the effects of the starvation that cause the anorexic to seek medical care, in addition to being the major cause of death for those who are diagnosed as eating disordered (Dardis and Hofland, 1990, p. 85).

Psychiatrist Dominic McAleer as cited in Rockett (1993) claims that anorexia is a classic case of self sabotage. He says

> the anorexic never allows herself to feel her weight is right. When she reaches her goal, she changes it. The fantasy of being thin and admired is always there. But for the anorexic, it's never enough. Instead of worrying about other things that are challenging, unfamiliar, maybe even risky, the anorexic says, 'I can't handle that. I'll go back to worrying about my weight' (p. 98).

Because bulimia nervosa is such a recently recognized disorder, current knowledge of its long-term course and outcome is limited. Such knowledge is vital to the patient, clinicians, and researchers. Bulimia has been shown to be associated with elevated rates of several other forms of psychopathology in women, and this comorbidity has recently been the focus of increased research (Mitchell, Specker, and Swan, 1991, p. 13). Most bulimics suffer from depression, self disgust, and a disabling preoccupation with food and body image (Ordman and Kirschenbaum, 1985, p. 305).

Bulimia has many features in common with obsessive-compulsive disorders. Bulimics often describe constant and irrational preoccupations with food and body weight as well as similarly obsessive, intense, and unrealistic fears of fat and its consequence. Ordman and Kirschenbaum (1985) say that

> bulimics may be presumed to rely on primary or secondary appraisal deficits: overestimation of the dangerousness and the probability of weight gain (primary); underestimating the ability to cope with weight gain, binge eating, and other stressors and therefore resorting to purging and fasting (secondary). The binge purge behavior often follows a compulsively rigid pattern with regard to particular foods consumed, the setting, and the automaticity of cognition and behavior. This ritualistic behavior not only prevents weight gain but also may serve as an anxiety reducing function often postulated for compulsive rituals (e.g., hand washing) in

obsessive-compulsive disorders (p. 305).

Information on binge eating, on its own merit is difficult to find. It is often included with bulimia, as binge eating is the precursor to bulimia. One reason for this could be that the person who compulsively eats and does not purge, tends to gain weight. Upon seeking help, they are then treated for the obvious, obesity. The problem with this approach is that the excess fat is a physical symptom of the act of over eating, which is a response to an underlying issue.

Orbach (1978) found that by and large the approach by professional (psychiatrists, psychoanalysts, psychologists, medical doctors, nutritionists, and endocrinologists) to binge eating has been either to try to remove the resultant obesity or to treat the underlying cause of distress that has produced the compulsive eating. She notes that there is not a satisfactory definition for compulsive eating (p .xvi). Based on her work with women in various workshops and her own experience, Orbach (1978) has come up with the following:

> Compulsive eating is: "Eating when you are not physically hungry.
> Feeling out of control around food, submerged by either dieting or gorging. Spending a good deal of time thinking or worrying about food and fatness. Scouring the latest diet for vital information. Feeling awful about yourself as someone who is out of control. Feeling awful about your body (p. xvi).

II. Prevalence

Frank (1991) begins her article by explaining that in recent years, clinicians and researchers believe that anorexia nervosa and bulimia are posing serious threats to the mental and physical health of North America (Frank, p. 303; Barry and Lippmann, 1990, p. 161; Lachenmyer and Muni-Brander, 1988, p. 303; Grant and Foder, 1986, p. 269). Brumberg (1989) reports that 5 to 15 percent of hospitalized anorexics die in treatment, giving the disease one of the highest fatality rates for a mental illness (p. 9). Wolfe (1990) has found that 40 to 50% never recover completely (p.182). Medical and psychological research on eating disorders has burgeoned within the past ten years. Reportedly, the incidence of eating disorders such as anorexia nervosa and bulimia is increasing steadily in the adolescent and adult female population in Canada and the United States to as high as 20% of females who are at risk for these disorders due to subclinical symtomatology (Cantrel and Ellis, 1991, p. 53; Heilbrun and Worobow, 1991, p. 3; Kaye and Weltzin, 1991, p. 21;

Strober,1991, p. 9; Knight and Broland, 1989, p. 412; Hall et.al., 1989, p. 174; Brone and Fisher, 1988, p. 155; Mintz and Betz, 68-79%,1988, p. 463; Lundholm and Littrell, 1986, p. 573; Ordman and Kirschenbaum, 1985, p. 305; Kagen and Squirer, 1984, p. 15). The most frequently cited age for the onset of severe eating disorders was early adolescence (Kagen & Squires, 1984, p. 16).

In Western Europe and Japan the figures are lower, at about 1 to 2 % of those women being afflicted by eating disorders. This may seem low, but these numbers are equal to the rates in the United States approximately ten years ago and are rising at a similar rate that was observed in the United States (Wolfe, 1990, p.183).

There are clear discrepancies in the prevalence ratings of eating disorders reported in the literature. This may be due, in part, to the types of different diagnostic criteria, sampling techniques, and operationalization of the terms in different studies, as well as geographic or cultural differences. Also, it is only within the past ten years that bulimia has been a syndrome separate from anorexia nervosa. Prevalence studies that fail to delineate between the disorders are inexact and may be misleading (Lachenmyer and Muni-Brander, 1988, p.306).

III. Explanations for Eating Disorders

A. Historical Explanations

When referring to eating disorders , it must be noted that no matter which disorder one has, the quest is always for thinness. Seid (1989) claims that the ideal of

> thin beauty that we have today is really a complex of social psychological behaviours and attitudes toward beauty and health, toward the body and toward food. By briefly examining these attitudes and how they differed in the past we gain a perspective from which to assess the foundation and validity of our beliefs (p. 38).

For thousands of years the female body has not really altered significantly. Yet in Western culture its ideal shape has been transformed periodically, not merely shifting from plump to thin, but also emphasizing different parts of the body. Until recently, only Western culture evidenced these extreme shifts in taste (Seid, 1989, p. 38).

Seid (1989) sees two factors that seem to be principally responsible for this phenomenon: "our artistic heritage and the nature of our traditional dress, which has evolved the phenomenon of fashion" (p. 38). Seid (1989)

shows how changing fashion over the centuries has seen women go to great extremes to achieve the correct body to accent the fashion, from removing ribs to starvation (p. 3 -137).

In order to discuss fashion one must establish the need for clothing. Christianity deemed nakedness as sinful. The need to be covered stems from the "fig leaf" or "decency" mythology, the Wests' oldest most durable explanation for modesty and protection. These early Christians reflected their attitudes in the clothing they wore which was thick flowing unisex garments which concealed their bodies (Seid, 1989, p. 38).

During the Renaissance, artists revived the idea of the nude as an expression of beauty. Interestingly the artists modified the characteristics of the female body while the depiction of men remained constant, either Herculean, muscular and massive or Apollonian, blonde and lissome. Clothing during the Renaissance took on a celebratory nature. Trade was on the rise, populations converged to create towns and the middle class was born. What we now know as modern fashion emerged at this time. Until this time, Europeans wore a tunic like garment which was draped around the body. With the Renaissance came tailoring, cutting and sewing which replaced draping. Material began to be fitted and moulded to the body, which meant the body could appear to be remodelled. Clothing items became progressively more decorative and less functional, and began to redefine the bodies beneath them (Seid, 1989, p. 39 - 40).

The formation of classes had an effect on fashion. Laws were enforced to regulate the number of clothes and quality of fabric appropriate for each rank in society. The lower classes also had little to do with fashion (Seid, 1989, p. 50). Clothing and ornamentation were the manifestations of luxury, wealth, power and status.

At various times through history attention would be placed on specific parts of the female body. Since fashion was a part of the upper classes, a woman would have a tailor that could make the current fashion fit or enhance her form to achieve the look that was in vogue at the time. If one was not naturally built for the current style, the clothing was altered to achieve the correct appearance. These fashions did not conform to nor reveal the natural human form, rather the body became a type of "scaffolding" to display the sumptuous materials the wearer could afford (Seid, 1989, p. 50).

A combination of events during the 18th century affected the subsequent direction of fashion. Formerly, marriages for many social groups were arranged. During the shift from arrangement to courtship, women found it necessary to take an active part in attracting the right man. One action was to dress in such a way that adhered to fashion yet drew appropriate attention to herself. This can be interpreted as the roots of the female

obsession to attract men through their appearance and the inevitable emergence of competition between women (Seid, 1989, p. 50).

The 18th century also witnessed another shift in attention to a specific part of the female body. The desired women was petite and compact, but most importantly she had a tiny waist, introducing the hour glass figure. Noteworthy is the shift in desire to that of a smaller woman (Seid, 1989, p. 60).

Being thin is particularly important to women of the upper classes. A study cited in Brumberg (1988) shows that women in a higher social class wanted to be thinner more often than than those in lower social classes, and that more obese women come from the lower classes. The same study on men of these same social classes showed little difference in their desire for thinness (p. 32-33).

Seid (1989) and Wolfe (1990) agree with Brumberg's claim that eating disorders are mainly a problem of the upper classes (Seid, p. 4; Wolfe p. 184). However, they see eating disorders as now less confined to these classes and making its way down the social ladder (Seid, 1988, p. 4; Wolfe, 1990, p. 184).

One further advent of the 1800's was the industrial revolution. It becomes clear that the industrial revolution and a concomitant changing of mores lead to a tremendous shift in the way women function. With the arrival of factories, came the "ready made dress." Clothing was no longer tailor made to fit the person. Once the factories took over, large steel blades, patterns and assembly line work meant that now a woman had to become a "size". Many women could wear the same dress. Mass production also made more items readily available to a broader class base because of large quantities and economic feasibility (Seid, 1989, p. 66).

At the beginning of the 20th century came an idealization of youth. The slender style of the flapper, with her calf length skirts, short hair, flattened chests, and loosened waist was the first of the trend setters. These women were free spirited, educated and career oriented. They had cast off the shackles of gentility and experienced the freedom of making their own decisions. Entertainment that had been the choice of the working class was found to be enjoyable to the youth of the middle classes. Young women were now rejecting the rigidity of the middle classes and loving it. They now wanted freedom, happiness and fulfilment. Women's desire for money, power, and sex had become mainstream and acceptable (Seid,1989, p. 91-92).

Wolfe's (1990) view of this time is in a different light. She claims that the timing of the slenderness of the flapper and the emancipation of women is worthy of investigation. It is her view that just as women begin to make gains, she is reminded that she still a failure because she may not presently

have the body she believes she should have (p. 184 and 186).

Another point about the beginning of the 20th century is one of fashion. Seid (1989) notes that men's fashions cease to change much, while women's fashion begins to change more than ever. With the emergence of a modernized clothing industry and Paris designers, economic self interest became a motivation for frequently changing fashion. This encouraged women to keep buying new clothes, no matter how extensive their wardrobe, by perpetually introducing new styles (p. 42).

By drawing out the key factors in history one is able to see the shift in fashion that had no preference for a specific body build to a style and fashion that required that the wearer have a specific type of body. This is not to say that prior to the late 1800's women did not bother with their appearance. On the contrary, they painstakingly adorned themselves with decorations that had great meaning. These fashions came and went with the passage of time. The difference is that in the past the woman's body and face were the base that was adorned, changed, concealed, pushed in, pushed out, pushed up, from the outside, and externally altered with clothe, wire, whale bone or stuffing to achieve the desired look (Seid, 1989, p. 50).

The most significant changes in fashion in relation to eating disorders took place after mass production and a societal attitudinal shift towards women and can be summed up by saying that prior to mass production fashion was adapted to the body, while after mass production the body was altered to fit the fashion. In other words women altered their body size. As we move from the 18th century to the present we find fashion becoming more body revealing. As various body parts are more acceptably exposed to the public, women become more conscious of how their body parts appeared (Seid,1989, p. 40-71).

Although the philosophies and cultural images that are part and parcel of the contemporary climate that perpetuates eating disorders reach back to as early as the ancient Greeks, the recorded theories begin approximately a century ago. Earlier explanations about "Fasting Girls", were religious in nature. Joan Jacobs Brumberg (1988) offers several religious antecedents in her book *Fasting Girls,* where she refers to the Mediaeval period of 1200 to 1500, when many women refused food and underwent prolonged fasting that was considered both miraculous and an ascetic virtue, a female miracle. One of the most famous of these was Catherine of Siena (1347-1380) who ate only a handful of herbs each day and occasionally shoved twigs down her throat to bring up any other food that she was forced to eat. This mediaeval period of fasting was fundamental to the model of female holiness (p. 41). The mediaeval woman's capacity for survival without eating meant that she had substituted prayer for food. The Communion Wafer, or Eucharist symbolized all customary forms of

sustenance. Brumberg (1988) points out that this form of abstinence and denial did not emanate from the same motivations as those of modern anorexics. What they share in common is the refusal of food. The mediaeval woman's motivation for abstinence from food proved to people and God that she was worthy of him. Any person could attest that humans need food to survive. If one did not eat, one must not be a regular human, rather one blessed by a higher power (p. 46). This is pointed out to show that there have been various types of food refusal by males and females. However the present day eating disorder does not stem from religious motivation. Thus it can not be apart of present day eating disorder history. This enables researchers to identify the time line of the origin of modern day eating disorders.

The modern anorexics motivation has nothing to do with religious belief but rather has more to do with the society she was born into. For these reasons, to describe premodern women as anorexic is to ignore the differences in female experience across time (Brumberg, 1988, p. 46). True they both abstain from food, but they are not both anorexics. Anorexia then is a relatively recent phenomenon.

Associated with this historically recent emergence of eating disorders, is the present day claims-maker. It is always the intent of claims-makers to persuade. Most claims making begins with victims, activists or experts, people with special knowledge about a social condition. Firstly, the claims-maker must define the problem, and give it a name. This allows boundaries to be established around the problem, making some issues relevant and others irrelevant. Orientation statements provide an assessment as to the type of problem that is being defined (Best, 1984, p. 65). For example, eating disorders have been approached to date as psychological medical problems.

To "typify" the problem, the claims-maker uses referents for discussion of the problem in general. More specifically, by using testimonials or events from the lives of real people who hopefully are familiar to a large audience makes it easier to identify with the people affected by the problem (Best, 1984, p. 28). For the case of eating disorders, specifically anorexia nervous, images and stories of the pop singer Karen Carpenter were used exhaustively, both during her life and posthumously. Most recently, in 1993, the catch celebrity for eating disorders is Diana, the Princess of Wales, who has disclosed her problems with bulimia.

A tactic used in typifying is to use horrific examples which give the problem a sense of frightening, harmful dimensions. Tales of atrocity do not only act to attract attention, they also shape the perception of this problem (Best, 1984, p. 28). For the general public, it is hard to imagine not eating for weeks on end as is the norm for the anorexic. Even when

quoted with dangerously low weights that an anorexic achieves, such as 59-69 pounds for a fully grown female, one realises that this is out of proportion compared to normal weights of people. But once a person sees an anorexic at their lowest weight whether it be in person or in a photograph, it is something that one never forgets. Especially graphic are photographs of the person semi-clothed showing a body that is barely recognisable as male or female, and is little more than a skeleton with skin over it.

Claims-makers must establish a problem's human dimensions by assessing its magnitude. They will also claim that if the incidence is increasing, then the social problem is getting worse (Best, 1984, p. 26). This is certainly the case for eating disorders as the reported incidence of the general population is between 5-10%, of which 95% are female (Dardis and Hofland, 1990, p. 85). This is to say nothing of the unreported numbers. In a case like this, the claims-maker will also claim that unless action is taken, there will be further deterioration. With growth comes the metaphor of the epidemic. This suggests that people may be indiscriminately affected and that the problem could extend throughout the social structure (Best, 1984, p. 31).

Claims must be warranted, in other words, statements that justify drawing conclusions, based on the grounds for the claim, must be made. Claims evolve over a problems history (Best, 1984, p. 31). By knowing and understanding the history of eating disorders one is able to ground the most recent claims in the past. Although eating disorders appear to be novel, they do have an extended history which when referred to can help establish the issue as a social problem and gain acceptance. The evolution of the issue over time also allows the claims-maker to define and redefine the problem as more information becomes available (Best,1984, p. 31).

In order for claims-makers to do their job it is imperative that they know their history in the subject, thus grounding them. This dispels the notion that suddenly a great deal of attention is being paid to a "new" problem. Of course it is not all of a sudden, but the claim-makers have to make the topic appear ever novel (Best, 1984, p. 25). History shows that women have repeatedly tried to change their appearance to that which is popular for their life time. The difference for modern women is that we live in the "global village". Women believe that they can and should attain the appearance and thinness of that 5% of the female population that naturally do so, because they see it so often in the media. Because these ideals of thinness can not be attained, though the illusion that it can remains, problems result. Eating disorders are one group of problems.

B. Psycho-Social Factors

Most experts feel biology alone cannot explain eating disorders. The psychological perspective which includes thoughts, and feelings and life experiences, must also be taken into account (Marx, 1992, p. xv).

Sociologists who look at individual behavior in the context of society see eating disorders as the result of western cultures' high value of thinness. A link between the societal ideal of thinness and the steady increase of eating disorders has been proposed. Societal ideals influence behavior by defining what is, or is not acceptable. A behavioral manifestation of this extreme ideal is the obsessive attempt to "control" ones weight.

Any societal ideal may be endorsed to excess. Many females decode cultural messages about the desirability of thinness by converting these messages into disordered eating. A partial explanation for the preoccupation with weight and thinness, particularly among middle to upper-middle-class women in Western society is that cultural ideals and definitions of what is acceptable influence behaviour. By the turn of the twentieth century, elite society already preferred its women thin and frail as a symbol of their distance from the working classes. Sturdiness in women implied a lower class status. Thus women with social aspirations were determined to be slender. Through restrictive eating and restrictive clothing women changed their bodies in the name of gentility. In bourgeois society it became necessary that women control control their appetite, appetite being less of a biological drive and more of a social and emotional instrument (Brumberg, 1988, p. 185-186).

The acceptable female body has become thinner in the past several decades in North America (Wolfe, 1990, p. 185). Adolescent females often equate thinness with the characteristics of high intellect and social desirability and believe that thinness and attractiveness are necessary attributes for interpersonal success (Lundholm and Littrell, 1986, p. 573). The correlation of weight problems with gender and affluence suggest that attitudes about thinness and fatness may be intensified in certain social groups. Adolescent girls in competitive environments that emphasize weight and appearance experience increased social pressure to meet the "thin ideal" (Collins, 1988, p. 228). Various groups of adolescents, such as cheerleaders, dancers, gymnasts and athletes often are implicitly or explicitly required to attain and maintain a body weight that is less than average for other adolescents of the same height. Because thinness is the unwritten rule for these groups, attempts to lose weight by those who wish to belong, are undertaken. Adolescent members of these groups who attempt weight loss will exhibit behaviours similar to compulsive eaters and/or bulimics. It was found that the more important the desire for thinness, the more likely was the tendency toward problematic eating

behaviours (Lundholm and Littrell, 1986, p. 574).

1. Self Esteem

Self esteem is our personal assessment that we are appropriate to life and to the requirements of life. More specifically, self esteem is

> Confidence in our ability to think and to cope with the basic challenges of life.
> Confidence in our right to be happy, the feeling of being worthy, deserving, entitled to assert our need and wants and to enjoy the results of our efforts (Brandon, 1992, p. vii).

Whatever has and will happen to us will influence our self esteem. It would be incorrect if to imply that people grow up in a vacuum. The effect of parents on the developing child is a factor. Examples of positive parental impact on self esteem are

> Parents convey that they believe in the competence and goodness of the child.
> Parents can create an environment in which the child feels safe and secure.
> Parents can support the emergence of healthy self esteem (Brandon, 1992, p. 6).

To make changes in self esteem, a person has to accept herself as she is in the present state. She has to realize that this is the way she is right now. It does not have to be thought of as a permanent state. With the help of others she can make changes. She should not be lead to believe that the initial problem has magically disappeared. The problems still exist, but since she has made a change, the way that she approaches the problem has changed (Brandon, 1992, p. 70).

Children who have survived an extremely adverse childhood have learned a particular survival strategy that is called strategic detachment. This is a disengagement from negative aspects of their family or other aspects of the world. They turn to behaviours that help them to cope which are usually socially acceptable (Brandon, 1992, p. 58). Women often turn to food. Metaphorically they "stuff" down their feelings by paying attention to the food of the moment, instead of experiencing feelings at the appropriate time. The opposite extreme of this is the anorexic who, by refusing to ingest food is able to focus totally on herself, instead of being conscious of the real world. Thus a physical alteration of the body is intricately intertwined with self esteem.

2. Perfectionism

The desire for perfection is a trait that often accompanies anorexia nervosa. It should be noted that all anorexics are not perfectionists, and not all perfectionists are anorexics, but perfection and anorexia often go hand in hand. The roots of this trait begin when a person is a young child and being taught to follow rules. Success or failure of a child's actions are measured by the reactions of parents or other significant adults (Sacker and Zimmer, 1987, p. 141). The perfectionist uses pleasing others as her primary means of realizing success and subsequently becomes increasingly compliant in the process. Whether she pleases herself by her behaviour is not important. When the perfectionist spends all her energy and creativity on finding how to achieve perfection, then her "everyday life becomes like opening night at the theatre" (Sacker and Zimmer, 1987, p. 142). It becomes necessary for her performance to be flawless. She will seek out what is expected of her in order to comply, excel, and guarantee positive reinforcement of the pattern. Approval is sought from all authority figures not merely from parents.

For the anorexic, the quest for the "perfect" body can involve several variables including a passing comment about her size or seeing a beautiful model on the cover of a magazine. Whatever the trigger, the anorexic zealously pursues her vision of perfection even though it is usually distorted. The weigh scale becomes her "authority figure". Since there is no logic or thought processes in a weigh scale, it has no way of telling the person to stop. The anorexic thinks that a few more pounds will make her perfect until there are no more pounds to spare. Aside from her body, the anorexic, channels this attitude into everything she does. This may be manifested and made apparent to others in the school setting. In class, the compliant anorexic usually excels in her school work, and appears as the perfect student. Paradoxically because of this the teacher may not notice her or if she does, it will be to comment that she wished she had more students like her. Teacher awareness education therefore is imperative (Sacker and Zimmer, 1987, p. 141).

Areas where perfectionism may emerge in the school are in academics, sports, and school politics because here perfectionism is the type of behaviour that teachers like and praise. Thus a teacher could be effectively perpetuating the behaviour inadvertently Instead of being alerted to those alarm signals in the student's behavior.

3. Body Image

Female body image is intimately connected to subjective perceptions of weight. Pubescent girls who perceive themselves as underweight are most satisfied, followed by those who think they are average. Dieting behaviours emerge as the body develops, and is a function of body image changes occurring at puberty.

The DSM-IV (1994) refers to the Anorexics' disturbance in body image as feeling

> globally overweight. Others realize that they are thin, but are still concerned that certain parts of their bodies, particularly the abdomen, buttocks, and thighs, are "too fat" (p. 540).

Another definition of Body Image is:

> a pictoraliteral photograph, generated by an unknown mechanism, placed within an undisclosed mental viewing apparatus, for viewing by a hypothetical minds' eye. Also included is the subjective bodies that are the felt body, the seen body and the body of attitudes. The cooperative interaction of these creates a unity between visual, somatosensory and schematic body representations. Keep in mind that each of these can be experienced separately or as a unit. For instance, fat people can feel thin and thin people can feel fat (Tovin, 1993, p. 28).

Kagan (1987) found a significant association between compulsive eating and dieting and adolescents feelings of failure. These eating habits were strongly associated with feelings that they had failed to meet their own expectations and those of others. Among males, both dieting and compulsive eating were directly related to feelings that they had failed to meet the expectations of both parents. In contrast, compulsive eating among females depended upon the perceived power structure of the family. Girls from families where the mother was perceived as the dominant parent reported more compulsive eating, a feeling of failure to meet mother's standards, and a higher need for social approval than did girls from families in which mother and father were perceived to rule equally, or families in which the children were perceived to share equally with parents in making major decisions (p. 131).

4. Gender Roles and Eating Disorders

Studies show that the majority of people with eating disorders are

females. This is not to say that males do not have eating disorders. If one is female, the odds are high that at some time in ones life one will take part in some form of pathological eating style (Marx, 1992, p. 7).

Conner-Greene (1986) shows that men and women have been found to differ in their concerns about body weight. For both sexes, negative attitudes toward one's body correlate with lower levels of self esteem, this relationship is not stronger for females than males, however, males and females attach different meanings to their bodies (p. 27). According to Rodin, Silberstein, and Striegel-Moore as cited in Conner-Greene (1986) "Whereas men primarily view their bodies as actively functional, as tools that need to be in shape and ready for use, women primarily see their bodies as commodities, their physical appearance serving as interpersonal currency" (p. 28). Weight and body shape have been found to be the primary criteria by which women evaluate their own attractiveness. Although weight and shape are important to men, they are not central to their self-perceptions of attractiveness (Attie and Brooks-Gunn, 1989, p. 70; Connor-Greene, 1988, p. 28; Grant and Foder, 1988, p. 270).

Although anorexia nervosa is usually considered a disorder of young women and girls, 5% to 10% of all the cases diagnosed occur in men and boys (Barry and Lippmann, 1990, p. 161; Cantrel and Ellis, 1991, p. 53). Onset can range from prepubertal years to adulthood. Svec (1987) claims that the phenomenon is rare in males (.02%) and is attributed primarily to a by-product of athletic training (p. 617). A comparison of 37 males and 148 females with anorexia nervosa was made in a review of the literature dating from 1970 to 1980. The conclusion was that for males obsessional and antisocial behaviours at age of onset were significantly more prevalent relative to the female group. On the other hand, Bruch implies that the majority of the male cases reported were in fact atypical; that the eating disordered behaviour is a by product of another pathology (Svec, 1987, p. 617). In the same vein Korkina et.al. as cite in Svec (1987) concludes that anorexia nervosa in males was always a syndrome of schizophrenia (p. 618).

Barry and Lippmann (1990) state that males with primary anorexia nervosa often experience the delusion that their body weight is just right and not too thin, in contrast to females, who desire greater thinness. Anorexic symptoms in males represent a desperate attempt to establish a sense of identity. Although patients appear to be doing well, their performance is a facade to please parents and other authority figures. In their frantic effort to prove themselves, their behaviour takes on a driven, perfectionistic quality. Disturbed food intake and weight loss are often late symptoms (p. 163).

Several theories have been proposed to explain why the incidence of

anorexia nervosa in males is lower than females. For example, men are subjected to less social and advertising pressure to be slim. Fewer boys than girls feel fat. The typical adolescent male is more concerned about muscle mass than about being slender. Also, increased weight has fewer sexual implications in men than in women. Steady gonadotropin release in males, in contrast to cyclical female patterns of hormone release, may also be a factor (Barry and Lippmann, 1990, p. 163).

There is some evidence that gender differences exist not only in importance attached to weight and shape but also in what is perceived as the "ideal" body. When asked males and females were asked to indicate from a series of nine figure drawings their current figure, their "ideal" figure, the figure estimated to be the most attractive to the opposite sex, and the opposite sex figure which they would find most attractive. Both sexes erred in their estimates of what was most attractive to the opposite sex, with women selecting a thinner female shape than men had identified as most attractive, and men choosing a heavier male figure than women selected as most attractive. Women also rated their current figure as heavier than both their ideal shape and that which they perceived most attractive to males. Male estimates of their current and ideal figures and that which they believe to be most appealing to women were nearly identical. Consequently, male's perceptions tend to encourage satisfaction with their bodies, whereas females feel pressured to lose weight, even beyond what they think would be most attractive to men (Conner-Greene, 1988, p. 28; Cantrel and Ellis, 1991, p. 53). Additionally, the traditional stereotypical sex role identity for women, with its emphasis on submissiveness and indirect expression of autonomy, may increase risk for psychological problems, such as eating disorders, that are associated with poor self-concept (Cantrel and Ellis, 1991, p. 53).

Mintz and Betz (1988) have found that the topic of eating disorders is increasingly important to counselling psychologists as they have recognized the widespread anxiety women feel about their bodies, and there are serious psychological health consequences for otherwise normal females (p. 463). Upon administering a Binge Eating Questionnaire, Hawkins and Clement as cited in Lachenmeyer and Muni-Brander (1988) in found that 79% of 255 females and 49% of 110 males reported bingeing occurrences. One-third of the male and female normal weight participants and 33% of those who were overweight in the initial stages stated that they continued eating during a binge until they were painfully full or until they could not eat anymore. Nine females, 8 of whom were of normal weight, reported that they had induced vomiting after a binge (304). Orbach (1978) sees binge eating disorder as both a symptom and a problem. She sees it as a symptom in the sense that the binge eater does not know how to cope with

whatever underlies this behaviour, and turns to food for comfort. On the other hand the binge eating disorder is so highly developed and painfully absorbing that it has to be addressed as a problem (p. xvii). However, binge eating is not classified as an eating disorder under the criteria set forth by the American Psychological Association (Brone and Fisher, 1988, p. 146).

Kagen (1987) reports the prevalence of compulsive eating and dieting as "always greater among females than males". Among girls, disordered eating habits were consistently associated with feelings of stress, failure, and low self esteem. She also feels that eating disorders are not related to psychological disturbances. She found that for males it was difficult to find precise relationships between family networks and disordered eating because the occurrence was so rare. Her explanation is that eating is an unusual way for males to express negative emotions (p. 131).

Kagan (1987) also describes compulsive eating among females as representing "a rejection of the roles and behaviours traditionally perceived as 'feminine' by our society". Women who eat compulsively appeared to be dissatisfied because they were not "feminine" enough. These girls perceived themselves as low in feminine qualities, they desire to be more rather than less feminine (p. 132).

"Beauty knows no pain", the motto of the Dallas Cowboys Cheerleaders, is the way that Bepko and Krestan (1990) begin their chapter on attractiveness. They claim that the need to be attractive puts a woman's focus on someone "out there" in society. It tells a woman to work at looking good for someone else's pleasure and approval. Women tend to ignore their own comfort or unique appearance. Rather, women struggle painfully to match the contours and style of the "Ideal Woman", and feel unsuccessful when this cannot be achieved. A result of this is that for most women their self-image becomes identified with their body image. If they look good, they are good. Women end up being more focused on looking good than on feeling good. A sense of achieving external approval becomes more important than a feeling of internal satisfaction with one's "physical experience of the self". For women, weight is the major "battle ground on which the war for self-approval is fought" (p. 15).

Banner, Brownmiller, Lakoff, and Scherr as cited in Seid (1989) contend that fashion and the the existence of "ideal" female beauty have oppressed women and have even been the root of their oppression. Only women, they argue, are valued according to their beauty or sexual desirability. In effect, these authors combine the erotic and status theories of fashion and put them into a political context, charging that patriarchal societies often impose painful, debilitating styles on women to enforce and symbolize their oppression and to distract them from more serious pursuits

(p. 42).

Freedman (1986) reports that anger can be at the root of a women's eating problem. She claims that many women are angry because their work is undervalued or because their attempts to act independently are impeded. Often their appearance is constantly scrutinized and criticized. Freedman claims that the expression of anger has long been denied in women. Good girls learn to "act like Cinderella, to accept their lot, to ask little in return, to cry rather than fight, to smile when furious, to look good when feeling bad. Consequently their anger goes unrecognized, even to themselves"(p. 169). They fear rage because such emotion renders them unattractive. Hence, women repress and conceal anger. Silence also preserves and protects women. Eating can serve as displacement of anger. The mouth can aggressively attack food- biting, tearing and finally destroying it. Unconscious rage can be expressed at each meal through bingeing or starving. This is a symbolic silent rebellion that is safer than to open conflict (Freedman, 1986, p. 169).

What these studies have in common is that the authors avoid casting the behaviour as "pathological". Instead they seek to demonstrate that these disorders are the

> inevitable consequence of a misogynistic society, that demeans women by devaluing female experience and women's values; by objectifying their bodies and by discrediting vast areas of women's past and present achievements. Both overeating and non eating are a protest against the way in which women are regarded in our society as objects of adornment and pleasure (Brumberg, 1988, p. 33).

Chernin (1981), believes this view dignifies a rather more simple explanation, that most peoples' approach to food is merely an uncomplicated sensual pleasure. Hence her description of the binge eater is a person who has convinced herself that she does not have permission to eat, food will not satisfy her no matter how excellent it is, no matter how much is consumed. The binge becomes a compulsive rebellion against ones own prohibition (p. 17).

Moreover Chernin, as cited in Brumberg (1989), also postulates that eating disorders are rooted in the problems of the anxieties that pertain to mother-daughter separation and identity. Mothers and daughters express emotion around issues around food and eating rather than around issues of sexuality. The "hunger knot" experienced by so many modern daughters, represents issues of failed female development, fear, and guilt over her desire to surpass her mother. Chernin also asserts that women who have

disordered relationships with food are unconsciously guilty of symbolic matricide and their obsessive dieting is an expression of their desire to reunite with the mother (p. 29).

Szekely (1988) claims that the activities of the eating disordered individual stem from certain motives based on needs which are socially conditioned. The sociocultural dimensions of the relentless pursuit of thinness among women includes "socially constituted needs". Individual existence cannot be treated in isolation from the social; if you are a member of a society you absorb the rules of that society so that the member and society are indistinguishable. Szekely further specifies what she believes has become women's position in society. The imperatives to be thin and attractive are carried into a woman's daily life. Women must be knowledgeable about diet, exercise, gender appropriate behavior, health, fashion, and appearance in general. Many women compete to be the most attractive among attractive women in order to get and keep men's attention. In this process of securing men's attention, womens' existence undergoes a transformation, which take on the character of a commodity, an object constantly in need of perfection for men's service and pleasure. A woman's shape and her entire appearance must keep up with the changes "in what constitute objects of fetish and what the buyer--- men of status and wealth--- will purchase" (p. 13).

Psychologist Marlene Boskind-Lodahl, as quoted in Freedman (1986) takes this idea further. She explains that women's

> obsessive pursuit of thinness constitutes an acceptance of the feminine ideal, and an exaggerated striving to achieve it. Their attempts to control their physical appearance demonstrate a disproportionate concern with pleasing others, particularly men— a reliance on others to validate their sense of worth. They devote their lives to fulfilling the feminine role, rather than the individual person (p. 156).

Satisfying proof for Szekely (1988) that womens' bodies are sites for domination is the fact that there is little language (words, gestures and movements) to explore and express their bodies in a manner that would enable them to begin to question the indoctrinated ideals about the female body instead of the biological factors that determine female physicality. Therefore one might argue that the drive to slimness for many women is a battle against nature itself which prepares the female body for conception and pregnancy (p. 21). Hence, females of normal weight are misjudged and misjudge themselves as overweight. Analysis of media images confirms that a very thin body predominates and that positive social

attributes are related to thinness and negative attributes are related to fatness. The lean image conforms to our North American value system which admires hard work and self denial. The demands that accompany the relentless pursuit of thinness drive women to extreme measures to achieve the ideal body (Freedman, 1986, p. 150).

Orbach, Chernin, Freedman, and Szekely agree with Wolfe in that women's obsessive drive for thinness are attempts to please men by adopting mannerisms and personae that are fragile, dependent and childlike, asexual, weak and in need of protection. Though the 1960's seems to have released women from the former metaphorical prison of domesticity and the temporal space of suburbia they seemed to have adopted a more subtle and solitary form of imprisonment- their own bodies. In 1965 the model Twiggy appeared on the pages of *Vogue* and assumed and influenced in popular culture as an image for women. She was called "Twiggy" because" she looked as though a strong gale would snap her in two and dash her to the ground" (p. 184). What was possible for Twiggy to attain became paramount in shaping other women's bodies.

5. The "Ideal Woman"

The current standard of attractiveness portrayed in the mass media is that of a slimmer appearance for women than for men. The standard is slimmer now than in the past (Collins, 1988, p. 227). Chernin (1982) refers to women's attempts to conform to the present "Ideal Woman" as a rejection of exactly that which is traditionally seen as "feminine"- the sense of fullness, swelling, curves, softness, the awareness of plenitude and abundance, as being repulsive to anorexic women (p. 18).

When narcissism is healthy, Freedman (1986) claims, it helps one to gain a sense of identity. However, excessive narcissism can lead to an idealized self perception that is based on fantasy. The unattainable images that result can end up being a source of frustration. The narcissist internalizes with a "formula female" (ideal woman) with the body or major source of infantile gratification. Thus excessive narcissism may stunt psychological development (p. 111). This theory can be directly applied to the anorexic whose fantasy life revolves around the ideal of thinness and whose major satisfaction is derived from weight loss. However the amount of weight lost is never enough. Once the person gets to an unhealthy body weight her nutrition is so poor that her brain can not work properly. Aside from the narcissism slowing psychological growth, this physical state further complicates matters.

6. Adolescence

The tendency towards eating disorders at the age of adolescence forces us

to look at the physical changes that take place at puberty in a culture that values the prepubertal body over the mature female body. As girls mature sexually, they accumulate large quantities of fat in subcutaneous tissue. For adolescent girls, this "fat spurt" is one of the most dramatic physical changes associated with puberty, adding an average of about 11 kilograms of weight in the form of body fat. These increases in body fat accentuate the already deep seeded desires to be thin (Attie and Brooks-Gunn, 1989, p. 70).

While boys of the same age are developing muscles because of biological development, girls experience an increase in adiposity, particularly in the breast and hips. The increased fat is a necessity for the menstrual cycle to begin. In our fat phobic society, where female self worth is intimately tied to a slim figure, these biological differences have emotional consequences (Attie and Brooks-Gunn, 1989, p. 70).

For adolescent boys, growing larger is frequently a source of pleasure and power; for girls, an increase in size is often confusing, awkward, and stressful. Brumberg (1989) suggests that in this sense the psychological climate exacerbates the stresses associated with normal maturation thus setting the stage for female eating disorders during this period of growth and change (p. 27).

The timing of maturation may also influence the emergence of dieting behaviour. For example, children who mature early are at greater risk for eating disorders (Attie and Brooks-Gunn, 1989, p. 71).

As girls mature sexually, they accumulate large quantities of subcutaneous tissue, as indicated by increased skin-fold thickness (Attie and Brooks-Gunn,1989, p. 70; Collins, 1988, p. 228). Dornbusch et.al., as cited in Attie & Brooks-Gunn, found that increases in body fat in females in the pubertal years are associated with desires to be thinner (p. 71). Crisp as cited in Attie and Brooks-Gunn, (1989) notes other pubertal changes such as breast development may be associated with their efforts to control food intake, particularly in girls from higher social-class backgrounds. Putting all these factors together, the findings suggest that dieting emerges as the body develops at puberty (p. 71).

A study done by *Glamour* magazine confirmed that female self esteem and happiness are tied to weight, particularly in the adolescent and young adult. When asked to choose among potential sources of happiness, the respondents chose weight loss over success at work or interpersonal relations. These women consistently evaluate other women, themselves, and their own achievements in terms of weight (Brumberg, 1989, p. 32).

Carter and Duncan, as cited in Lachenmyer and Muni-Brander (1988) assessed the presence of bulimic behaviour in adolescent females. Four hundred twenty-four female students from a rural high school answered

the General Health Questionnaire; 9% of the girls engaged in self induced vomiting, 80% of these also binged. Lachenmyer and Muni-Brander caution that due to the secretive nature of the disorder, and the self report nature of the survey, these results should be treated cautiously. It could be possible that more than 9% of the adolescents have eating disorder symptoms but did not report them (p. 305).

Freud as cited in Brumberg (1988) regarded those with eating disorders as girls

> who feared adult womanhood and heterosexuality. In 1895 he wrote 'The famous Anorexia of young girls seems to me (on careful observation) to be melancholia where sexuality is undeveloped.' In Freudian terms, eating, like all appetites is an expression of libido or sexual drive. Clinicians confirm the direction of the Freudian interpretation: Anorexics are usually not sexually active adolescents (p. 28).

In a similar vein, Bruch's research concludes that the contemporary eating disordered individual is unprepared to cope with the psychological and social consequences of adulthood as well as her sexuality. Because of the paralyzing sense of ineffectiveness and anxiety about her identity she assiduously seeks to control of her body. Bruch argues that she will make her body substitution for the life around her that she cannot control. She experiences a disturbance of "delusional proportions" with respect to her body image and she eats in a peculiarly disorganized fashion at the same time as she denies herself food thus slowing the process of maturation; her menses stop and her body remains immature and child-like. Such preoccupation with controlling her appetite, turns the young woman inward so that she becomes increasingly estranged from the outside world. She lives a bizarre life, obsessed with thoughts of food simultaneously struggling with her parents over her right not to eat it (Brumberg, 1988, p. 28).

Kagan (1987) found that high school and college students use and abuse food as a response to stress. This is a time of life that can be critical to the formation of life long habits therefore an ideal time for teachers and counsellors to help young people compare their feelings of anxiety and failure, their guilt concerning food abuse, and their desire to be thin (p. 131).

7. Family

Between significant others is built an interpersonal bridge, an emotional bond that ties two individuals together. This bond involves trust and

allows for experiences of vulnerability and openness between individuals. It also becomes the catalyst for mutual understanding, change and growth. Consequently, emotional disruption of the interpersonal bridge has a significant potential for inducing shame.

Whenever we respond inappropriately to another's needs a shame-inducing process may take place. Intimate relationships within the family are vulnerable to such inducement to shame. A lack of response may be a relatively benign inducement to shame while disparagement, humiliation, ridicule or some transfer of blame may be more damaging. Shame may be diffuse, briefly intense, or linger for an indefinite time. To protect oneself against resultant feelings of inadequacy, a person may turn to a variety of outlets, such as the abuse of food. Familial patterns which affect shame and inadequacy are: overemphasis on appearance, social isolation, emotional rigidity and inability to resolve conflict. Some or all of these can increase the risks of a child becoming eating disordered (Attie & Brooks-Gunn, 1989, p. 71).

Family systems therapy provides another theoretical perspective to eating disorders. According to family systems theorist Salvador Minuchin, certain kinds of family environments encourage passive methods of defiance and within the setting young women have difficulty asserting their individuality. He describes the "psychosomatic" family as controlling, perfectionistic, and nonconfrontational. Minuchin, as quoted in Brumberg (1988) says the child has become

> enmeshed, meaning that the normal process of individuation is blocked by the complex psychological needs of the girl, her parents, even her siblings (p. 29).

The problem no longer belongs to the girl alone. Her behavior effects all members of the family system which causes them to react. Therefore if one part of the family system is infected with a problem, said problem also infects all the other members.

8. Influence of the Media

The assimilation of a cultural model that emphasises the class-specific image on body preference does enormous harm. The modern visual media (television, films, video, magazines, and particularly advertising) feed the imaginations of women so that many become preoccupied with thinness. The media therefore provides a primary stimulus for eating disorders. Female socialization in the hands of modern media emphasizes external qualities ("good looks") above all else. As a consequence, we see few women of "real girth" on television or in the movies, who have vigour,

intelligence, or sex appeal. Young girls "fed on this ideological pablum", learn to be decorative, passive, powerless, and ambivalent about being female (Brumberg,1988, p. 33).

Wolfe (1990) refers to media's influence on men's perceptions of female desirability and how this in turn, effects women. The media's images of the female impress themselves on male consciousness. The images become the standard by which they measure real women. Even when males know that the women in print or on film are not real, that 95% of women do not measure up, and against which many fall short, the images cannot be erased (p. 163-164).

Kagan (1987) also discusses the role the media plays in passing on the proper information. She refers to the information as the "how-to" variety, that does not address the psychological components of compulsive eating and dieting. She identifies a need to help adolescent girls find other means of releasing stress besides overeating. It is also important that they understand that thinness and losing weight are not panaceas for feelings of inadequacy. Kagan describes overeating as a very common stress response among otherwise normal females. She feels that psychiatrists, psychologists and physicians tend to "over diagnose" eating and weight problems in women as situations analogous to menstruation, pregnancy, and menopause, which some physicians regard as diseases rather than normal biological functions. If a female abuses food, chances are that she is not sexually confused, repressed, resentful of her family, or otherwise screwed up (p. 132).

In the early 1960's, the fashion model, who looked out at the average woman from magazines and televisions weighed 8% less than the average women, whereas in the 1990's, the fashion model weighs 23% less. In 1980 the average Playboy Playmate weighed 17% less than the average women. Autobiographies of models reveal that many fashion models are anorexic and bulimic while employed. The career of dancing houses many anorexic and bulimic individuals determined to make weight restrictions. In other terms, the average model, dancer, and actress is thinner than 95 percent of the female population (Wolfe, 1990, p. 185).

9. The Culture of Dieting

The shift toward a thinner ideal has been marked by pervasive dieting among women, evidenced by an estimate that women comprise 90% of the consumers of the diet/obesity industry. Though the benefits of slenderness have been extolled by health professionals, the potentially harmful effects of dieting have received considerably less attention. Sequence data indicate dieting usually precedes bingeing, with these authorities asserting that dieting itself is the disorder in need of cure. Chernin (1982) stated

bulimia may become a problem in psychologically normal individuals after a period of intensive caloric restriction, while weight loss, by itself, was identified as a cause of anorexia nervosa in vulnerable individuals (Cantrell & Ellis, 1991, p. 53). It is true that diets are initiated with the best of intentions. Dieting may begin as a vision of harmony between mind and body, initiating a sense of well being, physical fitness, and glowing health. These positive images however can become demonic, driving the dieter to further exploits. Thus she exercises more strenuously, denies herself more food, in order to lose even more weight, always goaded on by the idea that the perfect body awaits her only a step beyond the present achievement (Chernin,1982, p. 24).

A link between the societal ideal of thinness and the steady increase of eating disorders has been proposed. Societal ideals influence behaviour by defining what is acceptable. A behavioral manifestation of this extreme ideal is the obsessive attempt to "control" ones weight. These methods are based on the belief that one can alter biology by behaviour.

Any societal ideal may be pursued to excess. Many females encounter cultural messages about the desirability of thinness and convert these messages into disordered eating.

There are three key points that must be said about diets: they are all based on deprivation, with their variety of names and directions, they are all remarkably similar, the success rate for diets is very low, so it is correct to say that diets do not work. Also, the diets of the past, are the precursors to the diets of the present. They may have different names but they are uncannily similar in nature. Independent of the time period that a diet was used, they invariably involved deprivation and a definite form of deviation from a normal eating pattern. A person may not realize it, or be unable to admit it, but dieting is a form of pathological eating. Restrictive diets can eventually lead to eating disorders. The scenario may go as follows:
a)Restrictive diet -> works at first -> girl decides that if she eats even less she can loose more weight -> eventual Anorexia; or
b) Restrictive diet -> either it no longer works or the person is unable to stick to the diet -> girl decides that the only way she can eat and not gain weight is to purge ->Bulimia (here the steps can vary as Anorexia often leads into Bulimia or the girl practises a combination of the two;
c.) Restrictive diet -> regain weight plus a little more ->begin another restrictive diet -> yo yo dieting ->eventual obesity.

Of course these steps can vary, but there are definite patterns of eating disorders which inevitably begin with restrictive dieting This is not to say that this applies to all people, rather to those that have the propensity to turn to eating or non eating as their sacred place.

C. Medical Factors

Biologists see eating disorders as confusing the body systems that regulate hunger and eating, particularly the hypothalamus (Marx,1992, p. 28). It has been suggested that disturbances in hypothalamic function are linked to eating disorders. However it is unclear whether the malfunctioning hypothalamus is the cause of the eating disorder or the result of starvation (Stoutjesdyk, 1990, p. 12).

Is an eating disorder inherited? Studies of identical twins, found that when one of the pair of twins was anorexic, her sister has a better than 50% chance of developing the disorder (Marx,1992, p. 29). Some patients with Bulimia Nervosa may also have a genetic vulnerability to obesity. The possibility that some metabolism related trait disturbance may be there before the onset of a pathological eating behaviour arises when bulimics use the binge purge cycle to counter an existing weight problem (Marx,1992, p. 10). The bulimia may start out as a weight controlling technique. The irony is that it causes weight gain.

Eating disorders have been explained as an obsessive compulsive disorder. Behavior patterns displayed by disordered eaters are consistent with behaviors of the obsessive compulsive: stubborn, rigid, perfectionistic, excessively orderly and clean, pay meticulous attention to detail, self righteous, strongly defensive about their behavior, and can espouse elaborate intellectual theories about their problem. (Brumberg, 1989, p. 29)

Eating disorders are seen by some to be an addiction. Smuckler and Tantem, as cited in Brumberg (1989) refer to eating disorders, which involve habitual behavior, as a dependence disorder. They claim that the individual may be psychologically and physically addicted to the effects of their behavior, which like intoxication or drug abuse, alters the individuals psychological and physical state. Initially the behavior may be unpleasant, but with time, they begin to feel "right" (p. 31).

This literature review is a overview of the historical, psychological and medical information available on eating disorders. This comprehensive approach was used so that attention would be drawn to the variety of situations that contribute to the incidence of eating disorders.

CHAPTER 3

Methodology

Since the intent of this study is to determine the incidence of attitudes and behaviors indicative of the potential for eating disorders in adolescents among the general population, the methodological task was to devise an appropriate strategy for measuring a potential for eating disorders.

The Instrument

A variety of instruments to measure eating disorders have been developed. These include the Binge Questionnaire (Ordman and Kirschenbaum,1985, p. 307), Binge Eating Questionnaire and Eating Patterns Questionnaire (Ordman and Kirschenbaum, 1985, p. 307), Eating Attitudes Test (Attie and Brooks-Gunn, 1989, p. 70), Weight Management and Eating and Exercise Questionnaire (Mintz and Betz, 1988, p. 464). After considering the various instruments, the Eating Disorders Inventory (EDI) was selected because it can be used with individuals as young as 12; it is current; it has established reliability and validity; and it is broad, including categories for anorexia nervosa, bulimia, and binge eating. The test, available from Psychological Assessment Resources and was originally developed in 1983-1984 by David M. Garner, Marion P. Olmstead, and Janet Polivy. The EDI is a widely used, easily administered, self report measurement that provides standardized subscale scores on eight dimensions that are clinically relevant to eating disorders. Respondents answer whether each item applies "always," "usually," "often," "sometimes," "rarely," or "never." Hundreds of research citations indicate that the EDI is a valuable research instrument. It provides descriptive information, has been used as an outcome measure, and is a prognostic indicator in treatment studies. It has also been used to track psychological functioning in prospective studies of individuals at risk for eating disorders (Garner, 1991, p. 5).

The following 4 questions taken from the EDI give some indication of its' content.

1. I eat sweets and carbohydrates without feeling nervous.
2. I think that my stomach is too big.
3. I wish that I could return to the security of childhood.
4. I eat when I am upset (Garner, 1991, p. 26).

EDI Subscales

Drive For Thinness (DT) deals with excessive concern with dieting, and a

preoccupation an fear of weight. The Bulimia (B) subscales involves tendencies to think about and take part in uncontrollable bingeing. Body Dissatisfaction (BD) measures dissatisfaction with the overall shape and with the size of the body. Those regions of the body that are of greatest concern to those with eating disorders (ie. stomach, hips, thighs, buttocks). Ineffectiveness (I) deals with feelings of general inadequacy, insecurity, worthlessness, emptiness, and the inability to control one's life. High scores on this subscale indicates deficit in self-esteem owing to intense feelings of inadequacy. The extent to which one believes that personal achievements should be superior is what the Perfectionism (P) subscale measures. Interpersonal Distrust (ID) measures one's general feeling of alienation and reluctance to form close relationships. It also measures one's reluctance to express thoughts or feelings to others. Introceptive Awareness (IA)measures confusion and apprehension in recognizing and accurately responding to emotional states. The desire to retreat to the security of childhood is what the Maturity Fears (MF) measures (Garner, 1991, p. 5-6).

The validity and reliability of the EDI have been established by the Clarke Institute of Psychiatry, Toronto. The criterion for the reliability of the EDI subscales "was that they have a coefficient of internal consistency [Alpha; Cronbach, 1951] above .80 for an eating disorder sample. Reliability coefficients (alphas) for the original EDI subscales were between .83 and .93 for the eating disorder sample. They were recalculated using data from the updated patient sample" (Garner, 1984, p. 25).

Garner (1984) used two groups to determine the validity of the EDI. The participation in the testing was voluntary. All of the solicited students completed the questionnaire. Analysis of the collected data demonstrated the validity of the EDI prior to publication. There were several findings that indicated this: "1) correlations between patients' subscores and clinicians' ratings of these patients on the dimensions measured by the EDI; 2) the EDI subscale means for a small group of recovered patients were similar to the nonpatient group means and significantly lower than the symptomatic patient group; 3) significant differences between the restrictor patients and bulimic patients on a bulimia scale; and 4) convergent and discriminant validity as demonstrated by the pattern of correlations among EDI subscales and a number of other measures having different degrees of conceptual overlap with EDI subscales." (EDI Manual, 1984, p. 25).

The Sample

All Canadian provinces stipulate that all individuals must attend school until age 16, and since young people in Canada reach puberty by age 12 to

14, schools provided an ideal location for obtaining a sample for this study. Accordingly, the sample design was to include 500 junior high school students drawn from a city of nearly 700,000 using cluster sampling techniques. The city was divided into 10 areas with one junior high school randomly selected from each region. Fifty students were to be randomly selected from each school. The sample so drawn would be broadly representative of adolescents in the city.

As is generally the case, in order to collect data in schools within the city under study, permission of the local school board is required. The school board in question agreed to allow data collection in the jurisdiction but in only two schools. In addition the board designated the two schools at which data collection could occur. Despite concern about the size and representativeness of the sample, research officers at the school board insisted that this arrangement would have to suffice.

The school selected were junior high schools. One school had a total population of approximately 350 students, and was situated in a middle class community established in the early 1970's. Data taken from the census by Statistic Canada (1991) give the following information for the community in which this school presides:

total population	2085
single never married	505
legally married (and not separated)	1025
English	1610
French	30
non-official languages	395
total number of occupied private dwellings	770
owned homes	565
rented	210
single detached	600
semidetached	0
rowhouse	0
apartment , detached duplex	5
apartment building, more than 5 stores	0
apartment building, less than 5 stores	170
movable dwelling	0
size of household 4 or 5 persons	175
non-family household	195
number of persons living in private households	1960
average number of persons per household	2.5

Data Collection

After obtaining permission from the school board to collect the data, key personnel in each school were contacted to establish times and dates for school visits.

During the course of the initial contacts, the question of sample size was addressed with each principal. Both schools indicated that grade eight students would be the most appropriate group for the purpose of study and would be least disruptive of the scheduled activities of the schools. Given the size of the two junior high schools, testing all grade eight students would yield a sample of about 200 students. Although this number was less than half the original size proposed, it would provide enough cases for the study to proceed.

The data collection which took place in the second half of the 1994 school year began in January in School A. The principal indicated during the first meeting that the schools' guidance counsellor would act as an advisor during testing at the school. On the advise of the counsellor, after approval was obtained, the EDI was administered during class time. Overall, the staff at School A was very accommodating and helpful. Within two weeks, all testing at that school was complete.

The ease of data collection at School A was in complete contrast to the difficulties encountered at School B where repeated attempts to contact the principal during February, failed. After many calls and left messages, it seemed appropriate to go directly to the school without the benefit of appointment. Once reminded that permission had already been given to do the study, the principal indicated that the health and physical education teachers would coordinate the administration of the test. Accordingly, instructions for the administration of the tests and copies of the test were left at the school with the understanding that the completed tests would be available in mid-March. Suffice it to say that despite repeated calls to check on progress of the testing, it became clear by mid-June that the test would never be administered in that school. Unfortunately, by then it was too late in the school year to get permission to gather the data at another school.

Preparation and Analysis

Once the EDI test administration was completed, the scoring process began. Each individual test was scored by hand using a key provided with the Eating Disorders Inventory. The sex and age of each respondent was also recorded on each inventory because the EDI norms vary along these dimensions.

The Appendix to the *EDI Professional Manual* provides norms for a variety of 'normal' and clinical groups. In this case, two sets of norming

tables were consulted. The first of these provided percentile conversions by group for high school boys and girls (Table A7, Garner, 1984, p. 55). The second set of norms provided percentile conversions for 11 - 18 year old females (Table A8, Garner,1984, p. 56). Since the group under study included both boys and girls between the ages of 11 to 14, the first of the alternatives seemed most appropriate. Before making a final decision, however, the norms for 11-18 year old females were compared with those of high school females to see if any substantial differences were evident between the two sets of norms. Given that only very small differences existed between the two sets of norms, the inclination to use the high school norms was reinforced.

Table 3.1: EDI Raw Score Equivalents for the 75th and 99th Percentiles, Males and Females

	75th percentile		99th percentile	
	Girls	Boys	Girls	Boys
Drive for Thinness	8.67	2.33	10.33	9.67
Bulimia	2.5	1	12.5	8
Body Dissatisfaction	16.8	6.25	10	12.75
Ineffectiveness	5.4	4	15.6	10
Perfectionism	7.4	8	9.6	7
Introceptive Awareness	5	5.29	11	11.71
Interpersonal Distrust	5	5.33	11	9.67
Maturity Fears	6	4	14	10

Table 3.1 indicates the raw scores and percentile equivalents for males and females at the 75th and 99th percentiles. In preparation for analysis of respondents scores, a master graph was prepared that showed a shaded band indicating the range between the 75th and 99th percentiles for each subscales of the EDI. The 75th and 99th percentiles were used based on the testing of the EDI on other eating disordered groups. Figure 3.1 illustrates the master graph for females, and figure 3.2 illustrates the master graph for males. Individuals' scores on each subscale were then overlaid on the master graph to assess where they fell relative to this highest quartile. Generally, 1-4 individuals were overlaid at any one time to reduce the amount of graphing necessary but without congesting any given graph with so many lines that deciphering any given individuals's scores became difficult.

Figure 3.1: Female Master Graph

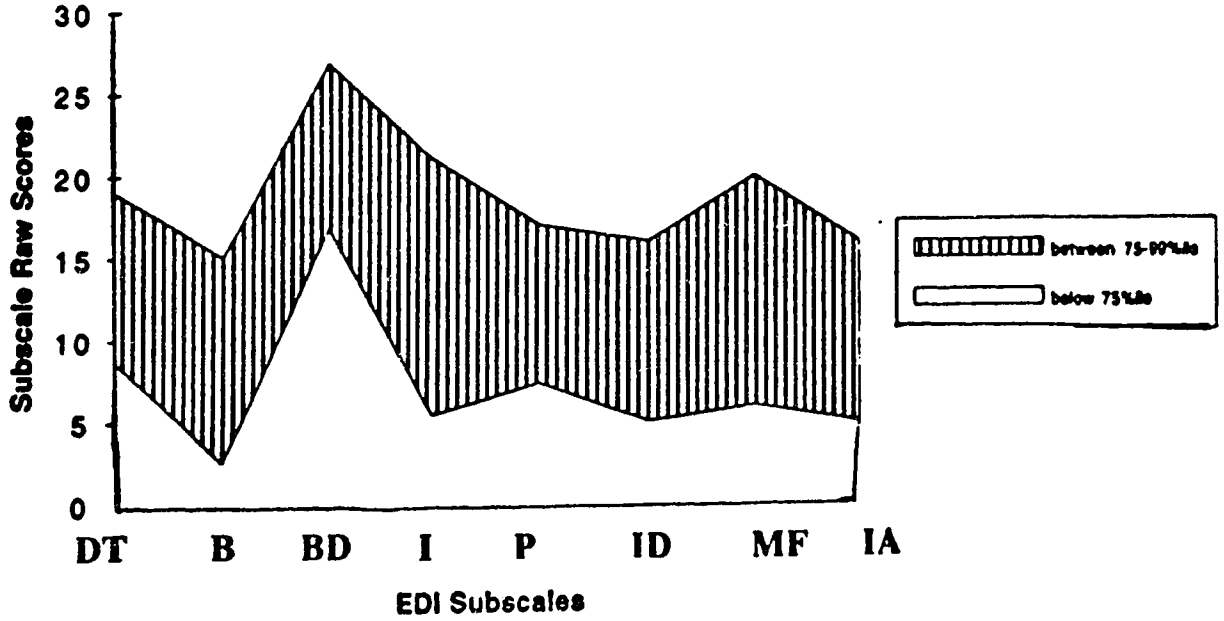
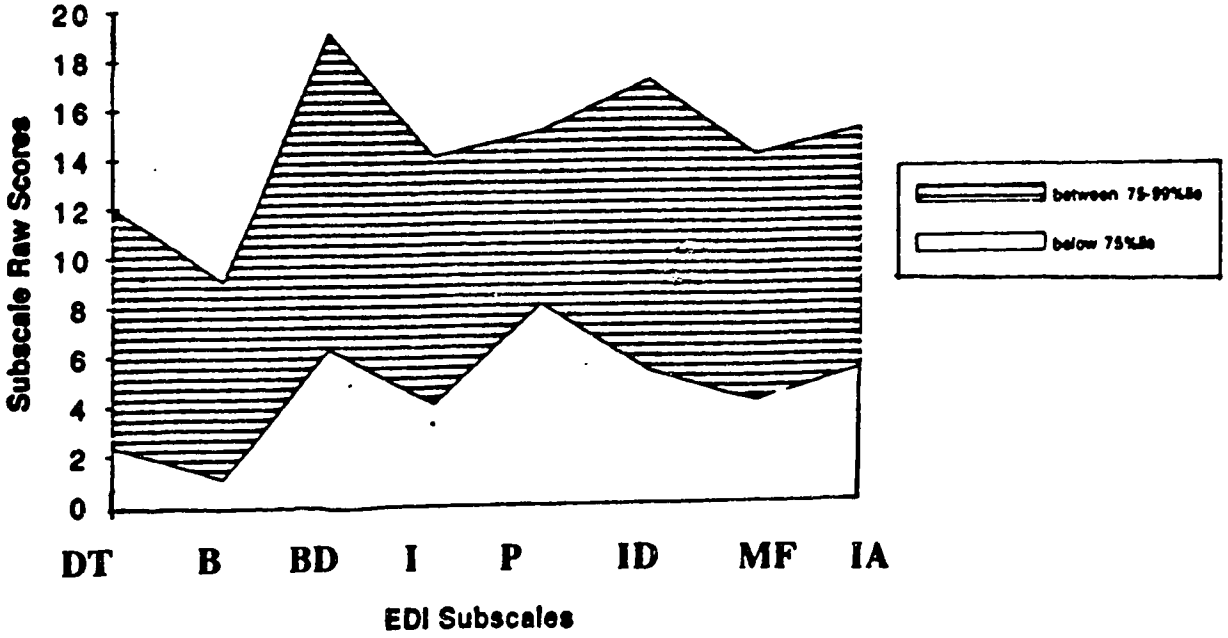


Figure 3.2: Male Master Graph



After the subscale scores of all male and female respondents was graphed, the graphs were closely examined to determine how many individuals fell below the 75th percentile on all subscale scores, how many fell within the the 75th to 99th percentile band on at least some subscale scores and how many fell within the band on all subscale scores. Chapter 4 reports on these findings.

CHAPTER 4

Data Analysis

As the previous chapter makes clear the EDI subscale scores for each individual were graphed against the norms for the 75th and 99th percentiles. Since the norms differ for males and females, the discussion below deals with females first then males. The purpose of this study was to determine the incidence of eating disorders and to discuss the social implications of eating disorders in society.

Table 4.1: Distribution of EDI Subscale Scores Above or Below 75th Percentile for Males and Females

	Females		Males	
	Frequency	Percent	Frequency	Percent
0 subscale scores between 75th-99th percentile	23	46%	8	17.4%
1 subscale score between 75-99th percentile	9	18%	18	39.1%
2 subscale scores between 75-99th percentile	2	4%	12	26%
3 subscale scores between 75-99th percentile	2	4%	1	2.1%
4 subscale scores between 75-99th percentile	2	4%	3	6.5%
5 subscale scores between 75-99th percentile	5	10%	1	2.1%
6 subscale scores between 75-99th percentile	5	10%	2	4.3%
7 subscale scores between 75-99th percentile	1	2%	1	2.1%
8 subscale scores between 75-99th percentile	1	2%	0	0
Total	50		46	

The above table (4.1) shows the distribution of scores on the Eating Disorders Inventory (EDI) for the adolescents who participated in this study. For the study 50 females and 46 males were surveyed. Table 4.1 shows male and female frequencies and corresponding percent for the range of subscales. The subscales range from "0 subscale scores between the 75-99th percentile" to "8 subscale scores between the 75-99th percentile". One or more individuals scored on each number of subscales. The exception was the male "8 subscales scores between the 75-99th percentile" on which no individual scored.

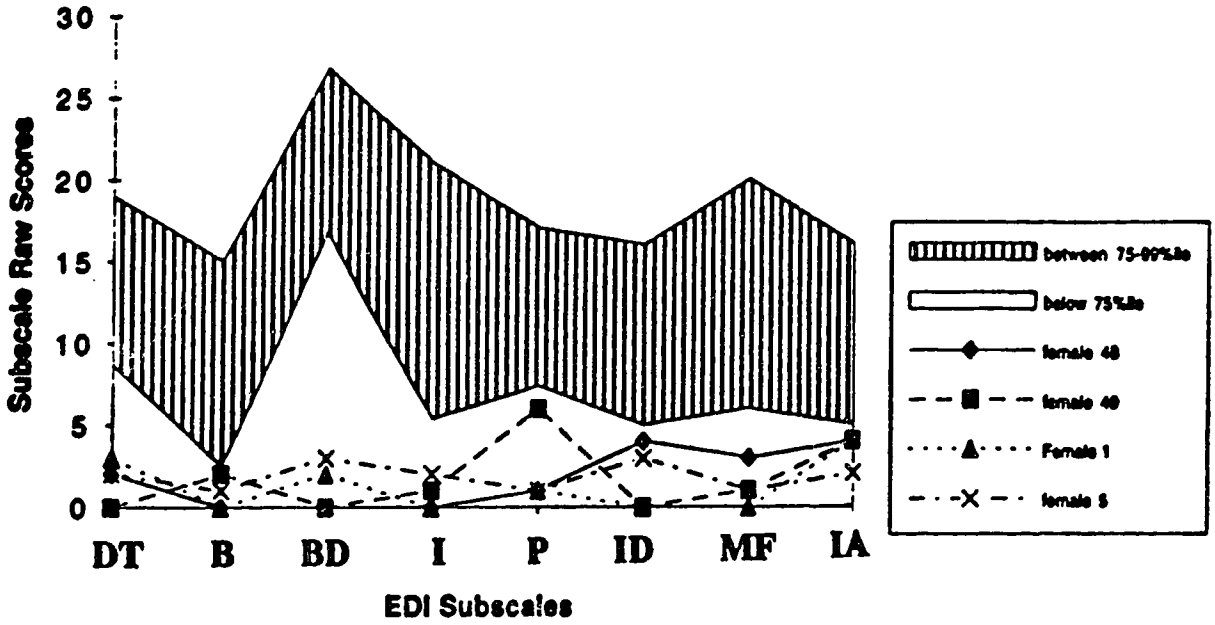
As the previous chapter makes clear the EDI subscale scores for each individual were graphed against the norms for the 75th and 99th percentiles because the percentile conversions from Table A8 of the *EDI Professional Manual* match most accurately the 11-14 year old students that were surveyed. Since the following graphs have differing norms for males and females, the females will be illustrated first followed by the males. The purpose of this study was to determine the incidence and social

implications of eating disorders in adolescents. The subscale most likely to have a score above the 75th percentile by females and males was Maturity Fears.

Females

Figure 4.1 graphs the subscale score for 4 individuals whose profiles are representative of this group of individuals whose raw scores fall below the 75th percentile on all eight EDI subscales.

Figure 4.1: Females with 0 EDI Subscale Scores Between the 75-99 Percentile



The profiles of four of the 9 female individuals whose scores fell below the 75th percentile on all but one EDI subscale are graphed in figure 4.2. Female 41, 14, and 15 each scored Maturity Fears as their subscale that was between the 75-99th percentile, while female 42 scored Bulimia as the subscale that fell between the 75-99th percentile.

Figure 4.2: Females with 1 EDI Subscale Score Between the 75-99 Percentile

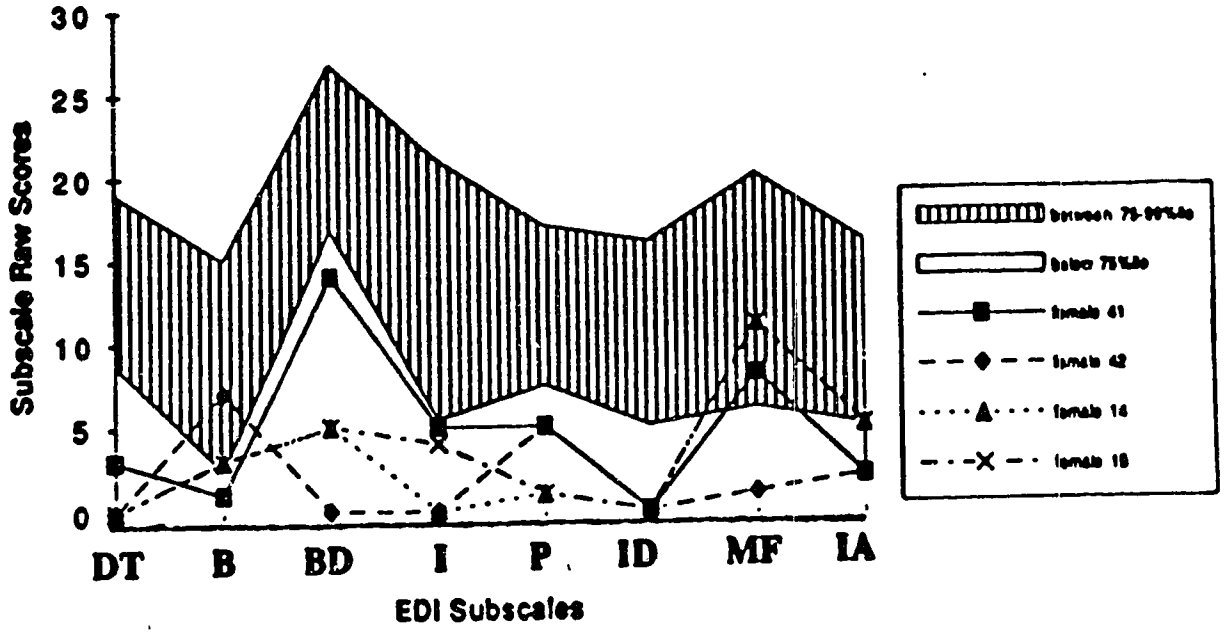
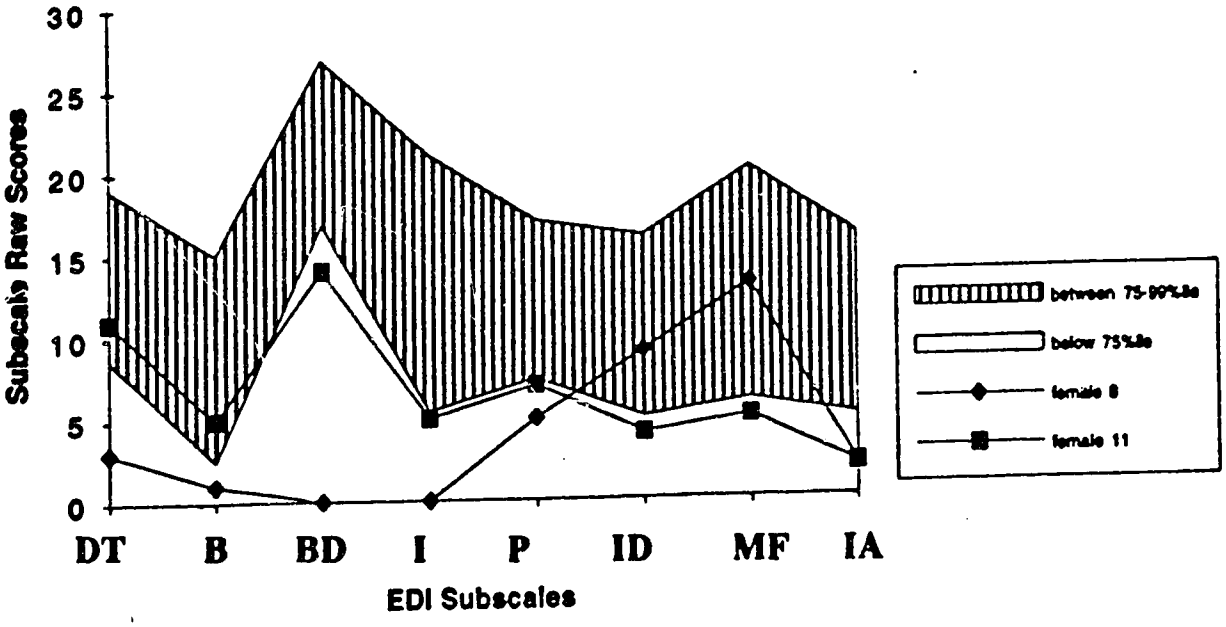


Figure 4.3 graphs the profiles of the 2 female individuals who had 2 EDI subscales between the 75-99th percentile. Two quite different patterns are evident in the scores of these individuals. Female 11 skirts the 75th percentile border even on those subscales that are below the 75th percentile. In contrast, female 8 scores well below the 75th percentile on all EDI subscales except for Interpersonal Distrust and Maturity Fears.

Figure 4.3: Females with 2 EDI Subscale Scores Between the 75-99 Percentile



Only two female individuals scored between the 75-99th percentile on 3 EDI subscales. As figure 4.4 illustrates, though these two individuals are the same in that their scores on 3 subscales are above the 75th percentile, they are quite different in terms of score profiles. Female 32 skirts the 75th percentile border, with the exception of subscale 8. Female 28, in contrast, scores well below the 75th percentile on the EDI subscales Drive for Thinness, Body Dissatisfaction, Interpersonal Distrust, and Introceptive Awareness, while EDI subscales Bulimia, Ineffectiveness, Perfectionism, and Maturity Fears are either just above or below the 75th percentile border.

Figure 4.4: Females with 3 EDI Subscale Scores Between the 75-99 Percentile

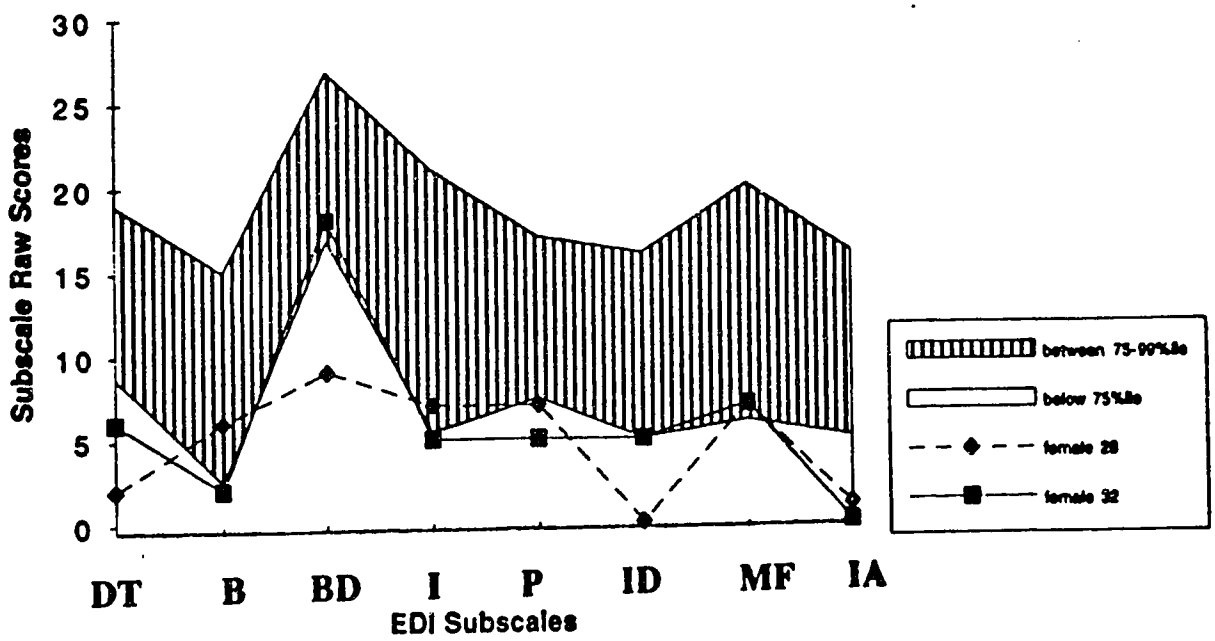


Figure 4.5 illustrates those two individuals who scored between the 75-99th percentile on half the EDI subscales. Female 13 scores well below the 75th percentile on Drive for Thinness, Bulimia, Body Dissatisfaction, and Ineffectiveness while her scores for Perfectionism, Introceptive Awareness, Interpersonal Distrust, and Maturity Fears are in the mid range between the 75-99th percentile. Female 26 scores very low on Drive for Thinness and Interpersonal Distrust, near the 75th percentile border for Bulimia, Body Dissatisfaction, and Perfectionism, in the mid range of the 75-99th percentile on Ineffectiveness and very high in the 75-99th percentile range for Interpersonal Distrust and Maturity Fears.

Figure 4.5: Females with 4 EDI Subscale Scores Between the 75-99 Percentile

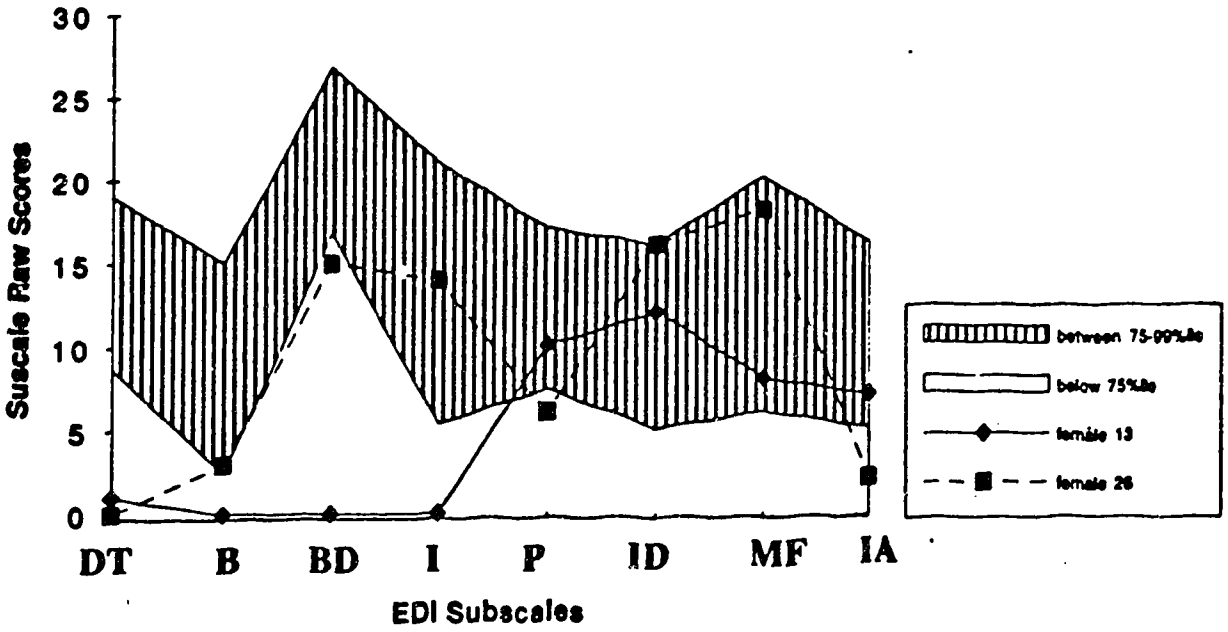
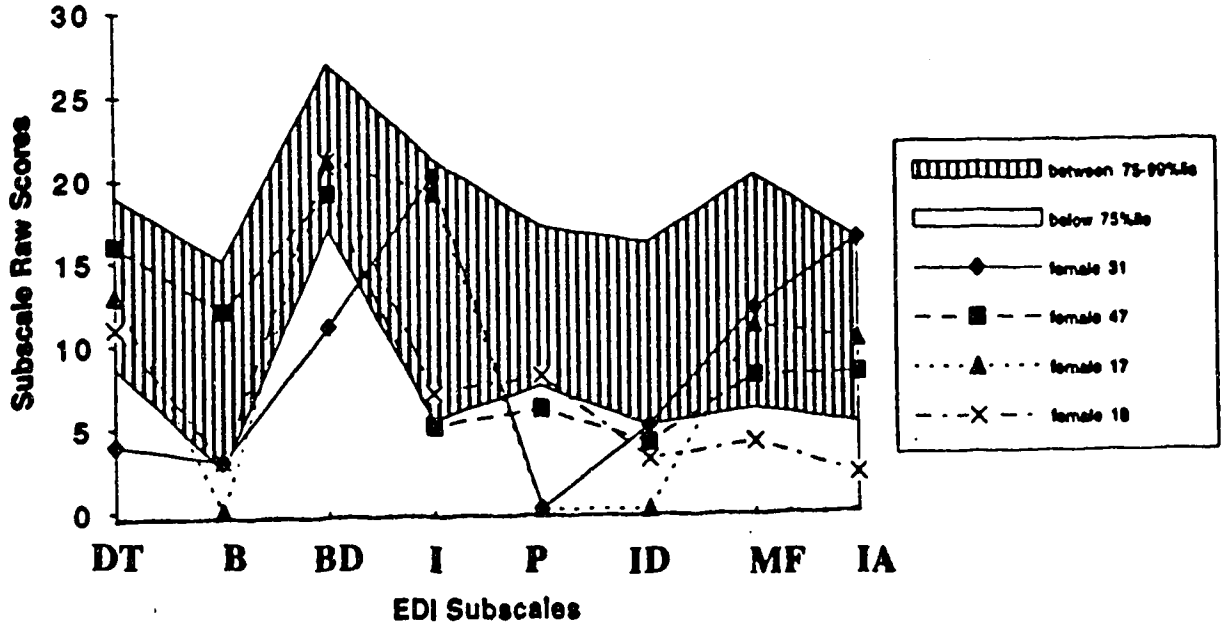


Figure 4.6 illustrates the 4 females who scored between the 75-99th percentile on 5 EDI subscales. Female 18's scores skirt the 75th percentile border on all subscales. The subscales that are within the 75-99th percentile range for female 47 are in the middle of that range while the subscales that are below the 75th percentile are very close to the 75th percentile border. Each of the subscales that are below the 75th percentile for female 17 are at zero while the subscales that are within the 75-99th percentile are in the mid range. Female 31 exhibits a varied distribution of subscale scores ranging from zero to the 99th percentile border. As with the scores for the cases graphed on the preceding pages, there does not appear to be any consistency from individual to individual in terms of which EDI subscales individuals score above the 75th percentile on nor is there a great deal of consistency in individual's scores from one subscale to another.

Figure 4.6: Females with 5 EDI Subscale Scores Between the 75-99 Percentile



Of the 7 females who scored between the 75-99th percentiles on 6 EDI subscales, the scores of 4 are illustrated in Figure 4.7. As with other female individuals in this group there is no consistency from one individual to another in terms of the 6 EDI subscales on which scores are above the 75th percentile. For example, Female 16 scores above the 75th percentile on the Bulimia, Body Dissatisfaction, Perfectionism, Interpersonal Distrust, Maturity Fears, and Introceptive Awareness. In contrast, female 50 scores above the 75th percentile on the Drive for Thinness, Bulimia, Perfectionism, Interpersonal Distrust, Maturity Fears, and Introceptive Awareness. For these individuals no EDI subscales lie near the 99th percentile border. Female 10 is a contrast in extreme with Perfectionism and Introceptive Awareness landing far below the 75th percentile border, while her Body Dissatisfaction score is at the 99th percentile border.

Figure 4.7: Females with 6 EDI Subscale Scores Between the 75-99 Percentile

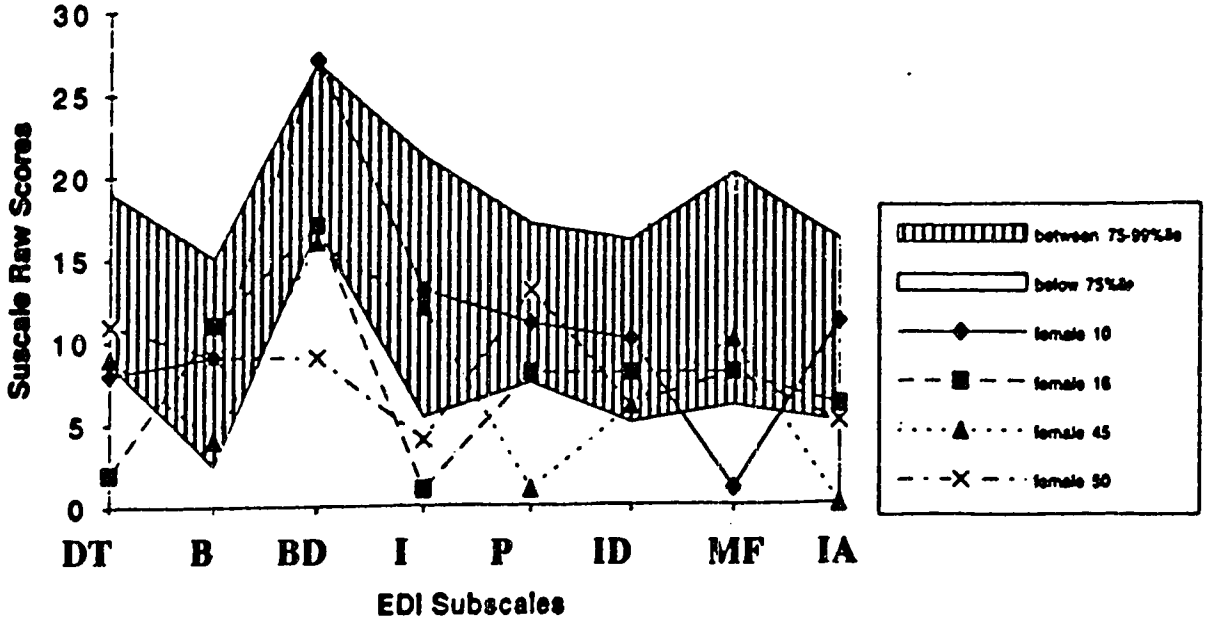
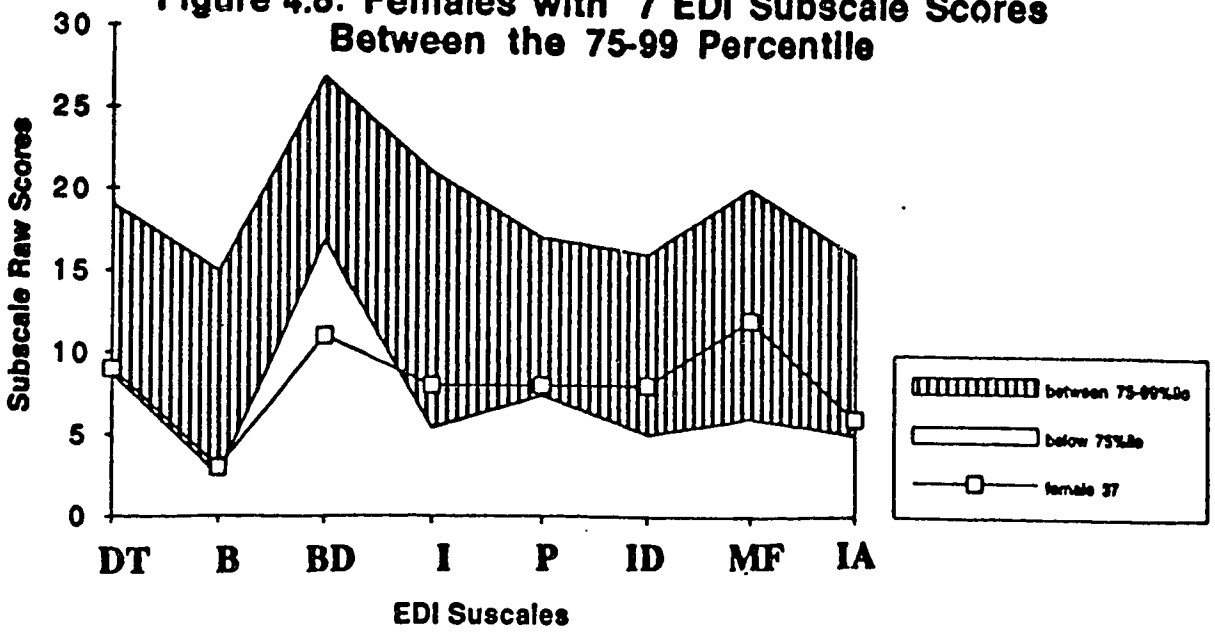


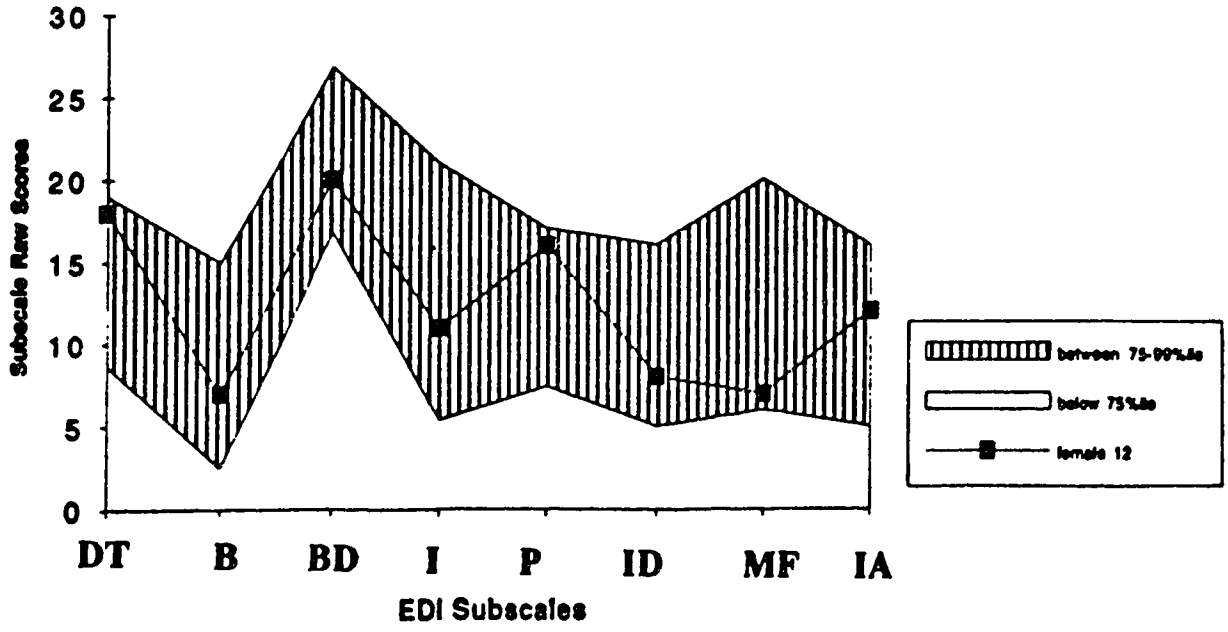
Figure 4.8 illustrates the single female who scored between the 75-99th percentile on 7 EDI subscales. Of the 7 subscales that are in the 75-99th percentile, 6 are close to the 75th percentile border, the exception being Maturity Fears which is in the mid range. Only the Body Dissatisfaction subscale score falls below the 75th percentile.

Figure 4.8: Females with 7 EDI Subscale Scores Between the 75-99 Percentile



Female 12, whose EDI subscale scores are graphed in figure 4.9, was the only female individual to score between the 75-99th percentile on all eight subscales. This is the one individual who might be said to show clear evidence of eating disorder using the Eating Disorder Inventory.

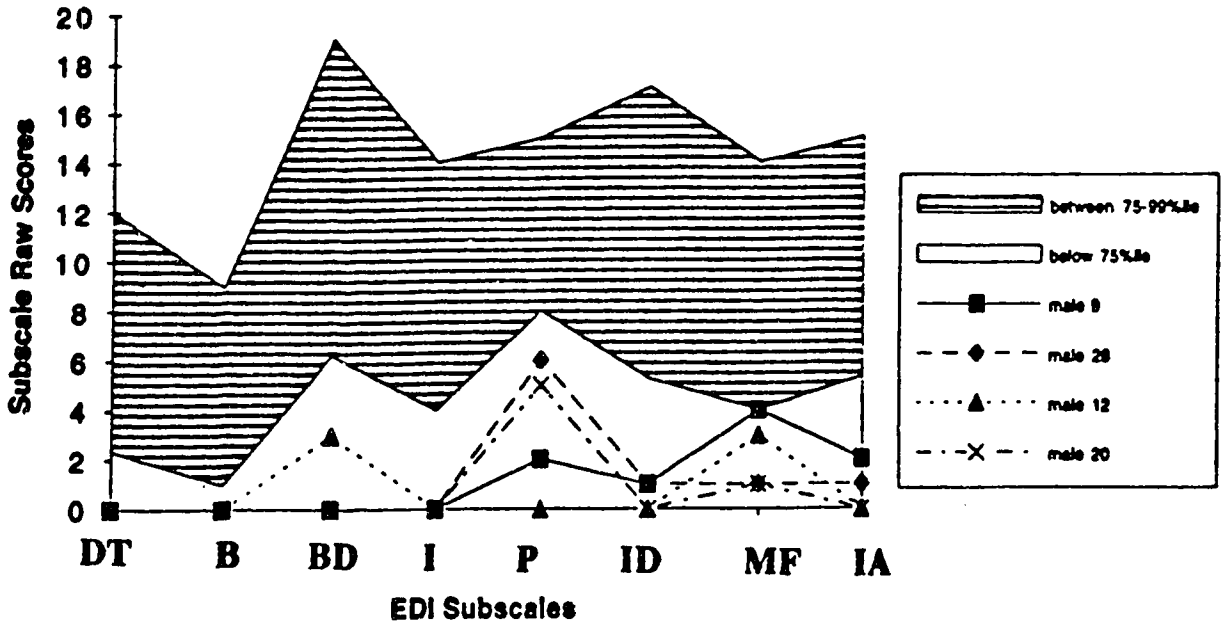
Figure 4.9: Females with 8 EDI Subscale Scores Between the 75-99 Percentile



Males

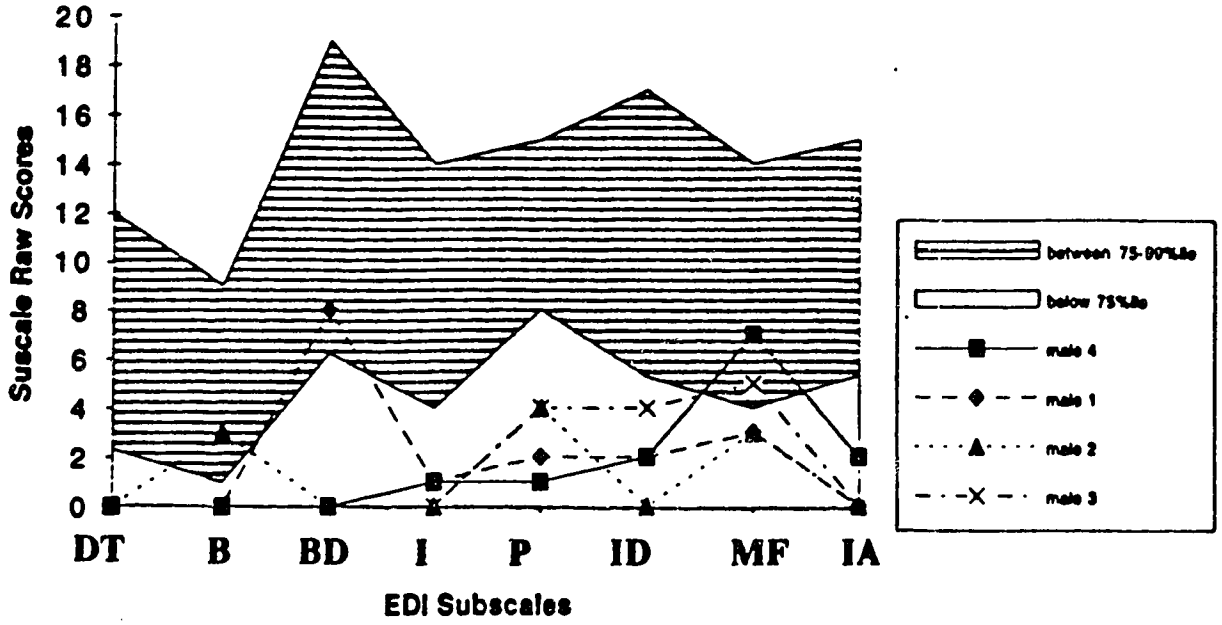
Of the males, 8 of the 46 respondents (17.4%) scored below the 75th percentile on all EDI subscales. Interestingly, this is a lower proportion than among females where 23 individuals or 46% scored below the 75th percentile on all EDI subscales. Figure 4.10 illustrates 4 cases having EDI subscale scores that are completely below the 75th percentile.

Figure 4.10: Males with 0 EDI Subscale Scores Between the 75-99 Percentile



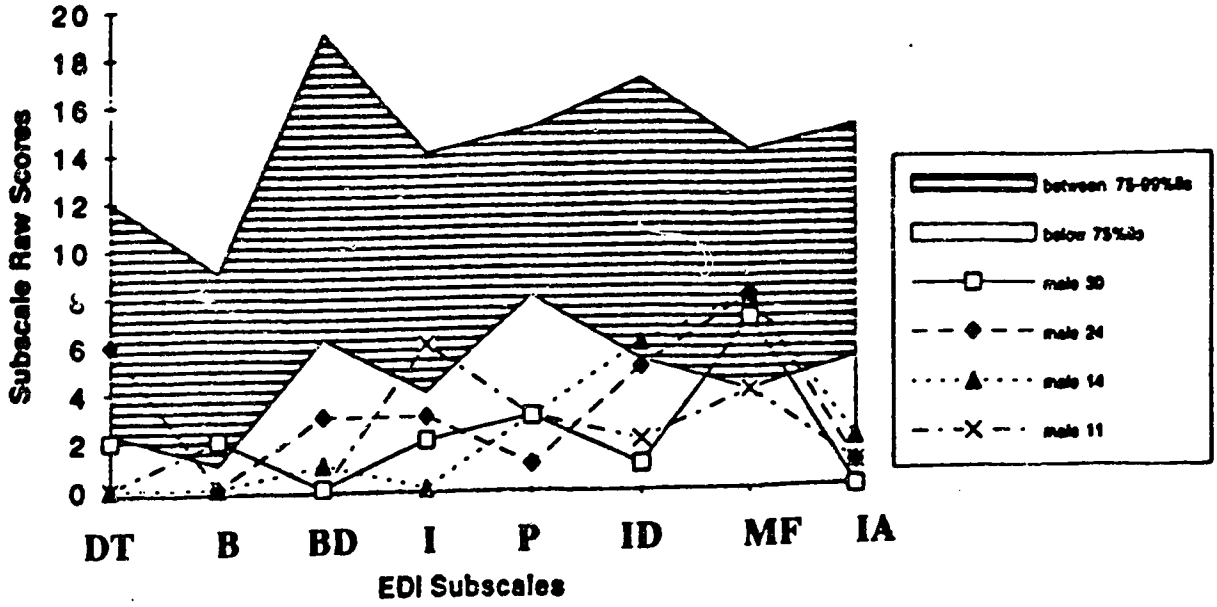
Of the male respondents 18 individuals (39.1%) scored above the 75th percentile on one EDI subscale. Interestingly 8 of these individuals scored on the Maturity Fears subscale and 9 scored above the 75th percentile on the Bulimia subscale. One individual, male 1, scored above the 75th percentile on the Body Dissatisfaction subscale. The consistency shown by the group of 8 for Maturity Fears and the group of 9 for Bulimia contrasts the findings for females who did not show any notable consistency. Figure 4.11 illustrates this.

Figure 4.11: Males with 1 EDI Subscale Score Between the 75-99 Percentile



Of the 12 males who scored above the 75th percentile on two EDI subscales, male 30, 24 and 14 did so on the Maturity Fears subscale and male 30 and 11 on the Bulimia subscale. The EDI scores of 4 of these males are graphed below on Figure 4.12. Individual 30 scored above the 75th percentile on both the Bulimia and Maturity Fears subscales. Of the remaining 8 individuals, 3 others scored on both the Bulimia and Maturity Fears subscales. Two individuals scored on the Bulimia subscale and on the Drive for Thinness subscale. Two individuals scored on the Maturity Fears subscales with accompanying subscale scores on Drive for Thinness and Interpersonal Distrust. One individuals scored above the 75th percentile on the subscales for Bulimia and Ineffectiveness.

Figure 4.12: Males with 2 EDI Subscale Scores Between the 75-99 Percentile



Only one male scored between the 75-99th percentile on 3 subscales. As is evident in Figure 4.13 this individual's scores on the Bulimia and Maturity Fears subscales as well as the Introceptive Awareness subscale are above the 75th percentile. This individual demonstrates a consistency in scoring above the 75th percentile on the Bulimia and Maturity Fears subscales similar to previous cases who were also likely to score above the 75th percentile.

Figure 4.13: Males with 3 EDI Subscale Scores Between the 75-99 Percentile

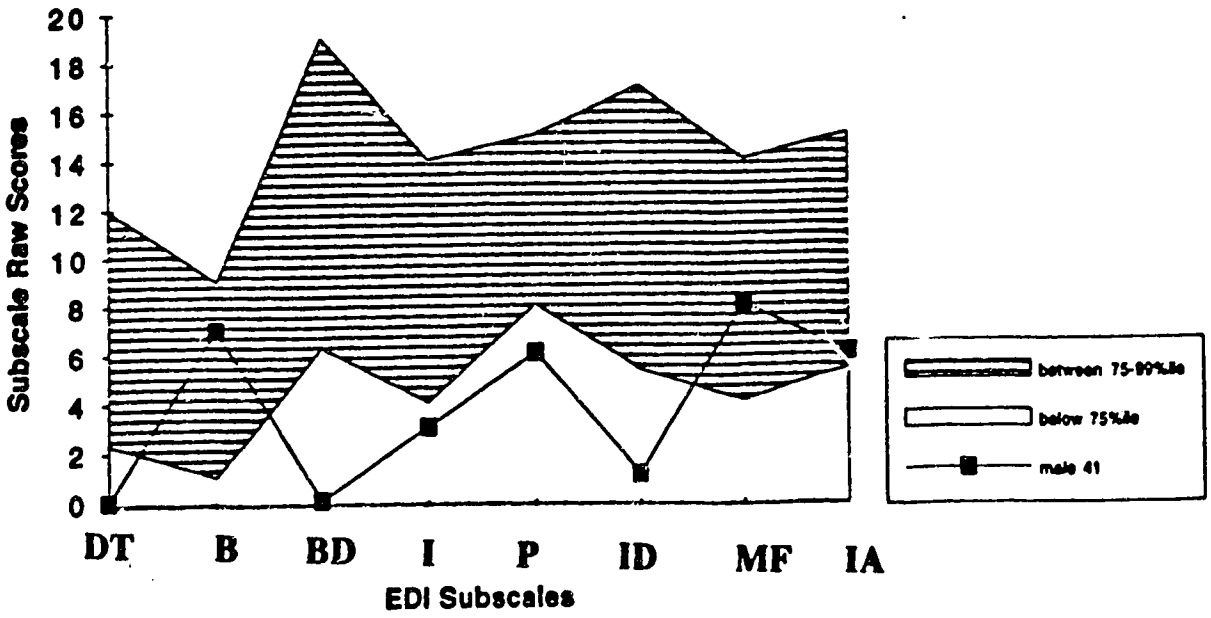


Figure 4.14 shows the EDI scores of 3 males who scored between the 75-99th percentile on 4 subscales. The four scores that are below the 75th percentile for male 4 are all close to zero. Male 33 exhibits high subscale scores within the 75-99th percentile range alternating with low subscale scores that are well below the 75th percentile. The subscale scores within the 75-99th percentile for male 29 are close to the 75th percentile border while the remaining subscale scores are well below the 75th percentile. Male 29's scores between the 75-99th percentile are close to the 75th percentile border or in the mid range while the subscales that are below the 75th percentile border are low. Interestingly, all three individuals score below the 75th percentile on Bulimia and above the 75th percentile on Maturity Fears.

Figure 4.14: Males with 4 EDI Subscale Scores Between the 75-99 Percentile

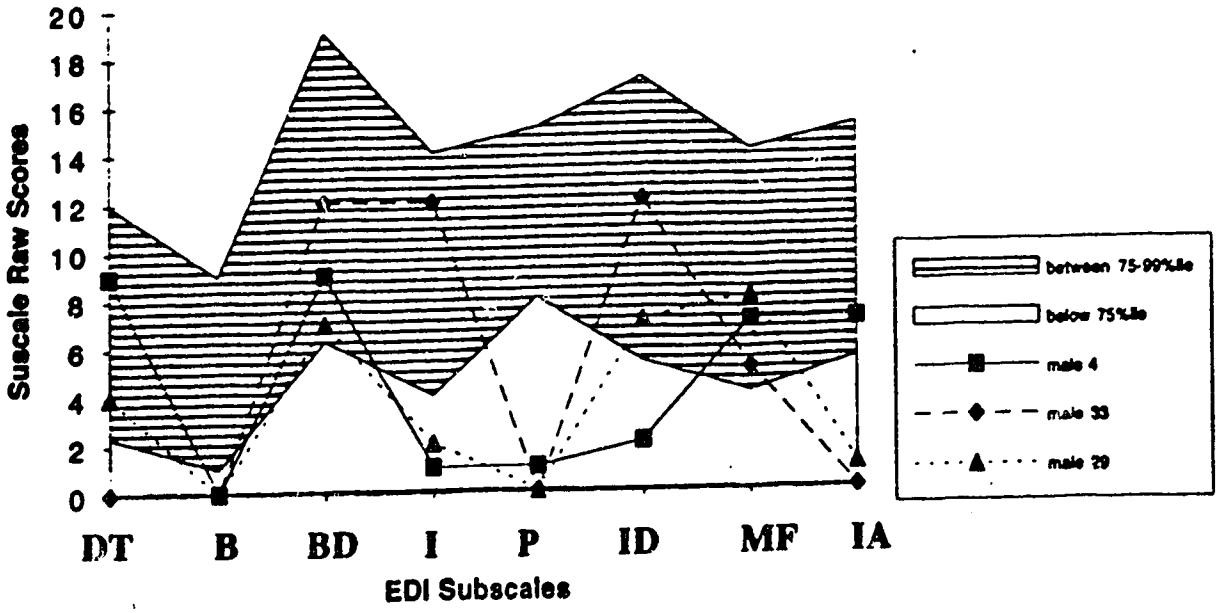


Figure 4.15 illustrates the scores of the one male who scored between the 75-99th percentiles on 5 subscales. The Bulimia and Maturity Fears subscales are two of the 5 subscales on which this individual scored between the 75-99th percentile. Each of the five subscales that are within the 75-99th percentile run close to the 75th percentile border. The three subscales that are below the 75th percentile are at zero.

Figure 4.15: Males with 5 EDI Subscale Scores Between the 75-99 Percentile

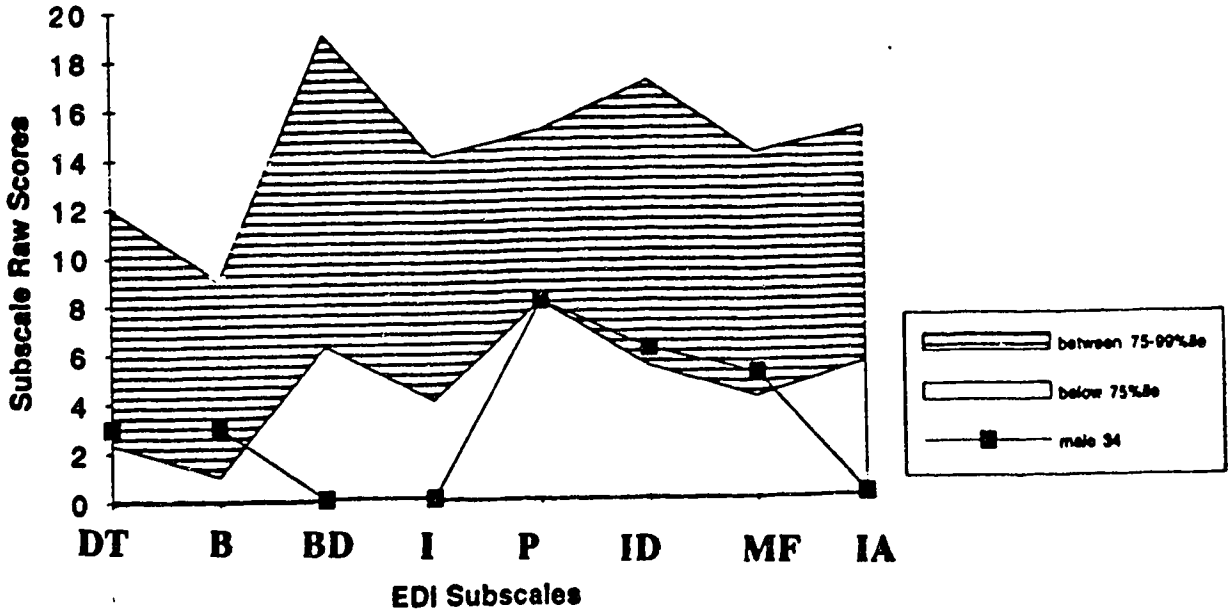


Figure 4.16 shows the 2 males who scored between the 75-99th percentile on 6 subscales. Scores for the Bulimia and Maturity Fears subscales are among those above the 75th percentile for both males. Despite this similarity, the scores of male 32 are closer to the 75th percentile border than those of individual 31 who scores on the Perfectionism and Interpersonal Distrust subscales are at or near the 99th percentile.

Figure 4.16: Males with 6 EDI Subscale Scores Between the 75-99 Percentile

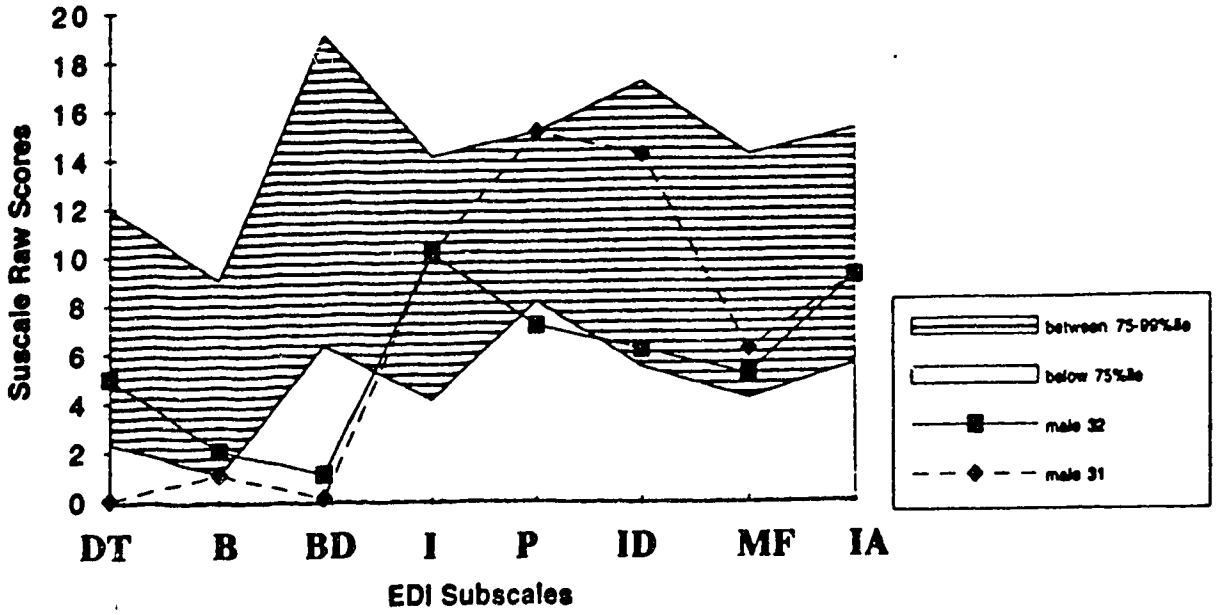
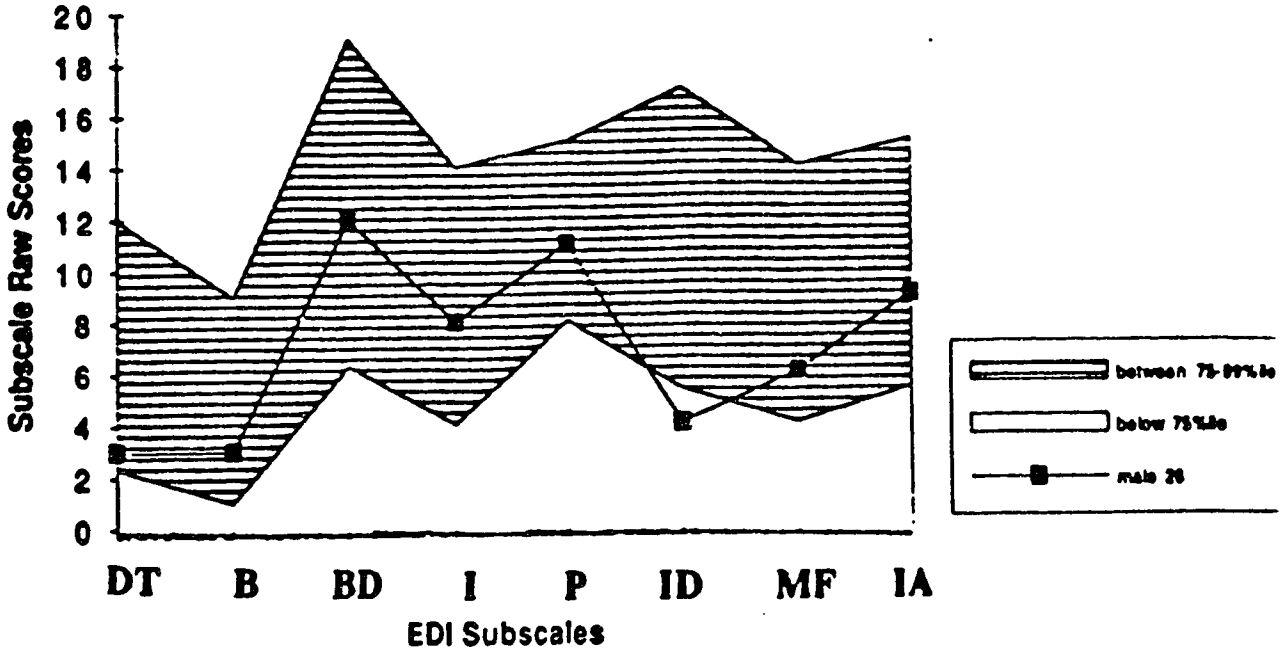


Figure 4.17 graphs the scores of the one male who scored between the 75-99th percentile on 7 EDI subscales. The single subscale that was slightly below the 75th percentile was Interpersonal Distrust. Of the 46 males surveyed, none fell entirely within the 75th and 99th percentile and 35 (76%) scored above the 75th percentile on Maturity Fears subscales or both. Twenty males (43%) scored above the 75th percentile on the Bulimia subscale and 15 males (33%) scored. Of these 5 scored above the 75th percentile on both subscales.

Figure 4.17: Males with 7 EDI Subscale Scores Between the 75-99 Percentile



Interpretation

The expectations from the literature were borne out when 6% of the females and 0% of the males from this study scored within the norms for the Eating Disorders Inventory (EDI). These norms were determined by use of the appendix to the *EDI Professional Manual* (Garner, 1984). Two sets of norming tables provided percentile conversions by group for high school boys and girls (Table A7, Garner, 1984, p.55) and percentile conversions for 11 - 18 year old females (Table A8, Garner,1984, p.56). The most representative of the two, table A7, was used to establish the 75th - 99th percentile as the norm for each EDI subscale to be used in this study. The actual outcome for this study was a finding 6% of females and none for the males fell within the 75-99th percentile on all subscales for eating disorders. These findings are at the lower end of the range of the findings of other researchers. Mintz and Betz (1988) found that 10% of their sample of undergraduate women were eating disordered using the Weight Management, Eating, and Exercise Habits questionnaire (p.463). Kagan and Squires (1984) question the frequency of eating disorders claiming that most researchers have used atypical samples. Using a pool of 71 multiple-choice items generated and organized into a questionnaire, they found that the prevalence of bulimia was 2% in their sample of 2004 students enrolled in grades 9-12, while 7% experienced emotional eating (p.16). Lachenmeyer and Muni-Brander (1988) report an incidence of eating disorders at 15.4%, from a sample of two colleges and one secondary school, using the Eating Attitudes Test and the Binge-Eating Questionnaire (p.303). Cantrell and Ellis (1991) report an incidence of 20% of women at risk for eating disorders from a sample of 134 females and 106 males, who were undergraduate students at college in the United States, using the Bem Sex Role Inventory and the Eating Disorders Inventory. Differences in target groups and measuring instruments may well account for differences in observed incidence (p.53).

Also noteworthy is the observation that 46% of females scored entirely below the norms compared to 17% of the males. This would indicate that eating disorders are a greater concern among females than males. Interestingly, more than half the total number for males and females (32 females, 64% and 26 males, 57%) had scores below the 75th percentile on all or 7 of the 8 subscales. This study reveals that for both females and males there is a substantial number of individuals who scores are not completely within the 75th percentile, but who score between the 75th-99th percentiles on 5, 6, or 7 subscales. Eleven females (22%) and 4 males (9%) fall in this category.

Of the 46 males 35 (76%) scored above the 75th percentile on the Bulimia or Maturity Fears subscales or both. In the case of the Maturity

Fears subscale 20 males (43%) scored above the 75th percentile while in the case of the Bulimia subscale 15 males (33%) did so. Why would so many of these males have fears of maturation? The age of the boys in this study coincides with the age of their sexual maturation. At this developmental stage, penis size can vary greatly from boy to boy. By late teens penis size is relatively equal. Folklore of many cultures emphasize that penis size is meaningful. Young boys who have adopted this folklore may have done comparisons that may lead to anxiety or fears of inadequacy. Adolescents live in the present. A few years into the future can seem a lifetime. Their lack of patience makes them fear that their present state is permanent (Atwater, 1988, p.63). This could explain the Maturity Fears experienced by the boys in the study. They fear they will not become a man as defined by society. This and the knowledge of what lies ahead of them and the expectations of maturity into a male adult, including performance in and out of school could make it desirable to remain more child like for an extended period of time. The findings for Maturity Fears are high enough to warrant further study on what it is about maturing that adolescent males are apprehensive about. This study has allowed a potential problem to surface that otherwise may have gone unnoticed.

Another interesting finding for the males were the scores for bulimia. As indicated in Chapter Two, Cantrel & Ellis (1991, p.53) and Barry & Lippmann (1990, p.161) claim that eating disorders in males are significant. Svec (1987), in contrast states that for males eating disorders are rare and can be seen as a by-product of athletic training (p. 617). The findings of this study coupled with the previous statement indicates that male adolescents have some concerns about their size. They also use weight as an indicator of their size. An example of this would be a sport that requires a weight restriction, such as weight lifting or wrestling.

The results of the survey indicate that eating disorders, though more commonly a female syndrome, may also touch males. At the very least some of the concerns and behaviors that are encompassed in eating disorders which would indicate forces that are evident in males as well as females. The consistency with which maturity fears and bulimic attributes are evident among males would indicate that the EDI has revealed concerns that require addressing.

A point is that although the test is scientific, the subjective judgment of the researcher or psychological expert is needed to assess the status of individuals who score within the norms for eating disorders on some but not all subscales.

CHAPTER 5

Conclusion

This thesis has demonstrated that eating disorders exist in adolescents in Edmonton, providing an empirical base which supports the theoretical social discussion. The larger purpose of the thesis was to describe a number of key social factors that may, in their culmination, contribute to the onset of eating disorders. This was accomplished by describing the historical context of eating disorders and integrating research from medical, psychological, and sociological perspectives. Taking the approach of any single one of the above was deemed too deterministic. This holistic approach discussed social pressures, the physical body and it's symptoms, and interpersonal and intrapersonal relations.

People are in society and society is in people. There is no escaping it. As a result the societal views of the human female body contribute to the use of eating disorders. Society wants women to be one particular way, namely very thin, while nature has provided humans with a plethora of body types. When people try to go against what nature has dictated for them, problems may arise. Food abuse can lead to physical and mental problems. These problems may seem controllable and minor at first, but the persistent use of them blurs the realm of control. A diet, for instance, can start out as a controlled food intake for an allotted period of time. As is often the case, the diet ends up controlling the person. This can take place in a such a subtle fashion that it becomes a lifestyle. The fact that the diet is not a natural way to nourish oneself may become lost. The persons desire to conform to the standards of society may become more important than nourishment.

The social world can be very complex. Each person learns how to cope with situations in a way that satisfies them. When food abuse, used mainly by women, is the chosen coping mechanism, the women may end up being at odds with what society has designated for them. On the one hand society says she should be thin and on the other hand abusing food may not always contribute to a thin body. This provides the opportunity for eating disorders to develop. As the woman gains weight, she then may desperately seek legitimate and unorthodox ways to reduce.

Women may be at greater risk for an eating disorder than men. This is where societal events and customs provide an opportunity for eating disorders. Women, for the majority of recorded history, have been the gatherers and preparers of food. This continues to be so to the present. Until most recent times, this may have not been problematic. However, in this age of plenty, the excess amounts of available food provides an

opportunity for abuse.

During the 18th century a culmination of social events took place which effected fashion and ultimately the desired shape of the female body. Marriages, changed from arrangement to courtship, creating an atmosphere of competition among women, their most obvious asset being their beauty. Attention to a petite compact body with an extremely tiny waist, the hourglass figure, was given. With the advent of the industrial revolution, fashion became available to all through mass production. This also introduced the "size" and reduced the need for a tailor who fitted the fashion to the body. All these events meant that a woman would have to create a body to receive the desired rewards of society. The result is the attempt to alter the female form to fit society's fashion of the moment. In the present these types of changes occur with great rapidity. This makes it increasingly difficult for women to conform to societies standards which in turn may increase the incidence of eating disorders.

Prior to the 18th century women glorified the spirit by denying the body, while present day women glorify the body by denying the body. Essentially, the conflict is more intense and also more subtle when the very goal - glorifying the physical body- is reached by rejecting and denying that body. The social context of female body prior to the 18th century approved denying the physical body to attain spiritual perfection: exposing the body was shameful. However, the social context of the female body of the present approves denying the physical body to attain physical perfection: exposing the a thin body is a source of pride.

Another explanation for the apparent increase in eating disorders might well be be that what is really happening is an increase in attention to the phenomenon. The "claims-makers, who seek knowledge from victims, activists or experts in the field of a specific phenomenon, draw attention to it. They use a variety of tactics. They may reveal shocking statistics and photographs or use the testimony of victims. Specifically, claims evolve over a problems history. The claims maker is necessary, in the case of eating disorders. By knowing and understanding the history of eating disorders they are able to ground the most recent claims to the past. They make it clear that eating disorders did not simply appear in the 1960's, and they continuously draw attention to the present state of the problem.

There are some important differences between this study and those found in the literature. Studies of the incidence of eating disorders have often been extrapolated from clinical observations. Those studies that have attempted to assess incidence in the general population have generally focused on females and/or on young adults. This study differs in that the sample group was 11 to 14 years of age, contained both males and females

and was done in a Canadian school setting.

Since the empirical focus of this study was of the prevalence of eating disorders in adolescents a major concern was finding an appropriate indicator of eating disorder. After considering several instruments, the Eating Disorders Inventory was selected because it could be used on individuals as young as 12 years of age, it had established reliability and validity, and covered a broad range of attitudes, including categories for anorexia nervosa, bulimia, and binge eating.

The EDI is a widely used, easily administered, self report measurement that provides standardized subscale scores on eight dimensions that are clinically relevant to eating disorders. The subscales of the EDI are Drive for Thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Awareness, Maturity Fears, and Interpersonal Distrust.

The sample used does not reflect the original intent of this study. Originally the study was to have been conducted in 10 schools and encompass 500 stu[illegible]s generally the case, in order to collect data in schools within the [illegible] study, permission of the local school board is required. The scho[illegible] question agreed to allow data collection in the jurisdiction [illegible] o schools. In addition the board designated the two schools at [illegible] data collection could occur. Despite concerns about the size and representativeness of the sample, research officers at the school board insisted that this arrangement would have to suffice. The result was the study that was compromised, as is apparent in the low total numbers to be analysed. After obtaining permission from the School board to collect the data in two Junior High Schools the data collection process began. Difficulties in cooperation of one of the principles arose. The result was a greatly reduced number of students surveyed. This in turn compromised the over all study.

Once the EDI test administration was completed, the scoring process began. Each individual test was scored by hand using a key provided with the Eating Disorders Inventory. The sex and age of each respondent was also recorded on each inventory because the EDI norms vary along these dimensions.

The Appendix to the *EDI Professional Manual* provides norms for a variety of 'normal' and clinical groups. In this case, two sets of norming tables were consulted. The first of these provided percentile conversions by group for high school boys and girls (Table A7, Garner, 1984, p.55). percentile conversions for 11 - 18 year old females (Table A8, Garner, 1984, p. 56). Since the group under study included both boys and girls between the ages of 11 to 14, the first of the alternatives seemed most appropriate. Before making a final decision, however, the norms for 11-18 year old females were compared with the high school students to see if

any substantial differences were evident between the two sets of norms. Given that only very small differences existed between the two sets of norms, the inclination to use the high school norms was reinforced. Finally, the norms for high school students were compared to those of eating disordered groups. Scores for eating disordered individuals fell above the 75th percentile for high school males so the 75th to 99th percentile range is used to determine those respondents whose scores indicate a potential for eating disorders.

The EDI subscale scores for each individual were graphed against the norms appropriate for this group (See table 3.1). It was found that 6% of females were completely within the range in which eating disordered individuals score while none of the males were completely within this range. This finding can be interpreted as indicating eating disorders are potentially a greater problem among girls than among boys. What is interesting about those studied is that 23 females (46%) scored entirely below the 75th percentile while 8 males (17%) did so and 9 females (18%) scored between the 75-99th percentile on one subscale while 18 males (39%) did so. However, it is more significant that an individual would score on a single subscale than identifying the subscale scored on. None of the subscales are more significant than another. The number of subscales scored is more significant than identifying the subscale scored on. The EDI does not identify individuals as eating disordered, rather it identifies whether an individual may have a propensity towards eating disorders. Thus the more subscales an individual scores between the 75-99th percentile on, the greater the likelihood the individual may have a propensity towards eating disorders. In other words, the 18% of females and 39% of males who scored between the 75-99th percentile on only one subscale would have a very low propensity towards being eating disordered. On the other hand what is more interesting is that 14 females (28%) and 7 males (15%) scored between the 75-99th percentile on 4 or more of the 8 possible subscales. Again this shows that eating disorders may be a more significant problem for females than for males.

The data also supports the claim that the onset of eating disorders coincides with puberty, as the students tested were considered to be at the age consistent with puberty.

The link between the phenomena of eating disorders and school can be made if one deems it to be a teachers duty to be a caring individual who will try to help students in times of crises. One of the ways in which this might be done is to inform students through the curriculum about eating disorders.

Teachers however, must have accurate and up-to-date information at their disposal, which can be analysed, reflected upon, and turned into knowledge

that is usefully transmitted to the student population. Time spent together in the school allows the teacher to familiarize herself with the student's problems. The bonds between teacher and student creates the opportunity for the teacher to recognize any sudden behavioural changes that may indicate a crisis in the student's life. While some educators may object to the premise of a teacher/student relationship being based on an "ethic of care" as is suggested at this point, even if we are to argue about constraints of time or lack of expertise to recognize such crises, nonetheless, such a crises must be addressed. (Noddings, 1984) Teachers should not find it difficult to teach their students the core curriculum while satisfying the social and legal expectations that require them to protect and nurture and encourage their success students in school and community (Sacker and Zimmer, 1987, p. 203). In the curriculum guides for health put out by Alberta Education, it is difficult to find any direct reference to eating disorders. One mention of fad diets is made under the grade eight section on nutrition (Alberta Education, 1986, p. 146-147). However, there are several appropriate areas under which eating disorders could be discussed, one being Body Knowledge and Care (Alberta Education, 1983, p. 10). The material should be given as information. The decision about what to teach should not be left up to the teacher. The system used presently has great gaps in reference to both what the teacher has to teach and how the student will receive the information about eating disorders.

While in school, the teacher is considered "in loco parentis". Society charges parents with the responsibility of caring for children so that the children will eventually become capable of taking care of themselves and contributing positively to the larger society. In order to do this, the parent has to help the child in times of crises. Sometimes it is less difficult for a family to identify a problem and then to gather the information, skill, and support necessary to solve it.

The teacher can help meet the child's needs by offering additional help. In most instances, children and teenagers do not have the legal authority to seek help for themselves and even if they did they do not always have the experience, skills, power, emotional capacity, social status, or knowledge to seek such assistance. Because of their age and dependent status, they need their parents, teachers, or adult significant others to help them get the professional help assistance (Sacker & Zimmer, 1987, p. 221).

It is necessary to stress that the teachers' role is not to act in the place of medical doctors or psychiatric persons. Neither is the teacher expected to know the diagnostic criteria of eating disorders or seek out students from among the school population who might manifest these symptoms.

Adolescence is a time for experimentation during which teens engage in a

variety of ritualistic activities designed to give them control over their changing bodies and environment. The adolescent is totally dedicated to the ritual at the exclusion of other aspects of functioning. One of these rituals is dieting. Dieting is both culturally sanctioned and intuitively appealing as a measure which will help the adolescent cope with the bodily changes of puberty. As with any other ritualistic behaviour, dieting presents the opportunity for pathological adherence (Sacker and Zimmer, 1987, p.155) At this age, adolescents are in school for a large portion of their day, introducing alternative coping mechanisms, in an educational approach can combat the widespread anxiety about the size and weight of some girls' bodies.

The results of this study responds directly to the research question: Is there evidence that a propensity for eating disorders exist in adolescents in secondary schools in Edmonton? The response is clearly in the affirmative. Of the total group, the findings indicate that eating disorders are more a problem for girls than for boys. This can be interpreted as societal forces that dictate a perceived desirable female body size are greater for females than those societal forces are for males. The age of the participants and their enrolment in school implies a different approach may need to be taken by the educators in terms of curriculum and daily attention to students. Attention to these findings would also be pertinent to school counsellors.

Appendix #1

Research Survey
by
Judith Laverty
Masters of Education Candidate

The survey which I would like to administer to junior high school students in the Edmonton Public School system are titled: Eating Attitudes Test (EAT), and Eating Disorders Inventory (EDI). Each test is a scale, having been developed by psychiatrists working in this field. The purpose of my research is to determine whether Eating Disorders exist in adolescents in Edmonton schools,and, if so, to compare the rate of incidence between girls and boys.
Please be reminded that at any time the participating child has the right not to take part in the testing. For further information, feel free to contact me at 438 -0357.

Consent Form

I, _____, as

name, please print

parent/guardian, consent/do not consent to my child,

_____

child's name, please print

participating in the above mentioned survey EAT, and EDI.

_____ _____

signature date

Please return this form to your home room teacher by:

References

American Psychiatric Association. (1994). Diagnostic Statistical Manual of Mental Disorders . Washington D.C.

Alberta Education. (1983). Curriculum Guide: Elementary Health.

Alberta Education. (1986). Curriculum Guide: Junior High School.

Alberta Education. (1988). Career and Life Management 20.

Ashley, David and David Orenstein. (1990). Sociological Theory. Allyn and Bacon,Toronto.

Attie, Ilana, and J. Brooks-Gunn. (1989). Development of Eating Problems in Adolescent Girls: a Longitudinal Study. Development Psychology 25 (1), p.70-79.

Babbie, Earl. (1983). The Practise of Social Research .Wadsworth Publishing Co. Belmont, California.

Barry, Archana and Steven Lippman. (1990). Anorexia Nervosa in Males. Post Graduate Medicine, 87 (8), p.161-168.

Best, Joel. (1990). Threatened Children . University of Chicago Press.

Bepko, Claudia and Jo-Ann Krestan. (1990). Too Good For Her Own Good. Harper Collins.

Brandon, Nathaniel. (1992). The Power of Self Esteem . Health Communications Inc.

Brone, Ronald J. and Celia B. Fisher. (1988). Determinants of Adolescent Obesity: A Comparison with Anorexia Nervosa. Adolescence, 23 (89), p.155-169.

Brumberg, Joan Jacob. (1989). Fasting Girls. Plume Books.

Cantrel, Peggy J. and Jon B. Ellis. (1991). Gender Roles and Risk Patterns For Eating Disorders in Men and Women. Journal of Clinical Psychology, 47 (1), p.53-57.

Chernin, Kim. (1981). The Obsession. Harper and Row.

Cohen, Louis and Lawrence Manion. (1980). Research Methods in Education. 3rd ed. Routledge.

Collins, M. Elizabeth. (1988). Education for Healthy Body Weight: Helping Adolescents Balance the Cultural Pressure for Thinness. Journal of School Health, 58 (6), p.227-231.

Connor-Greene, Patricia Anne (1988). Gender Differences in Body Weight Perception and Weight Loss Strategies of College Students. Women and Health, 14 (2), p. 27-43.

Dardis, Patricia and Sharon Leech Hofland. (1990). Anorexia Nervosa: Fluid Electrolyte and Acid Base Manifestations. Journal of Clinical Psychological Nursing, 3 (3), p.85-89.

Erickson, B.H. and Nosanchuk, T.A. (1992). Understanding Data. Second Edition, Open University Press.

Frank, Emily S. (1991). Shame and Guilt in Eating Disorders. American. Journal of Orthopsychiatry, 61 (2), p.303-306.

Freedman, Rita. (1988). Beauty Bound. Lexington Books.

Garner, David. (1984). Eating Disorder Inventory - 2, Professional Manual. Psychological Assessment Resources Inc.

Grant, Carol Lee and Iris Goldstein Foder. (1986). Adolescent Attitudes Toward Body Image and Anorexic Behavior. Adolescence, 21 (82), p.269-281.

Hall, Richard C. W., Ronald S. Hoffman, Thomas P. Beresford,Becky Wooley, Anne Klassen Hall, Lisa Kubasak. (1989). Physical Illness Encountered in Patients with Eating Disorders. Psychosomatics, 30 (2), p.174-190.

Heilbrun, Jr., Alfred B. and Alyson L. Worobow. (1991). Attention and Disordered Eating Behavior: Disattention to Satiety Cues As A Risk Factor in the Development of Bulimia. Journal of Clinical Psychology, 47 (1), p. 3-9.

Herzog, David B., Martin B. Keller, Philip W. Lavori and Natalie R. Sacks. (1991). The Course and Outcome of Bulimia Nervosa. Journal of Clinical Psychiatry, 52 (10), p. 4-8.

Herzog, David. (1990). Questions and Answers. Journal of Psychiatry, 52 (10), p. 39-43.

Hirschmann, Jane and Carol Munter. (1988). Overcoming Overeating. Ballantine Books, Random House.

Kagan, Dona M. (1987). Is Adolescent Compulsive Eating and Dieting Overdiagnosed. educational Horizons, p. 130-132.

Kagan, Dona M. and Rose L. Squires. (1984). Eating Disorders Among Adolescents: Pattern and Prevalence. Adolescence, 19 (73), p.15-29.

Katzman, Melanie A, and Sharlene Q Wolchik. (1985). Bulimia and Binge Eating in Change in College Women: A Comparison of Personality and Behavior Characteristics. Journal of Clinical and Consulting Psychology, 52 (3), p. 423-428.

Kaye, Walter H. and Theodore E. Weltzin. (1991). Neurochemistry of Bulimia Nervosa. Journal of Clinical Psychiatry, 52 (10), p.21-28.

Knight, Linda J. and Fred J. Boland. (1989). Restrained Eating: An Experimental Disentanglement of the Disinhibiting Variables of Perceived Calorie and Food Type. Journal of Abnormal Psychology, 89 (4), p.412-420.

Lachenmyer, Juliana Rasic and Paulette Muni-Brander. (1988). Eating Disorders in a Non-clinical Adolescent Population: Implications for Treatment. Adolescence, 23 (90), p.303-312.

Lundholm, Jewan K. and John Littrell. (1986). Desire for Thinness Among High School Cheerleaders: Relationship to Disordered Eating and Weight Control Behaviors. Adolescence, 21 (83), p.573-579.

Marx, Russell. (1992). It's Not Your Fault. Plume Books.

McFarland, Barbara and Tyeis Baker-Baumann. (1990). Shame and the Body Image. Health Communications Inc.

Mintz, Laurie B. and Nancy Betz. (1988). Prevalence and Correlates of Eating Disordered Behaviors Among Undergraduate Women. Journal of Counselling Psychology, 35 (4), p.463-471.

National Film Board of Canada. (1989). Famine Within.

Orlich, Donald C. (1978). Designing Sensible Surveys. Redgrave Publishing Co.

Orbach, Susie. (1978). Fat is a Feminist Issue. The Berkley Publishing Group.

Orbach Susie. (1982). Fat is a Feminist Issue II. The Berkley Publishing Group.

Ordman, Arnold M. and Daniel S. Kirschenbaum. (1985). Cognitive-Behavioral Therapy for Bulimia: An Initial Outcome Study. Journal of Consulting and Clinical Psychology, 53 (3), p.305-313.

Rockett, Eve. (1993). Self Sabotage. Homemakers Magazine, October, p. 97-101

Roth, Geneen. (1984). Breaking Free From Compulsive Eating. Penguin Books.

Sacker, Ira and Marc A. Zimmer. (1987). Dying to be Thin. Warner Books.

Sayers, Janet. (1988). Anorexia, Psychoanalysis, and Feminism: Fantasy and Reality. Journal of Adolescence, 11, p. 361-371.

Seid, Roberta Pollack. (1989). Never Too Thin. Prentice Hall Press.

Stoutjesdyk, Dexa C. (1991). Eating Attitudes in Relation to Eating Disorders Among High Performance Athletes. University of Alberta.

Strober, Micheal. (1991). Family-Genetic Studies of Eating Disorders. Journal of Clinical Psychiatry, 52 (10), p. 9-12.

Svec, Henry. (1987). Anorexia Nervosa: A Misdiagnosis of the Adolescent Male. Adolescence, 22 (87), p. 617-623.

Szekely, Eva. (1988). Never Too Thin. The Women's Press.

Thorton, Lisa P. and Richard R. Deblassie. (1989). Treating Bulimia. Adolescence, 24 (95), p. 631-637.

Tovin, Ben. (1993). Body Image:Paper Presentation,International Eating Disorders Conference 1993. London England.

Wolfe, Naomi. (1990). The Beauty Myth. Random House of Canada Limited.