THE ROLE OF SHAME IN THE AETIOLOGY OF ANOREXIC AND BULIMIC PSYCHOPATHOLOGY IN A NON-CLINICAL POPULATION OF YOUNG WOMEN.

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This thesis is dedicated to my father, Terry Murray, and my brother, Simon Murray.

DECLARATION

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Clare Murray

ABSTRACT

While a number of risk factors for eating psychopathology have been identified, the psychological mechanisms by which such factors impact on later eating attitudes and behaviour remain to be established. This thesis aimed to test the hypothesis that internalised shame acts as a mediator, and shame-proneness as a moderator, in the relationship between risk factors and the development of eating problems. Three studies, employing independent samples of non-clinical young women are reported. In Study 1, all participants (n = 139) completed questionnaire measures of family function, internalised shame, shame-proneness and anorexic and bulimic psychopathology. In Study 2 (n = 101), all the women completed scales assessing the experience of sexual abuse, internalised shame and bulimic psychopathology. In Study 3, 99 women completed scales assessing internalised shame and bulimic attitudes and behaviour. A sub-group of this sample of women (n = 13) were then administered an unstructured interview protocol assessing a range of experiences in order to provide a more in-depth, qualitative exploration of the links between known risk factors, shame and bulimic psychopathology. Regression analyses were used to test for the mediating and moderating effects of shame in Studies 1 and 2. In Study 3, content analysis was carried out on the unstructured interview data to assess the frequency of shame discourse markers in the recall of a number of past (i.e. familial , pubertal) and present (i.e., current eating habits) experiences. Findings from all three studies consistently demonstrated significant associations between shame and eating psychopathology, suggesting that shame-related variables (i.e., internalised shame and shame-proneness) are an important element of these disorders. However, rather than playing an antecedent role, as initially hypothesised, it would appear that shame (i.e. internalised shame) is more related to current disordered eating attitudes and behaviour. The findings are discussed in light of current conceptualisations of the development and nature of eating problems. It is proposed that it is important to distinguish between those factors which predispose for, and those which perpetuate, eating psychopathology.

Chapter 1 INTRODUCTION

Anorexia nervosa and bulimia nervosa are two of the most commonly discussed eating disorders. Anorexia nervosa has been identified in the medical literature as a psychiatric syndrome for more than 100 years, and was first recognised as a mental disorder in 1980 by the American Psychiatric Association in it's *Diagnostic and Statistical Manual of Mental Disorders (DSM-III).* The *DSM-III* (1980) also recognised bulimia nervosa as a distinct diagnostic category, distinguishing it from anorexia nervosa. In 1987, the revised *Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R)* changed the term to bulimia nervosa. Anorexia nervosa and bulimia nervosa thus represent distinct diagnostic categories of eating disorders.

The most salient characteristic of anorexia nervosa is that patients starve themselves to a point where they might die. With bulimia nervosa, the patients engage in binge eating episodes that consist of uncontrollable overeating, often outside normal meal times, thereby severely disrupting routine daily activity. Compensatory behaviours then occur subsequent to the binge eating which can include purging (self-induced vomiting, laxative abuse) and non-purging (excessive vigorous exercise, prolonged abstinence from food) (e.g., Blinder and Chao, 1994). Much research has demonstrated that certain psychological components also feature concurrently with the behavioural aspects of anorexia nervosa and bulimia nervosa. For example, a morbid fear of fatness is a common feature of both disorders (e.g., Blinder and Chao, 1995; Casper, 1983; Russell, 1979).

Both anorexia nervosa and bulimia nervosa most commonly affect females in their teenage and young adult years; findings suggest that there is a 1:10 male to female ratio of patients with anorexia nervosa (Andersen, 1993), and only 5% to 10% of persons with bulimia

nervosa are male (e.g., Pyle, Mitchell & Eckert, 1981). For this reason, the focus of the present thesis will be women who exhibit disturbed eating attitudes and behaviour.

1.1 Eating disorders: An historical perspective

The term anorexia nervosa was first used as a clinical term by William Gull (1810 - 1880) in 1874 (e.g., Bruch, 1973; Strober, 1986; Tolstrup, 1990). While noting the physical characteristics, Gull described anorexia nervosa as a "morbid mental state" (Brumber, 1988, p.121) and thus distinguished it from other organic diseases such as tuberculosis, as well as noting the importance of psychological factors in the etiology of the disorder. Almost concurrent with Gull's work in England were the observations of Lasegue in France. In 1873 Lasegue gave an account of a woman with anorexia nervosa (see Bliss and Branch, 1960), recognising the psychological origins of the disease by attributing the onset to a peculiar mental state resulting from some emotional upset. However, in 1914 Morris Simmonds described pituitary insufficiency as leading to the severe weight loss in some patients. Consequently, until about 1930, anorexia nervosa was largely attributed to pituitary failure. Findings from a number of subsequent studies reestablished anorexia nervosa as a disease of psychological origin (see Berkman, 1945; Farquharson & Hyland, 1936; Ryle, 1936; Sheehan & Summers, 1949), and by 1950 it had regained it's status as a distinct clinical entity.

Bulimia nervosa was not recognised as a distinct disorder until the late 1970's by Russell (1979). To begin with, bulimia nervosa was often associated with anorexia nervosa, but gradually the two disorders became partly separate. A review of the historical medical literature has revealed that very few cases of bulimia nervosa had been identified before the 1940's (Casper, 1983; Habermas, 1989 and Parry-Jones & Parry-Jones, 1991), although it is argued that the cases described by Janet (1903), Wulff (1932) and Binswanger (1958) are the most convincing forerunners of bulimia nervosa as we know it today (see Russell, 1997). It would appear that

bulimia nervosa is a relatively new disorder in relation to it's sister anorexia nervosa (e.g., Russell, 1997). In fact findings suggest that bulimia nervosa as recognised by clinicians today was virtually unknown until the latter half of the 20th century (e.g., Russell, 1997). Patients appeared in the 1970s and prevalence increased during the 1980s, coming to exceed that of anorexia nervosa (e.g., Fairburn & Beglin, 1990; Hall & Hay, 1991). It has been suggested that sociocultural factors such as social pressures resulting from the pervasive "cult of thinness" in current Western societies may largely explain the emergence of the syndrome of bulimia nervosa (e.g., Brumberg, 1988; Garner, Schwartz & Thompson, 1980; Russell, 1993).

1.2 Aetiology

Gull (1874) and Lasegue (1873) postulated a psychological causation for anorexia nervosa (e.g., Andersen, 1985). This was supported by psychoanalytic concepts, which were incorporated into psychiatric theory and practice during the 1940s and 1950s (e.g., Strober, 1986). Early psychoanalytic theory viewed anorexia nervosa as a repudiation of sexuality, and specifically, the repudiation of oral impregnation fantasies (Bruch, 1973, p.216). Since that time theories of the psychological causation of anorexia nervosa and bulimia nervosa have incorporated advances in psychoanalysis such as work on object-relations, separation-individuation (Bruch, 1973/1985/1988; Selvini Palazzoli, 1974/1988), and self-psychology (e.g., Goodsitt, 1985). Further models of individual psychology in anorexia nervosa and bulimia nervosa have since been postulated (e.g., Crisp, 1980; Strober, 1985).

Shifting the emphasis from individual psychology, some models of the aetiology of eating disorders have focused on family interaction. Family functioning was one of the earliest factors proposed to be relevant to anorexia nervosa (e.g., Lasegue, 1873). Since then researchers and clinicians have postulated a number of models of family interaction (e.g., Minuchin, Rosman & Baker, 1978; Selvini Palazzoli, 1974; Strober, 1992), parental style and strategies (e.g., Calam,

Waller, Slade & Newton, 1990; Palmer, Oppenheimer & Marshall, 1988), that might explain the development of anorexia nervosa and bulimia nervosa. However, Slade (1982) and Lacey (1986) both argue that the direction of causality in any association between family function and eating psychopathology is almost certain to be complex. Moreover, findings have been inconsistent and it has been further argued that other factors may have an effect in combination with family dysfunction (e.g., Waller, 1995). For example, sexual abuse, particularly intrafamilial abuse appears to have links with eating psychopathology (e.g., Calam & Slade, 1987), especially where there is a greater level of bulimic symptomatology (e.g., Waller, 1992).

Other researchers have focused on social and cultural factors that may influence the development and maintenance of eating disorders, particularly the increasing cultural pressures for women to be thin and the notion that thinness represents a major aspect of the feminine beauty ideal (e.g., Garner, Rockert, Olmsted, Johnson & Coscina, 1985; Silberstein, Striegel-Moore & Rodin, 1985; Wooley & Wooley, 1982).

More recently aetiological models of eating disorders have incorporated ideas from developmental psychopathology, with an emphasis on developmental transitions that may increase the salience of weight, shape and achievement (e.g., Attie & Brooks-Gunn, 1992; Levine & Smolak, 1992; Smolak & Levine, 1995).

It is now widely acknowledged that the causes of anorexia nervosa and bulimia nervosa are multifactorial. It is argued that no one model would be successful in it's own right because each disorder is determined by the interaction of a number of factors (e.g., Hsu, 1983). However, multiple-cause models still fail to establish why the presence of a number of factors may serve to influence the development of eating problems in some women and not others. A full understanding of the psychological processes involved in the development of eating psychopathology is lacking. Thus, it has been suggested that it would be more productive to

examine the mechanisms by which particular factors influence the development and maintenance of disordered eating; that is to identify those mediating variables in the relationship between specific phenomena and eating psychopathology (e.g., Waller, 1994). Indeed, researchers are placing increasing emphasis on the examination of the underlying psychological processes involved in eating disturbances (e.g., Lask, 1997).

Such notions demonstrate a relatively new shift in focus in eating disorders research. Several studies have attempted to identify the mediators of the relationship between sexual abuse and eating disorders (eg., Andrews, 1992; Andrews & Brewin, 1990; Finkelhor, 1986; Smolak, Levine & Sullins, 1990; Waller, 1992b), and between patterns of family interaction and eating psychopathology (eg., Hamachek, 1978; Slade, 1982) but findings have been inconsistent. It is clear that further research is required to extend and support these findings, and to explore the possibility that other factors may act as mediators in the link between particular phenomena and the development of eating psychopathology.

Recent advances in the field of emotion research have demonstrated that shame may play an important role in the etiology and maintenance of psychopathology, with particular reference to eating disorders (e.g., Cook, 1994; Kaufman, 1989; Silberstein, Striegel-Moore & Rodin, 1986). Recent evidence suggests that certain patterns of family interaction may increase feelings of shame, which in turn may render an individual more vulnerable to factors thought to contribute to psychopathology later in life (e.g., Fossum & Mason, 1986; Cook, 1993). Thus, initial findings tentatively suggest that one mechanism by which family dynamics may influence later development of psychopathology be via an increase in the experience of shame. Few studies to date have empirically tested this notion with regard to eating psychopathology.

Furthermore, it has been suggested that other factors known to contribute to disordered eating such as sociocultural variables, sexual abuse, and negotiation of bodily changes at puberty

have also been linked both theoretically, and to some extent, empirically, to increasing shameful feelings (e.g., Andrews, 1992 ; Attie & Brooks-Gunn, 1987).

Thus, the purpose of this thesis is to empirically test the hypothesis that shame may play a mediating role in the relationship between certain phenomena, such as family dysfunction (see Chapter 4) and sexual abuse (see Chapter 5) and the development and maintenance of eating psychopathology in women. Chapter 6 provides a more in-depth qualitative exploration of the nature of the relationship between other known risk factors for eating psychopathology (i.e. pubertal experiences, body dissatisfaction), shame, and feelings relating to current eating behaviour. Chapter 7 summarises the findings from this series of studies, and discusses the emerging themes from the research. In sum, shame was consistently associated with current disordered eating attitudes and behaviour, but was not found to play a mediating role in the relationship between specific risk factors such as family dysfunction and sexual abuse, and the development of eating problems. Thus, the conclusions may have important implications for the treatment and theoretical understanding of eating disturbances in women.

Chapter 2 EATING DISORDERS

2.1 Anorexia nervosa

Definition and description.

The term *anorexia* is derived from Greek and literally means lack of appetite or avoidance and loathing of food. However, when used clinically in the eating disorders literature, this term is somewhat of a misnomer. It is not until the advanced stage of the clinical disorder that the patient's appetite may be seen to significantly decrease, after initially being distorted and forcefully controlled (e.g., Blinder & Chao, 1994). Perhaps the most striking characteristic of this disorder is that, hungry or not, sufferers starve themselves to an extent that can prove to be fatal.

Anorexia nervosa, identified in the medical literature as a psychiatric syndrome for more than 100 years, was recognised as a mental disorder in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-III,* 1980). The revised *DSM-III-R* (APA, 1987) saw some additional changes to the diagnostic criteria for anorexia nervosa. The most recent version of the *Diagnostic and Statistical Manual Of Mental Disorders (DSM-IV)*, (APA, 1994) defines anorexia nervosa with the following criteria:

A. Refusal to maintain body weight at, or above, normal weight for age and height - less than 85% of expected weight.

B. Intense fear of gaining weight or becoming fat - though underweight.

C. Disturbance in the way one's body weight or shape is experienced. Undue influence of body weight or shape on self-evaluation, e.g., denial of seriousness of low body-weight.

D. In females: Amenorrhea.

Sub-types:

Restricting: no bingeing / purging.

Binge/purge: regular bingeing / purging.

Epidemiology

As previously mentioned (see Chapter 1), anorexia nervosa most commonly affects females in their teenage and young adult years. Clinical cases of this disorder are rare before the age of 10 and after the age of 30, but anorexia nervosa can occur throughout the life cycle (e.g., Blinder and Chao, 1994).

Despite the preponderance of female sufferers of anorexia nervosa, studies show a marginal increase in the number of male sufferers. Furthermore, male predominance of anorexia nervosa appears to be characteristic of atypical cases occurring in the geriatric age group (e.g., Gislason, 1988; Goodman, Blinder, Chaitin & Hagman, 1988).

Psychological correlates

Many researchers have consistently identified the "relentless pursuit of thinness" (e.g., Bruch, 1973), or "morbid fear of becoming fat" (e.g., Russell, 1970) to be a cardinal feature of anorexia nervosa (e.g., Crisp, 1977; Sholevar, 1987; Theander, 1970). Consequently, such notions were incorporated into *DSM-1V* (APA, 1994) diagnostic criteria for anorexia nervosa (see Criterion B above). Moreover, individuals with anorexia nervosa base much of their self-esteem on their weight and shape (see Criterion C above). If such individuals gain weight, they typically report feeling ashamed, frustrated, embarrassed, and frightened, whereas weight loss is accompanied by a feeling of deep accomplishment (e.g., Walsh & Garner, 1997). Furthermore, women with anorexia nervosa often view parts of their body as being too big. For example, they may focus on their breasts, abdomen, buttocks, or thighs and feel these parts of their body remain unsatisfactorily large, even though they have lost weight (e.g., Walsh & Garner, 1997). Of particular importance is the fact that such women often *perceive* their size accurately, but the problem appears to lie in the *judgement* they make about the size they see (e.g., Walsh & Garner, 1997).

Other studies indicate that women suffering from anorexia nervosa exhibit levels of psychological disturbance which extend beyond the domain of weight and shape. Most notably, it has been found that such women may demonstrate an underlying sense of ineffectiveness, lack of interoceptive awareness, interpersonal distrust, perfectionistic tendencies, and a high desire for control (e.g., Polivy & Herman, 1987; Slade, 1982; Strober, 1980). More recently, it has been proposed that such factors represent certain inherent qualities of personality which may render an individual vulnerable to the development of anorexia nervosa (e.g., Strober, 1995). Thus, psychological correlates of anorexia nervosa will be further discussed in the context of their role as risk factors (see "Theories of aetiology" below).

Subtyping within anorexia nervosa

The most notable change seen in the diagnostic criteria in *DSM-IV* (APA, 1994) is the division of anorexia nervosa into restricter and bulimic subtypes. This concept of anorexia nervosa as a heterogenous phenomenon consisting of various subgroups has received much attention in the literature, leading to a progression in the diagnostic conceptualisation of anorexia nervosa (e.g., Strober, 1986, p.238). Restricting anorexics are those patients who induce weight loss through dieting, food refusal and exercise (e.g., Beumont, Smart & George, 1976), whilst patients constituting the bulimic-anorexic group may engage in bingeing behaviour and induce weight loss using additional methods including self-induced vomiting and purgation (e.g., Bliss & Branch, 1960; Bruch, 1973; Sours, 1974).

Major differences have been found to exist between these two groups. For example, compared to restricters, bulimic anorexics have been found to show greater evidence for premorbid and familial history of obesity and to be more extroverted, more sexually active, and more emotionally labile (e.g., Beumont, George, & Smart, 1976; Casper, Eckert, Halmi, Goldberg, & Davis, 1980; Russell, 1979; Strober, 1981) (see DeCosta & Halmi (1992) for a

recent review). Thus, the subclassification of anorexia nervosa into anorexia nervosa-restricter type and anorexia nervosa-bulimic type is further supported by evidence from clinical studies (e.g., Alexander-Mott, 1994).

2.2 Bulimia nervosa

Definition and description

The term *bulimia* is derived from Greek and means ravenous hunger. Unlike persons with anorexia nervosa, sufferers of bulimia nervosa are often within the normal weight range, despite weight fluctuations (e.g., DeZwaan & Mitchell, 1991). Bulimia nervosa was not identified as a distinct syndrome until the 1970s. Previous to this, bulimia nervosa was regarded as an atypical form of anorexia nervosa. Terms such as *dietary chaos syndrome, bulimarexia* and *abnormal weight control syndrome* were used to describe the binge-eating syndrome in normal weight patients (e.g., Alexander-Mott & Lumsden, 1994). In 1980, the *DSM-III* (American Psychiatric Association) recognised a syndrome termed bulimia, separate from anorexia nervosa, defining it by a specific set of diagnostic criteria.

It is argued that this early definition of "bulimia" differed in important respects from the current concept of "bulimia nervosa" (e.g., Weiss, Katzman & Wolchik, 1994). Firstly, there was a failure to emphasise the specific psychological disturbance of the disorder - namely, the patient's pervasive dread of fatness. Secondly, this diagnosis excluded patients in whom the bulimic episodes were attributable to anorexia nervosa, thereby failing to allow for the relationship between these two disorders (e.g., Russell, 1997). Addressing these criticisms, the *DSM-III-R* (APA, 1987) changed the term *bulimia* to *bulimia nervosa* to highlight the association with anorexia nervosa (e.g., Alexander-Mott, 1994). The most recent *DSM-IV* (APA, 1994) defines bulimia nervosa with the following diagnostic criteria:

A. Recurrent episodes of binge eating

Binge defined as :

i) eating in a discrete period of time (eg., 2 hours) an amount of food that is definitely larger than most people would eat in the same time and similar circumstances;

ii) a sense of lack of control over eating during the episode (eg., cannot control how much is eaten or cannot stop eating).

B. Recurrent inappropriate compensatory behaviour to prevent weight gain, ie., self-induced vomiting, laxatives, dieuretics, enemas, fasting, excessive exercise.

C. A and B occur at least two times a week for three months.

D. Self-evaluation is unduly influenced by body weight and shape.

E. Disturbance does not occur exclusively during episodes of anorexia nervosa.

Purging: regularly engages in vomiting, laxatives and/or dieuretics.

Nonpurging: other compensatory behaviours ie., fasting, excessive exercise not vomiting / laxatives / dieuretics.

The use of the term *bulimia nervosa* has at times led to some confusion in the empirical literature as it has been used to describe both a symptom (associated with anorexia nervosa or obesity) and a distinct syndrome (e.g.,Weiss, Katzman &Wolchik, 1994). For the purpose of this thesis the use of the term will refer to a distinct disorder, separate from anorexia nervosa, including the related sub-clinical syndrome of bulimia nervosa.

Epidemiology

As previously noted (see Chapter 1) bulimia nervosa, like anorexia nervosa, occurs most often in young women. The age of onset is usually in the late teens (e.g., Fairburn & Cooper, 1982; Pyle, Mitchell & Eckert, 1981), but many women do not seek treatment for 4 to 5 years after the onset (e.g., Weiss, Katzman, & Wolchik, 1994).

Psychological correlates

Like sufferers of anorexia nervosa, individuals with bulimia nervosa are overconcerned with their body weight and shape, and their self-esteem is determined by these aspects of their appearance (see Criterion D above) (e.g., Garner & Walsh, 1997). They report feeling intense pressure to diet and to avoid weight gain. If they do gain weight these individuals often report feeling extremely distressed (e.g., Garner & Walsh, 1997).

As with anorexia nervosa, findings indicate that sufferers of bulimia nervosa also exhibit more general levels of psychological disturbance. For example, women with bulimia nervosa report having problems with impulse control and affect regulation, have a high need for approval and experience sex role difficulties (e.g., Weiss, Katzman, & Wolchik, 1994). Such psychological correlates of bulimia nervosa will be further discussed in the context of their role as risk factors in the development of this disorder (see "Theories of aetiology" below).

2.3 Epidemiological issues

Gender differences

Despite a recent relative increase in the incidence of male sufferers, anorexia nervosa and bulimia nervosa are still regarded as female disorders (e.g., Hsu, 1989). Several researchers have attempted to explain the female preponderance of eating disorder patients (e.g., Andersen, 1993; Woodside, Garner, Rockert & Garfinkel, 1990). However, the explanations offered largely refer to factors thought to contribute to the origins and development of eating psychopathology. Thus,

the issue of gender differences will be further elucidated in the latter half of this chapter where a discussion of theories of aetiology is presented.

Prevalence

Many studies have attempted to assess the actual frequency of eating disorders in women. However, the use of different methodologies has meant that estimates have varied both within and between particular populations (ie., adolescents, undergraduates) (e.g., Halmi, Falk & Schwartz, 1981; Hawkins & Clement, 1980; Russell, 1979).

Despite this shortcoming, two important conclusions can be drawn: 1) there has been a substantial increase in the prevalence of bulimia nervosa (e.g., Kendler, MacLean, Neale, Kessler, Heath & Eaves, 1991), and to a lesser extent, anorexia nervosa (e.g., Lucas, Beard, O'Fallon, & Kinland, 1991; Szmukler, McGance, McCrane & Hunter, 1986) in women over the last two decades; 2) findings indicate that many more women are exhibiting eating psychopathology, yet do not meet the strict diagnostic criteria for either anorexia nervosa or bulimia nervosa (e.g., Button & Whitehouse, 1981; Dancyger & Garfinkel, 1995; Garner, Olmsted, Polivy & Garfinkel, 1984). Dancyger & Garfinkel (1995) further concluded that there has been a five-fold increase for these partial syndromes/ subclinical cases over full syndromes/ clinical cases.

2.4 A continuum of eating psychopathology

In light of the conclusions drawn above, and in order to facilitate an understanding of the issues that exist for women in relationship to weight and body, it has been suggested that eating disorders are best conceptualised as existing on a continuum (e.g., Nylander, 1971). Normal eating accompanied by no concern with weight and shape falls at one end of the continuum, and clinically diagnosed anorexia nervosa and bulimia nervosa fall at the opposite end (e.g., Kalodner & Scarano, 1992; Rodin, Silberstein & Striegel-Moore, 1985). Here, normal eating is defined as

"eating that occurs in response to hunger cues and stops in response to satiety cues" (e.g., Polivy & Herman, 1987). Intermediate on the continuum are unhealthy behaviours such as bingeing or purging alone, fasting and chronic dieting accompanied by psychological factors such as fear of being fat, drive for thinness, and perfectionism (e.g., Mintz & Betz, 1988; Kalodner & Scarano, 1992).

The concept of an eating disorders continuum has been supported by findings from a number of studies assessing the degree of disturbed eating attitudes and behaviour in non-eating-disordered populations of women (e.g, Dykens & Gerard, 1986; Katzman & Wolchik, 1984; O' Halloran, 1989; Scarano, 1990). Moreover, a review of research assessing subclinical eating psychopathology suggests that six groups exist on the continuum: normal eaters, chronic dieters, bingers, purgers, subthreshold-level bulimia, and clinically diagnosed bulimia. These groups can be distinguished on both eating behaviour (i.e., restricting vs. bingeing/purging) and psychological factors such as degree of body dissatisfaction, low self-esteem, anxiety, and depression (see Kalodner & Scarano, 1992). Despite the evidence, these researchers further argue that future research must continue to focus on subclinical levels of eating psychopathology in an attempt to further elucidate the complex nature of disordered eating.

In line with these findings, *DSM-III-R* (APA, 1987) included an additional eating disorder category termed Eating Disorders Not Otherwise Specified (EDNOS).

Eating Disorders Not Otherwise Specified (EDNOS)

Diagnoses of EDNOS are reserved for a heterogenous group of individuals who do not meet the diagnostic criteria for anorexia nervosa and bulimia nervosa (e.g., Walsh & Garner, 1997). The most recent *DSM-IV* (APA, 1994) defines EDNOS with the following criteria:

A. Females meeting all the criteria for anorexia nervosa, but who have regular menses.

B. All the criteria for anorexia nervosa are met, despite significant weight loss, and/or the individual's current weight is within normal range.

C. All the criteria for bulimia nervosa are met except that the binge eating or inappropriate compensatory behaviour occur at a frequency of less than twice a week or for a duration of less than three months.

D. Regular use of inappropriate compensatory behaviour by an individual of normal weight after eating small amounts of food [eg., self-induced vomiting after the consumption of two biscuits]

E. Repeatedly chewing and spitting out, but not swallowing, large amounts of food.

F. Binge eating disorder. Recurrent episodes of binge eating, but not the inappropriate compensatory behaviour characteristic of bulimia nervosa.

Currently, the eating disorders literature reflects a growing interest in the assessment of individuals assigned to the EDNOS category, particularly those women suffering from binge eating disorder (e.g., Fairburn & Wilson, 1993; Hawkins & Clement, 1984; Dunn & Ondercin, 1981).

However, while the option of an EDNOS diagnosis remains clinically useful, it has been argued that employing a categorical approach when attempting to empirically assess the psychological processes involved in eating disorders is unhelpful (e.g., Waller & Calam, 1994). It could be suggested that employing the concept of an eating disorders continuum here is a particularly useful research strategy. Elsewhere in the clinical literature findings indicate that employing the concept of a continuum of psychopathology has helped to illustrate the psychological processes of schizophrenia (Hemsley, 1994). Thus, for the purpose of this thesis, eating disturbances will be quantitatively assessed, and conceptualised as existing on a continuum of psychopathology. Furthermore, it is not the aim of this thesis to identify and assess

clinical cases of eating disorders, but rather to explore the nature of eating disorder (anorexic and bulimic) symptomatology, in association with other factors, in a non-clinical population of women.

2.5 Theories of Aetiology

Historical perspective

The first models to explain eating disorders by way of psychological mechanisms were unifactorial and attempted to demonstrate a relationship of direct causation. Such models existed within the context of early psychoanalytic theory and focused on anorexia nervosa as bulimia nervosa had yet to be distinguished as a separate disorder. Between 1895 and 1905, Freud and Janet proposed that the aversion to food seen in anorexia nervosa was linked to conflicts in psychosexual development (e.g., Brumberg, 1988; Schwartz, 1990). Both Freud and Janet concluded that girls suffering from anorexia nervosa feared adult womanhood and heterosexuality, and that the refusal to eat forced their bodies to stay thin and childlike, thereby delaying normal sexual development and the transformation to sexual adults. By the 1940s and 1950s anorexia nervosa was conceptualised as an expression of the repudiation of sexuality, and more specifically, the repudiation of oral pregnation [by father] phantasies (Bruch, 1973, p.216). Thus, early psychoanalysts focused on the function of disturbed eating and proposed one psychodynamic formulation to "explain" anorexia nervosa (e.g., Alexander-Mott, 1994).

While psychoanalytic theory enhanced the understanding of psychological factors in anorexia nervosa, those early notions alluding to the repudiation of oral impregnation phantasies were widely criticised. For example, Dally (1969) argued that fears of sexuality are common in anorexia nervosa. He further argued that oral impregnation phantasies do not appear in boys and men. Thus Dally (1969) argued that other factors must be involved. Similarly, Bruch (1973)

argued that disturbed attitudes toward sex and adulthood may be found in primary anorexia nervosa, but such attitudes are manifestations of other developmental disturbances.

Bruch (1966) introduced a new concept of anorexia nervosa addressing these developmental disturbances. According to Bruch (1966), those patients exhibiting a "relentless pursuit of thinness" and who exhibited disturbances in body image, misinterpretation of bodily stimuli, and an underlying sense of ineffectiveness represented primary anorexia nervosa. This underlying sense of ineffectiveness was regarded as a central feature in the psychopathology, with the relentless pursuit of thinness seen as a means of assuming a sense of identity and control (Bruch, 1973).

Thus, the reconceptualisation of anorexia nervosa implied that other, hitherto unexplored, factors were involved in the etiology of this disorder. The subsequent identification of bulimia nervosa as a disorder separate from anorexia nervosa further highlighted the need to reassess early etiological models (e.g., Casper, 1983). Moreover, as eating disorders (anorexia nervosa and bulimia nervosa) and sub-clinical levels of eating psychopathology became more pervasive, the notion of a unifactorial model of causation was increasingly called into question. Consequently, researchers began to examine the role of a number of variables in the development of eating problems.

Current theories of aetiology

Research has tended to focus exclusively on the employment of either individual, family or sociocultural models to explain the development of eating disorders. However, it is now widely acknowledged that the etiology of eating disorders (anorexia nervosa and bulimia nervosa) is best described within a multifactorial framework (e.g., Hsu, 1983). That is, eating disorders appear to be determined by the complex interaction of a number of individual, familial, and social/cultural factors (e.g., Waller & Calam, 1994). Several risk factors for eating disorders

have now been identified, and are summarised by Garfinkel & Dorian (1997). Table 1 shows these purported risk factors.

Table 1. A summary of risk factors for the eating disorders (adapted from Garfinkel & Dorian, 1997).

Individual

Gender (e.g., Hsu, 1989)
Age (e.g., Dally, 1984)
Body Weight (e.g., Johnson, Stuckey, Lewis & Schwartz, 1982)
Puberty (e.g., Attie & Brooks-Gunn, 1987)
Dieting (e.g., Davis & Furnham , 1986)
Body Dissatisfaction (e.g., Polivy & Herman, 1987)
Impaired Affect Regulation (e.g., Lacey, 1986)
Depression (e.g., Blitzer, Rollins & Blackwell, 1961; Russell, 1979)
Poor Impulse Control (e.g., Russell, 1979)
Low Self-Esteem (negative self-evaluation) (e.g., Bruch, 1973)
Perfectionism (e.g., Slade, 1982)
Need for control (e.g., Slade, 1982)
Sexual and Physical Abuse (e.g., Goldfarb, 1987)

Family

Parental attitudes (re: high expectations and weight) (e.g., Craig, Johnson & Flach, 1985)
Familial function (re: autonomy, emotional warmth, enmeshment) (e.g., Lacey, 1986)
Familial Illness: Eating Disorder, Depression, Alcoholism (e.g., Strober, Morrell, Borroughs, Salkin & Jacons, 1985).
Criticism (e.g., Pike & Rodin, 1991)
Genetic Contribution (e.g., Hsu, 1990)

Peers

Attitudes (e.g., Fairburn & Cooper, 1982)
Teasing (e.g., Wooley, Wooley & Dyrenforth, 1979)

Culture

Media influences on: a) *thinness as a goal* (e.g., Garner, Garfinkel, Schwartz & Thompson, 1980)
b) *role performance* (e.g., Gordon, 1988)

While a vast body of research exists to confirm the multidetermined nature of eating disorders, the literature also suggests that much remains to be established about the nature of the relationship between individual, familial, and social factors and the development of eating psychopathology. The majority of studies have assessed the link between the presence of certain risk factors and disturbed eating attitudes and behaviour, attempting to demonstrate causal relationships. However, in a lot of cases, findings have been contradictory and inconclusive. The employment of a variety of measures, methodologies and models may account for some of these discrepancies, but, given the complexity of eating psychopathology, it is likely that other explanations exist. Moreover, multifactorial models fail to explain why, in the presence of a number of risk factors, only relatively few women go on to develop eating problems. In line with these ideas, the literature demonstrates some important theoretical shifts regarding the etiology of eating disorders. Most notably, it is argued that it would be more productive to look at the mechanisms by which different factors contribute to the development of disturbed eating attitudes and behaviour (e.g., Waller & Calam, 1994). Thus, there has been a move toward an examination of the psychological processes underpinning the relationship between known risk factors and the development of eating psychopathology. In fact, some researchers are now of the view that certain known individual factors, such as low self-esteem, may act as mediators in the link between other risk factors and the development of eating problems (e.g., Slade, 1982).

Mediator variables

According to Baron and Kenny (1986), any given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion, and is independently measured and defined. Thus, mediators may serve to explain how external physical events take on internal psychological significance (e.g., Baron & Kenny, 1986). Given

the conclusions outlined above it seems plausible to hypothesise that such a mediator model could continue to provide a useful basis for future research assessing the etiology of eating psychopathology. Thus, it could be argued that while there are many risk factors, their impact on eating is best conceptualised as indirect and mediated by a smaller number of factors. Such a model is illustrated in Figure 1.

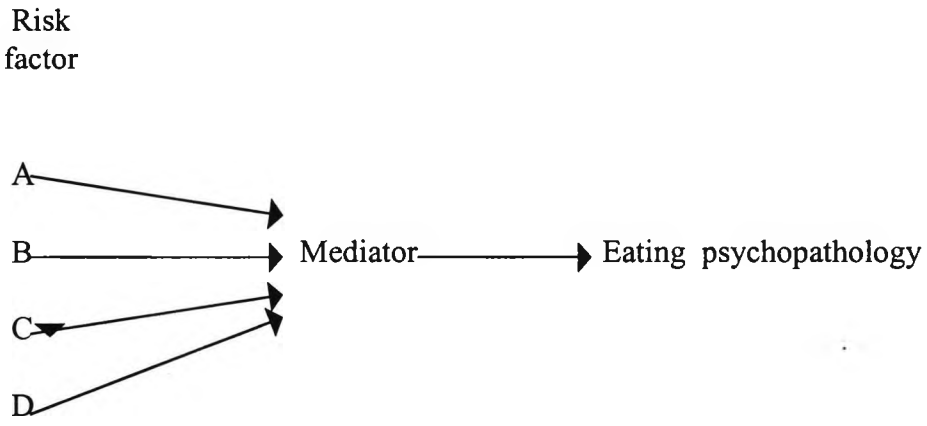

Figure 1. A mediator model of the etiology of eating psychopathology (adapted from Baron & Kenny, 1986).

For the purpose of this thesis, a mediator model will be employed in an attempt to explain the links between certain phenomena and the development of eating problems. Thus, the following review will both critically assess the current available evidence linking the various risk factors to the development of eating psychopathology, and attempt to demonstrate the utility of a mediator model when considering the aetiology of eating psychopathology.

Individual factors

Gender and Age.

As previously mentioned, all the epidemiological studies to date have confirmed that anorexia nervosa and bulimia nervosa are much more prevalent among women than men (Hsu, 1989). Furthermore, sufferers of eating disorders are predominantly late adolescent/young adult women, although clinical evidence suggests that the disorders may occur, albeit less frequently,

in children, women beyond age 25, and the elderly (e.g., Dally, 1984; Lask & Bryant-Waugh, 1997; Vandereycken, 1988).

Body Weight.

A previous history of obesity is associated with the development of eating psychopathology (e.g., Striegel-Moore, Silberstein, & Rodin, 1986). Other studies have demonstrated that many women with bulimia nervosa have a history of being overweight (e.g., Johnson, Stuckey, Lewis & Schwartz, 1982).

Despite the available evidence, the link between body weight and the development of eating psychopathology is far from clear. For example, proof of this relationship fails to explain why, in both anorexia nervosa and bulimia nervosa, almost all women are struggling to achieve or maintain a below-normal weight (e.g., Katzman & Wolchik, 1984; Russell, 1979; Weiss & Ebert, 1983). It would appear that the role of other factors in the body weight-eating psychopathology relationship need to be considered.

Puberty.

A number of researchers have attempted to explain the etiology of eating disorders by incorporating tenets of developmental psychopathology, which emphasise the importance of negotiating the specific demands of developmental transitions (e.g., Attie & Brooks-Gunn, 1992; Smolak & Levine, 1995). It is widely acknowledged that adolescents face numerous challenges during the transition from childhood to adulthood (e.g., Feldman & Elliot, 1990; Gunnar & Collins, 1988). These include biological, psychological and social changes which have an effect on every domain of the individual's life (e.g., Graber, Brooks-Gunn, Paikoff & Warren, 1994). Given that the age of onset for eating disorders is almost always within the adolescent years, many studies have attempted to explore the nature and impact of such biological, psychological

and social transitions, and how they may be related to the development of eating psychopathology in young women.

Biological factors such as pubertal maturation and the concomitant increases in body fat mean that issues of weight and shape become salient for most girls at this time, and have been associated with increased dieting and unhealthy behaviours in early adolescence (e.g., Attie & Brooks-Gunn, 1989; Killen, Hayward, Litt, Hammer, Wilson, Miner, Taylor, Varaday & Shisslack, 1992). Negative body image, which is closely associated with weight, has also been shown to be predictive of problematic eating behaviours during the mid-adolescent years (e.g., Attie & Brooks-Gunn, 1989). In addition to biological changes, the timing of maturation appears to be important. Longitudinal research suggests that early maturation (e.g., age at menarche) is a risk factor for both episodic and chronic eating problems (e.g., Graber et al., 1994). Early maturers are also more likely than on-time or late maturers to be dissatisfied with their body, to have poorer body images, and to have more negative feelings about menarche (e.g., Blyth, Simmons & Zakin, 1985; Brooks-Gunn & Warren, 1985b; Lacey, 1992). It is argued that early-maturing girls have had less time to develop coping strategies for dealing with the physical changes of puberty (e.g., weight gain) and experience those changes before other girls and boys, thus leading to a different social context for their development (e.g., Brooks-Gunn, Petersen, & Eichorn, 1985).

Concurrent with the biological changes at puberty are the psychological and social changes uniquely associated with this transition period. Psychologically, adolescence is characterised by a widening and intensification of affective experience (e.g., Strober, 1997), coupled with developmental demands for identity formation and greater autonomy, which arguably reawaken separation-individuation issues (e.g., Attie & Brooks-Gunn, 1987). Stronger drives for affiliation and intimacy during adolescence represent the changes seen in social

relationships (e.g., Strober, 1997). In particular, it is argued that embarking on romantic relationships can bring about threatening issues of intimacy and sexuality for some girls (e.g., Marx, 1994). Furthermore, findings suggest that physical attractiveness is more important to women's, as compared to men's, self-evaluations and evaluations by others (e.g., Bar-Tal & Saxe, 1976). Thus, the ritual dating characteristic of adolescence appears to highlight issues of body, weight and shape for many adolescent girls (e.g., Attie & Brooks-Gunn, 1987).

It has been suggested that the challenges posed by the biological, psychological and social changes during adolescence may become overwhelming if they occur simultaneously, and thus may render an individual vulnerable to the development of eating problems (e.g., Smolak & Levine, 1995). However, it is argued that the role of the various elements of pubertal growth and development in the etiology of eating psychopathology can only be considered against the backdrop of other individual, familial, and cultural factors (see below) (e.g., Strober, 1997). Furthermore, it would seem that current research has yet to identify the exact nature of the psychological processes which result from the experiences of puberty that may be associated with the development of eating problems for some women and not others.

Dieting.

Much research has demonstrated that dieting behaviour and weight concerns among adolescent and young adult women are increasing and, for some women, are associated with the development of eating disorders (e.g., Hsu, 1990; Johnson-Sabine,Wood, Patton, Mann & Wakeling, 1988). Melin, Irwin & Scully (1992) showed that, currently, in North America by age 13, 80% of girls and 10% of boys have been on a weight loss diet. Davis & Furnham (1986) studied eating behaviours and body shape concerns of female adolescents. Forty per cent considered themselves to be overweight, although only 4% actually were. These studies and others demonstrate both the frequency of weight concerns and the ubiquitousness of dieting and

weight control behaviours among young women. However, it is argued that comparatively few women go on to develop full blown eating disorders despite the pandemic nature of weight concerns and attendant behaviours (e.g., Strober, Lampert, Morrell, Burroughs & Jacobs, 1990). The role of other factors is thus implicated in the relationship between dieting and subsequent development of eating disorders.

Body Dissatisfaction.

As with dieting behaviour, many studies have demonstrated that body dissatisfaction is ubiquitous among nonclinical samples of adolescent girls and women (e.g., Levine & Smolak, 1992; Polivy & Herman, 1987), and that in some cases is related to the development of eating psychopathology (e.g., Smolak & Levine, 1995). Evidence from clinical studies shows that women with anorexia nervosa and bulimia nervosa consistently report feeling dissatisfied with their body in conjunction with significantly overestimating their weight, relative to their actual weight (e.g., Halmi, Falk & Schwartz, 1981). Despite evidence suggesting a link between body dissatisfaction and eating psychopathology, it remains to be explained why so many women report feeling dissatisfied with their body, and only relatively few go on to develop a full-blown eating disorder. There is justification for considering the role of other factors in the body dissatisfaction - eating psychopathology relationship.

Impaired Affect Regulation.

Much research has indicated that women with eating disorders suffer from self-regulatory deficits concerning eating patterns, weight and body image (e.g., Hsu, 1990; Johnson & Connors, 1987). However, other researchers have argued that these self-regulatory deficits extend beyond issues concerning eating, weight and shape. It has been suggested that women with bulimia nervosa often have more pervasive problems regulating their affective states (e.g., Villejo, Humphrey & Kirschenbaum, 1997). For example, Weiss, Katzman & Wolchik (1995) argue that

sufferers of bulimia nervosa frequently use bingeing to cope with a variety of negative feelings such as loneliness, anger and anxiety. These researchers further argue that when the feelings are very unpleasant and intense, many women may use food to numb these painful emotions. Similarly, Bruch (1988) argued that women suffering from anorexia nervosa are over-compliant to the wishes of others, and may lose the ability to both identify and express their feelings in the face of consistent approval from others for fake good behaviour.

It would appear that deficits in the regulation and negotiation of affective states, particularly negative affective states, are common among women with eating disorders. Indeed, other researchers have argued that eating disorders may be viewed as serving the function of managing strong emotions (e.g., Lacey, 1986; Root & Fallon, 1988; van der Kolk & Fisler, 1994). However, until recently, the potential role of emotion within a multifactorial framework of the etiology of eating disorders has been largely ignored. Given the available evidence there is justification for exploring further the complex nature of the relationship between affect regulation and eating psychopathology. Current theory suggests that emotional levels might link certain phenomena and subsequent eating psychopathology (e.g., Kent, Waller & Dagnan, in press). However, this is a relatively new line of inquiry and further research is required to extend and support this view.

Depression.

The relationship between anorexia nervosa and affective disorder has received much attention. This link is based on a number of facts: many patients with anorexia nervosa exhibit depressive symptoms (e.g., Blitzer, Rollins & Blackwell, 1961; Eckert, 1985; Morgan & Russell, 1975); many show depressive symptomatology at the time of follow-up (e.g., Cantwell, Sturzenberger, Burroughs, Salkin & Green, 1977; Santonasto, Pantano, Panarotto, & Silvestri, 1990); depression occurs more frequently in family members of patients with anorexia nervosa

(e.g., Dally, 1977; Logue, Crowe & Bean, 1989; Szmukler, 1987); and many sufferers of anorexia nervosa respond to antidepressant drugs (e.g., Winokur, March & Mendels, 1980). Such evidence, it is argued, demonstrates that anorexia nervosa is a variant of depression.

However, findings have been inconsistent and other researchers have distinguished between anorexia nervosa and depression (e.g., Ben-Tovim, Marilov, & Crisp, 1979; Garfinkel & Garner, 1982; Stonehill & Crisp, 1977). For example, Strober & Katz (1987) argue that there is greater divergence than overlap when considering the clinical phenomenology of anorexia nervosa and affective disorder (e.g., family-genetic and biologic correlates, course, outcome, and epidemiology), suggesting that they do not share a common aetiology.

Similarly, findings from a great number of studies have suggested that bulimia nervosa and depression are related (e.g., Pope & Hudson, 1985, Russell, 1979). Employing the *DSM-III* criteria for depression, Herzog (1982) found that 75% of women with bulimia nervosa reported marked symptoms of depression. Other research has demonstrated significant depression and psychological distress in women with bulimia nervosa (e.g., Hatsukami, Owen, Pyle & Mitchell, 1982; Johnson & Larson, 1982; Pyle et al., 1981). Furthermore, studies showing a decrease in reported bulimic symptoms with the use of antidepressants (e.g., Pope, Hudson, Jonas & Yergulun-Todd, 1983; Walsh, Stewart, Wright, Harrison, Roose & Glassman, 1982) lend further support to the notion that bulimia nervosa and depression are related. However, it remains to be established whether depression arises from the condition of bulimia nervosa or whether there is already an underlying depression rendering an individual vulnerable to bulimic symptomatology (e.g.,Weiss, Katzman & Wolchik, 1994).

Poor impulse control.

It has been suggested that women suffering from bulimia nervosa, and not anorexia nervosa, have difficulty with impulse control, demonstrated by self-reports of stealing (e.g., Lacey, 1992;

Leon, Carroll, Chernyk & Finn, 1985; Pyle, Mitchell & Eckert, 1981; Russell, 1979), drug use (e.g., Leon et al, 1985; Russell, 1979) and alcohol use (e.g., Lacey, 1992; Leon et al, 1985; Pyle et al, 1981). Other studies have failed to show any significant differences when women suffering from bulimia nervosa were compared with controls on the use of cigarettes and alcohol (e.g., Johnson, Stuckey, Lewis, Schwartz, 1982; Katzman & Wolchik, 1984). However, Katzman, Marcus & Greenberg (1991) argue that an increased rate of comorbidity is reported when the prevalence of eating disorders in women seeking treatment for substance abuse is examined.

Low self-esteem (negative self-evaluation).

The concept of low self-esteem or negative self-evaluation, described in terms of negative cognitions or schema about the self, has consistently been associated with eating psychopathology (e.g., Boskind-Lahl, 1976; Bruch, 1973; Dykens & Gerrard, 1986). Indeed, in her last work Bruch (1988) made the following comments:

> *In my early formulations, I recognised three features as characteristic of the anorexic illness...Now I am inclined to visualise these under a more general heading, namely as an expression of defective self-concept, the fear of inner emptiness or badness, as something to be concealed under all circumstances.* (p.4).

The literature on bulimia nervosa also consistently suggests that women who develop bulimic symptoms possess low self-esteem (e.g., Boskind-Lahl, 1976; Goldfarb, Dykens & Gerrard, 1985; Katzman & Wolchik, 1984; Ruderman & Besbeas, 1992). It has been further suggested that, paradoxically, anorexia nervosa appears to develop in order to repair self-esteem by evoking a false sense of control (e.g., Goldner & Laird Birmingham, 1994). In line with this notion, other researchers have argued that for women who exhibit eating problems, the domain of weight and shape is of paramount importance to feelings of self-worth (e.g., Geller, Srikameswaran, 1997; Silberstein, Streigel-Moore & Rodin, 1987).

Recently, the role of self-esteem in the development and maintenance of eating disorders has received increasing attention. Indeed, at the 1997 International Conference on Eating Disorders it was suggested that eating disorders should be re-defined as "disorders of self-esteem" (e.g., Lask, 1997). While deficits in self-esteem are clearly linked to eating psychopathology, future research must endeavour to assess the precise nature of this relationship. Furthermore, the eating disorder literature demonstrates that self-esteem is both defined and conceptualised by way of purely cognitive components, and arguably fails to account for emotional components which may initially influence the development of such cognitions (e.g., Kaufman, 1992).

Perfectionism.

Many studies have demonstrated that women suffering from both anorexia nervosa and bulimia nervosa exhibit perfectionistic tendencies (e.g., Johnson & Connors, 1987; Katzman & Wolchik, 1984; Slade, 1982). Such women tend to set unrealistic goals for themselves in both their personal lives and in how much they feel they should weigh. Furthermore, findings indicate that eating-disordered women not only feel they are never quite "thin enough", but also frequently have high expectations of themselves in domains other than weight, e.g., academic achievement (e.g., Root, Fallon, & Friedrich, 1986). Strober (1997) argues that for women suffering from anorexia nervosa perfectionistic characteristics are evident before the onset of weight loss, but are often accentuated by it and may persist after recovery (e.g., Casper, 1990; Strober, 1980). However, other studies have failed to show any link between perfectionism and disturbed eating attitudes (e.g., Fryer, Waller, & Kroese, 1997). Thus, further research must endeavour to elucidate the nature of this relationship.

Need for control.

Control seems to be a core issue in the development of eating psychopathology, in that anorexia nervosa and bulimia nervosa serve to reestablish an individual's sense of control over one aspect of life (e.g., Rezeck & Leary, 1991). A number of researchers have incorporated control into models of the psychopathology of eating disorders (e.g., Duker & Slade, 1988; Slade, 1982; Strober, 1997; Williams, Chamove, & Millar, 1990). It has been proposed that control over food is an attempt to compensate for the perception of lack of control elsewhere (e.g., Rezeck & Leary, 1991). Factors such as family environment, pubertal changes and sexual abuse have all been linked with the desire for high levels of control in eating-disordered women (e.g., Slade, 1982; Strober, 1997; Waller & Calam, 1994).

Sexual and Physical Abuse.

Research assessing the long-term consequences of childhood abuse upon eating psychopathology has tended to focus primarily on the impact of sexual abuse. In the last decade there have been a number of case reports citing sexual abuse as a crucial causal factor in individual cases of anorexia nervosa and bulimia nervosa (e.g., Goldfarb, 1987; Schechter, Schwartz & Greenfield, 1987). However, the prevalence figures of reported sexual abuse among women with eating disorders are inconsistent across studies, primarily due to different methods of inquiry and definitions of abuse (for a full discussion of these issues see Waller, Everill & Calam, 1994). Despite this, a number of tentative conclusions can be drawn from these studies. First, there is considerable evidence that there are links between sexual abuse and those eating disorders with a bulimic component, rather than eating disorders per se (e.g., Kanter, Williams & Cummings, 1992; Waller, 1991, 1993a; Waller, Halek & Crisp, 1993). Second, it would appear that in the eating disorders, specific types of abuse, such as enforced intercourse, intercourse with an authority figure, and abuse by a close male relative, appear to be associated with higher levels of eating psychopathology, (e.g., Calam & Slade, 1987, 1991).

In the non-eating disordered population levels of eating psychopathology also appear to be related to the occurrence and nature of sexual abuse (e.g., Beckman & Burns, 1990; Calam & Slade, 1987, 1989; Smolak, Levine & Sullins, 1990; Williams, Wagner & Calam, 1992).

In spite of this evidence, it is argued that any link between the phenomena of sexual abuse and eating disturbances is unlikely to be a simple causal one owing to the multidetermined nature of eating problems and the multidimensional nature of abuse (e.g., Oppenheimer, Howells, Palmer & Chaloner, 1985). It is further argued that in order to fully understand the sexual abuse-eating relationship it is necessary to examine how the two phenomena interact (e.g., Waller, Everill & Calam, 1995). One line of inquiry, has been to examine whether particular eating behaviours are associated with particular forms of abuse (e.g., a relationship between enforced oral intercourse and vomiting). Little research has addressed this question, but what there is suggests that some association does exist (e.g., Calam & Slade, 1987, 1989; Waller, 1992a,b).

Other researchers have studied the role of childhood physical abuse in eating psychopathology (e.g., Rorty, Yager & Rosotto, 1995; Schmidt, Tiller & Treasure, 1993), often considering its impact in conjunction with sexual abuse (e.g., Root & Fallon, 1988). In studies where the impact of different forms of trauma on eating psychopathology have been compared, there has been some indication that childhood physical abuse is a stronger predictor of eating psychopathology than sexual abuse (e.g., Bailey & Gibbons, 1989; McCallum, Lock, Kulla, Rorty & Wetzer, 1992).

Whilst there appears to be a link between childhood abuse (sexual and physical) and eating psychopathology, the exact nature of this relationship remains to be elucidated. There is a need to identify those factors that mediate the childhood abuse-eating disorders link (e.g., Waller, Everill & Calam, 1994).

Familial factors

Parental Attitudes.

A number of studies have indicated that particular parental attitudes may be associated with the development of eating psychopathology in women. For example, research suggests that high achievement orientation prevails in families of women with eating disorders, set against a backdrop of low emphasis on intellectual and social activities (e.g., Craig, Johnson & Flach, 1985). That is, while there is an expectation to achieve at a high level, the woman suffering from an eating disorder is encouraged to remain enmeshed in a family that does not encourage self-sufficient or expressive behaviour or support intellectual or social behaviour that might facilitate successful achievement (e.g., Craig, Johnson & Flach, 1985).

Other researchers have argued that maternal beliefs about weight and dieting are of particular importance in contributing to the eating attitudes and behaviours of adolescent girls (e.g., Orbach, 1986; Strober, Morrell, Burroughs, Salkin & Jacobs, 1985). It is argued that a mother's comfort with her own body and sexuality, as well as her satisfaction with her role in the family and society, is likely to affect the mother-daughter relationship, and thus the psychological development of the child (e.g., Attie & Brooks-Gunn, 1987). In one study, Pike & Rodin (1991) not only found higher levels of disordered eating in mothers of adolescent girls exhibiting disordered eating, but also that the mothers of girls with disturbed eating patterns were also more critical of their daughters' weight and physical appearance. Little research has assessed the possible influence of paternal attitudes about weight on the development of eating problems among adolescent girls (Attie & Brooks-Gunn, 1987).

Whilst the available evidence suggests a link between parental attitudes and the development of eating problems for some women, the exact nature of this relationship remains

unclear. Further research needs to assess the mechanisms by which parental attitudes may, for some women, contribute to the development of eating psychopathology.

Familial function.

That family function plays a role in the aetiology of eating disorders is a notion that has existed since the first descriptions of anorexia nervosa (e.g., Gull, 1873; Lasegue, 1874). Currently, familial variables are routinely incorporated in most multifactorial models of the aetiology of both anorexia nervosa and bulimia nervosa (e.g., Strober, 1992; Lacey, 1986). Numerous studies have attempted to assess family function by way of a variety of conceptual models, measures and methodologies. Consequently, findings have not always been consistent.

However, in general, empirical evidence demonstrates that the family environment of women with eating disorders is characterised by disturbed patterns of interaction. Factors cited include enmeshment, poor conflict resolution, lack of affection, either emotional overinvolvement or detachment, low levels of emotional warmth, limited tolerance of disharmonious affect and low levels of cohesion (e.g., Strober, 1992, 1997; Waller & Calam, 1995). It has been suggested that a more accurate picture is obtained when different features of eating disorders are considered. For example, restrictive eating patterns have been shown to be associated with high levels of enmeshment, whereas the frequency of bingeing tends to be linked to low enmeshment (e.g., Waller, 1994).

The mother-daughter relationship has received particular attention in the eating disorders literature, and is believed to be central to the development of a girl's body image and eating attitudes (Attie & Brooks-Gunn, 1987). As previously noted, adolescence reawakens issues of separation-individuation (e.g., Attie & Brooks-Gunn, 1987). Evidence from clinical studies of adolescents with anorexia nervosa suggests that the mothers of these girls are frequently unable to tolerate their daughter's efforts to separate, and may hinder this process by their intrusiveness

or overinvolvement (e.g., Lambley, 1983). Thus, considering the mother-daughter relationship during adolescence, Wooley & Wooley (1985) argue that "dieting may serve simultaneously as identification, differentiation, revenge, and penance." Similar findings have been demonstrated in nonclinical samples of women (e.g., Attie, 1987). However, it remains unclear why problems in the mother-daughter relationship become expressed in the form of eating psychopathology.

More recently, researchers have begun to assess the hitherto ignored role of inadequate fathering in eating disorders (e.g., Maine, 1991). Developmental research suggests that whilst mothers and fathers are similar in some ways, for example, as attachment objects (e.g., Fox, Kimmerly, & Schafer, 1991), there are significant differences in paternal versus maternal influences (e.g., Lamb, 1986). For example, findings indicate that fathers are more likely to endorse and enforce sex role stereotypes (e.g., Jacklin & Maccoby, 1983), which have been implicated in the development of eating problems (e.g., Timko, Striegel-Moore, Silberstein & Rodin, 1987). Furthermore, Calam, Waller, Slade & Newton (1990) found that there was a trend towards perceived paternal overprotectiveness (implying excessive parental involvement in the child's affairs, and thus hindering the development of autonomy) in women with eating disorders. Given the findings, it would appear that the role of the father in the development of eating psychopathology requires further exploration.

Despite the extensive body of research on this topic, familial models have failed to explain why growing up in a dysfunctional family may precipitate eating problems in some women, but not others. It is argued that future research must assess the psychological consequences of growing up in a family environment characterised by disturbed patterns of interaction (e.g.,Waller & Calam, 1994). Thus, it remains to be determined what factors mediate the family-eating disorder links.

Criticism.

Previous research has shown that families of women with eating disorders are characterised by high levels of parental criticism (e.g., Waller & Calam, 1995; Strober, 1992). In particular it is suggested that where there is increased maternal criticism concerning the domains of body, weight and shape, daughters are more likely to adopt those maladaptive attitudes and behaviours that lead to eating psychopathology (e.g., Pike & Rodin, 1991). However, Brewin, Andrews & Furnham (1996) found in their sample of young women that whilst self-criticism was associated, via reflected appraisals, with maternal criticism, this relationship was not found where self-criticism regarding appearance was concerned.

It could be argued that such contradictory findings reflect the general difficulties inherent in the employment of retrospective research designs when assessing the links between family function and the development of eating psychopathology. In particular, such designs rely on participants' subjective appraisal of their family environment which may be influenced by the presence of existing psychopathology. However, it has also been suggested that for eating-disordered (anorexic and bulimic) women, it is their perceptions of family dysfunction that are likely to have the greatest relevance to psychological factors in the etiology and maintenance of the eating disorder (e.g., Waller & Calam, 1994).

In their study, Brewin, Andrews & Furnham (1996) conclude that, in general, self-criticism regarding physical attractiveness may not be associated with familial factors but, as has been suggested elsewhere (e.g., Rodin, Silberstein & Striegel-Moore, 1985), with peer and cultural factors (see below). This implies the need to address the role of other factors outside the family environment which might predispose for later eating problems. Furthermore, there is a need assess the mechanisms involved in the link between parental criticism and the development of eating psychopathology.

Genetic contribution.

Families with women exhibiting eating disturbances are more likely to have a family history marked by incidences of other psychological disorders such as depression, eating disorders or alcoholism. It is postulated that familial transmission of psychopathology may operate by way of genetic or social (i.e., within the context of a dysfunctional family environment) factors (e.g., Garfinkel, Halmi, & Shaw, 1992; Strober, Morrell, Borroughs, Salkin & Jacobs, 1985). Evidence for the genetic predisposition for psychopathology in families of women with eating disorders is tenuous, and arguably incorrectly assumes a common etiology for various forms of psychopathology (e.g., Strober et al., 1985). Thus, research has tended to focus on the impact of dysfunctional patterns of family interaction (i.e., social factors) when assessing the familial transmission of psychopathology.

There is some evidence that genetic components play a role in the development of anorexia nervosa. In a summary, Hsu (1990) pooled the data from several studies to yield 42 female twin pairs in which at least one twin had anorexia nervosa. The findings strongly suggest a genetic disposition for anorexia nervosa in light of the differences in concordance for the disorder in monozygotic and dyzgotic twins (50% and 7% respectively).

Similar research has failed to replicate such findings when considering the etiology of bulimia nervosa. Evidence suggests that genetic components are less likely to contribute to the development of bulimia nervosa (e.g., Kendler, MacLean, Neale, Kessler, Heath & Eaves, 1991).

Peers

Attitudes.

The behaviour of adolescent girls and young women is likely to be influenced by their peer group (e.g., Fombonne, 1995). Certain environments such as college campuses, boarding schools, theatre and dance companies are "breeding grounds" for eating disorders (e.g.,

Fombonne, 1995). Such social environments are characteristically competitive and, given the influence of cultural factors (see below), may emphasise issues of weight and appearance (e.g., Attie & Brooks-Gunn, 1987).

Furthermore, women who have friends who purge or diet are more likely to engage in similar behaviours than those who do not (e.g., Fairburn & Cooper, 1982; Gibbs, 1986; Schwartz, Thompson & Johnson, 1981). Crandall (1988) found that bulimic behaviours could be acquired through social influences by demonstrating that, over the school year, young women became more and more like their friends in terms of their binge-eating levels.

Little research has addressed the extent to which other environments provide an opposite, protective effect. In addition, it is important to identify the underlying mechanisms; that is the psychological processes by which attitudes of the peer group may influence eating behaviour in adolescent and young adult women (e.g., Fombonne, 1995).

Teasing.

Perceptions of acceptance and support by the peer group become increasingly important for the developing individual. Moreover, perceptions of rejection by the peer group may render an individual vulnerable to the development of psychopathology (e.g., Smolak & Levine, 1995). Teasing may be one way in which perceptions of rejection by the peer group are evoked, and also a method of transmitting attitudes of the peer group (see above).

Of all the conditions for which a person may be stigmatised in our culture, the stigma of being overweight may be the most debilitating (e.g., Allon, 1982). A review by Wooley, Wooley and Dyrenforth (1979) concluded that children who are overweight tend to be rejected by their peers. Thus, it could be argued that issues of weight and shape become particularly salient for those individuals who are teased for being overweight and, for some, may be associated with the development of disturbed eating attitudes and behaviour. However, in common with other

reported risk factors, the nature of the link between being teased about being overweight and the development of eating psychopathology remains unclear.

Cultural Factors

It is widely documented that the prevalence of eating disorders is largely unique to Western societies (e.g., Hsu, 1989). As a result, many researchers have argued that the role of cultural factors in the aetiology of eating disorders is as important a consideration as individual and familial factors (e.g., Attie & Brooks-Gunn, 1987).

Media influences on thinness as a goal.

It is now commonly acknowledged that the attitudes and behaviours associated with anorexia nervosa and bulimia nervosa (e.g., the relentless pursuit of thinness and morbid fear of becoming fat) are a direct result of the powerful influences within the culture, and represent the extremes of the dieting behaviour and concern with thinness that have become increasingly prevalent in the industrialised affluent societies in the 20th Century (e.g., Gordon, 1988). Perhaps the most visible of these influences has been the marketing of the ideal of thinness by the fashion industry, and the promotion of anti-fat attitudes. Findings indicate that over the past two decades there has been a marked trend toward increasingly greater degrees of thinness of media images (e.g., Garner, Garfinkel, Schwartz & Thompson, 1980), to the extent that an (almost) anorectic body type has become the idealised standard of beauty and high fashion in Western societies (e.g., Gordon, 1988). However, research demonstrates that the average weight of women and men has increased over this same time period (e.g., Metropolitan Life Foundation, 1983). Thus, within the prevailing cultural climate, issues of body and weight appear to be particularly salient.

Media influences on role performance.

As with beauty ideals, gender role expectations also change with time, are culturally-bound, and are transmitted primarily through the media. It has been argued that over the last

twenty years, drastic changes have occurred in the role expectations of women which have been enormously conflicting (e.g., Garfinkel & Dorian, 1997). Thus, modern women are expected to be independent, assertive achievers, and to adopt the traditionally "masculine" values (e.g., competition) that permeate the workplace. At the same time they are under increasing pressure to maintain traditional female role expectations (e.g., to be attractive and fashionable), as well as to continue to carry out the tasks of childbearing and motherhood, a nurturant and largely supportive (and subordinate) social role. (e.g., Gordon, 1988). These highly stressful pressures are experienced by most women in the culture, but for some are associated with the development of eating disorders. It is argued that in the face of such pressures, thinness becomes a symbol for the achievement of this synthesis, and when combined with familial and individual factors, may render an individual vulnerable to eating psychopathology (e.g., Gordon, 1988). Once again, the nature of the mechanisms at play in this relationship remain unclear.

2.6 Gender differences

As previously noted, the consistent gender differences in the incidence of eating disorders (i.e., many more women than men) are thought to be best explained by a consideration of the cultural factors at play (e.g., Attie & Brooks-Gunn, 1987; Hsu, 1989).

Both men and women are exposed to the cultural preoccupation with thinness, so why should the cult of dieting and eating problems be so much a phenomenon of women? As previously discussed, physical attractiveness is more important to women's, as compared to men's, self-evaluations and evaluations by others (e.g., Bar-Tal & Saxe, 1976). Also, physical attractiveness is more likely to influence others' judgements of women's intelligence, education, social class, femininity, and desirability as a dating or marriage partner than corresponding judgements of men (e.g., Bar-Tal & Saxe, 1976; Seid, 1994; Striegel-Moore, Silberstein & Rodin, 1986). Thus, whilst physical attractiveness is of obvious concern to men, it is argued that

adherence to beauty ideals is more important for women than for men (e.g., Attie & Brooks-Gunn, 1987). Moreover, given the current feminine beauty ideal of thinness, contemporary women are encouraged to strive to attain (via media images) an almost unnatural body weight and shape (e.g., Silberstein, Striegel-Moore & Rodin, 1987). Alternatively, masculine ideals of physical appearance emphasise muscularity rather than thinness per se. Thus, it is postulated that the gender differences seen in the prevalence of eating disorders is largely due to the fact that many more women initially engage in dieting and other weight loss behaviour (e.g., exercise) and, consequently, why it is women, and not men, who become vulnerable to develop disturbed eating attitudes and behaviour (e.g., Hsu, 1989).

It can be seen that cultural factors may largely account for gender differences in the prevalence of eating disorders. Women experience a different cultural context to men by virtue of their biological sex (e.g., Attie & Brooks-Gunn, 1987). However, a moderate increase in the incidence of male eating disorders supports the notion that the role of cultural factors in the aetiology of these disorders can only be considered against the backdrop of existing individual and familial factors (e.g., Strober, 1997).

2.7 Increase in prevalence.

The notable increase in the frequency of eating disorders in women has also been the focus of much research. Many studies have attempted to ascertain why, over the last twenty years, eating psychopathology has reached almost epidemic proportions among young Western women. Cross-cultural studies have shown that, outside the West, only Japan has reported a signifcant number of cases of anorexia nervosa (e.g., Suematsu, Ishikawa, Kuboki, & Ito, 1985). Furthermore, within the developed countries such as Great Britian and the United States, eating disorders are less common among Black and Asian women (e.g., Crago, Shisslak & Estes, 1996; Hsu, 1987). However, other findings indicate that as young women from more weight-tolerant

cultures (e.g., Chinese, Egyptian, Japanese) are assimilated into "thinness-conscious" Western culture, they become more fearful of fatness, and eating disorder symptoms rapidly increase (e.g., Dolan, Lee & Lee, 1996).

As with the issue of gender differences, most researchers suggest that the dramatic rise in the incidence of eating problems in women is largely due to the pressure to meet increasingly thin beauty ideals and conflicting gender role expectations (e.g., Garfinkel & Dorian, 1997). Furthermore, it is argued that over the last twenty years the profit-oriented fashion industry has exploited this thinness ideal as evidenced by the increase in diet for weight loss advertisements in popular women's magazines over this time period (e.g., Garner et al., 1980). It seems the media glorification of the virtues of dieting and thinness goes some way to account for the dramatic rise in the prevalence of eating disorders (e.g., Garner, 1997).

However, other cultural factors are likely to contribute to the rise in prevalence of eating disorders. For example, it is argued that the average weight of women and men has increased due to the abundance of food, and the decrease of infectious diseases (e.g., Hsu,1989). The increased availability of high fat foods and overall decrease in levels of physical activity has meant that over half the UK population aged between 16 and 64 is now defined as being overweight, and the incidence of obesity has also risen dramatically (Health Survey for England, 1994). Recently, the World Health Organisation (WHO) and the UK government's *Health of the Nation* White Paper (1993) have both set targets to combat the rise in obesity such as increasing public awareness of the fat content of foods. While such publications are vital for understanding and improving physical health, it has been suggested that they may fuel prevailing anti-fat attitudes (e.g., Hill, 1997). It is argued that any attempts to reduce the incidence of obesity must take account of the well-established links between dieting behaviour and the development of

eating psychopathology, and thus prevent a backlash of even more cases of eating disorders (e.g., Hill, 1997).

The above review has focused on those factors thought to predispose toward eating disorders in an attempt to elucidate the nature of their aetiology. However, it is widely documented that one of the most notable features of eating disorders concerns the changes which occur over time (e.g., Crisp, 1980; Slade, 1982). Thus, it is argued that it is equally important to assess what factors serve to maintain, or perpetuate, such behaviour (e.g., Garner & Garfinkel, 1982).

2.8 Perpetuating factors

Many of the risk factors cited above also continue to operate during the course of anorexia nervosa and bulimia nervosa (e.g., Marx, 1994; Weiss, Katzman & Wolchik, 1994). For example, at an individual level it has been proposed that a sense of ineffectiveness and negative self-concept or low self-esteem may be countered by feelings of competence, control and strength that accompany the weight loss particularly associated with anorexia nervosa (e.g., Marx, 1994). Similarly, it is argued that the binge-purge behaviour associated with bulimia nervosa serves to regulate (albeit temporarily) otherwise intolerable negative emotional states, evoking a sense of control over one's feelings and ability to cope with day-to-day stresses (e.g., Katzman & Wolchik, 1983a).

At a familial level, other researchers argue that an eating disorder functions as a maladaptive solution to the young woman's struggle to achieve autonomy in a family where the move toward independence is perceived as a threat to family unity. Furthermore, an eating disorder can act as a powerful diversion, facilitating the avoidance of major conflict between the parents and the child (e.g., Garner & Needleman, 1997).

The prevailing cultural pressures to be thin also continue to operate throughout the course of any eating disorder. Such cultural factors, when considered in the light of individual and familial factors, may fuel the characteristic morbid fear of fatness and corresponding disturbed eating behaviour associated with eating psychopathology (e.g., Marx, 1994).

Given the evidence, it is clear that a number of identified factors thought to predispose to eating psychopathology, may also serve to perpetuate (either directly or indirectly) such disturbed eating attitudes and behaviour. Thus, findings from future research assessing the nature of the relationship between particular factors and the development of eating psychopathology may also have direct implications for understanding how some of these factors influence the maintenance of such destructive attitudes and behaviour.

2.9 Summary

The above review demonstrates the complexity and multifactorial nature of the aetiology of eating psychopathology (e.g., Waller & Calam, 1994). The review above also demonstrates the inconsistent and contradictory nature of these findings. It is clear that employing a multifactorial model of aetiology still fails to explain why the presence of a combination of factors precipitates eating problems in some women, but not others (e.g., Garner & Dorian, 1997). Furthermore, current models of aetiology fail to be specific to eating disorders rather than to psychopathology per se (e.g., Waller & Calam, 1994). Two important conclusions can be drawn from the above review which demonstrate attempts to account for these shortcomings.

Firstly, it would appear that the current conceptualisation of eating disorders reflects a gradual theoretical shift from the centrality of women's relationship to food to an emphasis on the psychological processes which underpin this relationship. It could be suggested that the notable upsurge of interest in the role of self-esteem in eating disorders is a prime example of this theoretical shift. Within a multifactorial framework, low self-esteem is consistently cited as

one factor in the aetiology of eating psychopathology (see above). However, the notion of deficits in self-esteem being a central aspect of the psychopathology is now under consideration (e.g., Bruch, 1988; Lask, 1997). Furthermore, it has recently been suggested that those risk factors more related to the production of negative self-evaluations (that is, low self-esteem) seem to be more specifically tied to the eating disorders (e.g., Fairburn, Welch, Doll, Davies & O'Connor, in press). Thus, attempts to enhance the predictive power of multifactorial models of aetiology require a shift in focus from the overt "eating" aspect (e.g., relationship to food, attitudes to weight, and body) of eating disorders to an analysis of the underlying psychological processes.

Similarly, when considering treatment issues, recent research suggests that cognitive therapy for bulimic disorders would be more successful if based on a model of the cognitive processes that underlie these disorders; that is, focusing on core beliefs which are not associated with food and eating (e.g., Waller, 1997).

Secondly, in line with the conclusion drawn above, current models of aetiology reflect a move from assessing overt associations between particular factors and eating psychopathology, toward an emphasis on the psychological consequences of the experience of these factors. Thus, as the above review indicates, a growing body of research has attempted to identify the mediating mechanisms in the relationship between known risk factors and the development of eating problems (e.g.,Waller & Calam, 1994). However, the existing evidence also suggests that much remains to be established about the nature of these mediating factors.

It would appear that the noted theoretical shifts in the eating disorders literature emerged in direct response to the limitations of previous multifactorial models of aetiology. Consequently, a general trend toward a more profound analysis of eating psychopathology has emerged. Thus,

the conclusions drawn above represent a watershed in the conceptualisation of eating disorders, and, by implication, the nature of the development, and treatment, of these syndromes.

This thesis arose out of a consideration of the need for further research to build on, and support, current ideas. By employing a mediator model (e.g., Baron & Kenny, 1986) this thesis will seek to extend current knowledge of the psychological processes underpinning the relationship between known risk factors and the development of eating problems. To date, relatively few studies have utilised the concept of a mediator model in attempting to explain the aetiology of eating psychopathology. Moreover, the majority of these studies have tended to focus on the links between only one risk factor, namely trauma (i.e., sexual abuse) and disturbed eating attitudes. While such research is valuable, knowledge of the psychology of the links between other known risk factors and the development of eating psychopathology is limited. Thus, the primary focus of this thesis will be further elaboration of the proposed mediating factors in the link between particular phenomena, such as unwanted sexual experience and family dysfunction, and the development of eating psychopathology. Current knowledge of these mediating factors will be outlined below. In critically assessing the evidence, this review will demonstrate that while a number of mediating factors have been proposed, findings are equivocal. This would imply that other, hitherto ignored, mediating factors remain to be identified. Furthermore, assessment of mediating variables has largely focused on the role of cognitive, behavioural, and social components.

Recent advances in the field of emotion research suggest that particular emotions, such as shame, may play an important role in the development of psychopathology (e.g., Lewis, 1987, Kaufman, 1989). In light of this evidence, it would seem plausible to suggest that an emotional component, such as shame, may play a mediating role in the links between certain, established risk factors and the development of eating psychopathology. Thus, the following review will also

attempt to direct the reader toward a consideration of emotional components in the aetiology of eating psychopathology.

2.10 Mediating factors in the aetiology of eating psychopathology: A review.

Within the field of psychology, the concept of mediating variables is not new (e.g., Baron & Kenny, 1986). As previously noted mediating variables may attempt to explain how external physical events take on internal psychological significance and, consequently, how or why certain effects may occur (e.g., Baron & Kenny, 1986). Theoretically, it would appear that the notion of mediating variables is especially relevant when considering psychological development and, by implication, the development of psychopathology. However, it is only in the last twenty years that such ideas have received any notable attention.

Slade's (1982) functional analysis of eating disorders represented one of the earliest attempts to formally recognise and incorporate the role of mediating factors within a multifactorial framework of aetiology. In this developmental model Slade (1982), suggested that family factors, adolescent conflict, and stressors can all contribute to the low self-esteem, perfectionism, and need for control that are high risk characteristics for anorexic and bulimic psychopathology. Thus, taking account of a number of domain-specific risk factors (e.g., individual, familial, and social), Slade (1982) proposed a more in-depth analysis of how these risk factors influence the development of eating disorders via a number of mediating mechanisms. Furthermore, in assigning low self-esteem a mediating role, it could be suggested that Slade (1982) made an important contribution to the previously noted reassessment of the role of self-esteem in eating psychopathology.

A number of studies have since employed Slade's (1982) model in an attempt to explore further the nature of mediating factors in the aetiology of eating psychopathology. Consequently, much research has sought to extend and support Slade's (1982) notion that low self-esteem and

perfectionism mediate the relationship between stress and eating psychopathology. However, when considering the stress-eating relationship, several studies suggest that factors other than self-esteem act as mediators (e.g., Shatford & Evans, 1986; Greenberg, 1986). Furthermore, in another study testing Slade's (1982) model, Fryer, Waller & Kroese (1997) found that perfectionism was not associated with disturbed eating attitudes and that the relationship between stress and eating psychopathology could only partially be accounted for by the mediating effects of low self-esteem. Such findings may, in part, be due to the use of different methodologies and working definitions of constructs such as stress and perfectionism (e.g., Fryer, Waller & Kroese, 1997). However, in contrast to Slade's original proposals, it is unlikely that low self-esteem is the only mediating factor in the relationship between stress and eating psychopathology.

When considering the other factors included in Slade's (1982) functional analysis of eating disorders, it has been suggested that this model would be a useful basis for future research when assessing the links between family dysfunction and eating psychopathology. In particular, it is argued that future research should focus on family factors which contribute to low self-esteem and perfectionistic tendencies (e.g., Waller & Calam, 1994).

However, while factors such as low self-esteem (e.g., Slade, 1982) and neurotic perfectionism (e.g., Hamachek, 1976/78) have been proposed as mediators in the family-eating relationship, there is comparatively little evidence that they have a substantial role. Thus, there is justification for exploring the role of other, hitherto unidentified, factors which mediate the links between family dysfunction and eating psychopathology.

Elsewhere in the eating disorders literature, much research has attempted to assess the mediators of the relationship between sexual abuse and eating disorders. As previously noted, there are well-established links between the experience of childhood sexual abuse and eating psychopathology, particularly bulimic psychopathology (e.g., Waller, Everill & Calam, 1994). In

acknowledging the complexity of this relationship, it is argued that there is a need to identify the mediating factors as they may provide important cognitive, emotional, and behavioural targets for treatment (e.g., Waller, Everill & Calam, 1994). It is suggested that, in general, psychological factors (e.g., general self-esteem, self-blame, dissociation, control, personality disorders) and interpersonal factors (e.g., family interaction), and developmental level may act as mediators in the sexual abuse-eating link (e.g., Waller, Everill & Calam, 1994).

Psychological factors as mediators in the link between sexual abuse and eating disorders

Self-esteem. Some researchers have argued that, given the known links between low self-esteem and eating psychopathology, and between childhood sexual abuse and low self-esteem, it is plausible that low self-esteem may act as a mediator in the sexual abuse-eating relationship (e.g., Waller, 1992b). However, a review of studies testing this hypothesis suggests that findings are inconsistent and relatively inconclusive (e.g., Finkelhor, 1986). Moreover, Waller (1992b) and Smolak, Levine & Sullins (1990) found that the mediating effect of self-esteem explained little or none of the relationship between childhood sexual experiences and eating psychopathology.

Self-blame. It has been proposed that self-blame for the abuse is an important psychological response (e.g., Waller, Everill & Calam, 1994). In the literature, self-blame has been defined in several ways including self-denigratory beliefs and shame. Examples of self-denigratory beliefs include feelings of worthlessness, stigmatisation, and inferiority (e.g., Jehu, 1988). Findings from one study suggest that shame over physical appearance acts as a mediator in the relationship between abuse and bulimia (e.g., Andrews, 1992).

Dissociation. Dissociation (including memory loss, depersonalization, etc.) is associated with sexual abuse (e.g., Briere & Runtz, 1988; Sanders, McRoberts & Tollefson, 1989) and with eating psychopathology (e.g., Heatherington & Baumeister, 1991; Russell, 1979). Dissociation is

regarded as a relatively primitive defence mechanism, and seems to be associated with the use of blocking. Consequently, the individual is able to escape from traumatic or abusive situations where physical escape is not possible (e.g., Sandberg & Lynn, 1992; Speigel, 1986). While dissociation is used initially as a normal defence, there is evidence that it may become maladaptive if used over time and in less traumatic situations (e.g., Putnam, 1989). It has been suggested that the blocking and escape from awareness is crucial to the development of bulimic psychopathology (e.g., Heatherington & Baumeister, 1991; Lacey, 1986).

Control. One critical aspect of the experience of abuse is the feeling of powerlessness that victims report as a result of the repeated violation of personal boundaries (e.g., Finkelhor, 1986). Brehm & Brehm (1981) found that while high levels of desire for control are likely in women who report abuse, these women consistently report poor levels of perceived control. As previously noted, control is also an important aspect of eating psychopathology (e.g., Slade, 1982). Thus, it has been suggested that eating-disordered women employ, for example, calorie counting, in an attempt to remain in control when faced with threatening situations where food is not present (e.g., Rezek & Leary, 1991).

Personality disorders. Personality disorders are associated with both reported sexual abuse (e.g., Briere & Zaidi, 1989; Herman, Perry, & Van Der Volk, 1989) and eating psychopathology (e.g., Gartner, Marcus, Halmi, & Loranger, 1989). Furthermore, one study found that sexual abuse, disordered personality and eating psychopathology were, to some extent, associated (e.g., McClelland, Mynors-Wallis, Fahy, & Treasure, 1991). Other studies indicate that those behaviours associated with borderline personality disorders (e.g., impulsiveness, poor anger control, self-harm, and affective disturbance) (American Psychiatric Association, 1987) are particularly relevant to the aetiology and maintenance of eating

psychopathology in women who report sexual abuse (e.g., Shearer, Peters, Quaytman, & Ogden, 1990; Wonderlich & Swift, 1990).

One recent study found evidence to suggest that reported sexual abuse, borderline personality symptoms and specific bulimic psychopathology (i.e., bingeing and purging) were related (e.g., Waller, 1993b, 1994). It is argued that these findings go some way towards confirming a proposed model where sexual abuse causes specific borderline symptoms to develop as consistent traits. As a result, this personality style influences the development of specific eating-disordered behaviour (i.e., bingeing and purging) (e.g., Waller, 1993b, 1994). Such conclusions remain tentative but arguably warrant further investigation (e.g., Waller, et al, 1994).

All of the variables discussed above are considered to be important psychological mediating factors in the link between sexual abuse and the development of specific eating disorder symptomatology (i.e, bingeing and purging) (e.g., Waller, et al, 1994). However, findings have been inconsistent, owing largely to the dearth of available evidence on this topic. Thus, further research is required not only to confirm the mediating role of those psychological factors discussed above, but also to explore the possibility that other psychological factors may mediate the childhood abuse-eating disorder relationship.

It should be noted that most of the studies cited above refer to cross-sectional, retrospective data. Thus, the general criticism inherent in this field regarding the reliability of retrospective reports must be borne in mind (e.g., Waller, et al., 1994). However, outside of the eating disorders literature, recent advances in developmental psychology suggest that even when employing a longitudinal design, children's perceptions of events are better predictors of their later psychological adjustment than the events themselves (e.g., Fauber & Long, 1991). Such findings imply that when considering psychological development in general, an understanding of

the psychological processes underpinning the relationship between particular phenomena and later adjustment is vital.

From the above discussion, it seems that knowledge of mediating factors is crucial to the understanding of the aetiology of eating psychopathology. Moreover, it would appear that the development of specific eating-disorder symptomatology (i.e. restriction vs. bingeing and purging) may be linked to the particular psychological mediating mechanisms at play, such as perfectionism and dissociation (e.g., Waller, et al., 1994). In light of the research cited above, there is justification for exploring the role of other psychological mediating factors. Thus, future research must not only seek to extend and support current findings, but also endeavour to discover the nature and identity of other psychological factors likely to mediate the relationship between these risk factors and the development of eating psychopathology. Furthermore, little research to date has examined the role of mediating variables in the link between other known risk factors and the development of disturbed eating attitudes and behaviour.

2.11 Conclusion

This chapter began with a description of the two most commonly discussed eating disorders - anorexia nervosa and bulimia nervosa. The reported dramatic increase in both the clinical incidence of these disorders, and the prevalence of related sub-clinical levels of eating psychopathology, augured a period of much research attempting to assess the origins of disturbed eating attitudes and behaviour. Employing the concept of an eating disorders continuum arguably facilitated this investigation, enabling a closer examination of the subtle, psychological processes at play in these disorders.

Current thinking consistently places the development of eating psychopathology within the context of a multifactorial framework (e.g., Waller & Calam, 1994). Such multifactorial models also attempt to explain the reported gender differences in sufferers of eating

psychopathology (i.e. many more women than men), and why these disorders appear to be primarily specific to Western cultures (e.g., Gordon, 1988; Hsu, 1990). More recently, increasing attention has been paid to an examination of the psychological processes which underpin both eating-disordered women's relationship with food and the previously established links between particular phenomena and the development of eating psychopathology. Such a shift in focus was required in order to enhance the predictive power of pre-existing models of aetiology. Furthermore, the development of more sophisticated aetiological models goes some way to acknowledge the full complexity of eating disorders, and may have direct implications for guiding prevention and treatment programmes.

While there have been notable advances in the understanding of the nature and aetiology of eating psychopathology, the review of the literature also demonstrates that this topic commands further inquiry. The apparent dearth of systematic, longitudinal studies is one major shortcoming inherent in the eating disorders literature. Such longitudinal designs are crucial when attempting to chart the development of psychopathology (e.g., Attie & Brooks-Gunn, 1987). However, the substantial time and financial requirements associated with the employment of longitudinal research may largely account for this lack.

Aside from methodological issues, the review also demonstrates important theoretical limitations. When considering the aetiology of eating psychopathology, discussion has largely focused on identifying common experiential (i.e., environmental) factors which predispose for such symptoms. However, such models still fail to explain why, in the presence of a combination of risk factors, some women go on to develop eating problems while others do not. The recent attempts to explain the psychology of the links between certain risk factors and the development of eating psychopathology reflect a change in the conceptualisation of the aetiology of eating psychopathology. More specifically, current ideas reflect the view that risk factors impact

indirectly, affecting certain psychological processes within the individual, which serve to influence the development of later eating problems. Thus, recent research has attempted to identify those factors which act as mediators (Baron & Kenny, 1986) in the relationship between known risk factors and later eating psychopathology (e.g., Andrews, 1995; Slade, 1982; Waller, 1992). Such research has tended to focus on cognitive factors (i.e., low self-esteem, perfectionism) as potential mediators (e.g., Slade, 1982; Hamachek, 1978). However, findings suggest that such factors do not play a substantial mediating role. Thus, those psychological processes which serve to mediate the impact of known risk factors in the development of eating psychopathology remain to be identified.

One important aspect of the development of eating psychopathology arguably involves the role of very powerful psychological processes that serve to suppress conventional motivation to respond to hunger cues, and continue to do so throughout the course of the disorder. Moreover, it is important that such factors, or factor, must also demonstrate, both conceptually and empirically, links between the various factors known to predispose for eating psychopathology. Given that there is consistent evidence suggesting that problems with (negative) affect regulation may serve as both predisposing and perpetuating factors in eating psychopathology, comparatively few studies have developed this line of enquiry. Thus, it is important to further explore the pathology of emotion in the aetiology of eating psychopathology. More specifically, attention should be paid to the possible mediating role of emotional factors in models of aetiology; that is, the experience of known risk factors might evoke a common emotional response which serves to influence the development of eating problems. Such an approach is adopted in this thesis, and may contribute to knowledge of how external physical events take on internal psychological significance, and of those powerful

psychological processes required to override the sensation of hunger. (e.g., Baron & Kenny, 1986).

Elsewhere in the clinical literature, the role of the pathology of emotion in the development of psychopathology is not a new idea. In particular, much research has focused on the role of fear in psychopathology. The well-established role of fear in phobias clearly demonstrates that certain (negative) emotions may be invested in inappropriate situations and objects. As previously reported, a morbid fear of fatness is a central feature of both anorexia nervosa and bulimia nervosa (e.g., Blinder & Chao, 1994). Thus, it would seem plausible to question whether fear is a contributing factor in the aetiology of eating psychopathology.

However, on closer examination, it could be argued that the characteristic fear of fatness and corresponding fear of food seen in the eating disorders represent overt symptoms of the psychopathology. In line with the noted theoretical shifts in the eating disorders literature, some researchers have argued that it is important to determine the meaning of "fat" to eating disordered women. It has been suggested that, given the current cultural climate which exalts thinness, being fat has become synonymous with being bad for many women. Thus, the fear of fat is best conceptualised as a fear of being bad (e.g., Silberstein, Striegel-Moore & Rodin, 1987). Such evidence appears to imply that the fear associated with eating psychopathology originates in the context of some other affective state which involves initial negative evaluation of the self.

Further support for this notion can be found when considering the treatment of eating disorders and fear-based syndromes such as phobias. Behavioural treatment interventions such as aversion therapy are based on conditioning models and appear to be the most effective treatment for phobic disorders. Such conditioning models use the individual's relationship with the object of the phobia (i.e., flying, heights, spiders) as a direct focus for treatment. However, it is well

established that the most successful treatment of eating psychopathology involves cognitive-based models. Furthermore, such cognitive-based models have moved away from addressing women's direct relationship to food, weight and shape toward a focus on the core beliefs which underlie this relationship (e.g., Waller, 1997). Elsewhere in the clinical literature, findings indicate that the application of conditioning models (i.e., aversion therapy) are not successful when attempting to treat other clinical populations such as alcoholics, sex addicts, and drug addicts. The clinical literature demonstrates that, conceptually, eating disorders are more closely linked to these addictive disorders than phobias, in terms of common aetiological factors (i.e., family dysfunction, sexual abuse) and psychological correlates (e.g., low self-esteem, poor affect regulation) (e.g., Cook, 1994; Kaufman, 1989), suggesting that appetite cannot be modified by associative processes (i.e., aversion therapy). Given the evidence outlined above it would appear that eating disorders are not fear-based syndromes, and there is justification for exploring the role of other emotions in the development of eating psychopathology.

Recent advances in the field of emotion research have demonstrated that self-conscious emotions such as pride, shame, guilt, and embarrassment are founded in social relationships, and profoundly affect the way people judge themselves and each other (e.g., Fischer & Tangney, 1995). Interest in the self-conscious emotions, particularly the negative self-conscious emotions of shame and guilt, has extended into the clinical literature. Specifically, findings indicate that shame may play an important role in the development of certain forms of psychopathology including alcoholism, depression, drug addiction and eating disorders (e.g., Cook, 1994; Kaufman, 1989). Thus, it is important to further explore the potential role of shame in the aetiology and maintenance of eating psychopathology.

Within the eating disorders literature, numerous references to shame can be found, beginning with the earliest accounts of eating-disordered women. In particular, Janet's (1903)

descriptions of his patient Nadia make direct reference to the shame Nadia felt about her body, and how, for her, becoming fat would be shameful and immoral (e.g., Russell, 1997). Indeed, Janet (1903) argued that the concept of a fear of fatness was too superficial to do justice to Nadia's illness (e.g., Russell, 1997). More recently, findings indicate that women suffering from eating psychopathology experience heightened levels of shame (e.g., Kaufman, 1989; Silberstein, Striegel-Moore, & Rodin, 1987). Furthermore, while exhibiting a morbid fear of being fat, eating-disordered women often report feeling high levels of shame as a result of gaining weight (e.g., Walsh & Garner, 1997). Thus, it would appear that feelings of shame are intricately linked to the body and being fat in women suffering from eating disorders. Given such findings it could be tentatively suggested that the characteristic manifest fear of fat in eating disorders in fact belies intense feelings of shame.

Despite the clinical and anecdotal evidence, little research to date has explored the links between shame and eating psychopathology. Moreover, even fewer studies have assessed whether shame may play a mediating role in the relationship between known risk factors and the development of eating psychopathology. The little available evidence that does exist suggests that shame may act as a mediator in the link between child sexual abuse and eating psychopathology (e.g., Andrews, 1992). However, further research is required to support and extend these findings. Moreover, no research to date has addressed the potential mediating effects of shame in the links between other risk factors and eating problems. The well-established individual risk factors for eating psychopathology, such as body dissatisfaction, deficits in self-esteem, and the experience of puberty, all arguably involve an element of judgement of the self in relation to others. Such evaluations of the self are a core feature of the self-conscious emotions. When the self is regarded as inferior to others, as in the case of body dissatisfaction and low self-esteem, then shame is the likely emotional experience. Similarly,

familial factors such as parental criticism and patterns of family interaction, and cultural and peer factors thought to predispose to eating psychopathology, all originate within an interpersonal context, and result in negative evaluations of the self. Thus, it could be argued that all risk factors for eating problems are also, theoretically, risk factors for self-conscious emotions, and in particular, for shame.

Chapter 3 SELF-CONSCIOUS EMOTIONS

In the last twenty years there has been a considerable upsurge of interest in the study of emotions, and they are now viewed as playing a crucial role in development and psychological functioning. As a result, emotions have emerged as a central focus of new theory and research (e.g., Tangney & Fischer, 1995). Use of the term *emotion* in the current literature mostly refers to specific non-cognitive states, which are described more broadly as *affect* (e.g., Lewis, M., 1992; Tangney & Fischer, 1995). Thus, for the purpose of this thesis, the terms *emotion* and *affect* will be used interchangeably.

3.1 Current theories of emotion

Definitions and descriptions of emotion have undergone dramatic changes during the course of the 20th century, reflecting the paradigmatic shifts in the field of psychology. Consequently, theoretical perspectives on emotion have become increasingly more sophisticated. Current ideas reflect the view that emotions are grounded in bodily expressions and actions, cognitive appraisals, and social interactions (e.g., Ekman, 1984; Fischer & Tangney, 1995; Rozin, Haidt & McCauley, 1997). Thus, emotions may be studied in terms of their various physiological, behavioural, cognitive and social/interpersonal components. In recent years, theory and research has attempted to bring together these different components of emotion into one comprehensive framework (e.g., Frijda, 1988; Lazarus, 1991; Oatley & Johnson-Laird, 1996; Power & Dalgleish, 1997; Tangney & Fischer, 1995). It is beyond the scope of this thesis to critically assess individual theories of emotion. However, Fischer and Tangney (1995) argue that most current theories of emotion share a number of key assumptions: a) emotions are fundamentally adaptive, promoting, rather than interfering with, successful human functioning; b) appraisals of events are an integral part of the experience of emotion, with particular appraisals leading to particular emotions; c) each emotion can be described by characteristic

cognitions, affective experiences, motivations and behaviours ('action tendencies') (e.g., Fridja, 1986); and d) emotions are organised into families of related affects (e.g., Fischer & Tangney, 1995).

Thus, in contrast to previous cognitive models of emotion that largely focused on the mind and the individual, current ideas reflect the importance of social/interpersonal aspects of emotion. This view has been confirmed by findings from a number of diary studies, demonstrating that most emotions are, in fact, associated with other people (e.g., Oatley, 1998). In light of these ideas, it is argued that all emotions are fundamentally social (e.g., Tangney & Fischer, 1995). The increasing attention paid to the social aspects of emotion has lead a number of authors to define and classify a family of "self-conscious" emotions which are directly associated with an individual's sense of the self only when in a (real or imagined) social context, and include pride, shame, guilt and embarrassment. More specifically, these emotions are concerned with evaluations of "what the self has done to the world", rather than "what the world has done to the self" as in, for example, anger or sadness. Thus, as noted above, these emotions are characterised by specific concerns related to positive or negative evaluations of the self as worthy or unworthy vis-a-vis others.

When considering the role of emotion in psychopathology, the clinical literature has tended to focus on the role of fear in psychological disorders, such as phobias. However, when considering emotional components in eating psychopathology, both theory and research suggest that while fear (of fatness) is a common manifest characteristic of eating symptomatology, it is unlikely that it is the underlying affect associated with these problems (see Chapter 2). Furthermore, as noted in Chapter 2, treatment for fear-based syndromes such as phobias is not successful when treating eating-disordered women. Instead, cognitive-based models, challenging core beliefs about the self (e.g., as unloveable, or deserving of rejection), rather than the

individual's overt relationship with food, and the body, appear to be the most successful in the treatment of women exhibiting eating psychopathology (e.g., Waller, 1997).

Alongside the noted conceptual shifts in the eating disorder literature, with an emphasis on identifying the underlying psychological processes at play in these disorders, it has been suggested that those risk factors more related to the production of negative evaluations of the self appear to be specifically linked to the development of disturbed eating attitudes and behaviour (e.g., Fairburn et al., in press). Thus, it is important to consider other negative emotion states explicitly associated with the production of negative evaluations of the self in the aetiology of eating psychopathology.

It would seem that a distinction can be made between those emotions related to concerns about "what the world has done to me" (e.g., fear, anger) and those related to "what I have done to the world" (e.g., shame, guilt, pride). As previously noted, this latter group, termed the "self-conscious" emotions are inextricably linked to positive and negative evaluations of the self in relation to other people. Moreover, both theory and research suggest that such evaluations of the self are specific to this family of "self-conscious" emotions (e.g., Fischer & Tangney, 1995). Thus, it is plausible to suggest that self-conscious emotions and, more specifically, negative self-conscious emotions, might play an important role in the development of eating psychopathology.

3.2 The self-conscious emotions.

The emotions shame, guilt, pride, and embarrassment are all members of a family of "self-conscious" emotions that are founded in social relationships in which people not only interact, but evaluate and judge themselves and each other. Like other, classically defined emotions (e.g., joy, anger, fear), the self-conscious emotions are both conceptualised and studied in terms of their physiological, cognitive, behavioural and social/interpersonal components. However, an important distinguishing aspect of the self-conscious emotions is that they are built

on reciprocal evaluation and judgement (e.g., Fischer & Tangney, 1995). Thus, one central feature of these emotions, unlike other emotions, involves some form of self-reflection and self-evaluation. This self-evaluation can be explicit or implicit, consciously experienced, or occurring below the level of conscious awareness (e.g., Tangney, in press). Thus, these emotions are essentially concerned with evaluations of the self. For example, when good things happen we may experience a variety of positive emotions such as happiness, joy, or satisfaction. However, we feel pride in relation to that which resides within ourselves - our own positive attributes. Similarly, we feel ashamed of ourself, guilty over our behaviour, and embarrassed by our faux pas. It would appear, then, that the self is always the object of self-conscious emotions. Furthermore, depending on the particular self-conscious emotion experienced, the self is evaluated either positively (in the case of pride), or negatively (in the case of shame, guilt, and embarrassment).

Not only are these self-conscious emotions inextricably linked to the self, but they are also inextricably linked to our relationships with other people. In fact, theory and research suggest that one defining feature of the self-conscious emotions is that they originate, and typically arise, within interpersonal contexts (e.g., Baumeister, Reis & Delespaul, 1994; Miller, 1995a; Tangney, 1992; Tangney, Miller, Flicker & Barlow, 1996). It is within the context of the infant's earliest and most significant relationships (i.e., with caregivers) that the foundation for experiencing shame, guilt, pride and embarrassment is formed (e.g., Barrett, 1995; M. Lewis, 1992). Furthermore, the self-conscious emotions motivate important and very different behaviours which are especially interpersonally focused. For example, evidence suggests that shame appears to motivate interpersonal avoidance or interpersonal aggression, whereas guilt seems to motivate confession, apology, and reparation (e.g., H. B. Lewis, 1987; Lindsay-Hartz,

1984; Tangney, Wagner, Fletcher & Gramzow, 1992; Tangney, et al., 1996; Wicker, Payne & Morgan, 1983).

Self-conscious emotions: Implications for psychopathology

Interest in the self-conscious emotions has extended to the clinical literature. Drawing on this body of research, it would appear that it is the negative self-conscious emotions (i.e., shame, guilt, and embarrassment) that are most often implicated in psychopathology. There is little mention of embarrassment in the development of psychopathology, although this area is one of increasing interest (e.g., Tangney, in press). Of the negative self-conscious emotions, it is shame, and to a lesser extent, guilt, that are most often associated with a variety of psychological symptoms (e.g., Cook, 1994; Kaufman, 1989; Tangney, Wagner, & Gramzow, 1992). This is not an altogether unexpected finding as such negative self-conscious emotions are characterised by negative evaluations of the self (or self's behaviour), which are common to most forms of psychopathology (e.g., Fairburn et al., in press; Gilbert, 1997).

However, the findings have not always been consistent, owing largely to the different working definitions of shame and guilt (e.g., Barrett, 1995). In fact, over the past several decades a whole body of theory and research has focused on the distinction between these two emotions. This issue is particularly relevant to eating disorders as both shame and guilt involve the production of negative evaluations about the self. Thus, a summary of the shame vs. guilt distinction, and the implications for their role in the development of eating psychopathology will be reviewed below (for a discussion of the differences between shame and embarrassment, which is beyond the scope of this thesis, see Miller, (1996) and Tangney & Miller, (1996)).

Shame vs. guilt distinction

It would appear that many people - researchers, clinicians and laypeople alike-tend to use the terms shame and guilt interchangeably (e.g., Tangney, in press). Nevertheless, a substantial

literature has attempted to differentiate between these two emotions. To provide a full analysis of this literature is beyond the parameters of this thesis. However, a summary of the main findings on this topic will be presented.

Firstly, taking an anthropological perspective, Benedict (1946) focused on public vs. private transgressions in an attempt to distinguish between shame and guilt. According to this view, certain kinds of situations lead to shame, and other kinds of situations lead to guilt. In sum, Benedict (1946) argued that shame was a more "public" emotion than guilt; that is, shame arises from public exposure and disapproval of some deficiency or transgression, whereas guilt is more "private", experienced as a result of self-induced pangs of conscience (e.g., Tangney, in press).

However, findings from a number of studies have consistently failed to support this public vs. private distinction (e.g., Tangney, Marschall, Rosenberg, Barlow & Wagner, 1994; Tangney, Miller, Flicker & Barlow, 1996). For example, evidence suggests that reported shame experiences are just as likely to occur when an individual is alone; that is, when not in the presence of others (e.g., Tangney et al., 1994). Furthermore, analyses of both adults' and children's reports of shame and guilt experiences indicate that there are very few, if any, "typical" shame-inducing or guilt-inducing situations - there is substantial overlap in the kinds of events which lead to shame and guilt. (e.g., Keltner & Buswell, 1996; Tangney, 1992; Tangney et al., 1994).

In contrast to the public vs. private distinction favoured by anthropologists, Helen Block Lewis (1971) emphasises the self vs. behaviour in attempting to distinguish between shame and guilt. According to Lewis (1971), with shame it is the self that is the focus of the negative evaluation (e.g., "I did the bad thing"), whereas with guilt it is a specific behaviour (e.g., I did the bad thing). Consequently, shame and guilt lead to very different phenomenological experiences (e.g., Lewis, 1971; Tangney, in press).

In brief, the experience of shame is acutely painful and involves a sense of "being small", and a concomitant sense of worthlessness and powerlessness. While shame may not necessarily require the presence of other people, there is often the imagery of how the defective self may appear to others (e.g., Lewis, 1971). Furthermore, Lewis (1971) proposed that in shame, the self acts as both the agent and object of disapproval. Thus, an (observing) self witnesses and consequently denigrates the focal self as worthless (e.g., Tangney, in press). Such an experience often leads to a desire to escape or to hide, and is accompanied by concomitant feelings of anger and hostility (e.g., Barrett, 1995; Fischer & Tangney, 1995; Lewis, 1971; Tangney, Wagner, Fletcher & Gramzow, 1992). Such feelings of hostility are initially directed inward (e.g., "I'm such a bad person"), but are often redirected outward in a defensive attempt to protect the self by turning the blame elsewhere (e.g., "I'm a bad person, but how could you make me feel like that?") (e.g., Tangney, 1995). Thus, interpersonally, the experience of shame typically orients people toward separation, distancing and defence and is likely to interfere with relationships (e.g., Tangney, in press).

In contrast, the experience of guilt is much less painful, because the primary focus is on the self's behaviour rather than the entire self. Thus, in guilt, one's core identity remains essentially intact. Guilt is characterised by a sense of tension, remorse and regret over the "bad thing done" (e.g., Barrett, 1995; Lewis, 1971/1987). Moreover, in the midst of a guilt experience people often report being preoccupied with the transgression, wishing they had behaved differently or could somehow undo the harm they had done. Findings further indicate that the experience of guilt is particularly associated with feelings of empathy for others involved (e.g., Leith & Baumeister, in press; Tangney, 1991, 1994). Thus, guilt more often leads to reparative behaviour such as confessing and apologising, and serves to orient people in a more constructive, proactive direction (e.g., Barrett, 1995; Lewis, 1971; Tangney, in press). As a

result, in contrast to shame, the experience of guilt enables individuals to remain constructively engaged in the relationships at hand (e.g., Tangney, in press).

Empirically, Lewis' (1971) differential emphasis on self vs. behaviour to distinguish between shame and guilt has received much support. Findings from a number of studies, employing a variety of methodologies, consistently confirm that each of these emotions leads to the very distinct phenomenological experiences outlined above (e.g., Ferguson, Stegge & Damhuis, 1991; Lindsay-Hartz, 1984; Tangney, 1992; Tangney et al., 1994; Tangney et al., 1996; Wicker, Payne & Morgan, 1983).

Furthermore, as previously noted, much research employing very different methodologies and measures, demonstrates that individuals who frequently experience shame about the entire self appear to be vulnerable to a wide range of psychological problems, including depression, anxiety, and addictive disorders (e.g.,Gramzow & Tangney, 1992; Harder, 1995; Harder, Cutler & Rockart, 1992).

Findings from research assessing the links between guilt and psychopathology are far more equivocal, and appear to vary as a result of the types of measures employed. For example, studies using adjective checklist measures of shame and guilt have found that both of these emotions are associated with psychological symptoms (e.g., Harder, 1995; Harder, Cutler, & Rockart, 1992; Meehan, O'Connor, Berry, Weiss, Morrison & Acampora, 1996). However, studies employing measures that are particularly sensitive to Lewis' (1971) self vs. behaviour distinction (e.g., Tangney's scenario-based measures assessing shame-prone and guilt-prone styles across a variety of situations) demonstrate a very different pattern of findings. These studies consistently show that in both children and adults, the tendency to experience guilt is unrelated to psychopathology, whereas the tendency to experience shame is associated with a

range of psychological symptoms (e.g., Gramzow & Tangney, 1992; Tangney, Burggraf & Wagner, 1995; Tangney, Wagner & Gramzow, 1992).

In sum, both theory and research suggest that shame and guilt differ in a number of important ways, particularly when considering Lewis' (1971) emphasis on the self vs. behaviour distinction. Consequently, each emotion leads to a distinct phenomenological experience, and has different implications for interpersonal relationships. Table 2 provides a summary of the distinction of these two emotional states.

Table 2.Comparison of shame and guilt (Adapted from Lewis, 1986).

Shame experiences	
Self (unable)	Other (able)
1. Object of scorn, disgust, ridicule, humiliation.	The source of scorn, contempt, ridicule, humiliation.
2. Paralysed, helpless, passive, inhibited.	Laughing, rejecting, active, uninhibited-free.
3. Inferior, smaller, weaker.	Superior, bigger, stronger.
4. Involuntary body response, rage, tears, gaze avoidance.	Adult and in control.
5. Functioning poorly, mind going blank, desire to hide, conceal.	Functioning well, but experiencing contempt.
6. Self in focal awareness.	Other in focal awareness.
Guilt experiences	
Self (able)	Other (unable)
1. The source of hurt, let down or failure.	Injured, needful, hurt.
2. Intact and capable.	Incapable, needing.
3. Focus on self, actions and behaviours/feelings.	Focus on let down/injury from other and own needs/losses.
4. Efforts to repair.	Efforts to elicit reparation or rejection/contempt leading to shame.

From the summary of the two emotions provided in the table above, it would appear that it is shame that is most likely to have a detrimental effect on both psychological and interpersonal adjustment. This is mostly attributed to the indiscriminate evaluation of the whole self (in contrast to the self's behaviour) as worthless, and the subsequent desire to escape, separate and distance oneself from other people, which is characteristic of the shame experience. In support of this view, the clinical literature confirms that while there is growing interest in the area of problematic guilt reactions and psychopathology, it is shame that is consistently shown to be associated with a whole host of psychological problems (e.g., Tangney, in press).

3.3 Shame

There is growing consensus concerning the phenomenology of shame, and how it operates, as the review below will demonstrate. Analysis of all the various physiological, biological, behavioural, and cognitive components of shame are beyond the parameters of this thesis. Thus, for the purpose of this thesis, only those psychological and behavioural/interpersonal components of shame will be discussed.

The phenomenology of shame

Shame and associated affects

a) Anxiety

It is now widely established that one central feature of the shame experience appears to be anxiety (e.g., Gilbert, 1998; Lewis, 1971; Tangney & Fischer, 1995). Helen Block Lewis (1971) first posited that the experience of shame is inextricably linked to anxiety, describing shame episodes as possessing an almost panic-like quality. Not only does the individual become acutely aware of how the (perceived) defective self may appear to others, but also becomes quickly and intensely aroused (e.g., Gilbert, 1998). This is experienced as intense anxiety and promotes the

feeling of being rooted to the spot, to wish the ground would open up, thus motivating the desire to escape or distance oneself from the situation (e.g., Gilbert, 1993; Tangney & Miller, 1996).

Furthermore, it has been suggested that shame may be defined as an acute fear of being exposed or negatively evaluated by others (e.g., Fischer & Tangney, 1995; Gilbert & Tower, 1990). However, the literature demonstrates that descriptions of a shame experience closely resemble those for social phobia and shyness reactions (e.g., Cheek & Melchior, 1990; Gilbert, 1998; Rapee & Heimberg, 1997). In particular, it is argued that both the social anxiety and the shame literature share common questions regarding the nature of the fear in the avoidance behaviour. In particular, it is argued that social anxiety may be related to the fear of *feeling* ashamed (e.g., physiological states, other aroused emotions) and/or *being* shamed (e.g., Gilbert, 1998). To date, the social anxiety and shame literatures remain relatively separate, but would arguably benefit from greater contact (e.g., Gilbert, 1998).

b) Anger

As previously noted, there is much evidence to suggest that anger and hostility also form part of the shame experience (e.g., H. Lewis, 1986). Some theorists are of the view that anger and rage/hostility are subsequent responses to shame, and can be activated so quickly that an individual may fail to be consciously aware of the feelings of shame (e.g., Retzinger, 1991; Scheff, 1987). In the literature this is often called by-passed shame (e.g., Scheff, 1987).

Empirically, the link between anger and shame has consistently been confirmed by numerous studies involving both adults and children (e.g., Tangney, Wagner, Fletcher, & Gramzow, 1992b, Tangney, 1994, 1995; Tangney, Wagner, Burggraf, Gramzow & Fletcher, 1991). Furthermore, findings from a cross-sectional, developmental study of samples of children, adolescents, college students and adults suggest that shame is associated with more destructive, non-assertive ways of managing anger and conflict, whereas anger associated with guilt is often

dealt with constructively, motivating more conciliatory behaviour (e.g., Tangney, Wagner, Barlow, Marschall & Gramzow, 1996).

Given the links between shame and anger, it is pertinent to question why and how these two emotions become related. It is argued that shame-anger arises from threats to a social bond - particularly attachment bonds with significant others, where feelings of rejection and separation may be all the more acute (e.g., Retzinger, 1991). Alternatively, Kohut (1977) believed that it is mirroring - approval giving, witholding or punishing that is linked to shame (and anger), rather than proximity - separation-closeness (e.g., Gilbert, 1992a). Thus, while shame may result from a rejection or separation, such an experience may be largely context-specific (e.g., situations which involve withdrawal of love, approval or punishment by a loved one) (e.g., Gilbert, 1998).

As previously noted, another popular explanation of the link between shame and anger involves the idea of a defensive attempt - a "face saving" strategy (e.g., Daly & Wilson, 1994; Tangney, 1995). In shame, associated anger is initially directed inward and is focused on the self, manifesting as self-denigratory thoughts (e.g., Tangney, 1995). However, in certain situations individuals attempt to cover or hide their shame, and redirecting anger outward is one possible way of doing this. For example, in gangs of poor males, the experience of being shamed is considered very serious, and must be immediately responded to by a display of one's own strength, or else risk losing one's life (e.g., Anderson, 1994; Gilbert, 1998). However, it must be borne in mind that the relationship between individuals, and the image each is attempting to present, will vary across different social situations, and will affect the various "covers" for shame, which include anger (e.g., Gilbert, 1998). Furthermore, there is evidence to suggest that the patterns of managing anger associated with shame (e.g., either inwardly or outwardly directed) are relatively gender-specific. Given that it is currently more socially acceptable for men, and not women, to act aggressively, and women are actively socialised not to be aggressive,

it is argued that men are more likely to direct their shame-anger outward and women turn their anger inward, focusing on the self (e.g., M. Lewis, 1992). These ideas will be further explored when discussing the role of shame in psychopathology in the latter part of this chapter.

c) Disgust

So far, anxiety and anger have been shown to be associated with shame. However, some theorists are of the view that shame originates from (self-)disgust (e.g., Power & Dalgleish, 1997). Etymologically, the word "disgust" (or it's relative in French - "degout") literally means "bad taste" (Rozin, Haidt & McCauley, in press). According to Fallon & Rozin (1987) disgust is defined as:

> *" Revulsion at the prospect of (oral) incorporation of an offensive substance. That substance has contamination properties: if it contacts an otherwise edible substance, it renders it inedible"* (p.23).

These authors further argue that disgust manifests physically as nausea, a gastro-intestinal sensation which is more often food-related. Thus, ingestion is discouraged and may also lead to the ejection (vomiting) of something already ingested (Rozin et al., in press). The facial expressions of disgust focus on the nose and mouth, and largely involve rejection of tastes and smells (Rozin & Fallon, 1987). Thus, disgust is distinctly associated with what goes into and what goes out of the body (self) (e.g., Rozin et al., in press). Findings suggest that while some disgust elicitors may be culturally determined (e.g., food preferred in some cultures may be considered disgusting in others), there is substantial universality (e.g., elicitors associated with bodily concerns such as faeces and sex) (e.g., Imada, Yamada & Haidt, 1993).

It has been argued that different forms of shame may arise depending on whether shame is experienced in the face of anxiety or disgust (e.g., Gilbert, 1992a). Gilbert (1998) further posits that the nature of the other affects associated with shame is largely determined by the social

situation in which individuals may find themselves. For example, behaviours associated with bodily functions, appearances or sexual activity are more likely to be labelled "dirty" or "disgusting". However, situations involving betrayal and loss of trust, are more likely to evoke feelings of shame associated with anxiety and/ or anger (e.g., Gilbert, 1998).

Cognitive components of shame

Given that most current theories of emotion strongly emphasise the role of cognitions or appraisals of events in the elicitation of emotion (e.g., Frijda, 1988; Izard, 1983; Power & Dalgleish, 1997), much shame theory and research has tended to focus on the particular appraisals associated with shame, which are mostly about the self (e.g., Gilbert, 1998).

Drawing on the current literature it would appear that the relationship between cognition and emotion is considerably complex (e.g., Izard, 1993). While there is evidence to suggest that particular emotions are associated with particular appraisals (e.g., Lazarus, 1991), Frijda (1993) argues that appraisals can be linked to emotion in a number of ways: either antecedent to, as a consequence of, or as part of the emotional experience itself. In line with the focus of this thesis, only those appraisals associated with the actual emotional experience of shame will be discussed.

In general, the cognitive content of the shame experience tends to focus on either the social domain (beliefs about how others see the self), the internal domain (how one sees oneself), or both social and internal domains (how one sees oneself as a consequence of how one perceives others see the self) (e.g., Gilbert, 1998).

Negative evaluation of self by others

Evidence suggests that, in general, people attempt to present themselves in a positive light; that is, to be seen as attractive to others (e.g., Leary, 1995; Trower, Gilbert & Sherling, 1990). The experience of shame is associated with the perception that one cannot create a positive image of the self to others; one will be found lacking in ability, appearance, talent, etc.,

one will be ignored, or actively rejected (e.g., Gilbert, 1997a). In a more negative light, the experience of shame may be related to a sense of the self as an object of scorn, ridicule of contempt. M. Lewis (1992) further argues that the potential to experience shame is inextricably linked to the development of an awareness of being "an object" for others. Thus, one important cognitive component of shame involves a sense that one has been judged and found lacking in some way "in the eyes of others" (e.g., Crozier, 1998; Goss, Gilbert, & Allan, 1994; Mollon, 1984; Reztinger, 1991; Scheff, 1988).

Negative self-evaluation

Another central cognitive aspect of the shame experience concerns negative self-evaluation, and is related to the subjective sense of self (e.g., H. B. Lewis, 1987; M. Lewis, 1992). Thus, one may see oneself as bad, unattractive, defective and worthless. A number of theorists are of the view that a sense of inferiority is a core self-evaluation in shame (e.g., Tomkins, 1987). In fact, Kaufman (1989) goes so far as to argue that shame is the "affect of inferiority". Such ideas have been confirmed by a number of factor analytic studies, demonstrating that when assessing shame in this way, inferiority emerges as a salient factor (e.g., Cook, 1993, 1996; Goss, et al., 1994). However, it is important to note that the inferiority experienced in shame is *involuntary* (e.g., Gilbert, 1992a, b). Gilbert (1998) argues that "if we voluntarily accept our inferior position, and/or believe our superiors will be helpful to us, there is no need to feel shame". Thus, shame cannot be about the perception of inferiority per se, but must include some notion of being in a position one does not want to be in, or an image of the self which one does not wish to create. Moreover, this position or image is associated with negative, undesirable attributes from which one wishes to be distanced (e.g., Gilbert, 1998).

In line with the ideas outlined above is the notion of falling short of standards or failure to live up to ideals, which have consistently been linked to shame (e.g., H. Lewis, 1987; Miller,

1996). It has been suggested that shame is related to appraisals of the self as having failed to live up to (internalised) ideals of worth in the eyes of others (e.g., Mascolo & Fischer, 1995). However, empirically, such views have failed to be confirmed. In fact, findings suggest that people construct several types of "self-ideals", and that (perceived) failure to live up to one, or all, of these need not be associated with shame (e.g., Higgins, 1987). Moreover, it is argued that it is the perception of being close to the "undesired self", rather than distance from the ideal self that is central to the experience of shame (e.g., Ogilvie, 1987). Such ideas have been supported by findings from a number of qualitative studies, as Lindsay-Hartz, de Rivera and Mascolo (1995) conclude:

> *" ....When ashamed, participants talked about being who they did not want to be. That is, they experienced themselves as embodying an anti-ideal, rather than simply not being what they wanted to be. The participants said things like, "I am fat and ugly", not " I failed to be pretty"....This difference in emphasis is not simply semantic. Participants insisted the distinction was important....* (p.277).

Thus, it would appear that shame involves the perception that there is something unattractive, or undesirable about the individual, and not just a failure to live up to an internalised ideal (e.g., Gilbert, 1992a,b, 1997a, b). Furthermore, given that our standards and ideals are often formed in the context of other people (e.g., Suls & Wills, 1991), it is likely that what is perceived as desirable or undesirable about the self is largely socially and culturally determined (e.g., Gilbert, 1998).

In sum, it would appear that the cognitive components of shame are complex and involve perceptions of external (i.e. other people) and internal negative self-evaluations. More specifically, as Gilbert (1998) argues, the experience of shame is essentially an "inner experience of the self as an unattractive social agent". The cognitions associated with shame reflect a sense of existing in the social world as an undesired self - a self that one does not wish to be (e.g.,

Gilbert, 1998). Thus, the experience of shame is inextricably linked to a sense of being involuntarily rejected and devalued, and consequently separated from (significant) others.

Behavioural components of shame

Shame has particular implications for interpersonal behaviour and adjustment (e.g., Fischer & Tangney, 1995). For example, much theory and research has focused on those behaviours employed in order to avoid shame. Nathanson (1992) argues that some people attempt to avoid shame by aiming to achieve exceptionally high (perfectionistic) standards in order to compensate for possible feelings of inferiority. Hewitt & Flett (1991a,b) distinguish between perfectionistic standards related to the self demanded of others (expecting others to be perfect), and what they term socially prescribed perfectionism - the belief that others expect/demand high standards of the self. When considering the previously noted links between shame and ideals/standards, it seems plausible to suggest that theoretically perfectionism could be potentially closely linked to shame. However, recent research suggests that it is only socially prescribed perfectionism that appears to be related to shame (e.g., Wyatt & Gilbert, in press). While further research is required to support and extend these results, such findings confirm the importance of the perception of how the self thinks others see the self in the experience of shame (e.g., Gilbert, 1998).

Furthermore, findings from a number of studies demonstrate that negative emotions, such as shame are associated with "self-control procedures" (e.g., Shaver, Schwartz, Kirson & O'Connor, 1987; Scherer, Wallbot & Summerfield, 1986) which serve to repair the self in the event of a shaming experience. For shame, self-control procedures include trying to change the (perceived) flaw or negative characteristic, denying it, disguising it, or blaming someone or something else for it (e.g., Fischer & Tangney, 1995). It would appear that there is some overlap in the description of self-control procedures employed to repair shame at a personal level, and

those behaviours characteristic of shame avoidance (e.g., perfectionistic standards) outlined above. Nevertheless, it is clear that shame motivates certain aspects of behaviour which are generally designed to escape, avoid or repair the concomitant painful, negative self-scrutiny. Moreover, behaviours associated with shame have specific implications for the interpersonal context (e.g., Tangney, in press).

To summarise, it would appear that shame is a complex, multifaceted emotion, which includes other emotional, physiological, cognitive, behavioural and social/interpersonal components, as illustrated in Table 3 below.

Table 3. Summary of shame experiences (adapted from H. Lewis, 1986) (Gilbert, 1997).

Self (unable)	Other (able)
Focus	
Object of scorn, disgust	Source of scorn, ridicule
Social comparison	
Inferior, smaller, weaker	Superior, bigger, more able
Evaluation	
Inadequate, bad, flawed, devalued	Able, competent, confident
Feelings	
Powerless, passive, inhibited	Laughing, rejecting, active, uninhibited-free, disgust.
Involuntary affects: tears, anxiety	Adult and in control Contempt, angry.
Behaviours	
Involuntary submissive: to hide, escape, conceal	Functioning well, attacking, rejecting

There is much evidence to suggest that shame can be reliably distinguished from the other most commonly discussed negative self-conscious emotion, guilt (e.g., Tangney, in press). To recap, in shame, the specific focus of the negative evaluation is the whole self, whereas in guilt

the focus is on a particular aspect of the self (i.e., behaviour). Thus, it is widely acknowledged that the experience of shame is far more painful than guilt, and involves an acute sense of the self as inferior to, worthless, and rejected by (significant) others. Moreover, the above review highlights the importance of other people in shame, be they real or imagined, and the potential detrimental effects of shame on interpersonal relationships. More recently, it has been suggested that empirically, the differences between shame reactions, shyness reactions and expressions of social anxiety are ill-defined, and therefore require further clarification (e.g., Gilbert, 1998). However, such distinctions remain, theoretically, relatively robust.

There is little doubt that the ability to experience shame is an innate potential. The developmental and cross-cultural studies reviewed above have consistently confirmed the view that shame is an universal emotion, beginning in infancy (e.g., Fischer & Tangney, 1995; M. Lewis, Sullivan, Stanger & Weiss, 1989; Scherer, Wallbott & Summerfield, 1986). In line with these ideas, it seems pertinent to question the function of such a negative experience as shame in everyday life.

3.4 The function of shame in everyday life

Social ranking theory of shame

Gilbert (1994,1997a) takes an evolutionary approach in attempting to explain the function of shame in day-to-day life. Central to Gilbert's (1997a) theory is the idea that shame "serves to alert the self and others to detrimental changes in social status". More specifically, it is argued that the experience of shame is grounded in rank and status judgements - of feeling inferior/ worthless in comparison to others (e.g., Gilbert, 1994, 1997a). Drawing on findings from non-human studies, Gilbert (1994) notes how animals low in a status hierarchy express submissive behaviour in the face of potential attack from a dominant animal (e.g., gaze avoidance, head down, inhibition of ongoing activity). Gilbert (1994) argues that such

behaviours serve to signal subordination and prevent possible attacks from the more dominant animals, and are potentially similar to shame behaviours observed in humans. Thus, it is proposed that at one level, submissive (i.e. shame) behaviours in humans may have evolved as a protective function, and are directly linked to the establishment and maintenance of rank order (e.g., Gilbert, 1994).

However, it is further suggested that human ranks and hierarchies are not only determined by power and aggression, but by other, more important, non-aggressive strategies. Drawing on findings from non-human primates and humans, Gilbert (1997) points out that gaining rank and reproductive success within these groups depends as much on affiliation as it does on intimidation (e.g., Barkow, 1989; de Waal, 1989). Thus, it is suggested that the expression of attractive qualities and abilities, which serve to facilitate affiliation with other group members, is also an important determinant of social rank in humans (e.g., Gilbert, 1997). More specifically, highlighting the importance of social bonds, it is argued that rank/status in humans is often achieved by eliciting positive reinforcers (e.g., respect, prestige) from others (e.g., Kemper, 1988; Kemper & Collins, 1990), and the belief that we are valued by others (e.g., Gilbert, 1989, 1992).

Thus, Gilbert (1994,1997a) concludes that social ranking/status in humans is determined by two major pathways; one based on threat and coercion, and the other based on social attractiveness. When considering this latter pathway, some evidence indicates that it is the experience of being unattractive, devalued and rejected that most often threatens social bonds, and these are the most characteristic domains of shame (e.g., Gilbert, 1993, 1995). As previously noted, it is argued that judgements of what is attractive and desirable (about the self) are largely socially and culturally defined (e.g., Gilbert, 1998).

Moreover, given that people are highly motivated to join groups (e.g., Baumeister & Leary, 1995), shame may also serve to induce conformity. If individuals do not conform to group values (i.e., correspond their strategies to gain status and acceptance with group values) then they risk being ostracised, rejected, and consequently lose status (e.g., Gilbert, 1997a). Once again, attributes and abilities that are considered acceptable (or to be rejected) by the group will be largely determined by social and cultural constructions (e.g., Gilbert, 1998).

In sum, Gilbert (1997a) argues that shame is related to the evolved human need to be seen as attractive, and is regarded as an emotional state that is associated with perceptions of social standing and social status. Thus, from an evolutionary perspective, shame may have important implications for social and reproductive success. Furthermore, while further research is required to support and extend these ideas, Gilbert's (1994) social ranking theory arguably incorporates the importance of both the internal (i.e., personal) and external (i.e., social environment) domains in the experience of shame, and acknowledges the particular "social" aspects (i.e., the importance of other people) of this emotion state.

Gender differences

H. B. Lewis (1971, 1987), a pioneer in the early field of shame theory and research, attempted to differentiate between men and women in terms of their capacity to experience shame. According to Lewis (1971, 1987), gender differences in the experience of shame are attributed to gender differences in certain cognitive styles (e.g., field-dependence vs. field-independence). Field-dependent individuals tend to be more influenced by information in the surrounding environment when making attributions about themselves and others. On the other hand, field-independent individuals remain relatively uninfluenced by their surroundings, and tend to be more self-referencing when making similar attributions. Lewis (1971,1976) posits that, on average, women are slightly more field-dependent than men. Furthermore, given that field-

dependent individuals are more grounded in the social context, it is argued that they are more likely to feel shame, whereas field-independent individuals are more likely to feel guilt. Thus, at a basic level, Lewis (1971,1976) argues that women are more likely to feel shame, and men are more likely to feel guilt. Such views have been partially confirmed by findings from a number of early studies (e.g., Binder, 1970; Lewis, 1976). However, these findings suggest that there is little evidence to support Lewis' (1971, 1987) explanations of gender differences in shame and guilt.

In contrast to H. B. Lewis' (1971,1976) ideas, M. Lewis (1992) proposes that, rather than reflecting gender differences in the capacity to experience shame and guilt per se, findings such as those reported above may, in fact, reflect gender differences in response to shame and guilt, or gender differences in the situations likely to elicit shame. Drawing on findings from his own research, M. Lewis (1992) concluded that there were two categories of situations most likely to elicit shame in men: a) failure over a task deemed important (for definition of the self) (e.g., poor performance in school and sports, and activities involving earning money); b) impaired sexual potency (e.g., premature ejaculation, failure to have an erection, and a woman's refusal to go out with them).

Similarly, M. Lewis (1992) posits that there exist two categories of situations most likely to elicit shame in women: a) physical (un)attractivenenss, which involves appearance and exposure; b) failure in interpersonal relationships, which includes failure with regards to peers, partners, parents and children. It is interesting to note that while failure in interpersonal relationships was mentioned by men as a potential shaming situation, it did not receive a high overall rating (e.g., M. Lewis, 1992).

Findings from a number of developmental studies demonstrate that such gender differences are observable in children as young as three years of age. For example, Zahn-Waxler

& Kochanska (1990) found that girls showed greater self-consciousness in response to the experience of being exposed than did boys.

According to M. Lewis (1992), such gender differences in prototypical shaming situations largely reflect the differential socialisation patterns for girls and boys. However, he further posits that the potential role of sociobiological factors cannot be ignored in that physical attractiveness in women and sexual potency in men, both of which are elicitors of shame, are also associated with reproductive success (e.g., M. Lewis, 1992).

In light of the above ideas, it seems that when considering gender differences in shame, it would be more relevant to consider the potential differential sources of shame for men and women, and the possible influence of both socialisation/cultural and sociobiological factors. In particular, the domain of physical attractiveness is consistently cited as a prototypical shaming situation for women, and not men. It would appear, then, that at a general level, women are more vulnerable to feeling shame about their body/ shape/appearance, than men-a fact that may be due to both social/cultural and sociobiological factors. Moreover, outside of the shame literature, it is argued that physical attractiveness is more important to women's, rather than men's, self-evaluations and evaluations by others (e.g., Bar-Tal & Saxe, 1976). Such conclusions therefore imply a potential role for shame in many (non-eating disordered) women's relationship to their body and weight.

Further to this, it is possible that gender differences exist in response to the experience of shame. While little research has addressed this issue, it is an area which is attracting increasing theoretical and empirical attention. Of the little available evidence it would appear that men are more likely to use anger as way of covering shame, than women. Moreover it is suggested that women are more likely to exhibit other behaviours associated with shame (e.g., avoidance, perfectionistic standards, "self-control" procedures). Thus, at a day-to-day level it is argued that

many women who feel shame about their weight or shape may choose to avoid or repair such an experience by adopting perfectionistic standards related to the self (i.e., concerning the body) or "self-control" procedures (e.g., Shaver et al., 1987) such as dieting. However, while a great many women participate in dieting behaviour, not all go on to develop eating psychopathology. Thus, these issues require further elaboration, and will be discussed in the latter part of this chapter.

3.5 Shame and psychopathology

As previously outlined, the links between shame and psychopathology have attracted increasing theoretical and empirical attention over the last twenty years. Indeed, there is much evidence to confirm H. Lewis' (1971) original idea that shame is the "sleeper in psychopathology" (Cook, 1994; Fischer & Tangney, 1995; Gilbert, 1994, 1997; Kaufman, 1989, 1992). However, given that the experience of shame is universal - we all have the capacity to feel shame- it has been important for shame researchers to establish when, and how, shame becomes pathological. Thus, the main thrust of research assessing the relationship between shame and psychopathology has been to identify individuals for whom shame is a continuing problem; that is high-shame individuals (e.g., Andrews, 1998). This has proved more difficult than theorists first thought, and there remains considerable controversy surrounding notions of pathological shame and how it is measured (e.g., Andrews, 1998; Gilbert, 1998).

While shame may be defined and measured by a number of methods (e.g., observational methods, narrative analyses), by far the most popular in the clinical literature are self-report measures. Such measures attempt to measure (pathological) shame as a trait or a disposition (e.g., Andrews, 1998). Thus, conceptual issues discussed below will focus on those associated with self-report measures of dispositional shame.

Conceptual issues

In general, existing measures of shame reflect two conceptualisations of pathological shame: shame-proneness and internalised shame. Thus, high-shame individuals can be defined in terms of their degree of shame-proneness, or levels of internalised shame. A detailed account of the conceptual issues associated with these two constructs of shame will follow.

Shame-proneness

H.B. Lewis (1987) first proposed the concept of shame-proneness as a further attempt to distinguish shame from guilt (see above). According to Lewis (1987), some people are more "shame prone" than others - that is, some people experience shame in situations where others do not. H.B. Lewis (1987) argued that such individuals are oversensitive to experiencing events as shaming. Moreover, shame-prone people will be more disrupted by their shame experiences - that is, their experience of shame will be more intense. Lewis (1987) further proposed that the concept of shame-proneness, both as an oversensitivity to experiencing events as shaming, and as a tendency to greater psychological disruption, are important when considering the role of shame in psychopathology.

Drawing on H.B. Lewis' (1987) original ideas, Tangney, Burggraf & Wagner (1995) define shame-proneness as an individual's likelihood to respond in a shame-like way when faced with negative, ambiguous situations. That is, in certain situations some people are more likely to experience shame than others. Thus, in line with Lewis' (1987) original ideas, Tangney et al.'s (1995) concept of shame-proneness also implies an oversensitivity to experience events as shaming and greater psychological disruption in the event of the experience of shame.

Thus, it appears that the concept of shame-proneness emphasises the interpersonal (external) aspect of the experience of shame. This concept of pathological shame defines high-shame individuals as those people more likely to experience shame in social situations. However,

as previously noted, research suggests that is it possible to experience shame without the presence of other people (i.e., when an individual is alone) (e.g., Argyle, 1988). It could be argued, therefore, that the concept of shame-proneness described above, fails to incorporate this "private" aspect of shame.

Shame-proneness and psychopathology

In an attempt to operationalise the concept of shame-proneness, Tangney, et al. (1988) developed the Self-Conscious Affect and Attribution Inventory (SCAAI), and the later, modified, Test of Self-Conscious Affect (TOSCA; Tangney, et al., 1989). These questionnaire measures consist of a series of hypothetically, potentially shame-inducing situations, or scenarios, followed by four common, phenomenological reactions to these situations, including shame and guilt reactions. Individuals indicate the degree to which they are likely to respond to each situation in each of the ways described. Thus, individuals may be assessed in terms of guilt-proneness and shame-proneness in a situational context. In line with theory (e.g., Lewis, 1987; Tangney et al. 1995), such measures arguably emphasise the social (external) aspect of the experience of shame.

Drawing on the literature, evidence suggests that shame-proneness, and not guilt-proneness, is consistently associated with various psychological problems (e.g., Tangney, in press). Findings from a number of studies employing the measures outlined above demonstrate that shame-proneness, and not guilt-proneness, is associated with various forms psychopathology such as anxiety and depression (e.g., Gramzow & Tangney, 1992; Sanftner, Barlow, Marschall, & Tangney, 1995; Tangney, 1993; Tangney, Burggraf & Wagner, 1995; Tangney, Wagner, Fletcher & Gramzow, 1991; Tangney, Wagner & Gramzow, 1992). Thus, both theory and research suggest that individuals who are characteristically shame-prone seem to be vulnerable to a range of psychological symptoms.

However, given that this is a fairly recent line of enquiry, conclusions must be treated with a degree of caution. While previous research has demonstrated bivariate associations between shame-proneness and different forms of psychopathology, the nature of the relationship between these variables remains to be elaborated. More specifically, such studies fail to demonstrate the direction of causation in the shame-proneness-psychopathology relationship; that is, it remains to be established whether the degree to which an individual is shame-prone is antecedent to, or a result of, existing psychological disturbance.

Internalised Shame

In addition to the concept of shame-proneness, is that of internalised shame. Within the shame literature, Kaufman (1989) is generally credited for introducing the terms "internalised shame" and "shame-based identity". According to Kaufman (1989), shame originates in the context of the infant's early relationship with a significant other (i.e., mother), and as an experience can be felt and then dissipates. However, Kaufman (1989) further argues that some individuals experience chronic exposure to shaming situations during development. As a result, shame is inadequately mitigated, and becomes "internalised". Consequently, an individual's sense of self becomes based on those cognitions and beliefs characteristic of shame - a sense of the self as worthless, inferior, and unloveable. Kaufman (1989) defines this as a "shame-based" identity. Moreover, Kaufman (1989) posits that once shame becomes internalised, it can be triggered without reference to any interpersonal event.

Thus, Kaufman's (1989) concept of internalised shame, and the development of a "shame-based" personality is inextricably linked to early social experience and, in contrast to shame-proneness, emphasises the internal aspect of the experience of shame. This concept of pathological shame defines high-shame individuals as those who frequently experience generalised or global shame about the self (e.g., Andrews, 1998).

Internalised shame and psychopathology

Cook (1994) attempted to operationalise this concept of internalised shame in the development of the Internalised Shame Scale (ISS). Drawing on Kaufman's (1989) ideas, Cook (1994) argues that internalised shame, as defined operationally by a high score on the ISS, is the result of the frequent triggering of shame in situations that intensify the shame feelings. Thus, Cook (1994) further posits that the "internalisation" of shame is to be understood as a "developmental process in which the experience of shame affect becomes linked to the development of the self in such a manner as to lead to the development of a personality style in which shame feelings play a prominent part". Employing an adjectival approach, the Internalised Shame Scale (ISS) consists of twenty-four items reflecting phenomenological descriptions of the experience of shame. More specifically, the items are designed to capture those cognitions about the self particularly associated with a "shame-based" identity (i.e., a central sense of the self as inferior and defective). Individuals are asked to rate the frequency with which they have such feelings, ranging from never to almost always. Thus, individuals are assessed in terms of their degree of internalised shame.

Findings from a number of clinical and non-clinical studies demonstrate that high levels of internalised shame, as measured by the ISS, have consistently been associated with various psychological problems, including depression, alcoholism, drug addiction and eating disorder symptomatology (e.g., Cook, 1991, 1994, 1996; Reynolds, 1991). Both theory and research demonstrate that those individuals who frequently experience a central sense of the self as inadequate and defective are vulnerable to psychological problems.

Thus, it would appear that internalised shame is an important factor in many forms of psychopathology. However, as with shame-proneness, research has only considered bivariate associations between the ISS and measures of psychopathology. Thus, further research is

required in order to elucidate the nature of the relationship between these variables; that is to determine the direction of causation in the links between internalised shame and psychological symptoms.

To summarise, within the literature it would appear that concepts of pathological shame tend to operationalise as two constructs - shame-proneness and internalised shame. Shame-proneness emphasises the social (external) aspect of shame, whereas internalised shame is concerned with the internal aspect of shame. Both constructs reflect current notions of the phenomenology of shame, and have been shown to be separately associated with a range of psychological symptoms. Theoretically, it has been suggested that shame-proneness and internalised shame are not mutually exclusive constructs, given that they reflect different aspects of shame (e.g., Andrews, 1998). Empirically, this view has been somewhat confirmed, with findings demonstrating some association between measures of shame-proneness and internalised shame (e.g., Harder, 1995). However, the degree of overlap is not great, with correlations in the range of .42 to .54 (e.g., Andrews, 1998). Thus, it is plausible to suggest that it is possible for some individuals to be shame-prone in a situational context, yet do not experience concomitant high levels of internalised shame, and vice versa. However, while the literature demonstrates that shame-proneness and internalised shame have largely been treated as independent constructs, it could be argued that it would be useful for future research to further assess their intercorrelation in order to determine whether they are truly independent.

Furthermore, as previously noted, the nature of the relationship between shame-proneness, internalised shame and various psychological symptoms is not clear. Little theory or research has addressed the question of whether pathological shame (i.e., shame-proneness and internalised shame) plays a functional role in psychopathology. That is, is pathological shame antecedent to, a concomitant of, or an effect of psychopathology? (e.g., Andrews, 1998). Given

the conceptual distinctions between shame-proneness and internalised shame, it may also be useful for future research to consider possible differential functional roles for these two constructs in the development and maintenance of psychopathology. This issue will be further elaborated after considering ideas regarding the development of pathological shame (i.e., shame-proneness and internalised shame) presented below.

Shame vs. low self-esteem

The issue of the relationship between low self-esteem and shame (shame-proneness and internalised shame) is a topic of ongoing debate and, as yet, remains to be resolved. Theoretically, definitions of low self-esteem are similar to those cognitive aspects of the experience of shame described above. That is, at one level, both incorporate a belief that the self is not good enough (e.g., Gilbert, 1998). Empirically, a number of studies have demonstrated significant correlations between self-esteem measures and measures of shame-proneness and internalised shame ($r > .5$ in most cases) (e.g., Cook, 1994; Cowdrey, 1995; Tangney, Burggraf & Wagner, 1995). As a result, some theorists have argued that the repeated exposure to shaming situations (in the context of early experiences) is the source of low self-esteem (e.g., Jacoby, 1994), while others are of the view that low self-esteem may increase an individual's sensitivity to certain kinds of social threat (i.e., shame) (e.g., Leary, Tambor, Terdal & Downs, 1995). Irrespective of whether pathological shame precedes or proceeds low self-esteem, these two constructs are undeniably linked. Indeed, Lewis (1987) argues that shame is the affective-cognitive state which accompanies low self-esteem.

However, in view of the ideas outlined previously in this chapter, it could be argued that definitions and descriptions of low self-esteem refer only to cognitive components, and fail to incorporate other emotional, physiological, behavioural and interpersonal/social aspects that are characteristic of the experience of shame. Thus, extending Lewis' (1987) original ideas, shame

might be best conceptualised as the behavioural and phenomenological manifestation of low self-esteem. Consequently, individuals exhibiting characteristic behaviours and other phenomenological aspects of shame might also be defined as having low self-esteem.

In light of the conclusions outlined above, it would appear that both theory and research demonstrate some degree of association between shame and low self-esteem. However, it remains to be established whether low self-esteem is a precursor to, or a result of, either shame-proneness or internalised shame. Also, it would appear that definitions and descriptions of self-esteem do not adequately describe the experience of shame in it's entirety. While an explanation of the link between shame and low self-esteem is offered, this relationship remains open to further investigation.

Having summarised the main conceptual issues associated with current ideas of pathological shame, it is now pertinent to consider what is known about how shame becomes a problem for some individuals, but not others.

Development of pathological shame

Theories of the development of pathological shame vary, and are dependent on which construct of pathological shame- either shame-proneness or internalised shame -is being considered. In general, such theories reflect the classic nature vs. nurture debate, inherent in the field of psychology.

Shame-proneness: A key question in the literature concerns whether shame-proneness has an innate dimension. Early shame-proneness theorists such as Lewis (1987) and Tangney (1990) acknowledge the role of innate (i.e., genetic) and, to some extent, environmental factors in the formation of dispositional shame-proneness. However, both theorists fail to offer an adequate discussion of these developmental issues. Drawing on findings from the personality literature, (Gilbert, 1998) points to the increasing evidence of temperament differences in children (e.g.,

Kagan 1994) in an attempt to explain why some individuals are more shame-prone than others. Findings suggest that about 15% of children show traits of behavioural inhibition (BI) (e.g., fear of the unfamiliar), and that such children tend to be more prone to anxiety and timidness from the first days of life. While such traits can be modified via particular styles of parenting, it is argued that they remain "predisposers" for later shyness and social anxiety, and by implication, shame-proneness (e.g., Gilbert, 1998). However, in an extensive review of BI and anxiety, Turner, Beidel and Wolff (1996) argue that "the critical factor seems to be a familial pattern of anxiety that is the key rather than the presence of BI" (p. 169). Thus, much remains to be established about familial patterns of social anxiety and shame-proneness, including possible genetic factors affecting sensitivity to shame (but see Zahn-Waxler & Robinson, 1995) (e.g., Gilbert, 1998). Moreover, as previously noted, increased communication between shyness and shame-proneness researchers may arguably enhance current knowledge regarding this issue (e.g., Gilbert, 1998).

More recently, other theorists have offered a social-developmental theory of shame-proneness. For example, Ferguson and Stegge (1995) argue that shame-proneness is best conceptualised as a "surfeit emotion trait". According to this view, shame-proneness results from repeated exposure to shaming situations such that the defining features of shame "continually and indiscriminately manifest themselves across time and situations" (p.182). Thus, an individual is thought to persistently organise and interpret experiences in a shame-prone way.

Given that shame originates interpersonally and is a self-evaluative emotion, Ferguson and Stegge (1995) further argue that the greatest potential for shame's disruptive consequences arises within the context of socialisation experiences with significant others. In their own developmental study, these authors combined interview and questionnaire methods in order to assess children's (ranging from 5 - 12 years of age) degree of shame-proneness and guilt-proneness in response to eight hypothetical scenarios (four moral transgressions and four failure

situations). Parents of these children were assessed in terms of their attributions, emotional reactions, and disciplinary reactions to their child being in these same situations. Ferguson & Stegge (1995) found that parents of shame-prone children were hostile, and provided little in the way of feedback regarding what the children had done that was right or wrong. In short, shame-proneness in children was best predicted by the strong *presence* of anger-related emotions, and an *absence* of love withdrawal and power assertion (e.g., Ferguson & Stegge, 1995). However, the measures employed were specifically designed for the purpose of the study, so findings require replication across different sample populations. Furthermore, these authors fail to distinguish between adaptive (i.e., normative) and maladaptive forms of shame in their sample of children. Thus, further research is required to extend and support these findings.

To summarise, it would appear that explanations of why some individuals are more shame-prone than others involve the consideration of both innate (i.e., genetic) and environmental (i.e., socialisation experiences) factors. However, current ideas largely focus on the innate dimension of shame-proneness (e.g., Lewis, 1987; Tangney & Fischer, 1995). Thus, high shame-prone individuals are regarded as being so largely due to a predisposition for this trait, which can then confer vulnerability to increased shame-proneness as a result of particular parenting styles (e.g., those involving anger-related reactions).

Internalised shame: In view of the conceptualisation of internalised shame outlined above, developmental theories of this construct are almost all environmentally-based. Such theories tend to focus on early social experiences, particularly in the context of parent-child relationships. For example, Kaufman (1989) argues that the experience of shame originates in the infant's early emotional relationships with significant others, and occurs when the infant's needs are not responded to appropriately.

As previously noted, Kaufman (1989) proposes that the internalisation of shame occurs as a result of chronic exposure to shaming situations over development, such that shame feelings are prolonged indefinitely. To further elaborate, Kaufman (1989) posits that humans have three motivational systems: emotions or feelings, drives and interpersonal needs, which can all act as potential sources of shame. According to Kaufman (1989), the internalisation of shame process occurs when a child attempts to express certain emotions (e.g., anger, joy, fear), drives (e.g., hunger, sex) or interpersonal needs (e.g., for a relationship, to be touched and held, for differentiation), but is met by a response from a significant other (e.g., parent) which induces shame. As a result, such chronic parenting styles lead to affect-shame binds, drive-shame binds or interpersonal need-shame binds. That is, individuals may eventually be unable to either acknowledge or express their feelings, drives or interpersonal needs because of the shame associated with them, and are left with a central sense of the self as defective (e.g., Kaufman, 1989). Thus, while internalised shame may manifest as a global sense of the self as inferior and inadequate, the original source of shame may lie in either one, two, or all of the motivational systems described above.

In line with these ideas, Kaufman (1989) further proposes that differential shaming of the expression of certain emotions, drives and interpersonal needs may occur for men and women, reflecting the predominant patterns of gender socialisation within a culture. For example, in Western culture men have traditionally been shamed for expressing distress (e.g., crying), fear, and their need for touching/holding. In contrast, women have traditionally been shamed for expressing anger, and for expressing their need to differentiate from significant others; that is, to define themselves as distinctly separate, while putting their own desires before others' (e.g., Kaufman, 1989). Thus, it is suggested that shame exacts a strong influence on the development of gender-specific behaviour within a specific culture (e.g., Kaufman, 1989/1992). Extending

these ideas, it could be argued that such differential shaming for women and men has differential clinical implications. Epidemiological evidence indicates that syndromes such as depression and eating disorders are more common among women, and extreme violent behaviour and other antisocial disorders are more prevalent among men (e.g., Gilbert, 1998; Hsu, 1990). Furthermore, as previously noted, empirical evidence indicates links between internalised shame (as measured by the Internalised Shame Scale) and depression and eating disorders in clinical and non-clinical samples of women (e.g., Cook, 1994). Therefore, the gender differences seen in the incidence of particular syndromes might be best explained by associated levels of internalised shame and the differential situations in which shame is likely to originate, and be expressed, for women and men.

Kaufman (1989) offers a particularly comprehensive theory of the development of internalised shame. However, while the concept of internalised shame has been operationalised in the construction of the ISS (Cook, 1994), few developmental studies have addressed Kaufman's (1989) notions of the internalisation of shame process. Thus, further research is required to support and extend these ideas.

Extending Kaufman's (1989) original ideas, McFarland and Baker-Baumann (1990) propose that the internalisation of shame can occur at any point in an individual's life as people are constantly in the process of defining themselves via their interactions with others. Thus, drawing on anecdotal evidence, these authors suggest that while internalised shame may initially develop within the context of parent-child relationships, more generalised culturally/socially-determined expectations can also augment the internalised shame process (e.g., McFarland & Baker-Baumann, 1990). However, little research has addressed this issue.

Other theorists have employed a family-systems perspective in an attempt to explain how shame becomes internalised. For example, Fossum and Mason (1986) propose that some family

systems are best defined as "shame-bound". Such shame-bound family systems are characterised by dysfunctional patterns of interaction, including unusual patterns of control, perfectionism, and a lack of continuity of emotional give and take between family members. Such dysfunctional patterns of interaction serve to enhance feelings of insecurity and rejection, and thereby provoke repeated experiences of shame among family members (e.g., Fossum & Mason, 1986). Thus, according to some authors, internalised shame develops in the context of such shame-bound family systems (e.g., Cook, 1994; Kaufman, 1992).

Some evidence confirms the links between a shame-bound family system and internalised shame. For example, findings from clinical and non-clinical samples demonstrate that individuals who perceive their family to be characterised by patterns of high levels of control and intrusiveness report higher levels of internalised shame (e.g., Cook, 1994).

Elsewhere in the literature, other early adverse experiences have also been linked to the development of internalised shame. In particular, both theory and research suggests that the experience of childhood sexual abuse is associated with higher levels of internalised shame (e.g., Cook, 1994). According to Kaufman (1989), childhood sexual abuse activates crippling shame and intense inner states of powerlessness, bodily violation and humiliation. Empirically, there is some evidence to confirm the link between childhood sexual abuse and internalised shame. For example, Playter (1990) demonstrated that within a clinical sample of chemically dependent women, those who had experienced forced intercourse before the age of 14 reported significantly higher levels of internalised shame (as measured by the ISS (Cook, 1994)) than those who had not. However, the number of women in this study who had reported such abuse was considerably small (N = 11). Furthermore, Playter (1990) employed a cross-sectional sample, so it is not possible to infer any causal links between sexual abuse and internalised shame. Thus, further research is required in order to explore the nature of the relationship between these variables.

To summarise, it would appear that current notions of the development of internalised shame largely focus on the influence of early adverse experiences, particularly within the context of the family. Theoretically, it would appear that these ideas are relatively robust. Empirically, these views have been somewhat confirmed by a number of studies employing the ISS which demonstrate that internalised shame is linked to dysfunctional patterns of family interaction, the experience of other childhood trauma such as sexual abuse, and psychological symptoms. However, while such findings are valuable, methodologically, these studies fail to address the nature of the relationship between these variables, and tend to rely on findings from bivariate associations as evidence of some causal relationship. Thus, it is important for future research to employ a model which attempts to address the processes by which variables such as family function, childhood sexual experience, internalised shame and psychopathology are linked. Such a model is the subject of this thesis.

3.6 Shame and eating psychopathology.

Shame has been implicated in the earliest descriptions of eating disordered patients, such as in Janet's (1903) account of his patient Nadia for whom becoming fat would be shameful and immoral (e.g., Russell, 1997). Interestingly, Janet's (1903) account of Nadia is regarded as one of the few convincing forerunners of modern bulimia nervosa (e.g., Russell, 1997). In fact, Russell (1997) points out that Nadia's distinctive obsessional shame about her body was one reason why Janet (1903) rejected a diagnosis of anorexia nervosa. Historical accounts of anorexia nervosa reflect no such reference to feelings of shame.

When considering later theoretical contributions to the eating disorders literature, the same pattern seems to emerge. For example, many authors have commented that feelings of shame are likely to precipitate and follow episodes of bingeing and purging - characteristic behaviours of bulimia nervosa (e.g., Boskind-Lahl &White, 1978; Loro & Orleans, 1981; Post &

Crowther, 1985). Thus, placed in an historical context, shame has been a notable feature of eating disorders, but seems to be specific to descriptions of bulimia nervosa.

In spite of these early noted links between shame and eating psychopathology, it is only relatively recently that researchers in the eating disorders field have begun to theoretically and empirically explore the relationship between these variables. Drawing on the current literature, there is now a growing body of both theory and research which suggests that shame plays a major role in eating psychopathology (e.g., Kaufman, 1989/1992; Silberstein, Striegel-Moore & Rodin, 1987).

Theoretical links

Shame and the body.

Before discussing the specific links between pathological shame and eating psychopathology, the more general association between shame and the body will be examined. As previously noted, a central feature of the experience of shame involves a sense of exposure, of being seen and judged negatively by others, and also by the self. Moreover, the self is perceived as passive, an *object*, and the focus of other's (and the self's) ridicule and scorn. Concomitant to this feeling of being exposed is a sense of wanting to hide or disappear (e.g., Lewis, 1971, 1986). Thus, it would seem that a central aspect of the experience of shame arguably concerns the physical self. Indeed, Darwin (1872) first posited that shame is essentially about appearance.

More specifically, Gilbert (1998) argues that the experience of shame involves a sense of personal unattractiveness - of being in the social world as an undesired self. It could be argued that judgements about how one looks physically are likely to play a major role in one's sense of personal attractiveness.

Thus, it seems plausible to suggest that the experience of shame is, in one sense, inextricably linked to the body. The body is, of course, the central focus of eating

psychopathology (see Chapter 2). Furthermore, a core feature of anorexia nervosa and bulimia nervosa is the feeling of being too big and wanting (the body) to be smaller, which arguably reflects the desire to hide or disappear common to the experience of shame (Silberstein, Striegel-Moore & Rodin, 1987). Thus, it would appear that both the experience of shame and eating psychopathology are rooted in the body.

Women, pathological shame and eating psychopathology

Shame-proneness: Theoretical links

Employing Lewis' (1971) original ideas of the experience of shame (see above), Silberstein, Striegel-Moore & Rodin (1987) were arguably the first to offer an extensive theory of the specific association between women, shame and eating psychopathology. While not directly addressing the concept of pathological shame, these authors base their ideas on Lewis' (1971,1987) construct of shame-proneness.

Acknowledging the deep-seated relationship between shame and the body described above, these authors posit that it is largely sociocultural factors that serve to place shame at the heart of women's relationship to their body and weight, and eating psychopathology. More specifically, these authors point to the socially prescribed definitions of female beauty, which at this sociohistorical moment means being thin, as a potential source of shame for many women. Given the well documented fact that being attractive is more important for women than men (e.g., Bar-Tal & Saxe, 1976), Silberstein et al. (1987) argue that women are more likely to want to live up to their culture's beauty ideal (i.e., to be thin). Consequently, the typical female consistently perceives a major gap between what her body looks like, and what the cultural ideal prescribes. That is, when comparing self to ideal, most women fail to match up, and shame ensues (e.g., Silberstein et al, 1987).

Furthermore, these authors argue that, disregarding the potential role of genetic factors, Western society promotes the view that a woman can choose and is responsible for her body type and shape. Thus, such a view not only implies that a woman's weight is under her volitional control, but also imputes an element of blame. Moreover, while thinness, for women, is exalted in current society, a counterpoint to this message is "what-is-fat-is-bad"; that is, being fat has become synonymous with being "bad" (e.g., Silberstein et al., 1987). Thus, in striving to attain the thin ideal, these societal views further serve to augment the shame involved in women's relationship to their weight and shape - the self is derogated not only for it's initial inadequacy (i.e., being fat), but also for it's inability to overcome this deficiency (e.g., Silberstein et al., 1987).

Concomitant to the myth that a woman's weight and shape is under her volitional control, are the societal prescriptions for weight loss, of which dieting is the most popular. However, evidence from physiological and psychological research (e.g., Evans, Nicholaidis & Meile, 1981; Polivy & Herman, 1985) demonstrates that, in fact, dieting is an ineffective method to lose weight, and may even contribute to weight gain and binge eating. In spite of this evidence, it is clear that dieting has become a primary strategy employed by many women to cope with the shame of fatness. Thus, Silberstein et al. (1987) argue that, paradoxically, the experience of shame is in fact amplified by a sense of personal failure when such dieting efforts fail to attain and maintain a (often unnatural) target weight. Moreover, consistent efforts to lose weight may also heighten a woman's attentiveness to her weight and shape, thereby evoking even more shame (e.g., Silberstein et al., 1987).

Having outlined the importance of shame in a woman's relationship to her weight and shape, Silberstein et al., (1987) extend these ideas to a discussion of eating disorders. Drawing on their clinical work, these authors have tended to focus on women suffering from bulimia

nervosa. While acknowledging that women with eating disorders (e.g., anorexia nervosa and bulimia nervosa) may feel more ashamed of themselves in general (e.g., Casper, Offer & Ostrov, 1981), Silberstein et al. (1987) argue that shame is a particularly salient emotion in bulimia nervosa. For example, research suggests that bulimic women have been found to aspire to a thinner ideal body shape than a group of nonbulimic controls (e.g., Williamson, Kelley, Davis, Ruggerio & Blouin, 1985). Elsewhere in the literature, as noted in Chapter 2, findings demonstrate that a woman who is heavier than her peers can be more likely to develop bulimia (e.g., Fairburn & Cooper, 1983; Johnson, Stuckey, Lewis & Schwartz, 1982). Thus, Silberstein et al. (1987) argue that the discrepancy between self and ideal may be enhanced for bulimic women owing to a thinner than average ideal and a heavier than average actual self, which thereby heightens the experience of shame. Furthermore, these authors found evidence to suggest that women with bulimia expressed substantially greater acceptance of attitude statements based on sociocultural values (e.g., "attractiveness increases the likelihood of success") than nonbulimic women (e.g., Silberstein et al, 1987).

Moreover, Silberstein et al. (1987) argue that shame is present at multiple points during the course of bulimia nervosa. These authors suggest that the shame provoked by the discrepancy between a woman's actual body and her ideal body can prompt many women to withdraw from both superficial and intimate social interactions (e.g., Silberstein et al., 1987). In an attempt to combat the shame of fatness, bulimic women typically engage in repeated and stringent dieting efforts which consistently fail to reshape their biological destiny. It is further suggested that these subsequent feelings of failure propel many women in to the binge-purge cycle characteristic of bulimia (e.g., Silberstein et al., 1987). However such ideas are largely based on anecdotal clinical evidence, and therefore remain open to empirical investigation.

According to these authors, the functions of bingeing are diverse and shame is implicated in many of them. For example, for some women, a shame-provoking experience - typically an interpersonal situation which leaves a woman feeling "stupid" or "silly"- may prompt a binge. In other cases, shame may be a secondary affective response; the woman may be experiencing another emotion (e.g., anger) that she feels ashamed of, and bingeing is her response to it. Silberstein et al. (1987) further propose that for many other women, bingeing serves as an anaesthetic against other emotion states. Regardless of the motives that may have prompted a binge, Silberstein et al. (1987) argue that the most common outcome of such an episode is shame.

A common response to bingeing in bulimia nervosa is purging, which often involves trying to dissipate the shame following the binge. Like bingeing, Silberstein et al. (1987) posit that purging may serve a variety of functions. For example, it has been suggested that some women use purging to express their anger or to release mounting tension produced by the binge (e.g., Johnson & Lard, 1982). For others, it is proposed that purging may serve as punishment for transgression of the binge. According to Fisher (1985), the notion of punishment reinforces a view of the self as bad, and further heightens the experience of shame. Thus, as Silberstein et al. (1987) conclude, ashamed at first of her weight, then of her repulsive eating behaviours, the bulimic woman now experiences herself as a personal failure, and feels unloveable, which provokes yet more shame.

To summarise, Silberstein et al. (1987) emphasise the role of sociocultural factors in attempting to demonstrate the important role shame plays in many women's relationship to their weight and shape. The deeply entrenched societal messages which hold that what-is-fat-is-bad enhances the shame many women feel about their body shape, and by implication, their more global self. As a result, many women engage in an endless struggle of yo-yo dieting, consistently

failing to attain and maintain an ideal weight, and thereby reinforcing feelings of shame. More specifically, drawing on anecdotal evidence, these authors argue that shame plays an important perpetuating role in the syndrome of bulimia nervosa (e.g., Silberstein et al., 1987).

Silberstein et al. (1987) offer a cogent theory of the specific links between women, shame and eating psychopathology, and attempt to address the potential functional role of shame in eating psychopathology, both as an antecedent to, and an effect of, particular disordered eating attitudes and behaviour. When considering the concept of pathological shame, these authors have used Lewis' (1971) original ideas of shame as a conceptual framework for their theory, and have thus employed Lewis' (1971) construct of shame-proneness (see above) in their explanations of eating psychopathology. However, in light of current notions of pathological shame outlined above, Silberstein et al. (1987) do not adequately discuss ideas regarding the origins (e.g., innate or environmental) of shame-proneness. Instead, these authors have chosen to focus on the impact of sociocultural factors, and fail to acknowledge the influence of genetic (i.e., innate) factors in the construction of shame-proneness as a personality trait.

Furthermore, Silberstein et al., (1987) fail to explain why it is that all women are exposed to the same sociocultural values regarding thinness and attractiveness, yet only a few go on to develop eating psychopathology. In light of the above criticisms, it could be argued that women who are already relatively shame-prone may be more vulnerable to want to adhere to societal messages regarding weight and shape, and are thus more vulnerable to the development of eating problems. Finally, while these authors demonstrate that shame may serve to maintain the characteristic bulimic attitudes and behaviour, this does not explain why some women develop bulimia nervosa, while others develop anorexia nervosa. Thus, it is clear that further research is required to support and extend Silberstein et al's (1987) ideas.

More recently, other theorists have also addressed the role of sociocultural factors in the experience of shame and the construct of shame-proneness. For example, Gilbert's social ranking theory highlights the importance of (perceived) social unattractiveness in the experience of shame (see above). While Gilbert (1998) does not directly discuss eating psychopathology in the context of social rank theory, he does acknowledge that what is deemed socially attractive is largely socially and culturally defined. Given that the domain of physical attractiveness is a primary source of shame for most women (e.g., M. Lewis, 1992), it would seem that when considering women and eating psychopathology, Gilbert's (1997) social ranking theory may pose some useful directions for future research. However, it could be argued that by largely focusing on the construct of shame-proneness and sociocultural factors, Gilbert's (1997) ideas do not provide an adequate account of internalised shame.

In sum, theoretical ideas linking women, shame-proneness and eating psychopathology have largely focused on the role of sociocultural factors and the social context. Acknowledgement of potentially innate (e.g., genetic) factors in the formation of shame-proneness as a trait have been omitted from these explanations. Furthermore, while sociocultural factors have been implicated in etiological models of eating disorders, it is argued that they need to be considered against the backdrop of other individual and familial factors (see Chapter 2). Thus, future research should also explore the relationship between other known risk factors (e.g., family dysfunction), shame-proneness and eating psychopathology.

Internalised shame: Theoretical links

Elsewhere in the shame literature, Kaufman (1989) posits a specific theoretical link between internalised shame and eating psychopathology. According to Kaufman (1989), eating disorders (e.g., anorexia nervosa and bulimia nervosa) are essentially disorders of shame. However, Kaufman (1989) further proposes that important differential patterns of scripts for

responding to shame exist between women with anorexia nervosa and women with bulimia nervosa.

First, considering bulimia nervosa, Kaufman (1989) argues that the characteristic bingeing on food is a substitute for shame-bound interpersonal needs. That is, when an individual feels desperate to be held close; a craving to be wanted and admired, but the expression of these needs has, in the past, been met with shame, then the individual is likely to turn to food. Thus, the individual attempts to use food to satisfy these inner needs. However, food can never provide the comfort required and the individual is left with a sense of longing, which eventually becomes a feeling of shame, often accompanied by fear and distress. At this stage, Kaufman (1989) argues, the individual is eating to anaethetise the longing.

This author further posits that the shame experienced about bingeing on food is in fact a displacement of the more profound, internalised shame about the self (e.g., Kaufman, 1989). According to Kaufman (1989), the purging cycle then adds another important emotional component to the process - that of disgust. As previously noted, disgust is commonly associated with the experience of shame (e.g., Gilbert, 1998). Kaufman (1989) argues that disgust, dissmell and nausea all function as signals to the self, and to others, of a sense of rejection. Thus, the vomiting to which women with bulimia nervosa frequently resort in order to purge themselves of the shameful food they have shamelessly binged on represents the affect of disgust experienced overtly in action (e.g., Kaufman, 1989). At this stage, it is suggested that the deeper shame about the self has been displaced onto the food (e.g., Kaufman, 1989). Thus, the sufferer of bulimia emerges, not only purged of food but (temporarily) of shame as well. Kaufman (1989) further posits that the shame and disgust evoked by the bingeing and purging behaviour essentially reflects the shame first generated in the individual's initial relationships with parents; that is, where the expression of interpersonal needs resulted in shame.

In contrast to sufferers of bulimia who essentially crave food, Kaufman (1989) argues that sufferers of anorexia nervosa actually reject food, seeking to distance the self from crucial nourishment. In doing do, the sufferer of anorexia nervosa seeks to gain control over food, eating behaviour, and by implication, weight gain (e.g., Kaufman, 1989). However, Kaufman (1989) further posits that attempts to control food are, in fact, attempts to control the sources of shame. Thus, individuals with anorexia nervosa displace the deeper, internalised shame about the self directly onto food. More importantly, Kaufman (1989) concludes that sufferers of anorexia nervosa attempt to distance the self from the perceived source of shame, which has become equated with food. Furthermore, such individuals may also employ additional strategies of perfectionism and control in response to internalised shame.

In sum, Kaufman (1989) provides an in-depth theory of the specific links between internalised shame and eating disorders, and proposes differential patterns of responding to shame in anorexia nervosa and bulimia nervosa. However, Kaufman's (1989) theory fails to account for why it is predominantly women, and not men, who suffer from eating disorders. In view of the evidence outlined above, it would seem plausible to suggest that consideration of sociocultural factors may help to explain this phenomenon (e.g., Silberstein et al, 1987). While Kaufman (1989) acknowledges the potential role of social and cultural factors in determining attitudes to weight and shape, he fails to adequately develop this line of inquiry. This may be largely due to the basic tenets of his theory regarding the internalisation of shame process which, according to Kaufman (1989), initially occurs within the context of early parent-child relationships. Thus, within such a conceptual framework, social and cultural factors are unlikely to play a substantial role.

However, other theorists have extended Kaufman's (1992) original ideas to include a discussion of the role of social factors in the relationship between women, internalised shame

and eating psychopathology (e.g., McFarland & Baker-Baumann, 1990). As previously noted, these authors argue that the internalisation of shame may occur at any point in a individual's life, given that the process of self-definition via our interactions with others is ongoing (e.g., McFarland & Baker-Baumann, 1990). These authors, like Silberstein et al. (1987) above, point to the socially prescribed definitions of feminine beauty ideals (i.e., thinness), and societal messages regarding the value of attractiveness as potential sources of shame for many women. According to McFarland and Baker-Baumann (1990), women's beautification of the body and the pursuit of beauty can be traced back to ancient civilisations. Thus, in line with other theorists (e.g., Silberstein et al., 1987) McFarland and Baker-Baumann (1987) highlight the importance of physical attractiveness for women by drawing on historical evidence. Furthermore, these authors posit that current Western societal messages reflect the view that natural bodily processes, appetite and body weight, are under conscious control, and that being overweight means simply being out of control. In light of the ideas outlined above, such messages are particularly pertinent for women, and are reinforced by the current popularisation of calorie counting and dieting (e.g., McFarland & Baker-Baumann, 1990). Thus, these authors conclude that such societal messages serve to chronically induce shame in women, and thereby contribute to the internalisation of shame process. However, in line with Kaufman's (1989) original ideas, these authors and others argue that a woman's early experiences significantly influence her feelings about her body; that is, if a woman has developed reasonably positive feelings about her body shape and bodily functions, then she will able to withstand the pressures of a culture that fosters shame and insecurity in women (e.g., McFarland & Baker-Baumann, 1990; Orbach, 1986). Furthermore, like Kaufman (1989), these authors argue that a woman's feelings about her body are likely to be fostered within the context of family relationships (e.g., McFarkand & Baker-Baumann, 1990). Thus, in sum, McFarland and Baker-Baumann (1990) also demonstrate the links between

internalised shame and eating psychopathology, but further point to the role of social and cultural factors in order to explain why it is mainly women who suffer from these problems.

To conclude, it would appear that there is substantial evidence linking pathological shame (shame-proneness and internalised shame) and eating psychopathology (e.g., Silberstein et al, 1987; Kaufman, 1989). Having considered the two constructs of pathological shame (i.e., shame-proneness and internalised shame), theorists employing the concept of shame-proneness tend to place more emphasis on sociocultural factors in linking this construct to eating psychopathology. On the other hand, while acknowledging such sociocultural variables, researchers employing the concept of internalised shame largely stress the role of early parent-child relationships in attempting to explain the internalised shame-eating psychopathology relationship. Such ideas reflect the differential conceptual frameworks of these two constructs of pathological shame (see above). Sociocultural and familial factors are both consistently cited in multifactorial etiological models of eating psychopathology. Thus, it is clear that further research must endeavour to explore the links between pathological shame (i.e., shame-proneness and internalised shame) and eating psychopathology in the context of these, and other, known risk factors. Moreover, given the conceptual distinctions between these two constructs of pathological shame, it would be useful for future research to consider a model where the impact of both shame-proneness and internalised shame on eating is assessed (in the presence of known risk factors), in order to establish whether these conceptual distinctions are upheld.

However, some degree of overlap between ideas linking shame-proneness and internalised shame to eating psychopathology is apparent. In particular, when considering the specific aspects of eating psychopathology, such as bingeing and purging, both shame-pronenesss theorists and internalised shame theorists argue that such behaviours are especially shame-inducing. Moreover, in attempting to explain the specific link between women and eating

psychopathology in the context of pathological shame, both shame-proneness and internalised shame theorists point to the body and notions of physical attractiveness as major sources of shame for many women (e.g., Kaufman, 1989; Silberstein et al., 1987). Thus, it would seem plausible to suggest that such evidence further confirms the potential central role shame plays in women's relationship with their body, and in eating psychopathology.

In view of the more general aspects of the shame experience described earlier in this chapter, the above review also demonstrates important links with eating psychopathology. For example, at the heart of the experience of shame is the sense that the self is inherently bad or defective in some way. Many (eating disordered and non-eating disordered) women adhere to the societal message that what-is-fat-is-bad. Thus, these women equate feeling fat with feeling that the self is bad. At this level, it is suggested that the experience of feeling fat for many women is in fact synonymous with the experience of shame (e.g., Silberstein et al, 1987). However, it is argued that all women are exposed to these societal messages regarding feminine beauty ideals, yet it is only a few that go on to develop eating problems. Thus, while shame may play a central role in many women's relationship with their body and weight, the role of other factors must also be considered when attempting to establish the development of eating psychopathology.

Furthermore, it is argued that the extreme weight loss strategies employed by eating disordered women (e.g., constant dieting, vomiting, excessive exercise) can be conceptualised as "self-control procedures", which serve to repair the self in the event of a shaming experience. In shame, such procedures include, among other things, trying to change the (perceived) flaw (e.g., being fat) (e.g., Shaver et al., 1987). Moreover, as noted in Chapter 2, much research has demonstrated that eating disordered women consistently exhibit perfectionistic tendencies (e.g., Slade, 1982). As previously noted, within the shame literature, some theorists are of the view that one way in which people may attempt to avoid shame is by aiming to achieve exceptionally high

(perfectionistic) standards, thereby protecting the self against feelings of inferiority (e.g., Nathanson, 1992). In view of this fact, it could be suggested that perfectionistic tendencies seen in eating disordered women are actually attempts to avoid the experience of shame. Thus, as the above ideas demonstrate, phenomenological aspects of the shame experience, implicated in the conceptualisation of both shame-proneness and internalised shame, appear to be associated with eating psychopathology.

Empirical links

Shame-proneness and eating psychopathology

A small number of clinical and non-clinical studies employing measures of shame-proneness such as the TOSCA (Tangney et al., 1990) have demonstrated significant associations between shame-proneness and eating psychopathology. For example, utilising Lewis' (1987) and Tangney et al's (1990) concept of shame-proneness (i.e., as a characterological trait), Srikameswaran and Goldner (1997) produced clinical anecdotal evidence to point out that shame-proneness was a particularly common personality trait among eating disordered women, and was linked to concomitant perfectionistic attitudes and other forms of self-destructive behaviour (e.g., self-mutilation). However, given that these findings were not drawn from any systematic statistical analysis of the data, they must be regarded with a degree of caution. Furthermore, in the absence of a control group of either non-eating disordered women or women suffering from other forms of psychopathology (e.g., depression), it is not possible to conclude that shame-proneness is specific to eating disordered women.

In another study, Sanftner, Barlow, Marschall and Tangney (1995) administered the TOSCA (Tangney et al, 1990) and the Eating Disorders Inventory -2 (EDI-2; Garner, 1991) to a non-eating disordered sample of undergraduate women. These authors found that shame-proneness, and not guilt-proneness, was associated with disturbed eating attitudes and behaviour.

However, these data were cross-sectional and conclusions were drawn from bivariate correlations, which can provide little information regarding the direction of the relationship between these variables. Further research is required in order to determine the nature of the shame-proneness-eating psychopathology relationship.

Internalised shame and eating psychopathology

Evidence from clinical and non-clinical studies employing measures of internalised shame such as the ISS (Cook, 1994), goes some way to confirm the theoretical links between internalised shame and eating psychopathology. For example, in a study comparing a number of clinical groups (e.g., individuals with affective disorder, alcoholism, PTSD and eating disorders) with a non-clinical group, eating disordered inpatients reported the highest average ISS score. Furthermore, Reynolds (1991) administered the ISS and the Eating Disorders Inventory-2 (EDI-2; Garner, 1991) to 28 women diagnosed with either anorexia nervosa or bulimia nervosa. Findings from this study demonstrated that there was a significant relationship between the severity of eating disorder (i.e., anorexia nervosa or bulimia nervosa) and degree of internalised shame (as assessed by the ISS). However, in view of the small sample size and the absence of a control group, further research is required to replicate these findings.

Regarding non-clinical studies, Cook (1994) administered the ISS and the Eating Disorders Inventory-2 (EDI-2; Garner, 1991) to independent samples of undergraduate (N=113) and graduate (N= 46 women). With both samples, higher levels of internalised shame were significantly associated with all scales on the EDI-2. Women who had high scores on the Body Dissatisfaction and Drive for Thinness subscales of the EDI-2 were considered to be most at risk for the development of eating psychopathology. Thus, these samples were then combined (N = 159) and the participants were separately divided into high and low Body Dissatisfaction and Drive for Thinness groups (with women in the high group scoring at or above the 75th percentile

for college women norms from the EDI-2 manual), and assessed in terms of their ISS scores. It was found that women with higher Body Dissatisfaction and Drive for Thinness scores reported significantly higher internalised shame scores. However, while these findings demonstrate a link between internalised shame and eating psychopathology, they reveal little about the nature of the relationship between these variables.

To summarise the evidence presented above, from both a theoretical and empirical perspective there appears to be a relationship between pathological shame (i.e., shame-proneness and internalised shame) and eating psychopathology. More specifically, such findings go some way to confirm the notion that pathological shame (i.e., shame-proneness and internalised shame) is an important emotional component in eating psychopathology. However, theory and research has tended to treat the two constructs of pathological shame (i.e., shame-proneness and internalised shame) as separate and independent. Further research is required in order to determine whether they are truly independent. The findings might have important implications for the functional role of pathological shame in psychopathology.

The above review also demonstrates that when considering the relationship between shame and eating psychopathology many questions remain unanswered. The relationship between shame and eating psychopathology is likely to be a complex one, and empirical evidence is limited due to the reliance on simple bivariate associations. Thus, while valuable, these findings reveal little about the nature of the relationship between these variables, or about the potential functional role of shame in eating psychopathology. In view of the conceptual distinctions between shame-proneness and internalised shame, and the vast body of literature confirming known risk factors for the development of eating psychopathology, it would be more productive for future research to focus on those experiential (i.e., known risk factors) variables which may serve to influence the level of internalised shame and moderate the impact of shame-

proneness on eating behaviour. Such ideas will be further elaborated in the discussion of the current model to be tested, presented below.

3.7 The current model

The mediating role of shame in eating psychopathology.

Drawing on the extensive literature outlined in Chapter 2, current views place the aetiology of eating psychopathology in the context of a multifactorial framework, including a number of individual, familial and social factors. However, such multifactorial models still fail to explain why, in face of a number of risk factors, some women develop eating disorders, while others do not. Moreover, while a number of risk factors have been confidently identified, findings are often inconsistent. As a direct response to this shortcoming, recent theoretical and empirical shifts in the eating disorders literature reflect a move away from assessing the overt relationship between women and their body, weight and food, towards an analysis of the processes which underpin this relationship. Similarly, current models of etiology reflect a move towards assessing the psychological consequences of the experience of known risk factors in the development of eating disorders (e.g., Slade, 1982). Thus, Chapter 2 attempted to direct the reader to consider a mediator model (e.g., Baron & Kenny, 1986) to explain the etiology of eating psychopathology.

Within the eating disorders literature, a number of studies have, in fact, employed a mediator model in an attempt to explain the development of eating psychopathology (e.g., Fryer, Waller & Kroese, 1997; Hamachek, 1978; Slade, 1982). However, such studies have largely focused on cognitive variables (e.g., perfectionism, low self-esteem) as potential mediating factors and have produced considerably inconsistent findings. It has recently been suggested that those risk factors most related to the production of negative self-evaluations are specifically tied to the eating disorders (e.g., Fairburn et al., in press). Recent advances in the field of self-

conscious emotion research demonstrate that such negative self-evaluations are characteristic of one of the most commonly discussed self-conscious emotions - shame. Thus, it is suggested that one potential candidate for a mediating role in the link between known risk factors and the development of eating psychopathology is shame.

The ideas outlined in the current chapter suggest that, when considering a potential mediating factor in the aetiology of eating psychopathology, shame seems a likely contender. Current views on the phenomenology of the shame experience all point to the characteristic negative evaluation and painful scrutiny of the self that lies at the heart of this emotional experience. More specifically, the experience of shame originates interpersonally and involves a sense of exposure and a sense of the self as inferior, defective and unattractive (in comparison to others) (e.g., Gilbert, 1997; Kaufman, 1989; Lewis, 1971; Tangney, Wagner & Gramzow, 1989). Furthermore, such an experience is also associated with certain "self-control procedures" (e.g., attempts to change the perceived flaw) to counteract feelings of shame and the employment of other behaviours (e.g., perfectionistic standards) in order to avoid the experience of shame (e.g., Shaver et al., 1987). As elaborated above, such evidence theoretically supports the notion that the characteristic attitudes and behaviours of eating disordered women in fact belie feelings of shame.

In an attempt to further explore the relationship between shame and eating psychopathology, it was necessary to draw on the shame literature and assess current views of pathological shame. These tend to operationalise as two constructs - shame-proneness and internalised shame - which are viewed as dispositional traits. Shame-proneness is essentially viewed as an oversensitivity to experience shame when faced with negative ambiguous situations, and has been linked, theoretically, to concepts of shyness and social anxiety (e.g., Gilbert, in press; Lewis, 1987; Tangney & Fischer, 1995). While parenting styles have been

implicated in the development of shame-proneness, it is posited that such a trait is relatively innate (e.g., Gilbert, in press). Alternatively, internalised shame is viewed as the direct result of chronic exposure to shameful situations during development. Feelings of shame are indefinitely prolonged such that they become internalised and incorporated into a "shame-bound" identity. It is argued that internalised shame originates in the context of the early parent-child relationship and, therefore, is an environmentally-based concept of pathological shame (e.g., Kaufman, 1989). Theoretically, both shame-proneness and internalised shame have been linked to eating psychopathology (e.g., Silberstein, et al., 1987; Kaufman, 1989).

Empirically, current notions of pathological shame (i.e., shame-proneness and internalised shame) demonstrate consistent associations with eating psychopathology (e.g., Cook, 1994; Tangney et al., 1992). However, the nature of the relationship between these variables remains to be elucidated. An in-depth review of the shame literature further supports the earlier suggestion that it may be useful to consider (pathological) shame as an important mediating factor in the link between known risk factors and the development of eating psychopathology. Furthermore, it remains to be established whether the two constructs shame-proneness and internalised shame are truly independent, and also whether they play differential functional roles in the etiology of eating psychopathology. For example, it seems plausible to suggest that shame-proneness, with its noted innate dimension, is best conceptualised as antecedent to eating problems. More specifically, it might be argued that the impact of particular risk factors such as family function can only be understood in the context of an existing predisposition to be shame-prone. In this situation, shame-proneness may be regarded as a moderating factor (e.g., Baron & Kenny, 1986) in the risk factor-eating relationship. By contrast, the environmentally-based concept of internalised shame is perhaps best viewed as a psychological process by which risk factors serve to influence the development of eating psychopathology; that is, internalised shame

is more likely to be a mediator in the relationship between risk factors and eating psychopathology. Thus, for the purpose of this thesis, shame-proneness will be viewed as serving a moderating role and internalised shame a mediating role in the development of eating psychopathology.

As previously noted (see Chapter 2), it is important that any potential mediating variables in the aetiology of eating psychopathology must demonstrate links with most known risk factors. Drawing on the eating disorders literature, it would appear that few studies have tested a model where shame acts as a mediator in the relationship between known risk factors and the development of eating psychopathology. However, some studies have applied a mediator model when assessing the psychological consequences of one known risk factor for eating psychopathology - sexual abuse. For example, Andrews (1997) found evidence to suggest that shame over physical appearance acted as a mediator in the relationship between childhood abuse and later eating psychopathology. However, the sample size in this study was especially small (N=9), so such conclusions are questionable. Moreover, working definitions of shame employed in this study did not correspond to the more popular notions of pathological shame described above. Thus, it is important to further explore the potential mediating role of shame in the relationship between sexual abuse and eating psychopathology.

Furthermore, within the eating disorders literature, familial factors are consistently cited as playing an important role in the development of eating psychopathology (e.g., Lacey, 1986; Strober, 1992). When considering the evidence presented in the current chapter, it would appear that many theorists are of the view that the experience of shame originates in the context of early parent-child relationships. Moreover, when considering pathological shame, both theory and research indicate that abnormal patterns of family interaction and disturbances in early parent-child relationships appear to be particularly associated with internalised shame. Thus, while

significant associations have been found between family function and eating psychopathology, and family function and shame, the nature of the relationship between these variables remains to be established. It would therefore be useful to test a mediator model where shame acted as a mediating variable in the relationship between family dysfunction and eating psychopathology.

Current model

From the conclusions outlined above, it is proposed that (pathological) shame plays an important role in eating psychopathology. Moreover, it is hypothesised that (pathological) shame is a mediating factor in the development of eating problems; i.e., that the impact of known risk factors on the development of eating disorder symptomatology is indirect, and mediated/moderated by an individual's level of (pathological) shame. Thus for the purpose of this thesis, Baron and Kenny's (1986) conceptual and statistical mediator-moderator model will be employed in an attempt to explain the development of eating problems in women. Figure 2 illustrates the general model to be tested.

When employing such a model, it is important that particular relationships between the components are first demonstrated both conceptually and, where possible, empirically (e.g., Baron & Kenny, 1986). First, it is essential that the proposed causal agent (i.e., a known risk factor) is associated with the proposed outcome or consequence (i.e., eating psychopathology). Furthermore, it is necessary that any potential candidate for the mediating role (i.e., internalised shame) is influenced by the experience of the hypothesised known risk factor (i.e., the causal agent), and is also associated with likely consequence of this risk factor (i.e., eating psychopathology). Moderator variables operate at the same level as do any causal agents (i.e., known risk factors) in this proposed model; that is, the impact of any causal agent in determining a particular outcome (e.g., eating psychopathology) is best explained by the moderating effects of other preexisting factors (i.e., shame-proneness) (e.g., Baron & Kenny, 1986). Details of the

statistical procedures used to test for mediating and moderating effects (Baron & Kenny, 1986) will be elaborated in the methods section of the following chapter (Chapter 4).

When considering the evidence outlined in Chapter 2, both theory and research indicate that the experience of factors such as family dysfunction and sexual abuse are associated with the development of eating psychopathology. Drawing on the shame literature, evidence suggests these known risk factors (i.e., family dysfunction and sexual abuse) are also significantly associated with pathological shame (i.e., shame-proneness and internalised shame). However, the nature of the relationships between these variables remains unclear. Thus, this thesis will attempt to test the utility of a mediator-moderator model, where internalised shame is a mediator, and shame-proneness a moderator, in an attempt to explain the relationship between the experience of particular known risk factors, namely family dysfunction and sexual abuse, and the development of eating psychopathology.

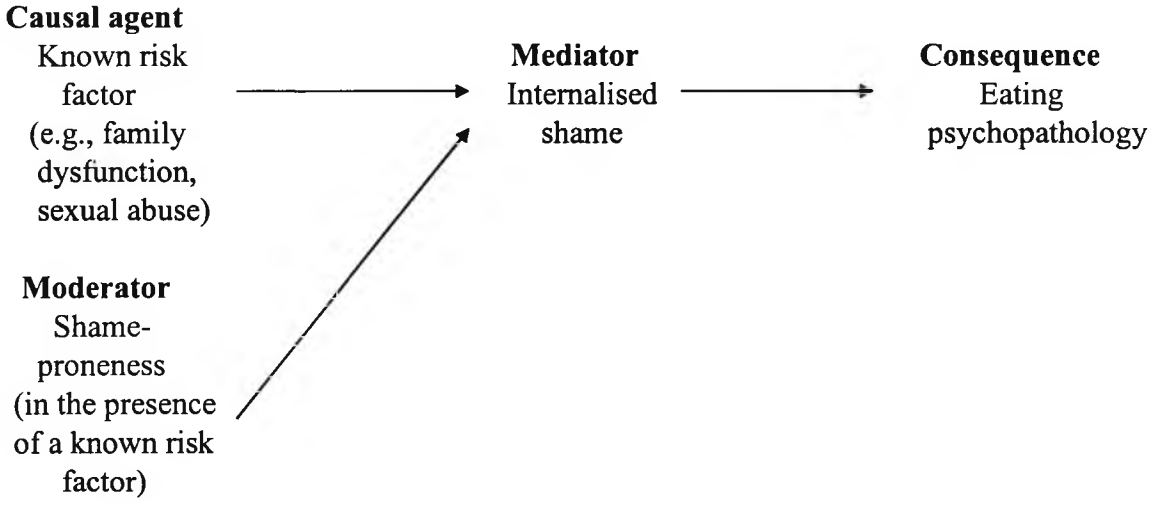

Figure 2. Application of a mediator-moderator model to explain the etiology of eating psychopathology (adapted from Baron & Kenny, 1986).

Given that those risk factors more related to the production of negative self-evaluations appear to be specifically linked to eating psychopathology (e.g., Fairburn et al., in press), and that negative self-evaluations are a central aspect of (pathological) shame, it is argued that other known risk factors might represent, hitherto ignored, potentially chronic sources of shame for some women. More specifically, it is plausible to suggest that pathological shame (i.e., internalised shame) may be one mechanism by which other known risk factors serve to influence the development of eating problems. For example, given that the experience of shame is rooted in the body, and involves a sense of exposure, it is argued that the body represents that which is directly observable and is thus a container of the defective inner self (e.g., McFarland & Baker-Baumann, 1990). As previously noted, the body is a major source of shame for many women. Moreover, it could be suggested that eating-disordered women, who are arguably high shame (i.e., shame-proneness or internalised shame) individuals will experience the body as a heightened source of shame. Thus, it is suggested that known risk factors which draw direct attention to the body and weight such as body dissatisfaction, puberty, and a previous history of being overweight, are best conceptualised as potentially chronic sources of shame for women who go on to develop eating problems.

Furthermore, other known risk factors such as peer attitudes and teasing, parental expectations and criticism, and even, possibly gender (i.e. being female) may also prove to be potential sources of shame for many women. By making a woman's body or appearance a central focus, such risk factors may serve to make the body and shape a direct source of shame for some women. Given that physical attractiveness is especially important for most women, it is argued that failures experienced in other domains of life (e.g., regarding academic performance or career) can lead to a woman feeling bad about her body and shape (e.g., Silberstein et al, 1987).

Thus, such risk factors may also indirectly heighten the sense of shame many women feel about their weight and shape.

In sum, it would appear that there are theoretically robust links between the experience of shame and a number of known risk factors for eating disorders, thereby justifying the use of a mediator-moderator model (e.g., Baron & Kenny, 1986) in an attempt to explain the etiology of eating psychopathology. Moreover, it would appear that the eating disorders literature and the shame literature would clearly benefit from increasing communication of ideas.

3.8 Aims of the current thesis:

The aims of the current thesis were threefold:

1. Employing Baron & Kenny's (1986) mediator-moderator model, the first aim was to test whether shame-proneness was a moderator, and internalised shame a mediator, in the relationship between perceptions of family dysfunction and eating psychopathology (anorexic and bulimic symptomatology). Figure 2 represents the general model to be tested in this first study.

2. Using the model noted above, and in keeping with the literature, the second aim of this thesis was to test whether internalised shame was a mediator in the relationship between unwanted sexual experience and bulimic psychopathology. Figure 3 represents the general model to be tested in this second study.

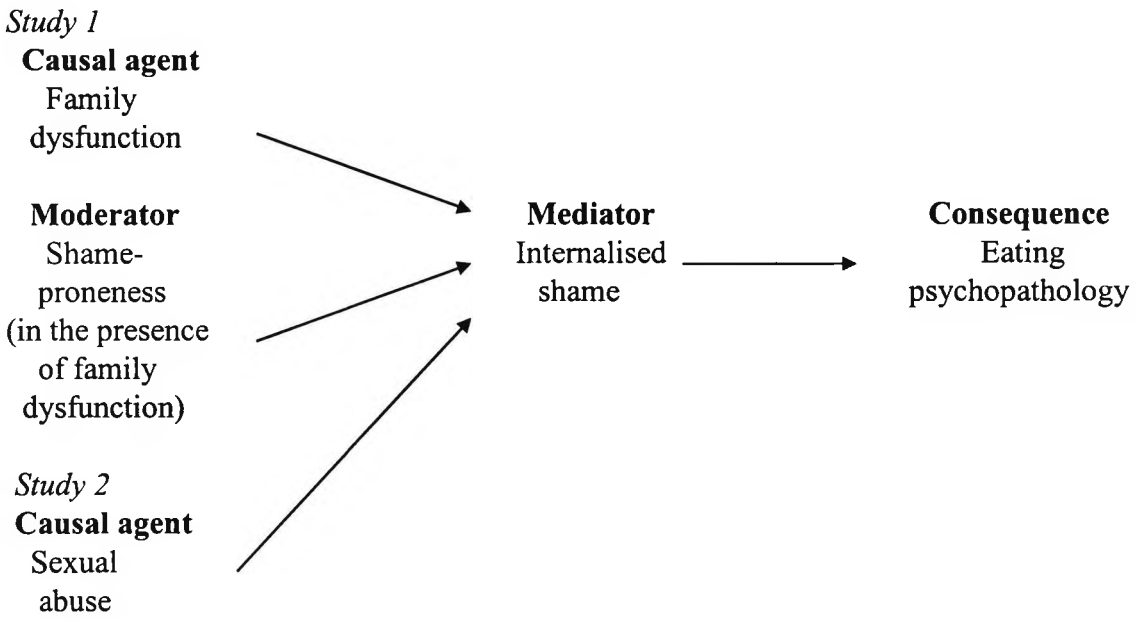

Figure 3. Application of a mediator-moderator model to test whether shame-proneness is a moderator and internalised shame a mediator in the family-eating psychopathology relationship, and whether internalised shame is a mediator in the sexual abuse-bulimic psychopathology relationship (Adapted from Baron & Kenny, 1986).

3. To further explore the relationship between family dysfunction, unwanted sexual experience, and other known risk factors, shame, and eating psychopathology by way of unstructured, open-ended interviews.

Chapter 4

Study 1: Family dysfunction and eating psychopathology: The mediating and moderating role of shame

4.1 Introduction

Within a multifactorial framework, family function is routinely cited as one factor influencing the development and course of disordered eating (e.g., Lacey, 1986; Strober, Lampert, Morrell, Burroughs, & Jacobs, 1990) (see Chapter 2 for a full review). However, the employment of a variety of conceptual models, measures and methodologies in the assessment of family function has meant findings have often been inconsistent. Moreover, in general, familial models fail to explain to explain why growing up in a dysfunctional family environment may precipitate eating problems in some women, but not in others. Thus, in line with the noted theoretical shifts in the eating disorders literature (see Chapter 2), it has been suggested that it would be more productive to examine the mechanisms by which familial factors influence eating psychopathology; that is what are the mediating factors in the family-eating relationship? (e.g., Waller & Calam, 1995). Such findings would enhance the predictive power of current familial models of aetiology.

Drawing on the emotion literature (see Chapter 3), it would seem that one potential candidate for this mediating role is shame, which researchers have suggested may play a major role in eating psychopathology (e.g., Kaufman, 1989; Silberstein, Striegel-Moore & Rodin, 1987). Furthermore, current shame theory and research indicates there is some evidence to suggest that the experience of a dysfunctional family environment increases feelings of shame, which then enhances the subsequent risk of psychological symptoms (e.g., Cook, 1994; Fossum

suggest that they do not play a substantial role. Given the conclusions reached earlier, there is justification for investigating the mediating role of shame. Moreover, this study will assess the differential role of the two constructs of pathological shame (i.e., shame-proneness and internalised shame) in the link between recalled parental style and different features of eating psychopathology.

The experience of shame originates interpersonally, and involves an awareness of how the defective/unattractive self may appear to others. There is a corresponding heightened sense of the self as an object (passive) rather than an agent (active), and as being separate from, and rejected by, others. The whole self is scrutinised and found to be lacking, and with this comes a sense of wanting to hide or conceal the self as well as feelings of powerlessness, inferiority and worthlessness (e.g., Gilbert, 1997a; Kaufman, 1989; Lewis, 1987, Tangney, Wagner & Fletcher, 1992). The experience of shame is universal; we all have the capacity to experience this emotion. However, when considering the links between shame and psychopathology, it becomes pertinent to focus on individuals who exhibit problematic levels of shame, or pathological shame (e.g., Kaufman, 1989; Lewis, 1987; Tangney et al., 1992).

Concepts of pathological shame tend to operationalise as one of two constructs - *shame-proneness* or *internalised shame*. First, *shame-proneness* is regarded as an oversensitivity to experience negative, ambiguous situations as shaming, and a tendency to experience more intense shame reactions (e.g., Lewis, 1987; Tangney, Wagner & Gramzow, 1989). Moreover, the literature suggests that innate (i.e. genetic) factors might play a role in the construction of dispositional shame-proneness (e.g., Lewis, 1987; Gilbert, 1998). Second, *internalised shame* is defined as the result of chronic exposure to shameful situations over time such that an individual's identity becomes associated with feelings of worthlessness and inferiority (Cook, 1991; Kaufman, 1989). Thus, theories of internalised shame are largely environmentally based;

that is, internalised shame arises as a direct result of experiential factors (e.g., Kaufman, 1989,1992). Most the literature on these two constructs has treated them as independent. Future research should consider their intercorrelation in order to determine whether or not they are truly independent constructs.

When considering the development of pathological shame, it is argued that the greatest potential for shame's disruptive consequences arises from socialisation experiences with significant others - in particular, within the context of the family environment (e.g., Ferguson & Stegge, 1995; Kaufman, 1989). Dysfunctional patterns of family interaction (characterised by belittling/humiliating other family members and little or no expression of warmth and affection) are regarded in the literature as "shame-bound" systems (Fossum & Mason, 1986). In particular, it is argued that chronic exposure to such shameful situations during development leads to internalised shame where an individual's identity becomes associated with feelings of inferiority, incompetence, unworthiness and self-contempt (Cook, 1991; Ferguson & Stegge, 1995; Kaufman, 1992). There is some evidence to confirm this view. For example, employing the Parental Bonding Instrument (PBI; Parker, et al., 1979) and the Internalised Shame Scale (ISS), Cook (1994) found that perceptions of an insufficiency of parental care and high levels of parental overprotection (intrusiveness and control) were associated with increased levels of internalised shame, in both clinical and non-clinical samples. However, many individuals experience dysfunctional backgrounds without developing problematic levels of eating or internalised shame. Therefore, it might be argued that the impact of family function upon eating can only be understood in the context of an existing characterological predisposition to experience shame (i.e., shame-proneness); that is, shame-proneness might be best conceptualised as a moderator variable in the relationship between family function and eating psychopathology (e.g., Baron & Kenny, 1986).

Recent research implicates shame as a major contributing factor in eating psychopathology (eg., Cook, 1994). Moreoever, the eating disorders literature contains numerous references to feelings of shame (eg., Boskind-Lahl & White, 1978; Frank, 1991; Silberstein, Striegel-Moore & Rodin, 1987). Furthermore, Rosen (1992) argues that eating-disordered women process all information regarding self-worth in terms of body size and shape, and thus succumb to a more shame-like style of thinking (eg., "Because I'm fat people don't like me").When considering current notions of pathological shame, both shame-proneness and internalised shame have been shown to be separately associated with anorexic and bulimic psychopathology (e.g., Cook, 1994; Sanftner, Hill, Barlow, Marschall & Tangney, 1995; Silberstein et al, 1987). To summarise, the evidence suggests that shame is a particularly prominent emotion among women exhibiting eating problems. However, this research has tended to focus on the construct of internalised shame. Much less work has addressed the potential role of the characterological variable of shame-proneness.

In light of these conclusions, the aim of the present study is to test whether internalised shame is a mediator in the relationship between family function and eating psychopathology in a non-clinical group of women. Previous research has shown bivariate correlations between patterns of family interaction and shame (e.g., Cook, 1994), shame and eating (e.g., Cook, 1994; Sanftner et al., 1995; Silberstein, Striegel-Moore & Rodin, 1987), and patterns of family interaction and eating (e.g., Strober, 1992; Waller, 1994). However, the nature of the relationship between these three variables remains to be elucidated. It is predicted that higher levels of reported family dysfunction will be associated with eating psychopathology, and that this relationship will be moderated by high levels of shame-proneness, and mediated by internalised shame. Figure 4 illustrates the model be tested in Study 1.

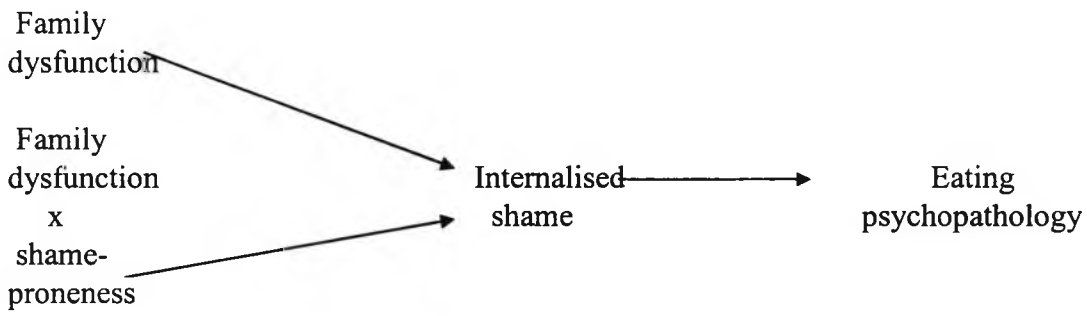

Figure 4. Proposed model of the aetiology of eating psychopathology (adapted from Baron & Kenny, 1986).

4.2 Method

Participants

Two hundred female undergraduates were randomly selected from records held at a university hall of residence. All the women were sent a letter (see Appendix 2) inviting them to take part in a study of eating attitudes and behaviour in college students, together with a questionnaire booklet and a self-addressed envelope (see Appendix 1). The questionnaire booklet contained an assessment of demographic factors (e.g., age), and a selection of measures assessing perceived relationships with parents, anorexic psychopathology, bulimic psychopathology, and reported shame feelings (i.e., shame-proneness and internalised shame).

The women were instructed to complete the questionnaire booklet and return it in the enclosed envelope to the hall of residence reception within seven days, where it would be collected by the researcher. Evidence from epidemiological studies suggests that there is a reluctance to report eating psychopathology (e.g., Halmi, Falk, & Schwartz, 1981; Strangler & Prinz, 1980). Thus, participants in the present study were informed that their responses were anonymous and would be completely confidential. Two weeks after the women were initially

invited to participate in the research, those women who had not yet completed and returned their questionnaire booklet were sent a chase-up letter (see Appendix 3).

One hundred and thirty-nine women agreed to take part, representing a response rate of 70%. In general, non-respondents (N = 61) tended to report a lack of time, rather than the presence of any eating problems, as the reason why they did not want to participate in the research. The mean age of the participants was 21.0 years (SD = 2.75; range = 18 to 34).

4.3 Measures

The questionnaire booklet consisted of five measures. Perceived relationships with parents was assessed using **The Parental Bonding Instrument** (**PBI**; Parker, Tupling & Brown, 1979). In keeping with the literature and the hypotheses, shame was treated as two constructs-shame-proneness (a characterological trait) and internalised shame (the immediate experience). Shame-proneness was assessed using the "shame-proneness" scale of the **Test of Self-Conscious Affect** (**TOSCA**; Tangney, Wagner & Gramzow, 1989), and internalised shame was measured using the **Internalised Shame Scale** (**ISS**; Cook, 1994). The **Eating Attitudes Test-40** (**EAT-40**; Garner & Garfinkel, 1979) was employed to measure reported levels of anorexic psychopathology and **The Bulimia Test** (**BULIT**; Smith & Thelen, 1984) assessed reported bulimic psychopathology.

4.3.1 The Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979).

The PBI (see Appendix 1) is a 25-item measure and assesses an individual's perception of the relationship with each parent in the first 16 years of their life. For each item, participants are asked to rate their parents, each separately, on a four-point scale (1 = "Very like" to 4 = "Very unlike"). The items assess two bi-polar aspects of the parent-child relationship - care and protection. The care scale has 12 items (possible range of scores: 12-48) and involves one pole defined by perceptions of warmth, affection, and empathy (high care), and the other by

perceptions of emotional coldness, indifference and neglect (low care). Examples of items from the care scale include: "Spoke to me with a warm and friendly voice"; "Made me feel I wasn't wanted". The protection scale has 13 items (possible range of scores: 13-52) and involves one pole defined by perceptions of control, overprotection, intrusion, and prevention of independent behaviour (high protection), and the other by items that suggest allowance of independence and autonomy (low protection) (e.g., Parker, Tupling, & Brown, 1979). Examples of items on the protection scale include: "Let me decide things for myself"; "Tried to make me dependent on her/him". Four overall scores are obtained: perceptions of the level of care in the mother-child, and the father-child relationship, and perceptions of the level of protection in the mother-child, and the father-child relationship.

The PBI was developed as a bonding instrument, and allows for the following possible types of parental bonding to be examined: "optimal bonding" (characterised by high care-low overprotection), "absent or weak bonding" (characterised by low care-low overprotection), "affectionless constraint" (characterised by high care-high overprotection), and "affectionless control" (characterised by low care-high overprotection) (e.g., Parker, Tupling & Brown, 1979).

Reliability and validity

Reliability of the PBI was established using the test-retest, split-half, and inter-rater methods. First, to establish test-retest reliability, 17 members of the original (N = 148) nonclinical sample completed the questionnaire on two occasions three weeks apart. A Pearson's r correlation coefficient of .76 ($p < .001$) was obtained for the "care" scale, and .63 ($p < .001$) for the "protection" scale. The scale was also halved in order to determine a measure of split-half reliability. A Pearson's r correlation coefficient of .88 ($p < .001$) was obtained for the "care" scale, and .74 ($p < .001$) for the "protection" scale (e.g., Parker, Tupling & Brown, 1979).

Two raters jointly interviewed 65 of the original sample, and then independently assigned a 'care' and 'protection' score for each parent. The inter-rater reliability coefficient for the "care" scale was .85 ($p < .001$) and .69 ($p < .001$) for the "protection" scale. In order to establish the concurrent validity of the "care" and "protection" scales, the raters' scores of these two scales obtained at interview were correlated with those determined by the questionnaire scales. The Pearson's r correlation coefficients obtained for the two "care" measures were .77 ($p < .001$) for rater 1, and .78 ($p < .001$) for rater 2, and for the two "protection" scores were .48 ($p < .001$) for rater 1 and .50 ($p < .001$) for rater 2 (e.g., Parker, Tupling & Brown, 1979). In sum, the PBI has been found to have acceptable reliability and validity, and is an appropriate tool for assessing individuals perceptions of their relationships with their parents.

The PBI has been used extensively in studies of a variety of psychiatric disorders, and has been found to discriminate between neurotic and control populations in a way which is predictable and theoretically consistent as reviewed by Parker (1983). For example, Parker (1983) reported that neurotic participants tend to produce high protection and low care scores relative to normal controls. Furthermore, the responses of general population samples drawn from both the UK and Australia are remarkably consistent, showing little variation with age or social class (e.g., Parker, 1983).

When considering groups of eating-disordered women, similar results have been found. The PBI has been used to successfully distinguish between eating-disordered and non-eating disordered women, and to differentiate diagnostic groups (e.g. Calam, Waller, Slade & Newton, 1990; Palmer, Oppenheimer & Marshall, 1988). In general, the findings suggest that low parental care and high paternal protection distinguish eating-disordered from comparison women (e.g., Waller & Calam, 1994). This pattern of differences appeared to be most true for bulimics

(particularly those with no history of anorexia), who reported particularly low levels of parental care (e.g., Calam et al., 1990).

4.3.2 The Test of Self-Conscious Affect (TOSCA; Tangney, Wagner, & Gramzow, 1989).

The TOSCA (see Appendix 1) consists of a series of brief scenarios (10 negative and 5 positive) and associated responses, yielding indices of shame-proneness, guilt-proneness, externalization, detachment/unconcern, alpha pride, and beta pride. For the purposes of the present study, only the shame-proneness scale of the TOSCA was employed. Participants are asked to indicate on a five-point scale (1 = "Not likely" to 5 = "Very likely") how they would react to each of the 15 scenarios. Examples of items include: " While playing around, you throw a ball and it hits your friend in the face" , with the corresponding shame response being "You would feel inadequate that you can't even throw a ball". This scale yields one overall score (possible range:15-75) of reported shame-proneness. A high score reflects a high level of shame-proneness (i.e., an oversensitivity to experience ambiguous, negative events as shame-inducing), which is more likely to be associated with psychological symptoms. In the present study, this scale of the TOSCA was found to have an internal consistency (Cronbach's alpha) of 0.75.

Reliability and validity

The TOSCA was modelled after the Self-Conscious Affect and Attribution Inventory (SCAAI; Tangney, Burggraf, Hamme & Domingos, 1988), also a scenario-based measure of characteristic affective, cognitive, and behavioural responses associated with shame, guilt, externalisation of blame, detachment/unconcern, and pride (e.g., Tangney et al., 1988). Previous studies have presented data supporting the reliability and construct validity of the central scales of the SCAAI (e.g., Tangney, 1990; Tangney et al., 1988). However, in contrast to the SCAAI where the items were researcher-generated, the TOSCA consists of an entirely new set of scenarios which were drawn from written accounts of personal shame, guilt, and pride

experiences, provided by a large sample of several hundred undergraduate students, and adults not attending university. According to Tangney et al., (1992) the use of participant-generated items is likely to enhance the ecological validity of the TOSCA. Furthermore, a new set of responses were also drawn from a larger pool of affective, cognitive and behavioural responses provided by a new sample of undergraduate students.

Given that theoretically, the construct of shame-proneness is associated with psychological maladjustment, and has been implicated in various forms of psychopathology (e.g., Tangney et al., 1988), construct validity of the TOSCA was determined by the assessment of the association between scores on this measure and scores on measures of a variety of psychological symptoms (e.g., Tangney et al., 1992). Findings from a nonclinical student sample (N = 234) who were administered the TOSCA, the Symptom Checklist 90 (SCL-90; Derogatis, Lipman, & Covi, 1973), the Beck Depression Inventory (BDI; Beck, 1972) and the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch & Lushene, 1970) demonstrated that shame-proneness (as measured by the TOSCA) was consistently associated with a range of symptom clusters ($p < .01$ in all cases).

In order to determine the internal reliability of the TOSCA it was administered to a sample of 234 undergraduate students, and estimates of internal consistency (Cronbach's alpha) were computed for the shame-proneness and guilt-proneness subscales. For the shame-proneness subscale, the reliability coefficient was found to be .76, and for guilt-proneness it was .66 (e.g., Tangney, Wagner & Gramzow, 1992). Thus, the above data suggest that the shame-proneness subscale of the TOSCA has satisfactory internal reliability.

Previous studies using the TOSCA have found shame-proneness to be associated with eating disorder symptomatology (e.g., Sanftner, 1995; Srikameswaran & Goldner, 1997).

4.3.3 The Internalised Shame Scale (ISS; Cook, 1994).

The ISS (see Appendix 1) consists of 30 items. Twenty-four items incorporate phenomenological descriptions of internalised shame, and are negatively worded. The remaining six items are positively worded "self-esteem" items. The ISS "shame score" (possible range: 0-96) is derived from only the 24 negatively worded items. Examples of these items include: " I feel as if somehow I am defective as a person, like there is something basically wrong with me", " I think others are able to see my defects". Participants indicate on a four-point scale (0 = "Never" to 4 = "Almost always") the frequency with which they have such feelings. A score of 50 on the ISS reflects possibly problematic levels of internalised shame. High scores reflect high levels of internalised shame, which are more likely to be associated with psychopathology (Cook, 1994).

Reliability and validity

The ISS has been found to be a reliable and valid measure for assessing individual levels of internalised shame in both clinical and nonclinical samples. The ISS is based on a conceptual framework which views shame as the quintessential emotion in psychopathology. Moreover, this scale is designed to measure the extent to which shame has become internalised into one's sense of self, thereby increasing the risk of a variety of psychological symptoms (e.g., Cook, 1994). Thus, given that the ISS is essentially measuring feelings about the self, Cook (1994) hypothesises that the ISS is likely to converge with measures of global self-esteem and self-concept. Empirical evidence appears to support this view, with findings from a number of clinical and nonclinical student samples demonstrating significant associations between the ISS and a variety of scales assessing global self-esteem (or self-concept). For example, in a sample of in-patient psychiatric males (N = 85), the ISS correlated -.74 ($p < .001$) with the Rosenberg Self-Esteem Scale (Rosenberg, 1965) (e.g., Cook, 1994). Furthermore, in a sample of 113 female

undergraduate students, the ISS correlated .79 ($p < .001$) with the Ineffectiveness Scale of the Eating Disorders Inventory (EDI; Garner, 1991). Thus, Cook (1994) concludes that the ISS is measuring the negative affective-cognitive components of global self-esteem which would be identified more specifically as internalised shame. However, Cook (1994) proposes that, from a psychometric viewpoint, the ISS can be differentiated from self-esteem measures on two bases. First, items on the ISS consistently emphasise only negative feeling and cognitive states, whereas almost all self-esteem measures include items indicative of positive feelings about the self. Second, in contrast to most self-esteem scales, the ISS employs particularly high-intensity wording to describe negative feelings states that are associated with internalised shame. Thus, while demonstrating a substantial degree of overlap, it is possible to differentiate the ISS from self-esteem measures (e.g., Cook, 1994).

Further validity of the ISS was established by assessing its degree of convergence with various measures of psychopathology administered to both clinical and nonclinical samples. For example, Cook (1994) compared scores on the ISS with scores from the Brief Symptom Checklist, the 50-item version of the SCL-90 (Derogatis, 1992a), administered to 336 adult outpatient psychotherapy patients. Scales on the SCL-50 are identical to those on the SCL-90. Correlations between all scales on the SCL-50 and the ISS ranged from .45 to .74 ($p < .01$ in all cases), suggesting a relationship between internalised shame and psychopathology. Allan, Gilbert & Goss (1994) compared scores on the ISS with scores on the Beck Depression Inventory (BDI; Beck & Steer, 1987) in a sample of British undergraduate students. The correlation between these scores was found to be .72 ($p < .0001$). These data suggest that the ISS is a valid measure of the negative affectivity (i.e., shame) known to be associated with various psychological symptoms in nonclinical populations (e.g., Cook, 1994).

Validity of the ISS was further confirmed by comparison of combined ISS scores from a large sample of clinical subjects in several different diagnostic categories (N = 506) with those from a nonclinical college student sample (N = 514). The respective means for these two groups on the ISS were 51.1 (SD = 19.9) and 33.9 (SD = 15.5) respectively. This difference was found to be highly significant, as demonstrated by a one-way ANOVA ($F = 234.8$; $p < .001$). These findings further confirm that increased levels of internalised shame are associated with various forms of psychopathology.

Reliability data were obtained by combining a number of different clinical samples (e.g., individuals with a diagnosis of alcohol dependence, depression, eating disorders, PTSD and anxiety (N = 370)), and a nonclinical sample of undergraduate and graduate students (N = 645). Internal consistency of the 24 shame items of the ISS was established by obtaining alpha reliabilities based on scores from both these clinical and nonclinical samples. The item-total correlations (based on the correlation of the item score with the total score for all remaining items) for the nonclinical group ranged from .56 to.73, with a median correlation of .63. For the clinical group, item-total correlations were in the range of .52 to .82, with a median correlation of .70. The alpha reliability coefficients for the nonclinical and clinical groups were .95 and .96 respectively. Thus, internal consistency of the ISS was found to be high. Employing the test-retest method, reliability for the shame items of the ISS was determined by its administration to a subset of 44 graduate students from the original nonclinical sample after an interval of seven weeks. The reliability correlation coefficient obtained was .84 ($p < .0001$). These findings substantiate that the ISS is a reliable measure of internalised shame, as defined by the 24 shame items. Moreover, this scale is appropriate for use on a student population.

The ISS has been used in a number of clinical and non-clinical studies, showing significant associations between levels of internalised shame and degree of disordered eating (e.g., Cook, 1994; Reynolds, 1991).

4.3.4 The Eating Attitudes Test-40 (EAT-40; Garner & Garfinkel, 1979).

The EAT-40 (see Appendix 1) contains 40 items assessing eating attitudes and behaviour most characteristic of anorexic symptomatology. For each item participants are asked to indicate on a 6-point scale ("Never" to "Always") the response which is most like them. Examples of items include: " Prepare foods for others, but do not eat what I cook"; "Am terrified of being overweight". The most 'symptomatic' response for each item receives a score of 3 points, while the adjacent, non-extreme alternative responses receive a score of 2 points and 1 point respectively. No score was given to 'non-anorexic' responses. In addition to yielding an overall score reflecting general attitudes to eating, the EAT-40 contains three subscales measuring specific dimensions of anorexic symptomatology (dieting, bulimia and food preoccupation, and oral control) (e.g., Garner, Olmsted, Bohr & Garfinkel, 1982). The aim of the present study was to assess the degree of association between the EAT-40 and other family, shame and eating psychopathology measures. Thus, a modified version of this scale was employed consisting of five response categories (i.e., "Never", "Rarely", "Sometimes", "Very Often", and "Always") in order to increase the likelihood of higher scores, and thereby enhance potentially existing patterns of associations. In the present study, this modified version of the EAT-40 was found to have an overall internal consistency coefficient (Cronbach's alpha) of .88. Reliability coefficients (Cronbach's alpha) were also computed for the dieting, bulimia and food preoccupation, and oral control subscales of this measure, and were found to be .87, .77, and .70 respectively.

Reliability and validity

The EAT has been shown to be an objective and valid measure of symptoms frequently observed in anorexia nervosa. For example, a crucial component of test validity for measures of psychopathology is the determination of the test's predictive ability (e.g., Garner & Garfinkel, 1979). Thus, the EAT-40 was administered to independent samples of women suffering from anorexia nervosa (N = 33) and normal control women with no known eating disorder. Correlating the total score on this scale with these groups, a validity coefficient of .87 ($p < .0001$, biserial correlation) revealed that the EAT-40 was a good predictor of group membership. Further validity of the items on the EAT-40 was determined by assessing the degree to which item scores were predictive of group membership. Thirty-eight of the items were significant predictors of group membership ($p < .01$ in all cases). The remaining 2 items failed to significantly predict group membership. However, these items were retained as it was felt they were clinically relevant to anorexia nervosa. In light of the above findings, the EAT-40 appears to be a valid measure of anorexic symptomatology (e.g., Garner & Garfinkel, 1979).

Discriminant validity of the EAT-40 was determined by it's further administration to two independent samples of male (N = 49) and obese (N = 16) participants. Combining mean scores from the cross-validation samples of women with anorexia nervosa and normal controls, and the male and obese participants, a one-way ANOVA revealed significant group differences, with the women with anorexia nervosa demonstrating the highest EAT-40 scores ($F = 190.04$; $p < .001$). Thus, from these data, the EAT-40 appears to measure symptoms specific to anorexia nervosa (e.g., Garner & Garfinkel, 1979).

Internal consistency of the EAT-40 was established by computing a reliability (Cronbach's alpha) coefficient for the sample of anorexia nervosa patients and the pooled sample of this clinical group and the normal control participants. For the anorexia nervosa participants

the coefficient was .79, and for the normal control sample the *alpha* was .94. Thus, the EAT-40 demonstrates a high level of internal consistency (e.g., Garner & Garfinkel, 1979).

In a later assessment of the psychometric characteristics of the EAT-40 with a large sample of female anorexia nervosa (N = 160) and non-clinical female undergraduate participants (N = 140), factor analysis (employing an oblique rotation) extracted three factors, accounting for 40.2% of the variance (e.g., Garner, Olmsted, Bohr & Garfinkel, 1982). Items loading on the first factor, termed 'dieting', relate to an avoidance of fattening food and a preoccupation to be thinner. The second factor labelled 'bulimia and food preoccupation' consisted of items reflecting thoughts about food as well as those indicating bulimic attitudes and behaviours. The third factor was termed 'oral control', and items loading on this factor related to self-control of eating and the perceived pressure from others to lose weight (e.g., Garner et al, 1982). The 'dieting' and 'bulimia and food preoccupation' factors are considered to be polar opposites and appear to reflect the desire to restrict food intake found in all patients, and certain bulimic attitudes and behaviour experienced by a specific subgroup of women suffering from anorexia nervosa (e.g., Garner et al., 1982). Internal consistency of these subscales was established by computing a reliability (Cronbach's alpha) coefficient for the same anorexia nervosa and normal comparison participants. For the 'dieting' subscale the *alpha* was .90 for the clinical group, and .86 for the normal comparison sample. For the 'bulimia and food preoccupation' subscale, the coefficient was .84 for the anorexia nervosa sample and .61 for the female comparison group. The 'oral control' subscale demonstrated an *alpha* of .83 and .46 for the clinical and nonclinical groups respectively. Thus, these three subscales demonstrate acceptable internal consistency (e.g., Garner, Olmsted, Bohr & Garfinkel, 1982). In order to determine the discriminant validity of these three subscales, independent t-tests were carried out on mean scores from the anorexia nervosa and female comparison samples. Significant differences were found between the two

groups on all three subscales ($p < .0001$ in all cases), with the highest scores found in the clinical group (e.g., Garner et al, 1982). To summarise, while the total EAT-40 score represents a valid measure of general anorexic symptoms, the three subscales of the EAT-40 appear to be reliable and valid measures of specific features of anorexic psychopathology (e.g., Garner et al., 1982).

The EAT-40 has been a widely used measure within the field of eating disorders research. For example, it has been used as a screening instrument for identifying previously undiagnosed cases of anorexia nervosa in populations at high risk for the disorder, such as ballet students (e.g., Garner & Garfinkel, 1980). Furthermore, studies employing samples of undergraduate students have demonstrated that the EAT-40 can be used to identify college women with abnormal concerns with eating and weight (e.g., Button & Whitehouse, 1981; Thompson & Schwartz, 1982). Thus, the EAT-40 is an appropriate measure for use with the present sample of undergraduate women.

4.3.5 The Bulimia Test (BULIT; Smith & Thelen, 1984).

The BULIT (see Appendix 1) is a 32-item, self-report, multiple-choice scale designed to assess the symptoms of bulimia nervosa as defined by DSM-III (American Psychiatric Association, 1980) criteria. Examples of items include "Do you ever eat to the point of feeling sick?" and "Do you believe that it is easier for you to vomit than it is for most people?". Each item requires the participant to select, out of a choice of five responses, that which is most appropriate to herself. The BULIT yields one overall score (possible range: 32-160) of degree of bulimic attitudes and behaviour. High scores reflect higher levels of bulimic psychopathology.

Reliability and validity

The BULIT has been shown to be a reliable and valid measure by which to identify individuals with symptoms of bulimia nervosa (e.g., Smith & Thelen, 1984). For example, cross-validation was performed on independent samples of bulimic (N= 20) and normal control (N=

94) subjects. An overall validity coefficient was obtained by correlating total scores for the 32 items with group membership ($r = .82$, $p < .0001$, point biserial correlation). Thus, the BULIT was found to be a good predictor of group membership for these samples (e.g., Smith & Thelen, 1984). The same bulimic and normal control samples noted above were also administered the Binge Scale (a measure of bingeing behaviour) (Hawkins & Clement, 1980) and the EAT (a measure of anorexic attitudes and behaviour) (Garner & Garfinkel, 1979) in an attempt to establish the BULIT's construct and discriminant validity. Scores on the BULIT were found to be significantly associated with Binge Scale scores (Pearson's $r = .93$, $p < .0001$). This would suggest that these two scales are based on similar underlying constructs (e.g., Smith & Thelen, 1984). Scores on the EAT were also significantly associated with BULIT scores (Pearson's $r = .68$, $p < .0001$). However, this lower correlation coefficient would suggest that the EAT and the BULIT are tapping overlapping, but not identical, constructs (e.g., Smith & Thelen, 1984).

Given that the BULIT was initially designed, in part, to identify bulimic individuals in the general population, further validation of this scale was established by its administration to a sample of nonclinical undergraduate women (N= 652). Once again, scale scores were predictive of diagnosis (a score of 102 or above places an individual in the bulimic category), as judged on the basis of independent clinical interviews ($r = .54$; $p < .0001$, point-biserial correlation) (Smith & Thelen, 1984). This would suggest that the BULIT is a valid measure for identifying individuals in the general population who are at risk for, or suffering from, bulimia nervosa.

Employing the test-retest method, reliability of the BULIT was determined by its administration to 69 (22 who had initially scored in the bulimic range, and 47 who had scored in the normal range) of the original 652 subjects in the above nonclinical sample. Retesting took place about 2 months later, and the reliability coefficient (Pearson's r) was found to be .87 ($p < .0001$) (e.g., Smith & Thelen, 1984). Thus, these findings demonstrate that the BULIT is a valid

and reliable measure by which to identify individuals in both clinical and nonclinical samples with symptoms of bulimia (e.g., Smith & Thelen, 1984). More specifically, given the sample in the present study, these and other findings demonstrate that the BULIT is appropriate for use with a student population of women (e.g., Smith & Thelen, 1984; Wertheim, 1989).

4.4 Results

Data analysis.

Initially, correlations (Pearson's r) were used to determine the patterns of associations between measures of family function (PBI), shame (ISS, TOSCA) and eating psychopathology (EAT-40, BULIT).

Moderating effects of shame-proneness

To determine whether the relationship between perceptions of dysfunctional family and eating psychopathology is moderated by shame-proneness, the product term (i.e. family function x shame-proneness) is included in the regression equation (where eating psychopathology is the dependent variable, and family function and shame-proneness the independent variables). While significant main effects may be found for family function and shame-proneness, moderator effects are only indicated if the product term is significant (Baron & Kenny, 1986).

Mediating effects of internalised shame

To determine whether the relationship between perceptions of family dysfunction and eating psychopathology is mediated by internalised shame, three regression equations must be conducted, and the following conditions must hold (Baron & Kenny, 1986). First, the relationship between perceptions of disturbed family function and eating psychopathology must be significant. Second, the relationship between perceptions of disturbed family function and internalised shame must be significant. Finally, when internalised shame is included in the first regression equation, the relationship between disturbed family function and eating

psychopathology should be either no longer significant or weakened. If the relationship between family dysfunction and eating psychopathology is no longer significant, internalised shame is said to be a perfect mediator. Alternatively, if the relationship between family dysfunction and eating psychopathology is only weakened, internalised shame is said to be an imperfect mediator. To avoid problems with multicollinearity between the independent (i.e. family dysfunction) and mediating variables (i.e. internalised shame), it is crucial to examine both the significance and the absolute size of the regression coefficients (e.g., Baron & Kenny, 1986).

Descriptive statistics.

The means and standard deviations for all scales used in the study are illustrated in Table 4.

Table 4. Means and standard deviations for scales assessing family dysfunction, shame-proneness, internalised shame, anorexic psychopathology, and bulimic psychopathology.

Measure	X	SD
Maternal Care (PBI)	27.48	8.59
Maternal Protection (PBI)	14.13	8.59
Paternal Care (PBI)	25.53	8.72
Paternal Protection (PBI)	13.22	8.44
Shame-proneness (TOSCA)	43.30	8.40
Internalised Shame (ISS)	34.80	19.50
EAT-40[a] (total)	24.55	14.41
dieting (EAT-40)	10.24	7.66
bulimia (EAT-40)	2.46	3.08
oral control (EAT-40)	3.84	3.24
BULIT	61.21	20.35

PBI = Parental Bonding Instrument (Parker, Tupling & Brown, 1979)
TOSCA = Test of Self-Conscious Affect (Tangney et al., 1989)
ISS = Internalised Shame Scale (Cook, 1994)
EAT-40[a] = modified version of the Eating Attitudes Test-40 (Garner & Garfinkel, 1979)
BULIT= The Test for Bulimia (Smith & Thelen, 1984).

The mean scores for the care and protection scales of the PBI (possible range: "Care" = 12-48; "Protection" = 13-52) were in line with those previously reported for non-clinical samples of college women (e.g., Calam et. al., 1990; Kent & Clopton, 1992). Comparative data for the shame-proneness scale of the TOSCA (possible range = 15-75) are not currently available. Mean scores for the ISS (possible range 0-96) matched those previously quoted for similar populations (e.g., Cook, 1994). Given that a modified version of the EAT (possible range 0 - 120) was employed in the present study, any comparison of the mean scores to those previously cited in the literature is not appropriate here. The mean scores for the BULIT (possible range 32-160) corresponded with those previously noted for non-clinical samples of female undergraduates (e.g.,Wertheim, 1989). Due to a high degree of skewness, a logarithm (LOG_{10}) of the BULIT scores was used to normalise the distribution of those scores for subsequent analyses.

Preliminary analyses: Associations between individual variables

Pearson correlations were calculated for all links in the proposed model. In order to reduce the likelihood of a Type 1 error, a Bonferroni t test was applied, and the accepted probability was adjusted to 0.001 level of significance. Table 5 shows the results of these correlation analyses.

Table 5. Correlations between measures of family function (PBI), shame-proneness (TOSCA), internalised shame (ISS), anorexic psychopathology (EAT-40) and bulimic psychopathology ($BULIT_{Log10}$).

	BULIT $_{(log10)}$	EAT-40 (total)	Dieting (EAT-40)	Bulimia (EAT-40)	Oral control (EAT-40)	Shame-proneness (TOSCA)	Internalised shame (ISS)
Maternal Care (PBI)	-.14	-.18	-.16	-.09	-.14	-.11	-.37***
Maternal Protection (PBI)	.16	.29***	.19	.13	.29***	.22	.40***
Paternal Care (PBI)	-.18	-.17	-.08	-.10	-.24	-.10	-.41***
Paternal Protection (PBI)	.19	.32***	.26	.19	.29***	.29***	.45***
Shame-proneness (TOSCA)	.11	.24	.21	.22	.19	1.00	.53***
Internalised shame (ISS)	.45***	.49***	.41***	.41***	.26	.53***	1.00

Note. PBI = Parental Bonding Instrument; BULIT = the Test for Bulimia; EAT-40 = Eating Attitudes Test (modified); TOSCA = Test of Self-Conscious Affect; ISS = Internalised Shame Scale.
*** $p < .001$

Bulimic (BULIT) and anorexic (EAT-40 total) symptomatology were significantly associated with internalised shame (ISS), but not shame-proneness (TOSCA) ($p < .001$ in both cases).The bulimia and dieting subscales of the EAT-40 were reliably associated with the ISS (internalised shame), but not the TOSCA (shame-proneness) ($p < .001$ in both cases). The oral control subscale of the EAT-40 was not associated with either of the shame scales (ISS and TOSCA). These findings support the reported link between internalised shame and eating

psychopathology (e.g.,Cook, 1994), but do not support previous studies demonstrating a link between shame-proneness and disordered eating attitudes and behaviour (e.g., Sanftner et al, 1995). Thus, these results confirm the need to consider both constructs of shame (i.e. internalised shame and shame-proneness) when assessing its relationship with eating psychopathology.

Considering the relationship between family function (PBI) and eating psychopathology, BULIT scores showed no association with any of the family factors (maternal and paternal PBI scores). Higher levels of general anorexic symptomatology (EAT-40 total) were significantly related to perceptions of high maternal and paternal protection ($p < .001$ in both cases). With regards to specific features of anorexic psychopathology, higher levels of oral control (EAT-40) were significantly correlated with perceptions of high maternal and paternal protection ($p < .001$ in both cases). Dieting and bulimia (EAT-40) scores were not related to any of the family factors (maternal and paternal PBI scores). These findings support the hypothesised model, suggesting that high parental overprotection characterises the family environment of women exhibiting anorexic psychopathology (e.g., Calam et al., 1990). However, the results do not support previous studies demonstrating a link between perceived parental control and bulimic psychopathology (e.g., Calam et al., 1990).

Significant intercorrelations were found between the care and protection scales of the PBI. Paternal care was inversely associated with paternal protection ($r = -.56$, $p < .001$), and maternal care was inversely correlated with maternal protection ($r = -.55$, $p < .001$). These intercorrelations confirm previous findings that when considering levels of psychopathology, perceived insufficiency of parental care is associated with perceived parental overprotection (e.g., Parker, 1983). Significant intercorrelations were also found between the maternal and paternal care scores ($r = .55$, $p < .001$), and the maternal and paternal protection scores ($r = .83$, $p < .001$). Such intercorrelations between the maternal and paternal scales of the PBI suggest that these data

are collinear. Thus, to avoid problems of multicollinearity in subsequent regression analyses, maternal and paternal scores were analysed separately.

Associations were also found between the PBI scales and the two shame scales. The ISS was significantly associated with perceptions of low paternal and maternal care ($p < .001$ in both cases), and high paternal and maternal protection ($p < .001$ in both cases). The shame-proneness scale of the TOSCA was only significantly associated with perceptions of high paternal protection ($p < .001$). This pattern confirms the previously noted link between shame and family dysfunction (e.g., Cook, 1994), and also suggests that it is important to consider the different constructs of shame when assessing it's relationship with perceptions of family dysfunction.

Internalised shame (ISS) was found to be significantly related to shame-proneness (TOSCA) ($p < .001$). This suggests that shame-proneness (TOSCA) is directly contributing to the variance in internalised shame (ISS). Furthermore, all the family factors (maternal and paternal PBI scores) were highly significantly associated with the proposed mediator (i.e., internalised shame) in the current model. That is, both family factors and shame-proneness were independently directly associated with internalised shame. Thus, the present pattern of results suggests that the impact of family dysfunction on internalised shame is unlikely to moderated by the characterological variable of shame-proneness (Baron & Kenny, 1986). Further supplementary analyses were carried out in order to clarify this point.

In sum, all the PBI subs-scales (maternal and paternal care and protection) were significantly associated with internalised shame (ISS), and internalised shame was related to both scales measuring dimensions of eating psychopathology (BULIT, EAT-40). In order to adopt Baron & Kenny's approach to testing for mediation, it is necessary that all the family variables are associated with scales measuring eating psychopathology (BULIT, EAT-40). However, this was not the case. Only perceptions of maternal and paternal protection (PBI) were significant,

and then only with the scale assessing anorexic psychopathology (EAT-40). Thus, the present findings suggest that internalised shame does not act as a mediator in the relationship between family dysfunction and eating psychopathology. In view of this fact, it was not relevant to proceed with the proposed modelling process. However, supplementary analyses were carried out in order to further explore the relationship between perceived parental protection, internalised shame and anorexic psychopathology described above.

Supplementary analyses

1. Parental protection and internalised shame as predictors of anorexic psychopathology

A planned hierarchical multiple regression analysis was carried out to further explore the relationship between family function, internalised shame and anorexic psychopathology described above. Perceived maternal and paternal protection were the only family factors associated with anorexic psychopathology. Thus, only these variables were used in the current multiple regression analysis. Given the high intercorrelations between these two scales, maternal and paternal protection scores were combined to give one overall parental protection score (PARPRO) in order to avoid problems with multicollinearity. In the first step of the regression analysis, this parental protection variable was used to predict anorexic psychopathology. In the second step, internalised shame was then included in the equation. Table 6 demonstrates the results of this analysis. Overall, parental protection significantly predicted anorexic psychopathology ($p < 001$). Thus, perceptions of one's parents as overprotective is associated with the development of anorexic psychopathology. However, when both parental protection and internalised shame (ISS) were used to predict anorexic psychopathology (EATT), only internalised shame was significant ($p < .001$). This suggests that the relationship between perceived parental protection and anorexic psychopathology shown by previous researchers (e.g.,

Calam et al., 1990) is not as simple as first thought. The association between these two variables is no longer found when considering an individual's current levels of internalised shame.

Table 6. Multiple regression analysis used to assess relationship between parental protection (PARPRO), internalised shame (ISS) and anorexic psychopathology (EAT-40 total)

Dependent Variable	Overall F Ratio	df	p	Total % Variance	Independent Variables	Beta	p
Step 1. Prediction of anorexic attitudes (EATT) from parental protection (PBI)							
Anorexic psychopathology (EAT-40 total)	14.05	1	.00	9.3%	Parental Protection (PARPRO)	.31	.00
Step 2. Prediction of anorexic attitudes (EATT) from parental protection (PBI) and internalised shame (ISS)							
Anorexic psychopathology (EAT-40 total)	15.20	2	.00	25.1%	Parental Protection (PARPRO)	.10	NS
					Internalised Shame (ISS)	.46	.00

2. Family factors and shame-proneness as predictors of internalised shame

Two planned hierarchical multiple regression analyses were used to determine whether perceptions of family dysfunction were associated with internalised shame, and whether this relationship was moderated by shame-proneness. In line with previous analyses, maternal and paternal scores, and their related product terms were analysed separately.

Maternal factors

First, maternal care and protection scores and shame-proneness were used to predict internalised shame. The related product terms (maternal care x shame-proneness and maternal protection x shame-proneness) were then included in the regression equation. Table 7 shows the results of this analysis. In this case, adding the product terms into the regression equation

produced no significant change in R^2 (R Square Change = .01, p =NS). Thus, while perceptions of an insufficiency of maternal care and maternal overprotection are associated with higher levels of internalised shame, this relationship is not moderated by an individual's predisposition for shame-proneness.

Table 7. Hierarchical multiple regression analyses assessing the moderating effects of shame-proneness (TOSCA) in the relationship between maternal factors (PBI) and internalised shame.

Dependent Variable	R Square	R Square Change	df	p	Independent Variables	Beta	p
Model 1. Prediction of internalised shame (ISS) from maternal PBI scores and shame-proneness (TOSCA)							
Internalised Shame (ISS)	.41	.41	3	.00	Maternal Care	-.22	.01
					Maternal Protection	.18	.03
					Shame-proneness	.18	.00
Model 2. Testing for moderating effects of shame-proneness (TOSCA)							
Internalised Shame (ISS)	.42	.01	2	NS	Maternal Care	-.43	NS
					Maternal Protection	-.43	NS
					Shame-proneness	.17	NS
					Maternal Care x shame-proneness	.20	NS
					Maternal Protection x shame-proneness	.66	NS

Paternal factors

Second, paternal care and protection scores and shame-proneness were used to predict internalised shame. The related product terms (paternal care x shame-proneness and paternal protection x shame-proneness) were then included in the regression equation. Table 8 shows the results of this analysis. In this case, a significant change in R^2 was found when the product terms were included in the regression analysis (R Square Change = .04, $p < .05$). When the variables were taken individually, internalised shame was predicted by low paternal protection and the related product term (paternal protection x shame-proneness) ($p < .05$ in both cases) and low paternal care ($p < .01$) and the related product term (paternal care x shame-proneness) ($p < .05$).

Table 8. Hierarchical multiple regression analysis used to assess the moderating role of shame-proneness (TOSCA) in the relationship between paternal factors (PBI) and internalised shame (ISS).

Dependent Variable	R Square	R Square Change	df	p	Independent Variables	Beta	p
Model 1. Prediction of internalised shame (ISS) from paternal PBI scores and shame-proneness (TOSCA)							
Internalised Shame (ISS)	.43	.43	3	.00	Paternal Protection	.17	.04
					Paternal Care	-.26	.00
					Shame-proneness	.46	.00
Model 2. Testing moderating effects of shame-proneness							
Internalised Shame (ISS)	.47	.04	2	.01	Paternal Protection	-1.03	.01
					Paternal Care	-1.35	.00
					Shame-proneness	-.51	NS
					Paternal Protection x shame-proneness	1.34	.00
					Paternal Care x shame-proneness	1.16	.02

Thus, internalised shame was associated with perceptions of lower levels of paternal protection per se, but also levels of paternal protection in the context of being shame-prone, and with lower levels of paternal care per se, and levels of paternal care in the context of being shame-prone.

To summarise, perceived parental control was the only family characteristic associated with anorexic attitudes (EAT-40) in this non-clinical group. This association was no longer found when accounting for the individual's ISS scores. Figure 5 illustrates this model. The strength of links between variables is shown by the absolute values of the standardised regression coefficients. Thus, the relationship between family dysfunction and anorexic psychopathology is not mediated by internalised shame, nor moderated by shame-proneness (Baron & Kenny, 1986).

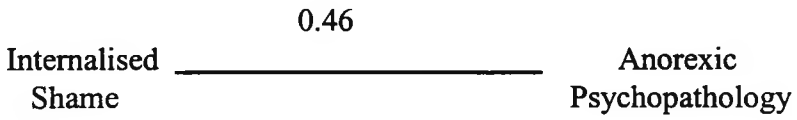

Figure 5. Diagram showing links (standardised regression coefficients) between internalised shame and anorexic attitudes. Only statistically significant pathways are shown.

Furthermore, perceptions of low maternal care and high maternal protection were associated with internalised shame. This relationship was not moderated by the individual's levels of shame-proneness. Internalised shame was also directly related to perceptions of lower levels of paternal protection, and with perceptions of higher levels of paternal protection, only in the context of being shame-prone. Perceptions of lower levels of paternal care per se, and perceptions of higher levels of paternal care, in the context of shame-proneness, were also related to internalised shame. Figure 6 shows this model, using Duncan's (1966) path analysis format as a method of presentation. Absolute values of the standardised regression coefficients are used to demonstrate links between variables.

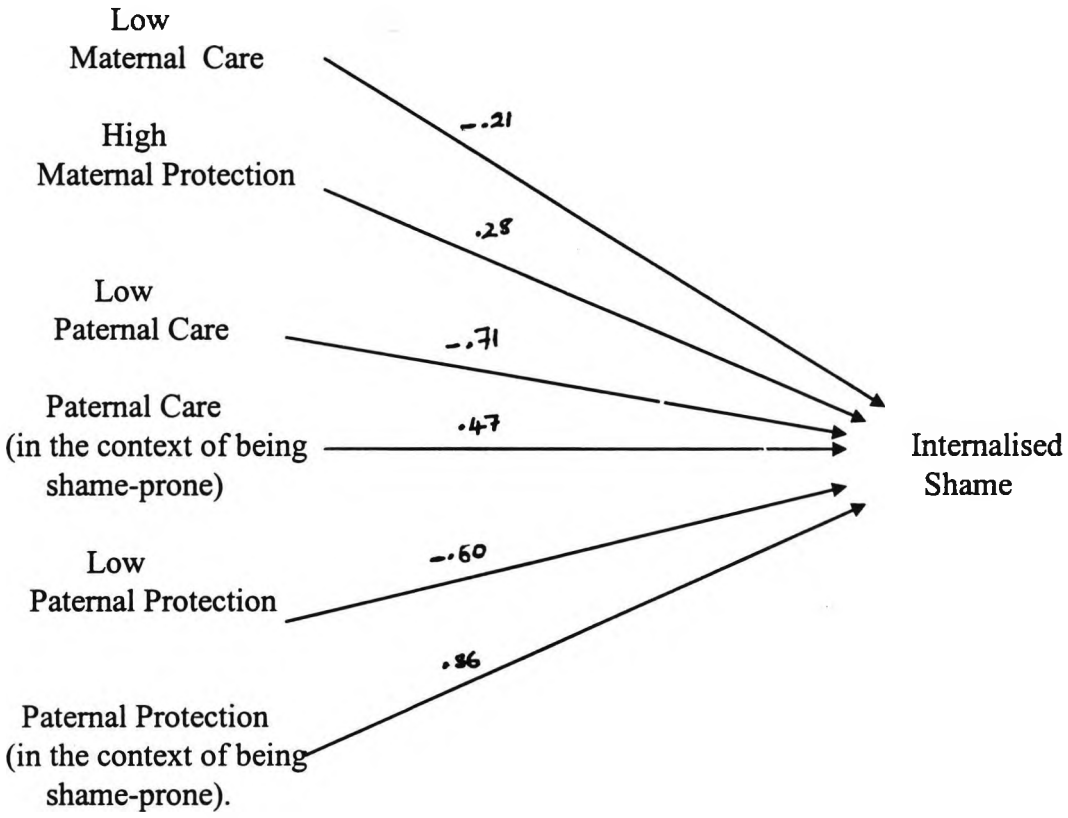

Figure 6. Path analysis (Duncan, 1966) showing links (standardised regression coefficients) between family factors, shame-proneness and internalised shame.

4.5 Discussion

The present study of a non-clinical group suggests that shame plays an important role in eating psychopathology. When considering anorexic psychopathology, the findings are compatible with a model where perception of one's parents as overprotective is associated with higher levels of anorexic attitudes and behaviour. However, this relationship is no longer found when accounting for the individual's current levels of internalised shame (Figure 5). Thus, while internalised shame did not act as a mediator in the link between family dysfunction and anorexic psychopathology, it appears to play an important role in these symptoms. In light of the current findings, it is clear there is a need to explore the role of other 'carrier' mechanisms in the

relationship between familial factors such as parental overprotectiveneness and the development of anorexic psychopathology.

When considering bulimic psychopathology, none of the family factors was associated with these symptoms. However, the present results suggest that internalised shame is a salient emotion in women exhibiting bulimic attitudes and behaviour. Thus, the role of other familial factors and the psychological mechanisms by which they influence the development of bulimic psychopathology require further investigation. This pattern of results confirms the utility of considering different features of eating psychopathology when assessing familial models of etiology (e.g., Waller & Calam, 1994). In this non-clinical sample of women, the hypothesised parental factors (i.e., care and protection) appeared to best predict the development of anorexic attitudes and behaviours, rather than those attitudes and behaviour characteristic of bulimic syndromes.

Further supplementary analyses confirmed a model where perceptions of one's mother as intrusive, and as lacking empathy and warmth, were directly associated with greater levels of internalised shame. This relationship was not moderated by an individual's level of shame-proneness. Considering paternal factors, perceptions of one's father as lacking in warmth and being underinvolved in the child's affairs were directly associated with internalised shame. However, the impact of paternal behaviours of care and protection on internalised shame was also found to be moderated by the individual's levels of shame-proneness.

These findings go some way towards confirming the view that internalised shame is fostered within the context of a "shame-bound" family environment (i.e., one that is unusual in its patterns of control) (e.g., Cook, 1994; Fossum & Mason, 1986; Kaufman, 1992). However, such a phenomenon does not appear to explain the development of eating problems, given the lack of association between family factors and eating psychopathology found in the present

sample of non-clinical women. Instead, the present pattern of results suggests that internalised shame states (at least in this non-clinical group) are more a product of current disordered eating attitudes and behaviour. Thus, it would appear that in women exhibiting eating psychopathology (in this non-clinical sample), internalised shame might be best conceptualised as being either concomitant to, or an effect of, rather than antecedent to these symptoms. However, the signficant high associations found between family factors and internalised shame, and eating psychopathology and internalised shame, suggest that it would be unwise to completely rule out the notion of a mediator model where internalised shame was a mediating factor in the relationship between family dysfunction and anorexic psychopathology. Thus, this topic clearly requires further investigation.

There was a lack of support for the notion of characterological shame-proneness as being a causal factor in the development of eating psychopathology (cf. Tangney et al., 1992; Sanftner et al., 1995), as demonstrated by the absence of any relationship between shame-proneness and measures of eating psychopathology. However, the present results suggest that a predisposition for shame-proneness directly contributes to an individual's levels of internalised shame, and also moderates the impact of family factors on the development of internalised shame. Furthemore, it is notable that the relevant family factors were perceived paternal care and protection, suggesting that a predisposition for shame-proneness (at least in this non-clinical sample) is more likely to lead to higher levels of internalised shame in the context of relationships with fathers than with mothers. These findings go some way to support the view advanced earlier in this thesis that shame-proneness and internalised shame are independent constructs (albeit, with some degree of overlap) and are best viewed as playing differential functional roles in eating psychopathology. This issue will be further elaborated in the general discussion chapter (see Chapter 7).

These results are generally compatible with current models of the relationship between family dysfunction and eating psychopathology (e.g., Strober et al., 1990). The findings are particularly relevant to previous studies employing the PBI, which have demonstrated a tendency towards perceived parental overprotection in women with eating disorders, particularly anorexic psychopathology (e.g., Calam et al., 1990; Pole et al., 1988). Overprotection is characterised by excessive parental involvement in a child's affairs. Consequently, children are prevented from developing autonomy, and are unable to exert any control over their own lives (e.g., Calam et al., 1990). Eating problems are seen as a response to that lack of personal control (e.g., Slade, 1982). However, the findings also suggest that the conclusions of earlier research into the association between PBI scores and anorexic psychopathology may have been oversimplified, due to a reliance on bivariate associations and a failure to assess individuals' current emotional levels. When considering an individual's current levels of internalised shame, the relationship between parental factors and anorexic psychopathology was no longer found. This pattern of findings confirms the need to further explore how family factors impact on the development of eating problems.

These conclusions must be treated with some degree of caution because the use of a cross-sectional sample means that it is not possible to establish the exact chronology of perceptions of family dysfunction and levels of internalised shame in relation to the development of eating problems. Thus, there is a need for longitudinal investigations in this field of study. Furthermore, the PBI relies upon the recall of perceived relationships with parents, which might limit any measure's objective validity. This concern is alleviated somewhat by a review of studies that has demonstrated that the PBI is a relatively valid and reliable instrument (Parker, 1983). Moreover, recent advances in the field of developmental research indicate that, even when employing a longitudinal design, children's perceptions of early social events are often better

predictors of their later psychological adjustment than the events themselves (e.g., Fauber & Long, 1991). Thus, the PBI remains potentially useful for the purpose of assessing young women's perceptions of their relationship with their parents.

Further research is needed to support and extend the current findings. In particular, the nature of the relationship between internalised shame and eating psychopathology remains to be elucidated. Given the definitions of shame discussed above (e.g., Kaufman, 1989; Lewis, 1987; Tangney et al., 1992), it might be that the characteristic intense drive for thinness, and concomitant severe efforts at weight loss (e.g., harsh restriction, excessive exercise) seen in anorexia serves to make individuals feel that they are never quite good (i.e., thin) enough, and thus vulnerable to constant feelings of inadequacy and failure at not being able to live up to expectations (albeit, self-imposed, unreal) regarding their appearance. In bulimia, the characteristic bingeing and purging behaviour and the secrecy surrounding such behaviour might be shame-inducing factors in and of themselves. Indeed, previous researchers have suggested that this might be the case (e.g., Silberstein et al., 1987). This issue will be further explored in Chapter 7.

Furthermore, one could ask the question of how problematic levels of protection/control and a lack of warmth and empathy result in internalised shame. One mechanism might be that the parental behaviour has the impact of making the individual feel defective (as a result of being someone who needs to be strictly controlled, or of being someone who is not worth the parent's attention). This point will be further elucidated in the general discussion (see Chapter 7).

While it is important that these findings should be shown to generalise to clinical groups, the links between family dysfunction, shame and eating psychopathology demonstrated in the present study are potentially clinically useful. For example, in a case of anorexia or bulimia, one potential target for cognitive therapy is internalised shame relating to these symptoms. Moreover,

Chapter 5

Study 2: Sexual abuse and bulimic psychopathology: The mediating role of shame

5.1 Introduction

A history of reported sexual abuse is another factor consistently included in multifactorial models of eating psychopathology (see Chapter 2). However, findings have not always been consistent, deriving in part from the multidetermined nature of eating psychopathology (e.g., Lacey, 1986), and the multidimensional nature of abuse (e.g, Rosenberg, 1987). More importantly, it is not clear why some women who are the victims of abuse go on to develop eating problems, while others do not. It would appear that sexual abuse impacts indirectly, and influences certain psychological processes which may render the individual vulnerable to the development of eating problems (e.g., Rorty & Yager, 1993). However, relatively few studies have systematically tested the proposed mediators in the sexual abuse-eating psychopathology relationship. In view of the evidence from the emotion literature outlined in Chapter 3, one potential candidate for this mediating role is (pathological) shame. Women who have been abused are likely to experience particular feelings of inferiority about their femininity and sexuality (e.g., Oppenheimer, Howells, Palmer, & Chaloner, 1985) Given that a sense of inferiority is a core feature of the experience of shame, it is proposed in the current thesis that shame is a mediating factor in the relationship between sexual abuse and eating psychopathology.

Findings from studies employing both clinical and non-clinical samples indicate that women with bulimic disorders (and particularly those women with no history of anorexia nervosa) report higher rates of unwanted sexual experiences than women with anorexia nervosa

(e.g., Waller, 1991). Thus, it would appear that reported sexual abuse is linked to bulimic psychopathology (bingeing and purging) rather than to the diagnosis per se (e.g., Waller, 1992). Furthermore, it appears that the *nature* of any reported sexual abuse, rather than just the *presence* of such a history, is also important. More specifically, it would appear that certain characteristics of abuse, such as age at abuse (i.e., before age 18 years), abuse involving a family member, and abuse involving force are particularly associated with bulimic symptomatology (e.g., Calam & Slade, 1989; Waller, 1992; Wonderlich, Brewerton, Jocic, Dansky & Abbot, 1997). Thus, these findings show that it is important to acknowledge the nature of any sexual abuse when considering its relationship to the development of eating problems.

However, it is not clear what factors might mediate the links between a history of sexual abuse and eating problems. While factors such as family function and low self-esteem have been proposed as mediators, findings suggest that they do not play a substantial mediating role (e.g., Waller, 1992). Furthermore, given that eating disorders have been viewed as serving the function of managing strong (negative) emotions, it seems likely that negative emotional levels might link sexual abuse and later bulimic psychopathology. Indeed, one study indicated that shame over physical appearance (i.e., the body) acts a mediator in the link between reported child sexual abuse and the development of bulimia in adult women (e.g., Andrews, 1997). However, such conclusions were based on a small sample size of women with bulimia (N= 9), and the statistical procedures for testing for mediating effects (e.g., Baron & Kenny, 1986) were not sufficiently reported. This suggests that these findings must be treated with caution. Thus, those factors which mediate the relationship between sexual abuse and bulimic psychopathology remain to be elucidated.

This study will assess the role of pathological shame, and in particular, internalised shame, in the link between reported sexual abuse and bulimic psychopathology. The

development of internalised shame is essentially explained by way of experiential factors; that is, certain external events will impact on the individual by evoking feelings of shame, which, if prolonged indefinitely, can lead to internalised shame (Kaufman, 1992). According to Kaufman (1992), the experience of sexual abuse, particularly when perpetrated by a family member (i.e., incest) or involving physical force (i.e., rape), is likely to evoke intense feelings of shame, powerlessness, and bodily violation. Thus, in the experience of sexual abuse, intense shame is arguably the predominant emotional response (e.g., Kaufman , 1992). Moreover, the experience of shame is characterised by painful negative self-evaluations (e.g., Lewis, H.B., 1987). Self-blame for the abuse is a common long-term psychological response seen in many victims (e.g., Jehu, 1988), which might best be conceptualised as evidence of internalised shame. Few studies have tested the relationship between internalised shame and sexual abuse. The little available evidence which does exist suggests that these two phenomena are, indeed, linked. For example, Playter (1990) administered the Internalised Shame Scale (ISS; Cook, 1994) and a brief questionnaire assessing a range of sexually abusive experiences (i.e., enforced intercourse, enforced touching of another's genitals, or being touched on their breasts or genitals against their will) before the age of 14 years, to a sample of 92 women inpatients in an alcohol treatment programme. Playter (1990) found that those women who reported any sexual abuse (N= 40) had significantly higher levels of internalised shame than the nonabused group (N = 52). Moreover, those women who reported an experience of enforced intercourse (defined as severe abuse) (N = 19) demonstrated significantly higher ISS scores than those who did not report intercourse, but did report touching (defined as moderate abuse) (N = 21), and those reporting no abuse. Thus, not only is internalised shame associated with the experience of childhood sexual abuse per se, but that relationship is enhanced when considering specific characteristics of abuse (i.e., enforced intercourse). However, it remains to be established whether the relationship between sexual

abuse and internalised shame is present in samples of women exhibiting other forms of psychopathology. Given the noted empirical links between sexual abuse and eating psychopathology, there is justification for assessing the role of internalised shame in women exhibiting disordered eating attitudes and behaviour who also report unwanted sexual experiences.

Elsewhere in the literature, there is evidence to support a relationship between internalised shame and bulimic psychopathology. For example, Kaufman (1992) proposes that for women suffering from bulimic symptoms (i.e., bingeing and purging), the shame about food is, in fact, a displacement of the deeper, more painful, internalised shame about the self (Kaufman,1992). Thus, internalised shame is implicated as playing a major role in bulimic psychopathology. Relatively few studies have tested this hypothesised relationship between internalised shame and bulimic symptomatology. The little available evidence suggests that in both clinical and non-clinical samples of women higher levels of internalised shame (as measured by the ISS (Cook, 1994)) are significantly associated with increased levels of bulimic symptoms (Cook, 1994; Reynolds, 1991). However, the paucity of research in this area means that these findings require further support. Moreover, the studies cited above have failed to assess the potential functional role of internalised shame in eating psychopathology; that is, is internalised shame antecedent to, concomitant to, or an effect of the eating problem?

In sum, previous research has demonstrated bivariate associations between sexual abuse and internalised shame (e.g., Cook, 1994), internalised shame and bulimic psychopathology (e.g., Cook, 1994; Murray, Waller & Legg, in press (see Chapter 4)) and sexual abuse and bulimic psychopathology (e.g., Waller, 1991; Wonderlich, et al., 1997). However, the nature of the relationship between these variables remains unclear. Thus, the aim of the present study is to test whether internalised shame is a mediator in the link between reported sexual abuse and bulimic

psychopathology in a non-clinical sample of adult women. It is predicted that higher levels of reported sexual abuse will be associated with increased bulimic psychopathology, and that this relationship will be mediated by internalised shame. Figure 7 represents the model to be tested in this study.

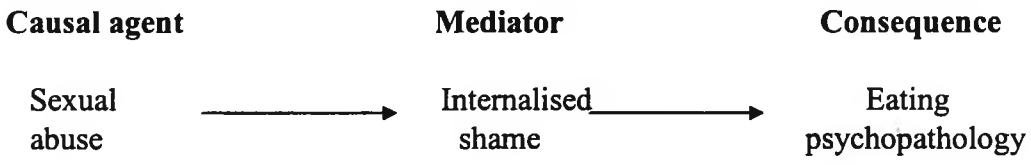

Figure 7. Mediator model of the etiology of eating psychopathology (adapted from Baron & Kenny, 1986).

5.2 Method

Participants

Initially, 101 female undergraduates attending City University, London were randomly approached at various sites around the university, and invited to take part in a study of eating attitudes and behaviour in college students. All the women were instructed to complete a questionnaire booklet (see Appendix 1) and return it to the researcher who was waiting nearby. The questionnaire booklet contained an assessment of demographic data (e.g., age), and a selection of measures assessing reported sexual abuse, internalised shame and bulimic psychopathology. Given the sensitive nature of the information required, all the women were informed that their responses would be anonymous and ensured of complete confidentiality.

Of the 101 women, 99 agreed to take part, representing a response rate of 98%. The mean age of the participants was 21.4 years (SD = 2.62; range = 18 - 32). Those women refusing to

participate (N=2) gave the reason of not having enough time to complete the questionnaire booklet.

5.3 Measures

The questionnaire booklet consisted of four measures. Reported experiences of sexual abuse were assessed using the **Sexual Events Questionnaire-2 (SEQ-2;** Calam & Slade, 1994). Internalised shame was assessed using **The Internalised Shame Scale (ISS;** Cook, 1994). **The Bulimia Test (BULIT;** Smith & Thelen, 1984) was employed to measure bulimic psychopathology.

5.3.1 The Sexual Events Questionnaire-2 (SEQ-2; Calam & Slade, 1994).

The SEQ-2 is a 14-item, self-report measure, based on an original interview schedule developed by Russell (1983) (see Appendix 1). Participants are asked to respond either "Yes" or "No" to items concerning whether or not they had experienced any of a range of unwanted sexual events, and whether they have had sexual contact with biologically close or distant family members. Each item is also followed by a request for information concerning the individual's age at the time of the event.

Six items are worded so that participants are instructed not to include events which they have already reported. However, those items concerning experience with a person of the same sex, rape, sexual contact with an authority figure or family members do not have this exclusion applied in order to avoid underreporting of these experiences. Thus, an individual could report, on one question, unwanted intercourse and, on another, contact with a family member and this could refer to the same experience. It is not therefore appropriate to obtain a total score on this scale, nor can an index of severity of sexual abuse be calculated. The SEQ-2 simply records whether or not an individual has had a particular form of unwanted sexual experience. It is, however, possible to combine events and assess specific characteristics of abuse. In particular,

the experience of sexual abuse involving force, and events involving unwanted sexual contact with a family member, were assessed. Items 5, 7, 12 and 13 were combined to create a dichotomous variable of abuse involving physical force (FORCE). In this case, participants reporting sexual abuse score 0 if sexual abuse without force is reported, or 1 if one or more events involving force has occurred. Items 9,10 and 11 were combined to create a dichotomous variable of abuse involving a family member (FAM). In this case, participants reporting sexual abuse score 0 if sexual abuse not perpetrated by a family member is reported, or 1 if one or more events involving a family member has occurred.

Reliability and validity

Formal reliability and validity data for the SEQ-2 is not currently published. However, this scale has been used with both clinical and non-clinical samples of women (e.g., Calam & Slade, 1989; Calam, Griffiths & Slade, 1997) and the available data provide evidence for the validity of the SEQ-2. For example, Calam, Griffiths & Slade (1997) administered the SEQ-2 to a sample of 100 eating- disordered women from the U.K., 78 eating-disordered women from Australia, and 34 eating-disordered women from the U.S.A. These authors found that patterns of reported sexual abuse, such as high frequencies of unwanted touching or exposure (as measured by the SEQ-2), were considerably similar across the samples from different countries. This suggests that the SEQ-2 is a valid measure of unwanted sexual experiences likely to be reported by eating disordered women, and may be used with samples from other countries as well as the UK. Furthermore, Calam & Slade (1989) administered the SEQ-2 and the Eating Attitudes Test (EAT; Garner & Garfinkel, 1979) to a sample of 130 female students, and found that unwanted intercourse before age 14 years was significantly associated with the bulimia subscale of the EAT. Thus, the SEQ-2 has proven construct validity, and is able to predictively distinguish

between groups of women exhibiting different features of eating psychopathology (i.e., bingeing and purging vs. restricting).

5.3.2 The Internalised Shame Scale (ISS; Cook, 1994) (see Chapter 4)

5.3.3 The Bulimia Test (BULIT; Smith & Thelen, 1984) (see Chapter 4).

Definition of sexual abuse:

The definition of sexual abuse adopted in this study was broad in nature and was largely determined by the conceptualisation of sexual abuse as operationalised in the SEQ-2 scale. Sexual abuse was defined as any experience that was perceived to be both unwanted and sexual. As previously noted, the SEQ-2 also assesses the occurrence of specific characteristics of sexual abuse-intrafamilial, and sexual abuse involving physical force (e.g., Calam & Slade, 1994). For the purpose of the present study, these two categories (i.e., sexual abuse involving force and intrafamilial sexual abuse) were also employed.

5.4 Results

Data analysis.

Initially, a dichotomous variable 'ABUSE' was created to enable the sample to be divided into those women who had reported any occurrence of abuse (ABUSE= 1), and those who had not (ABUSE = 0). Two further dichotomous variables (FORCE and FAM) were then computed in order to assess the impact of different characteristics (i.e., that involving force = FORCE; that involving a family member = FAM) of sexual abuse on eating psychopathology. In the case of FAM, each of the women who had reported sexual abuse were given a score of 0 if the abuse occurred outside of the family, and 1 if any experience of intrafamilial abuse had occurred (a response of "yes" to one or more items 9,10 and 11). In the case of FORCE, each of the women who had reported sexual abuse were given a score of 0 if the abuse did not involve

force, and 1 if any experience of force had occurred (a response of "yes" to one or more items, 5, 7, 12, and 13).

Correlations (Pearson's r) were then used to determine the patterns of associations between the sexual abuse variables described above, measures of internalised shame (ISS) and bulimic psychopathology (BULIT).

Mediating effects of internalised shame

To determine whether the relationship between reported sexual abuse and bulimic psychopathology is mediated by internalised shame, three regression equations must be conducted, and the following conditions must hold (Baron & Kenny, 1986). First, the relationship between reported sexual abuse and bulimic psychopathology must be significant. Second, the relationship between reported sexual abuse and internalised shame must be significant. Finally, when internalised shame is included in the first regression equation, the relationship between reported sexual abuse and bulimic psychopathology should be either no longer significant or weakened. If the relationship between sexual abuse and bulimic psychopathology is no longer significant, internalised shame is said to be a perfect mediator. Alternatively, if the relationship between sexual abuse and bulimic psychopathology is only weakened, internalised shame is said to be an imperfect mediator. To avoid problems with multicollinearity between the independent (i.e., sexual abuse) and mediating variables (i.e., internalised shame), it is crucial to examine both the significance and the absolute size of the regression coefficients (e.g., Baron & Kenny, 1986).

Descriptive statistics

The mean and standard deviation scores for the ISS and BULIT scales used in the present study are illustrated in Table 9 below. As previously noted, it is not appropriate to establish a mean score on the SEQ-2.

Table 9. Mean and standard deviation scores for scales assessing internalised shame (ISS) and bulimic psychopathology (BULIT).

	X	SD
Internalised Shame Scale (ISS)	32.52	16.64
The Bulimia Test (BULIT)	58.62	18.04

Mean scores for the ISS (possible range 0-96) matched those previously quoted for similar populations (e.g., Cook, 1994). The mean scores for the BULIT (possible range 32-160) corresponded with those previously noted for non-clinical samples of female undergraduates (e.g.,Wertheim, 1989). For the purpose of subsequent analyses, BULIT scores were subjected to a square root ($_{SQR}$) transformation, in order to reduce skewness and eliminate outliers from the distribution.

Thirty-five women reported no sexual abuse (ABUSE = 0), while 64 women reported at least one unwanted sexual experience (ABUSE = 1). Of these 64 women, 53 reported no intrafamilial abuse (FAM=0), while 11 reported sexual abuse with a family member (FAM=1). Forty-seven of the 64 women, reported non-forced sexual abuse (FORCE = 0), while 17 women reported an experience of sexual abuse involving physical force (FORCE = 1).

Preliminary analyses:Associations between variables

Initially, correlations (Pearson's r) were carried out in order to determine the relationship between all the variables in the proposed model. Table 10 shows the results of this analysis.

Table 10. Pearson's correlations assessing the relationship between measures of sexual abuse (SEQ-2), internalised shame (ISS) and bulimic psychopathology ($BULIT_{SQR}$).

	ABUSE	FAM	FORCE	AGEX	ISS	$BULIT_{SQR}$
ISS	NS	NS	NS	NS	1.00	.48**
$BULIT_{SQR}$	.27**	.24*	NS	NS	.48**	1.00

Note. ABUSE = presence/absence of reported abuse; FAM = Sexual abuse involving a family member; FORCE = Sexual abuse involving force; AGEX = Age at first experience of abuse; ISS = The Internalised Shame Scale; $BULIT_{SQR}$ = BULIT (square root transformation).
* $p < .05$; ** $p < .01$ (2-tailed).

Bulimic psychopathology ($BULIT_{SQR}$) was significantly associated with internalised shame (ISS) ($p < .01$). These findings support the previously reported link between internalised shame and bulimic attitudes and behaviours (e.g., Cook, 1994; see Chapter 4).

Considering the relationship between reported sexual abuse and bulimic psychopathology, BULIT scores were reliably associated with the ABUSE variable ($p < .01$). Thus, reported sexual abuse per se was linked to higher levels of bulimic symptomatology. This finding supports previous studies demonstrating a link between reported sexual abuse and bulimic psychopathology in non-clinical samples of women (e.g., Calam & Slade, 1989).

Considering the relationship between specific characteristics of abuse and bulimic psychopathology, only abuse involving a family member (FAM) was reliably linked to bulimic attitudes and behaviours ($p < .05$). This finding supports previous research demonstrating that sexual abuse perpetrated by a family member is a particular risk factor for the development of bulimic psychopathology (e.g., Waller, 1992), but does not support those studies showing that

age at first experience of abuse, and abuse involving force, are also risk factors for the development of later eating problems (see Wonderlich et al., 1997 for a review).

No associations were found between any of the abuse variables (ABUSE, FAM, FORCE) and internalised shame (ISS). This suggests that the relationship between sexual abuse and internalised shame found by previous researchers (e.g., Playter, 1990) is not straightforward. While the relationship between these two variables is apparent in alcohol dependent women (e.g., Playter, 1990), it is not found in the present non-clinical sample of women exhibiting bulimic symptomatology.

In keeping with Baron & Kenny's (1986) approach to testing for mediation, the lack of association between sexual abuse and internalised shame found in the present sample, meant that it was not possible to proceed with the current modelling process. Thus, while a reported history of sexual abuse, particularly intrafamilial abuse, is related to bulimic psychopathology, this association could not be accounted for by the individual's ISS scores. However, both intrafamilial abuse and internalised shame were found to be separately associated with bulimic attitudes and behaviour. Thus, subsequent supplementary analyses were carried out to further explore the relationship between these variables.

Supplementary analyses:

Intrafamilial abuse and internalised shame as predictors of bulimic psychopathology.

Multiple regression analysis was used to assess the relationship between intrafamilial abuse, internalised shame and bulimic attitudes and behaviour. Table 11 shows the results of this analysis. Intrafamilial abuse (FAM) and internalised shame (ISS) were used to predict bulimic symptomatology ($BULIT_{SQR}$). Overall, these variables significantly predicted bulimic psychopathology ($p < .001$). However, when the variables were taken individually, only internalised shame was significant ($p < .001$). This suggests that the relationship between

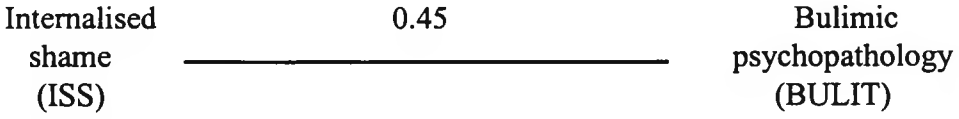

Figure 8. Diagram showing links (standardised regression coefficients) between internalised shame and bulimic attitudes. Only statistically significant pathways are shown.

5.5 Discussion

The present study of a non-clinical group of women suggests that internalised shame is a critical element in understanding bulimic psychopathology. Furthermore, the findings are compatible with a model where reported intrafamilial abuse is associated with bulimic attitudes, but this relationship is no longer found when accounting for an individual's levels of internalised shame. The lack of association between sexual abuse and internalised shame meant that the proposed model could not be confirmed. Thus, internalised shame did not act as a mediator in the relationship between reported intrafamilial abuse and bulimic attitudes and behaviour (e.g., Baron & Kenny, 1986). Instead, the present findings suggest that internalised shame is the best predictor of bulimic psychopathology.

These findings fail to confirm the argument advanced in the introduction that traumatic experiences such as intrafamilial sexual abuse are especially shame-inducing, and lead to the formation of a 'shame-bound' personality (e.g., Cook, 1994; Kaufman, 1992), which may render some women vulnerable to the development of bulimic psychopathology (e.g., Cook, 1994; Kaufman, 1992). Instead, the present results indicate that internalised shame (at least in this non-clinical group), is an unlikely emotional reaction to the experience of sexual abuse, and more related to bulimic attitudes and behaviours. Thus, those factors which might act as mediators in

the relationship between sexual abuse and the development of bulimic symptoms remain to be identified.

The results are generally compatible with current models of the relationship between sexual abuse and eating psychopathology (e.g., Waller, Everill & Calam, 1994). In particular, the findings are in keeping with previous studies demonstrating that a reported history of sexual abuse is a specific risk factor for the development of bulimic symptoms (i.e., bingeing and purging), rather than eating psychopathology per se (e.g., Calam & Slade, 1989; Waller, 1992, 1992b). Furthermore, the findings confirm the need to consider the *nature* of any abuse in the development of eating problems (e.g., Calam, Griffiths & Slade, 1997; Waller, 1992; Wonderlich et al., 1997). In the present sample of non-clinical women, only the experience of intrafamilial sexual abuse was associated with bulimic psychopathology. Bulimic symptoms (e.g., binge eating, purging, and starving) are seen as efforts to regulate intolerable internal states and conflicts regarding interpersonal needs, which are particularly heightened in individuals who have been sexually abused (e.g., Rorty & Yager, 1986). Moreover, certain factors such as family function are likley to contribute to the psychological consequences of intrafamilial sexual abuse (e.g., Conte & Schuerman, 1987; Wonderlich, Wilsnack, Wilsnack, & Harris, 1996b). More specifically, where there is intrafamilial abuse, such family environments are likely to be characterised by abnormal patterns of interaction associated with maintaining the secrecy surrounding the abuse (e.g., Wooley, 1994). Thus, bulimic symptoms such as binge eating and purging may also serve to enable the individual to avoid or escape from factors such as family tension particularly associated with intrafamilial sexual abuse (e.g., Wonderlich et al., 1997).

However, the notable links between internalised shame and bulimic attitudes found in the current sample of women suggests that the conclusions of earlier research into the relationship between intrafamilial abuse and bulimic psychopathology may have been

oversimplified due, in part, to a reliance on simple bivariate associations, as well as to a failure to address emotional levels in victims of abuse. While internalised shame did not act as a mediating influence in the relationship between intrafamilial abuse and bulimic psychopathology, it appears to play a crucial role in these symptoms (cf. Cook, 1994; Kaufman, 1989). Indeed, the present findings suggest that emotional levels (i.e., of internalised shame) are more important than the experience of abuse per se in women exhibiting bulimic symptomatology. Such results suggest that internalised shame might best be conceptualised as either concomitant to, or an effect of bulimic psychopathology, rather than antecedent to these symptoms (see Introduction). This issue will be further explored in the general discussion chapter (see Chapter 7).

However, the present study is limited because it was not possible to establish the specific chronology of the unwanted sexual experiences, and levels of internalised shame in relation to the development of bulimic symptoms. Thus, there is a need for longitudinal studies in this area of research. Furthermore, this study only focused on the experience of sexual abuse. Other forms of abuse such as physical and emotional neglect also make important contributions to an individual's long-term psychological adjustment (e.g., Calam, et al., 1990; Kent, Waller & Dagnan, 1998). It may be that consideration of these other forms of maltreatment, in conjunction with sexual abuse, may lead to a clearer understanding of the development of bulimic psychopathology in some women, and not others.

Further research is needed to support and extend the current findings. In particular, one could ask the question of what other factors, linked to problematic levels of internalised shame, are important in the relationship between sexual abuse and bulimic psychopathology. Given the ideas regarding the development of internalised shame discussed above (e.g., Kaufman, 1989), it could be that consideration of the impact of other risk factors, such as family function, is also important when assessing the impact of sexual abuse on eating. Indeed, internalised shame has

been found to be an imperfect mediator in the relationship between family function and bulimic psychopathology (see Chapter 4).Thus, it might be the case that where there is intrafamilial abuse, problematic levels of shame arise in the context of concomitant abnormal patterns of family interaction (i.e., concerning secrets in the family). However, such an explanatory model fails to account for the potential psychological consequences of sexual abuse per se. Thus, there is a need to consider emotional reactions, other than shame, that result from the experience of sexual abuse. This issue will be further explored in the general discussion chapter (see Chapter 7).

While it is important that these findings should be shown to generalise to clinical populations, the relationship between sexual abuse, internalised shame and bulimic psychopathology demonstrated in the present study is still of some clinical use. For example, one potential target for cognitive therapy is internalised shame, which appears to be a central feature in bulimic psychopathology. Furthermore, any clinician working with a woman exhibiting high levels of bulimic symptoms should be aware of the possibility of a history of sexual abuse, and the need to address this in the therapeutic context.

To conclude, it would seem that the relationship between reported sexual abuse and the development of bulimic psychopathology is not as straightforward as suggested in previous studies. In particular, it is important to further explore the role of internalised shame in the relationship between sexual abuse and bulimic psychopathology. Furthermore, there is a need to identify the mediating factors in the relationship between sexual abuse and the development of eating problems, while continuing to acknowledge the multidetermined nature of eating psychopathology. Such an approach is likely to provide useful targets for treatment and to enhance current knowledge of why, in the presence of known risk factors, some women go on to develop eating disorder symptoms, while others do not.

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Chapter 7 GENERAL DISCUSSION

7.1 Summary of findings

The aim of the current thesis was to test whether a mediator-moderator model could best explain the aetiology of eating psychopathology. More specifically, it was proposed that known risk factors for eating psychopathology impact indirectly, effecting certain psychological mechanisms, which then serve to render an individual vulnerable to the development of eating problems. It was suggested that (pathological) shame was a likely contender for a mediating role in the relationship between risk factors, such as family dysfunction and sexual abuse, and the development of disordered eating attitudes and behaviour.

The first study (see Chapter 4) aimed to test a model where internalised shame was a mediator, and shame-proneness was a moderator, in the relationship between family dysfunction and eating psychopathology (i.e., anorexic and bulimic symptomatology). The findings were compatible with a model where both perceptions of problematic levels of parental protection and internalised shame had a separate significant impact on anorexic psychopathology. However, when accounting for an individual's levels of internalised shame, the previously noted relationship between familial factors and anorexic psychopathology was no longer found. Thus, internalised shame appears to be a salient emotional component in women exhibiting such symptoms. Indeed, internalised shame was also strongly related to bulimic attitudes and behaviours, suggesting that it is also an important emotional factor in women exhibiting eating problems with a bulimic component (i.e., bingeing and purging).

Findings from Study 1 also confirmed a model whereby familial factors significantly contributed to levels of internalised shame. More specifically, perceptions of one's parents as lacking in empathy and warmth, and as either over- or underprotective, were related to higher levels of internalised shame. This relationship between familial factors and internalised shame

was found to be somewhat moderated by an individual's predisposition for shame-proneness. In particular, the findings are compatible with a model whereby a predisposition for shame-proneness (at least in this non-clinical sample) directly contributes to higher levels of internalised shame, and also moderates the impact of factors reflecting relationships with fathers, rather than mothers, on levels of internalised shame. However, despite these noted links between family factors and internalised shame, and internalised shame and eating psychopathology, the lack of association between family factors and eating psychopathology meant that the necessary conditions for testing for mediation were not met (e.g., Baron & Kenny, 1986). Thus, internalised shame (at least in this non-clinical group) does not act as a mediator in the relationship between family dysfunction and eating psychopathology.

The aim of Study 2 was to test a model whereby internalised shame was a mediator in the relationship between reported sexual abuse and bulimic psychopathology. The findings suggest a model where both internalised shame and intrafamilial abuse independently predict bulimic attitudes and behaviours. However, when these variables were considered together, only internalised shame was a reliable predictor of bulimia. That is, the relationship between sexual abuse and bulimia was no longer found when accounting for an individual's current levels of internalised shame. Thus, internalised shame appears to be a central emotional component in women exhibiting bulimic symptoms, confirming the pattern of results reported in Study 1 (see Chapter 4).

In sum, Study 1 and 2 failed to confirm the hypothesised model whereby shame acted as a mediator in the links between certain risk factors, such as family dysfunction and sexual abuse, and the development of eating psychopathology. However, shame-related variables (particularly internalised shame) were clearly a central feature of both anorexic and bulimic attitudes and behaviour, and therefore warrant further investigation. Furthermore, these studies only assessed

the impact of one known risk factor for eating psychopathology (i.e., family dysfunction or sexual abuse) and therefore failed to account for the multidetermined nature of these disorders.

In light of these conclusions, Study 3 attempted to both quantitatively and qualitatively explore the relationship between a number of known risk factors for eating psychopathology (i.e., family function, puberty, body dissatisfaction), shame, and bulimic psychopathology. Qualitative assessment of emotions allows for more in-depth information regarding contextual and sequential cues related to specific emotions, which is not possible with quantitative modes of analysis (e.g., Retzinger, 1995). Thus, feelings of shame were assessed in the context of specific past and present social experiences, which have been previously identified as risk factors for eating psychopathology (i.e., family function, pubertal changes, body dissatisfaction, current eating habits). The findings were compatible with a model whereby higher levels of internalised shame and bulimic psychopathology were only associated with shame evoked in the context of current disordered eating behaviours, particularly those associated with bulimic syndromes (i.e., binge eating). This pattern of findings, employing both quantitative and qualitative measures of shame, further confirmed the findings from the previous two studies, suggesting that internalised shame states (a least in these non-clinical groups) are more a product of current eating psychopathology, than of the experience of certain risk factors for eating problems such as sexual abuse, pubertal experiences and body dissatisfaction.

Thus, this pattern of findings suggests that the psychological mechanisms by which known risk factors, such as family dysfunction, sexual abuse, pubertal experiences, and body dissatisfaction, influence the development of anorexic and bulimic psychopathology remain to be identified.

The functional role of pathological shame in eating psychopathology

Internalised shame

The theory of the development of internalised shame focuses on the role of experiential factors in the formation of this construct (see Chapter 3). That is, chronic exposure to shame-inducing situations leads to shame becoming internalised and incorporated into an individual's sense of identity, thus rendering the individual vulnerable to the development of psychopathology (Kaufman, 1992).

The present results only partially support this view. For example, there was some evidence to suggest that the experience of a dysfunctional family environment (i.e., one that is unusual in its patterns of control and emotional give and take), leads to a 'shame-bound' personality (e.g., Cook, 1994; Fossum & Mason, 1986) (see Chapter 4). Thus, these findings go some way to support the view that internalised shame originates in the context of a child's early emotional relationships with parents (e.g., Kaufman, 1989). However, such a phenomenon could not explain the development of eating psychopathology. Indeed, it would appear that current anorexic attitudes and behaviours also significantly contribute to levels of internalised shame.

Kaufman (1992) further proposed that another adverse early experience, sexual abuse, is also likely to be associated with intense feelings of shame. However, the present findings failed to support the previously reported empirical links between these variables (e.g., Playter, 1990). It is notable that the significant relationship between sexual abuse and internalised shame was found in a sample of chemically-dependent women and not women exhibiting eating psychopathology. Thus, it would appear that the relationship between sexual abuse and internalised shame is not straightforward, and might well depend on the impact of other factors not assessed in either of the studies mentioned above. Moreover, such factors might also influence the developmental course of particular forms of psychopathology (i.e., drug/alcohol

abuse, eating problems), and therefore explain the differential pattern of associations between sexual abuse and internalised shame found across the two samples of women in the research cited above.

Furthermore, measures of internalised shame (i.e., ISS) employed in the studies above focus on global negative attributions about the self. Such measures cannot detect problematic levels of shame associated with specific aspects of the self (i.e., the body) (e.g., Andrews, 1998). Thus, as has been suggested by previous researchers, shame evoked in the context of sexual abuse may become focused on the body, and it is this specific body shame which confers vulnerability for the development of bulimia (e.g., Andrews, 1995). However, such findings remain to be supported. It is clear that the relationship between pathological (i.e., internalised shame) shame and sexual abuse requires further exploration.

When considering other risk factors for eating disorders, such as pubertal experiences, body dissatisfaction, and sociocultural factors (via peer attitudes), the findings indicate that these factors are not related to internalised shame states (see Chapter 6). More specifically, such experiences are stimulus situations for evoking shame (as assessed by qualitative measures of shame) for most women, but cannot be regarded as the kind of chronic sources of shame likely to lead to the internalisation of shame, and the later development of eating psychopathology (Kaufman, 1992). This issue will be further explored below (see 'Women's shame').

To summarise, the findings failed to support the argument advanced earlier in this thesis that internalised shame was a likely response to risk factors for eating psychopathology such as, family dysfunction, sexual abuse, pubertal experiences and body dissatisfaction, which might then render some women vulnerable to the development of eating psychopathology. The present pattern of findings failed to confirm the hypothesised mediating role for internalised shame in the relationship between known risk factors and the development of eating problems.

However, it is clear that internalised shame states are a central feature of eating psychopathology. This suggests that rather than being solely a product of past experiences (i.e., relationships with parents), as Kaufman (1989) originally proposed, internalised shame states can also occur in the context of ongoing, current experiences (i.e., disordered eating behaviour) (e.g., McFarland & Baker-Baumann, 1990). For example, it might be the case, as has been suggested by previous researchers, that eating disorder symptomatology (particularly the bingeing and purging seen in bulimic syndromes) is in itself shame-inducing (e.g., Kaufman, 1992; Silberstein et al., 1987). That is, the present findings go some way to confirm the view that a common emotional response to certain behaviours exhibited by eating-disordered women (i.e., binge eating, purging, stringent efforts at weight loss) is shame (e.g., Kaufman, 1992; Silberstein et al., 1987). Given the definitions of internalised shame discussed above, such behaviours might best be conceptualised as chronic sources of shame for these women, and thereby contribute to the internalisation of shame process (e.g., MacFarland & Baker-Baumann, 1990). Thus, the current findings suggest that internalised shame is best viewed as either concomitant to, or an effect of, eating psychopathology, rather than antecedent to such symptoms. This issue clearly requires further investigation.

Shame-proneness

Shame-proneness is another popular construct of pathological shame, and has been implicated in a range of psychopathologies such as depression, anxiety and eating disorder symptoms (e.g., Tangney & Fischer, 1995; Sanftner et al., 1995). Theories of the development of shame-proneness tend to focus on the innate (i.e., genetic) dimension of shame-proneness, although the role of environmental factors (i.e., socialisation experiences) are acknowledged (e.g., Ferguson & Stegge, 1995; Lewis, 1987; Tangney & Fischer, 1995). Thus, high shame-prone individuals are regarded as being so largely due to a predisposition to this trait, which can

then render such individuals vulnerable to increased shame-proneness as a result of specific parenting styles (e.g., those involving anger-related reactions). In view of this fact, it was proposed that shame-proneness acts as a moderator in the link between certain risk factors such as family dysfunction and the development of eating psychopathology. That is, the impact of certain factors (i.e., family dysfunction) on the development of eating psychopathology will be enhanced by the individual's innate predisposition for being shame-prone.

The present results do not support this view. The lack of association between shame-proneness and eating psychopathology (see Chapter 4) fails to confirm the argument advanced by some researchers that shame-proneness plays a direct causal role in eating psychopathology (cf. Tangney et al., 1992; Sanftner et al., 1995). Moreover, shame-proneness failed to demonstrate a moderating influence on the impact of family dysfunction in the development of eating psychopathology. Such findings fail to confirm a functional role for shame-proneness in the development of eating psychopathology.

However, the significant direct relationship between shame-proneness (TOSCA) and internalised shame (ISS) (see Chapter 4), suggests that shame-proneness may directly contribute to levels of internalised shame. Moreover, the findings imply that shame-proneness may act as a moderating influence (i.e., in the context of problematic relationships with fathers) in the development of internalised shame states. Thus, such results go some way to support the idea that shame-proneness has a potential innate dimension (e.g., Lewis, 1987; Tangney & Fischer, 1995). Further elaboration of the conceptual distinction between shame-proneness and internalised shame will be presented below.

In sum, it would appear that the current results generally support the view advanced in Chapter 3 that problematic levels of pathological shame, most notably internalised shame, are associated with eating psychopathology (e.g., Cook, 1994; Kaufman, 1989). There is less

evidence implying a direct role for the characterological variable of shame-proneness in these symptoms, although it is possible that such a trait might serve to moderate the impact of other risk factors in the development of eating problems. However, further research is required to confirm this view. Thus, the precise function of each of these constructs of pathological shame in eating psychopathology remains to be clarified, but is clearly necessary in order to further enhance understanding of the development and maintenance of these syndromes.

7.2 Conceptual issues

Shame-proneness vs. Internalised Shame

The present findings are generally compatible with the view that shame-proneness and internalised shame reflect different aspects of shame, so are not mutually exclusive constructs (e.g., Andrews, 1998). For example, results from Study 1 (see Chapter 4) demonstrate that measures of shame-proneness (TOSCA) are significantly associated with measures of internalised shame (ISS). The actual correlation ($r = .53$) between these two measures was in keeping with those previously reported in the literature (correlations ranging from .42 to .54) (e.g., Harder, 1995). Indeed, subsequent analyses revealed that an individual's predisposition to shame-proneness directly contributes to their levels of internalised shame. However, levels of shame-proneness do not account for all the variance in internalised shame scores. Thus, the role of other factors (i.e., environmental) is implied in the formation of internalised shame states. This pattern of results goes some way to confirm the argument advanced in Chapter 3 that it is possible for some individuals to be shame-prone in a situational context, yet do not experience concomitant high levels of internalised shame and vice versa.

Further support for the conceptual distinction between these two constructs of pathological shame can be found when considering the relationship between these two variables and scales assessing eating psychopathology. The present findings (see Chapter 4) demonstrate

that only internalised shame (ISS) is associated with anorexic and bulimic attitudes and behaviour. The lack of association found between measures of shame-proneness (TOSCA) and scales assessing dimensions of eating psychopathology (BULIT, TOSCA) generally support the view that the conceptualisation and measurement of internalised shame (ISS) has more clinical relevance than concepts of shame-proneness (e.g., Cook, 1994). More specifically, the results suggest that when considering eating psychopathology, it is most appropriate to assess those global negative attributions about the self related to the internalisation of shame process. Such internalised shame states may arise, in part, from an individual's predisposition for shame-proneness, but will also depend on other experiential factors.

In sum, it seems that internalised shame and shame-proneness reflect different aspects of the shame experience (i.e., external vs. internal),and therefore cannot be viewed as completely independent constructs. However, it would appear that when considering eating psychopathology, internalised shame plays the more salient role in these symptoms.

7.3 General links with the literature

Risk factors for eating psychopathology

The findings from the present thesis are generally compatible with current models of the relationship between certain risk factors, such as family dysfunction and sexual abuse and eating psychopathology. For example, results from Study 1 (see Chapter 4) confirm the relationship between familial factors (i.e., parental overprotection) and the development of eating problems (e.g., Calam et al., 1990; Lacey, 1986; Strober et al, 1990). Eating disorders are seen as a response to the lack of personal control resulting from parental intrusiveness and excessive involvement in the child's affairs (e.g., Calam et al., 1990). Furthermore, findings from Study 2 (see Chapter 5) confirm the previously reported link between sexual abuse (specifically intrafamilial abuse) and bulimic psychopathology (e.g., Calam & Slade, 1989; Waller, 1992;

Wonderlich et al., 1997). In this case, the development of bulimic psychopathology is seen as an effort to regulate intolerable internal states, or to facilitate avoidance or escape from other factors such as family tension associated with intrafamilial abuse and continued memories of the abuse (e.g., Baumeister, 1991; Wonderlich et al., 1997). However, the present pattern of findings suggest that when considering individual's levels of internalised shame, the relationship between these risk factors and eating psychopathology is no longer found.

The relationship between other risk factors, such as puberty, body dissatisfaction, sociocultural factors (i.e., via peer attitudes) and eating psychopathology was also assessed, but only in terms of the degree of shame evoked by such experiences (see Chapter 6). In this case, in contrast to previous studies (e.g., Attie & Brooks-Gunn, 1987; Fairburn & Cooper, 1982; Johnson et al., 1987), such risk factors failed to show any relationship with bulimic psychopathology. However, it might be the case that the lack of any association between these risk factors and bulimic attitudes and behaviour may be largely due to the proposed mediating factor in this relationship (i.e., internalised shame). That is, such risk factors may be associated with the development of eating psychopathology, but they do not impact via levels of internalised shame.

In sum, findings from the current thesis confirm the multidetermined nature of eating psychopathology (e.g., Hsu, 1990). However it would appear that conclusions drawn from previous aetiological studies may have been oversimplified largely due to a failure to acknowledge an individual's current emotional state (i.e., of internalised shame). Thus, the present results lend weight to the view that eating disorders serve the function of managing strong (negative) emotions (e.g., Lacey, 1986). Indeed, it would appear that certain emotion states (i.e., internalised shame) play a central role in the maintenance of eating psychopathology. However, as previously noted, it is not clear whether shame-related variables are concomitant to,

or an effect of, disordered eating attitudes and behaviour. The role of emotional factors in the development and maintenance of eating psychopathology has been considerably underresearched, and clearly requires further exploration.

Furthermore, the current findings imply that the psychological mechanisms by which known risk factors (e.g., family dysfunction, sexual abuse, pubertal experiences, body dissatisfaction) influence later eating attitudes and behaviour remain to be identified. Thus, in keeping with the etiological literature, there is a continuing need to move away from assessing the overt relationship between experiential factors and eating psychopathology, toward a more profound analysis of the psychological processes which underpin this relationship (e.g., Waller & Calam, 1994). However, it is also clear that such research must also attempt to distinguish between those factors which predispose for eating psychopathology, and those factors which serve to perpetuate such symptoms.

The phenomenology of shame

The present findings go some way to support current views regarding the phenomenology of shame. For example, the consistent association between quantitative (i.e., TOSCA, ISS), qualitative (i.e., Retzinger, 1995) measures of shame and eating psychopathology in the current thesis lend weight to the view that shame is characterised by specific cognitive components. Such cognitions reflect an awareness of the self as worthless, deficient and inferior (e.g., Kaufman, 1989; Lewis, 1987).

When considering other emotions that are likely to be associated with shame, the current findings suggest that in women exhibiting eating psychopathology, there is a trend towards concomitant disgust states (see Chapter 6). While such results must be shown to hold up under rigorous statistical analysis, they remain worthy of comment. As previously noted (see Chapter

3), disgust manifests physically as nausea, a gastro-intestinal sensation which is more often food-related (e.g., Fallon & Rozin, 1987). Moreover, disgust is distinctly associated with what goes in and what goes out of the body (self) (e.g., Rozin et al., in press). Such definitions of disgust clearly make this emotion state particularly pertinent to eating psychopathology. More specifically, characteristic behaviours such as bingeing, purging and restriction (of food) exhibited by eating-disordered women might best be viewed as behavioural components associated with problematic levels of disgust. However, little research to date has addressed this issue.

Furthermore, the results go some way to support the view that different forms of shame may arise depending on whether shame is experienced in the context of disgust, anxiety or anger (other affects commonly associated with shame). Moreover, it might be the case that such differential shame-affect combinations (i.e., shame and anger, shame and anxiety or shame and disgust) are associated with the development of different forms of psychopathology. For example, there is some evidence to suggest that shame and anger are common affect combinations in depression (e.g., Gilbert; Scheff, 1987). The present findings suggest that shame and disgust is perhaps a more common affect combination in eating psychopathology, particularly bulimic psychopathology. However findings are tentative and therefore require further exploration.

Furthermore, the current findings are generally compatible with current views of behaviours employed to repair shame (e.g., Shaver et al., 1987). More specifically, shame is often associated with 'self-control procedures', which serve to repair the self in the event of a shaming experience. In shame, such 'self-control procedures' include trying to change the (perceived) flaw or negative characteristic (i.e., being fat) (e.g., Shaver et al., 1987). The association between shame and eating psychopathology found in the current thesis suggests that

behaviours such as severe restriction of food, and purging might best be viewed as 'self-control procedures' employed in attempt to repair the shame associated with feeling fat. Further research is clearly required to support and extend these ideas.

Women's shame

The current results lend weight to the view that there are differential shame-inducing situations for women and men, which are related to both socialisation and sociobiological factors (e.g., M. Lewis, 1992). In particular, the present results go some way to confirm the idea that physical (un)attractiveness is a prototypical shaming situation for many women. For example, findings from Chapter 6 demonstrate that factors such as body dissatisfaction, (i.e., feeling fat), and weight are stimulus situations for evoking shame for all the women in the sample (N =13), but are not associated with the development of eating psychopathology. Thus, the domain of physical appearance appears inextricably bound to feelings of shame for many women.

Furthermore, as previously noted, judgements of what is physically attractive (about the self) are largely socially and culturally defined (e.g., Silberstein et al., 1987). For women, at this moment in sociohistorical time, physical attractiveness is equated with being thin. Moreover, a counterpoint to this message is the notion that "what-is-fat-is-bad" (e.g., Silberstein et al., 1987). Consequently, these authors argue that such sociocultural factors serve to place shame at the heart of many women's relationship to their body and weight. The current results go some way to support this argument, suggesting that feeling fat (i.e., physically unattractive) is associated with shame (i.e., feeling bad) for many women. Indeed, it would appear that there is some evidence to confirm that this is a normative aspect of female experience in society today (e.g., Silberstein et al., 1987).

These results are generally compatible with Gilbert's (1998) notion of shame as essentially an "inner experience of the self as an unattractive social agent", and an awareness of

being involuntarily rejected and devalued by (significant) others. For many women, perceptions of the self as undesirable (i.e., to self and/or others) are likely to be inextricably linked to the perception that they are physically unattractive. Thus, the present findings highlight the importance of the social context in the experience of shame (i.e., self vis-a-vis others), and the importance of such social judgements in the construction of attributions about the self (i.e., as being inferior, less attractive, etc.) (e.g., Gilbert, 1998).

To summarise, it would appear there is some evidence to confirm the view that there are specific stimulus situations for evoking shame for women (i.e., physical (un)attractiveness), and that these situations are likely to be influenced by sociocultural factors (i.e., what is deemed physically attractive for women) (e.g., Gilbert, 1998; M. Lewis, 1992; Silberstein et al., 1987). However, while it would appear that women are more vulnerable to feeling shame about their body/shape/appearance, this alone cannot explain why some women go on to develop eating problems, while others do not. Thus, such a phenomenon can only be considered within the context of a multifactorial model of aetiology.

7.4 Methodological issues

Measurement issues

The current findings must be treated with some caution because the use of self-report measures (i.e., PBI, SEQ-2), which rely upon the recall of perceptions of events (i.e., family dysfunction, sexual abuse) might affect any measure's objective validity. However, while such measures will, in part, be influenced by the individual's subjective constructions of the past, findings from longitudinal developmental studies demonstrate that children's perceptions of events are more important than the event themselves in influencing later psychological adjustment (e.g., Fauber & Long, 1991). Thus, measures such as the PBI and the SEQ-2 remain

useful for assessing factors such as perceived relationships with parents (i.e., PBI) and the experience of sexual abuse in samples of young women.

The use of both quantitative and qualitative methods to assess shame is also worthy of attention. Quantitative measures of shame (i.e., TOSCA, ISS) assess the specific cognitive and behavioural components of shame (e.g., Cook, 1994; Tangney et al., 1990). Thus, the use of quantitative measures enables any researcher to carry out large-scale systematic assessment of emotion states (i.e., shame), and to make generalisations about such phenomena. Moreover, such measures facilitate the comparison of emotion states between different samples (i.e., clinical vs. non-clinical). However, the study of emotion is replete with problems largely relating to the definition and description of any given emotion. Thus, it could be argued that quantitative assessment of emotion is only appropriate when the phenomenology of specific emotions has been previously established; that is, when there is general consensus in the literature regarding the specific cognitive and behavioural components of any given emotion. The development of both shame scales (i.e., ISS and TOSCA) used in the current thesis was based on a conceptual framework consistent with current views regarding the phenomenology of shame (see Chapter 4). Thus, these scales remain potentially useful for assessing levels of internalised shame and shame-proneness in non-clinical samples of women.

Furthermore, it is now widely acknowledged that most emotions are associated with other people; that is, the elicitation of any given emotion is inextricably linked to the social context in which individuals find themselves (e.g., Oatley, 1998). Quantitative measures of shame such as the ISS (Cook, 1994) employed in the present thesis only focus on the internal experience of pathological shame (i.e., global attributions about the self), and therefore do not assess the interpersonal contexts in which such internalisation of shame might occur. Thus, while the ISS may be a useful tool for assessing problematic levels of internalised shame, it is not able to

establish the precise nature of the interpersonal contexts in which such emotion states might have originated. In contrast to the ISS, the scenario-based approach of the TOSCA (Tangney et al., 1990) assesses shame-proneness in the context of certain hypothetical social situations. However, such situational items can only assess the self-reported expectation that shame will be experienced in those situations, and not the actual situations in which shame arises.

In sum, quantitative measures of (pathological) shame (i.e., ISS and TOSCA), are useful for assessing levels of pathological shame in large samples, and are therefore useful for establishing patterns of relationships between problematic levels of shame and other variables (i.e., eating psychopathology). However, these measures are limited in that they do not adequately capture the interpersonal aspects associated with such shame states.

By contrast, qualitative methods of assessing emotion (i.e., content analysis) from transcripts enables emotions to be charted as they actually occur, and therefore provide a holistic picture of emotions in context, which is not possible with quantitative measures (e.g., Retzinger, 1995). Thus, it might be the case that such methods of qualitative analysis could be used as a valuable accompaniment to quantitative methods of emotion assessment. For example, when considering the assessment of shame, methods such as Retzinger's (1995) content analysis scale for shame employed in the current thesis explore both past and present contexts in which shame arises. Thus, a more in-depth analysis of the experience of shame can be obtained. However, qualitative modes of analysis remain time-consuming and costly, so their use remains limited.

To summarise, it would appear that quantitative and qualitative measures of shame each have their own advantages and disadvantages. However, given that shame is a 'social' emotion it might useful for future research to consider a combination of both methods in order to fully capture both the intra- and interpersonal aspects of this emotion state. Moreover, when considering the relationship between pathological shame and eating psychopathology, the use of

both quantitative and qualitative methods may be particularly appropriate. For example, such an approach might help to distinguish between those contexts in which shame arises that are specific to women exhibiting eating psychopathology, and those contexts likely to evoke shame for most women (i.e., physical appearance). This may help to explain why some women develop eating problems, while others do not.

Design issues

One limitation in the design of the current thesis is the employment of cross-sectional samples. More specifically, the use of such samples make it difficult to assess the chronology of early social experiences (i.e., family function, sexual abuse), shame (i.e., shame-proneness, internalised shame) and eating psychopathology. However, a major advantage of cross-sectional research is that patterns of relationships between variables can be established relatively quickly and at little cost, and therefore provide a basis from which longitudinal studies can explore more complex patterns of cause and effect. Thus, the present findings show a consistent link between (internalised) shame and eating psychopathology, which clearly require further exploration via systematic longitudinal studies.

7.5 Clinical implications

It is important that the findings reported in the current thesis are shown to generalise to clinical groups. However, given the continuous nature of eating disorders (e.g., Mintz & Betz, 1988), the present results are of clinical use. For example, one potential target for any clinician working with a woman exhibiting eating (anorexic and/or bulimic) psychopathology is internalised shame directly related to such symptoms. Furthermore, in a case of anorexia where there is an experience of problematic levels of parental care and protection, another target for therapy is internalised shame relating to such an experience. Moreover, where there is the experience of a father who is particularly lacking in warmth and is underinvolved in the child's

affairs, shame-proneness might be another potential target for cognitive therapy. The findings also suggest that any clinician working with a woman with bulimia should be aware of a potential history of sexual abuse, and address this within the therapeutic context.

In sum, the present results generally support the view that when treating women with eating problems, it is more productive for cognitive models of therapy to focus on underlying core beliefs (i.e., of the self as unloveable), rather than the eating disorder symptoms per se (e.g., Waller, 1997). Indeed, the current findings suggest that it might be important for any therapeutic model to focus on current emotional levels (i.e., of internalised shame, shame-proneness) and concomitant cognitive and behavioural components associated with specific emotions, which might serve to perpetuate such symptoms, as well as to acknowledge the experience of those factors thought to predispose for eating problems.

7.6 Conclusions

Future research

Further research is required to support and extend the findings reported in the current thesis. In particular, there is a need to address the precise function of internalised shame in eating psychopathology. For example, it might be the case that characteristic disordered-eating behaviours such as severe restriction, excessive exercise, bingeing and purging serve the function of being chronic sources of shame for women who suffer from these problems. Thus, internalised shame states are largely a product of current disordered eating behaviour, and may play an important role in the maintenance of anorexic and bulimic syndromes.

However, it is also important to address how problematic levels of parental care and control result in internalised shame. As previously noted, one mechanism might be that such parental behaviour has the impact of making the individual feel rejected and inadequate (as a result of being someone who needs controlling, or of not being worthy of the parent's attention),

and therefore not loveable. Such an explanatory model also needs to acknowledge the social aspect of the shame experience (i.e. self vis-a-vis others). Therefore, the impact of abnormal patterns of perceived parental care and protection might be enhanced when individuals perceive themselves as inferior to others (i.e., within the family, or in the peer group). Moreover, one could ask the question of how an individual's predisposition to shame-proneness moderates the impact of problematic levels of paternal care and protection in the formation of internalised shame states. Given the previously noted definitions of shame-proneness (e.g., Lewis, 1987; Tangney & Fischer, 1995), it might be that perceptions of dysfunctional patterns of paternal care and protection are chronic sources of shame for those individuals already predisposed to a sensitivity to experiencing shame in certain situations (i.e., shame-prone individuals).

In light of the current findings, it would appear that those factors which mediate the links between known risk factors such as family dysfunction, sexual abuse, and pubertal experiences, and the development of eating psychopathology remain to be identified. In light of the current findings, it might be that other emotion states commonly associated with shame are antecedent to the internalised shame states associated with current eating psychopathology. For example, the current pattern of results suggests a trend towards problematic levels of disgust related to specific early social experiences (i.e., sexual abuse, pubertal experiences) in women exhibiting eating problems. Given the definitions of disgust presented above (e.g., Root & Fallon, 1987), it could be the case that certain risk factors, such as sexual abuse and menarchal experiences serve to function as chronic sources of feelings of nausea associated with the disgust response. Consequently, problematic levels of disgust may then be associated with the development of eating problems, especially those with a bulimic component (i.e., bingeing and purging). Thus, there is justification for exploring the potential mediating role of disgust in the relationship between known risk factors and the development of eating psychopathology.

Conclusion

The current thesis suggests that pathological levels of certain emotions (i.e., shame) play an important role in eating problems. However, the results demonstrate that pathological shame (i.e. internalised shame) is more a product of current disordered eating attitudes and behaviour, rather than as a direct causal factor in the development of these symptoms. Thus, it seems important to distinguish between those factors which predispose for eating psychopathology and those which serve to maintain or perpetuate such disorders.

The present findings failed to support the hypothesised model where internalised shame acts as a mediator in the relationship between known risk factors such as family dysfunction and sexual abuse, and the development of eating psychopathology (e.g., Baron & Kenny, 1986). However, it would be unwise to rule out the notion of a mediator model per se in attempting to explain the aetiology of eating psychopathology. Those psychological mechanisms by which experiential factors impact on the development of eating problems remain to be identified. Testing and developing more sophisticated models of aetiology is clearly needed in order to enhance the predictive power of existing models, and to provide useful guidelines for treatment.

Thus, in keeping with the theoretical shifts in the eating disorders literature, the current findings reflect a move toward a more holistic picture of the development and maintenance of eating psychopathology. That is, rather than focusing solely on external (i.e., experiential) factors, it is important to acknowledge the role of individual factors (i.e., internalised shame) which also play a role in the development and maintenance of eating psychopathology. Further consideration of internal (i.e., emotional) factors might best explain why, in the presence of a combination of risk factors, some women go on to develop eating problems, while others do not.

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APPENDIX 1

QUESTIONNAIRE BOOKLET

A STUDY OF EATING ATTITUDES AND BEHAVIOUR IN COLLEGE STUDENTS

Subject no. .....

Please complete the following:

Age .....

Please answer all questions. If you are unsure of any questions please give the answer you think best applies to you.

Please answer all questions as quickly and carefully as you can. DO NOT SPEND TOO MUCH TIME OVER EACH QUESTION.

ALL INFORMATION WILL BE TREATED IN THE STRICTEST CONFIDENCE AND NO NAMES WILL BE ATTACHED TO QUESTIONNAIRES.

Thank you for your help

The Parental Bonding Instrument (Study 1)

Below is a list of various attitudes and behaviours of parents. As you remember your Mother AND Father (or other appropriate caregivers, ie. step-parents, guardians) in your first 16 years, would you circle the most appropriate response next to each question.
Please answer ALL questions.

Scale:

1	2	3	4
Very like	**Moderately like**	**Moderately unlike**	**Very unlike**

1. Spoke to me with a warm and friendly voice.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
2. Did not help me as much as I needed.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
3. Let me do those things I liked doing.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
4. Seemed emotionally cold to me.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
5. Appeared to understand my problems and worries.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
6. Was affectionate to me.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
7. Liked me to make my own decisions.	Mother.....	1	2	3	4
	Father.....	1	2	3	4

8. Did not want me to grow up.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
9. Tried to control everything I did.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
10. Invaded my privacy.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
11. Enjoyed talking things over with me.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
12. Frequently smiled at me.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
13. Tended to baby me.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
14. Did not seem to understand what I needed or wanted.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
15. Let me decide things for myself.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
16. Made me feel I wasn't wanted.	Mother.....	1	2	3	4
	Father.....	1	2	3	4
17. Could make me feel better when I was upset.	Mother.....	1	2	3	4
	Father.....	1	2	3	4

18. Did not talk with me very much. Mother.....1 2 3 4

Father.....1 2 3 4

19. Tried to make me dependent on her/him. Mother.....1 2 3 4

Father.....1 2 3 4

20. Felt I could not look after myself unless she/he was around. Mother.....1 2 3 4

Father..... 1 2 3 4

21. Gave me as much freedom as I wanted. Mother.....1 2 3 4

Father..... 1 2 3 4

22. Let me go out as often as I wanted. Mother.....1 2 3 4

Father..... 1 2 3 4

23. Was overprotective of me. Mother.....1 2 3 4

Father..... 1 2 3 4

24. Did not praise me. Mother..... 1 2 3 4

Father..... 1 2 3 4

25. Let me dress in any way I pleased. Mother.....1 2 3 4

Father.....1 2 3 4

The Sexual Events Questionnaire-2 (SEQ-2) (Study 2)

The following questionnaire asks some personal questions about sensitive issues. If you do not feel able to answer a particular question, leave it blank. Your replies would, however, be valuable.

If your answer is "YES" to a question, please fill in your approximate age at the time of this event.

		If "YES" your age at the time
1. Have you ever been upset by someone exposing their genitals?	YES / NO	.....yrs
2. Has anyone ever tried or succeeded in having any kind of sexual intercourse with you against your wishes?	YES / NO	.....yrs
3. Has anyone ever tried or succeeded in getting you to touch their genitals against your wishes?	YES / NO	.....yrs
4. Has anyone tried or succeeded in touching your breasts or genitals against your wishes (besides anyone included above)?	YES / NO	.....yrs
5. Has anyone ever felt you, grabbed you, or kissed you in a way you felt was sexually threatening (besides anyone included above)?	YES / NO	.....yrs
6. At any time in your life, have you ever had an unwanted sexual experience with someone the same sex as yourself?	YES / NO	.....yrs
7. At any time in your life have you been the victim of a rape or attempted rape?	YES / NO	.....yrs

		If "Yes" your age at the time
8. Some people have experienced unwanted sexual advances by someone who had authority over them such as a doctor, teacher, employer, therapist, policeman, or much older person. Did you ever have any kind of unwanted sexual experience with someone who had authority over you at any time in your life?	YES / NO	.....yrs
9. People don't often think of their relatives when thinking about sexual experiences, so the next questions are about relatives. At any time in your life has an uncle, brother, father or grandfather ever had any kind of sexual contact with you?	YES / NO	.....yrs
10. At any time in your life, has an aunt, sister, mother or grandmother ever had any kind of sexual contact with you?	YES / NO	.....yrs
11. At any time in your life, has anyone less closely related to you such as a step-parent, stepbrother or step-sister, in-law or first cousin had any kind of sexual contact with you?	YES / NO	.....yrs
12. In general, have you narrowly missed being sexually assaulted by someone at any time in your life (other than that included above)?	YES / NO	.....yrs
13. And have you ever been in a situation where there was violence or threat of violence, where you were also afraid of being sexually assaulted - again, other than that which you have included above?	YES / NO	.....yrs
14. Can you think of any (other) unwanted sexual experiences (that you haven't mentioned yet)? If you feel able to, please give brief details:	YES / NO	.....yrs

.....

.....

The Test of Self-Conscious Affect (TOSCA) (shame-proneness) (Study 1)

Below are situations that people are likely to encounter in day-to-day life, followed by one common reaction to those situations.As you read each scenario, try to imagine yourself in that situation. Then indicate how likely you would be to react in the way described.

Please do not skip any items - rate all responses.

Scale

1 2 3 4 5
not likely ---------- very likely

1. You make plans to meet a friend for lunch.At 5 o'clock you realise you stood him/her up.

You would think: "I'm inconsiderate."..... 1 2 3 4 5

2. You break something at work and then hide it.

You would think about quitting..... 1 2 3 4 5

3. You are out with friends one evening and you're feeling especially witty and attractive. Your best friend's partner seems to particularly enjoy your company.

You would probably avoid eye-contact for a long time..... 1 2 3 4 5

4. At work, you wait until the last minute to plan a project, and it turns out badly.

You would feel incompetent..... 1 2 3 4 5

5. You make a mistake at work and find out a co-worker is blamed for the error.

You would keep quiet and avoid the co-worker..... 1 2 3 4 5

6. For several days you have put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well.

You would feel like a coward..... 1 2 3 4 5

7. You make a commitment to diet, but when you pass the bakery you buy a packet of doughnuts.

You would feel disgusted with your lack of will power
and self-control..... 1 2 3 4 5

8. While playing around, you throw a ball and it hits your friend in the face.

You would feel inadequate that you can't even throw a ball.....1 2 3 4 5

9. You have recently moved away from your family and everyone has been very helpful. A few times you needed to borrow money but you paid it back as soon as you could.

You would feel immature..... 1 2 3 4 5

10. You are driving down the road and you hit a small animal.

You would think: "I'm terrible."..... 1 2 3 4 5

11. You walk out of an exam thinking you did extremely well. Then you find out you did poorly

You would feel stupid..... 1 2 3 4 5

12. You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success.

You would feel alone and apart from your colleagues..... 1 2 3 4 5

13. While out with a group of friends, you make fun of a friend who's not there.

You would feel small...like a rat..... 1 2 3 4 5

14. You make a big mistake on an important project at work. People were depending on you and your boss critcises you.

You would feel like you wanted to hide..... 1 2 3 4 5

15. You volunteer to help with the local Special Olympics for handicapped children. It turns out to be frustrating and time-consuming work. You think seriously about quitting, but then you see how happy the children are.

You would feel selfish and you'd think you are basically lazy....1 2 3 4 5

The Internalised Shame Scale (Study 1, 2 & 3)

Below is a list of statements describing feelings or experiences that you may have from time to time or that are familiar to you because you have had these feelings and experiences for a long time. Most of these statements describe feelings and experiences that are generally painful or negative in some way.

Some people will seldom or never have had many of these feelings. Everyone has had some of these feelings at some time, but if you find these statements describe the way you feel a good deal of the time, it can be painful just reading them. Try to be as honest as you can in responding.

Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. **DO NOT OMIT ANY ITEM.**

SCALE

N	SE	SO	O	AA
Never	**Seldom**	**Sometimes**	**Often**	**Almost Always**

1. I feel like I'm never quite good enough.....N SE SO O AA

2. I feel somehow left out..... . N SE SO O AA

3. I think that people look down on me..... . N SE SO O AA

4. All in all, I am inclined to feel that I'm a success..... N SE SO O AA

5. I scold myself and put myself down..... N SE SO O AA

6. I feel insecure about others' opinions of me..... N SE SO O AA

7. Compared to other people, I feel like I somehow never measure up..... N SE SO O AA

8. I see myself as being very small and insignificant..... N SE SO O AA

9. I feel I have much to be proud of..... N SE SO O AA

10. I feel intensely inadequate and full of self-doubt..... N SE SO O AA

11. I feel as if I am somehow defective as a person, like there is something basically wrong with me..... N SE SO O AA

12. When I compare myself to others I'm just not as important..... N SE SO O AA

13. I have an overpowering dread that my faults will be revealed in front of others.....N SE SO O AA

14. I feel I have a number of good qualities.....N SE SO O AA

15. I see myself striving for perfection, only to continually fall short..... N SE SO O AA

16. I think others are able to see my defects..... N SE SO O AA

17. I could beat myself over the head with a club when I make a mistake..... N SE SO O AA

18. On the whole, I am satisfied with myself..... N SE SO O AA

19. I would like to shrink away when I make a mistake..... N SE SO O AA

20. I replay events over and over in my mind until I am overwhelmed..... N SE SO O AA

21. I feel I am a person of worth at least on an equal plane to others..... N SE SO O AA

22. At times I feel like I will break into a thousand pieces..... N SE SO O AA

23. I feel as if I've lost control over my body functions and my feelings..... N SE SO O AA

24. Sometimes I feel no bigger than a pea..... N SE SO O AA

25. At times I feel so exposed that I wish the earth would open up and swallow me..... N SE SO O AA

26. I have this painful gap within me that I have not been able to fill..... N SE SO O AA

27. I feel empty and unfulfilled..... N SE SO O AA

28. I take a positive attitude towards myself..... N SE SO O AA

29. My loneliness is more like emptiness..... N SE SO O AA

30. I feel like there is something missing..... N SE SO O AA

The Eating Attitudes Test -40 (Study 1)

Below are a set of statements which directly relate to food or eating, although other types of questions have been included.
Please respond to each statement carefully by circling the most appropriate response for you. Do not omit any item.

SCALE

N	R	S	VO	A
Never	**Rarely**	**Sometimes**	**Very Often**	**Always**

1. Like eating with other people..... N R S VO A

2. Prepare foods for others, but do not eat what I cook.....N R S VO A

3. Become anxious prior to eating.....N R S VO A

4. Am terrified about being overweight.....N R S VO A

5. Avoid eating when I'm hungry..... N R S VO A

6. Find myself preoccupied with food.....N R S VO A

7. Have gone on eating binges when I feel that I may not be able to stop.....N R S VO A

8. Cut my food into small pieces.....N R S VO A

9. Aware of the calorie content of foods that I eat.....N R S VO A

10. Particularly avoid foods with a high carbohydrate content (eg. bread, rice potatoes, etc.).....N R S VO A

11. Feel bloated after meals.....N R S VO A

12. Feel that others would prefer if I ate more.....N R S VO A

13. Vomit after I have eaten.....N R S VO A

14. Feel extremely guilty after eating.....N R S VO A

15. Am preoccupied with a desire to be thinner.....N R S VO A

16. Exercise strenuously to burn off calories.....N R S VO A

17. Weigh myself several times a day.....N R S VO A

18. Like my clothes to fit tightly.....N R S VO A

19. Enjoy eating meat.....N R S VO A

20. Wake up early in the morning.....N R S VO A

21. Eat the same foods day after day.....N R S VO A

22. Think about burning up calories when I exercise.....N R S VO A

23. Other people think that I am too thin.....N R S VO A

24. Am preoccupied with the thought of having fat on my body.....N R S VO A

25. Take longer than others to eat my meals..... N R S VO A

26. Enjoy eating at restaurants.....N R S VO A

27. Take laxatives..... N R S VO A

28. Avoid foods with sugar in them..... N R S VO A

29. Eat diet foods..... N R S VO A

30. Feel that food controls my life..... N R S VO A

31. Display self control around food.....N R S VO A

32. Feel that others pressure me to eat.....N R S VO A

33. Give too much time and thought to food.....N R S VO A

34. Suffer from constipation.....N R S VO A

35. Feel uncomfortable after eating sweets..... N R S VO A

36. Engage in dieting behaviour..... N R S VO A

37. Like my stomach to be empty..... N R S VO A

38. Enjoy trying new rich foods..... N R S VO A

39. Have the impulse to vomit after meals..... N R S VO A

40. Have regular menstrual periods..... N R S VO A

The Test for Bulimia (BULIT) (Study 1, 2 & 3)

Below are another, different set of questions which directly relate to food and eating. Please answer all the items circling the most appropriate response for you. Please answer as honestly as possible; remember, all of the information you provide will be kept strictly confidential. Do not omit any item.

1. Do you ever eat uncontrollably to the point of stuffing yourself (ie., going on eating binges)?

a) Once a month or less (or never)
b) 2 - 3 times a month
c) Once or twice a week
d) 3 - 6 times a week
e) Once a day or more

2. I am satisfied with my eating patterns.

a) Agree
b) Neutral
c) Disagree a little
d) Disagree
e) Disagree strongly

3. Have you ever kept eating until you thought you would explode?

a) Practically every time I eat
b) Very frequently
c) Often
d) Sometimes
e) Seldom or never

4. Would you presently call yourself a "binge eater"?

a) Yes, absolutely
b) Yes
c) Yes, probably
d) Yes, possibly
e) No, probably not

5. I prefer to eat:

a) At home alone
b) At home with others
c) In a public restaurant
d) At a friend's house
e) Doesn't matter

6. Do you feel you have control over the amount of food you consume?

a) Most or all of the time
b) A lot of the time
c) Occasionally
d) Rarely
e) Never

7. I eat until I'm too tired to continue.

a) At least once a day
b) 3 - 6 times a week
c) Once or twice a week
d) 2 - 3 times a month
e) Once a month or less (or never)

8. How often do you prefer eating ice cream, milk shakes, or puddings during a binge?

a) Always
b) Frequently
c) Sometimes
d) Seldom or never
e) I don't binge

9. How much are you concerned about your binges?

a) I don't binge
b) Bothers me a little
c) Moderate concern
d) Major concern
e) Probably the biggest concern in my life

10. Most people I know would be amazed if they knew how much food I can consume in one sitting.

a) Without a doubt
b) Very probably
c) Probably
d) Possibly
e) No

11. Do you ever eat to the point of feeling sick?

a) Very frequently
b) Frequently
c) Fairly often
d) Occasionally
e) Rarely or never

12. I am afraid to eat anything for fear that I won't be able to stop.

a) Always
b) Almost always
c) Frequently
d) Sometimes
e) Seldom or never

13. I don't like myself after I eat too much.

a) Always
b) Frequently
c) Sometimes
d) Seldom or never
e) I don't eat too much

14. How often do you intentionally vomit after eating?

a) 2 or more times a week
b) Once a week
c) 2 - 3 times a month
d) Once a month
e) Less than once a month (or never)

15. Which of the following describes your feelings after binge eating?

a) I don't binge eat
b) I feel O.K.
c) I feel mildly upset with myself
d) I feel quite upset with myself
e) I hate myself

16. I eat a lot of food when I'm not even hungry.

a) Very frequently
b) Frequently
c) Occasionally
d) Sometimes
e) Seldom or never

17. My eating patterns are different from eating patterns of most people.

a) Always
b) Almost always
c) Frequently
d) Sometimes
e) Seldom or never

18. I have tried to lose weight by fasting or going on "crash" diets?

a) Not in the past year
b) Once in the past year
c) 2 - 3 times in the past year
d) 4 - 5 times in the past year
e) More than 5 times in the past year

19. I feel sad or blue after eating more than I'd planned to eat.

a) Always
b) Almost always
c) Frequently
d) Sometimes
e) Seldom, never, or not applicable

20. When engaged in an eating binge, I tend to eat foods that are high in carbohydrates (sweets and starches).

a) Always
b) Almost always
c) Frequently
d) Sometimes
e) Seldom, or I don't binge

21. Compared to most people, my ability to control my eating behaviour seems to be:

a) Greater than others' ability
b) About the same
c) Less
d) Much less
e) I have absolutely no control

22. One of your best friends suddenly suggests that you both eat at a new restaurant buffet that night. Although you'd planned on eating something light at home, you go ahead and eat out, eating quite a lot and feeling uncomfortably full. How would you feel about yourself on the ride home?

a) Fine, glad I'd tried that new restaurant
b) A little regretful that I'd eaten so much
c) Somewhat disappointed in myself
d) Upset with myself
e) Totally disgusted with myself

23. I would presently label myself a "compulsive eater" (one who engages in episodes of uncontrolled eating).

a) Absolutely
b) Yes
c) Yes, probably
d) Yes, possibly
e) No, probably not

24. What is the most weight you've ever lost in 1 month?

a) Over 20 pounds
b) 12 - 20 pounds
c) 8 - 11 pounds
d) 4 - 7 pounds
e) Less than 4 pounds

25. If I eat too much at night I feel depressed the next morning.

a) Always
b) Frequently
c) Sometimes
d) Seldom or never
e) I don't eat too much at night

26. Do you believe that it is easier for you to vomit than it is for most people?

a) Yes, it's no problem at all for me
b) Yes, it's easier
c) Yes, it's a little easier
d) About the same
e) No, it's less easy

27. I feel food controls my life.

a) Always
b) Almost always
c) Frequently
d) Sometimes
e) Seldom or never

28. I feel depressed immediately after I eat too much.

a) Always
b) Frequently
c) Sometimes
d) Seldom or never
e) I don't eat too much

29. How often do you vomit after eating in order to lose weight?

a) Less than once a month (or never)
b) Once a month
c) 2 - 3 tines a month
d) Once a week
e) 2 or more times a week

30. When consuming a large quantity of food, at what rate of speed do you usually eat?

a) More rapidly than most people have ever eaten in their lives
b) A lot more rapidly than most people
c) A little more rapidly than most people
d) About the same rate as most people
e) More slowly than most people (or not applicable)

31. What is the most weight you've ever gained in 1 month?

a) Over 20 pounds
b) 12 - 20 pounds
c) 8 - 11 pounds
d) 4 - 7 pounds
e) Less than 4 pounds

32. How do you think your appetite compares with that of most people you know?

a) Many times larger than most
b) Much larger
c) A little larger
d) About the same
e) Smaller than most

APPENDIX 2

Covering letter (Study 1).

[date]

Dear student

I am a Research Psychologist working in the Psychology department at City University. I am currenty carrying out research on eating attitudes and behaviour in students.

I would be very grateful if you would fill out the enclosed questionnaire, seal it in the envelope provided, and return it to [hall of residence] reception. Please could you do this WITHIN THE NEXT SEVEN DAYS.

Any information that you give will be COMPLETELY CONFIDENTIAL. All questionnaires will only be seen by myself, and will be used for statistical purposes only. You do not need to give your name.

Thank you in anticipation for your help.

Yours sincerely

Clare Murray
Research Psychologist

APPENDIX 3

Chase-up letter (Study 1)

[date]

Dear student

You may remember that two weeks ago you received a questionnaire about eating attitudes and behaviours in students.

From my records of room numbers, I can see that you have not yet sent back your completed questionnaire. In order for this research to be meaningful we need as many questionnaires back as possible. Therefore, I would really appreciate it if you would complete your questionnaire, and return it to [hall of residence] reception, in the envelope provided. Please could you do this WITHIN THE NEXT SEVEN DAYS.

If you have any queries regarding this questionnaire, please do not hesitate to contact me, Clare Murray on: 071- 477 8000 Ext. 4593.

Any information that you give me will be COMPLETELY CONFIDENTIAL. All questionnaires will only be seen by myself,and will be used for statistical purposes only. You do not need to give your name.

Thank you in anticipation for your help.

Yours sincerely

Clare Murray
Research Psychologist

APPENDIX 4

Unstructured interview protocol (Study 3)

My research is concerned with asking women about how they feel different experiences during their life have affected them as people. In this interview I shall be asking you questions about your life so far. Some of the questions maybe a little unexpected, and I don't know if they will apply to you, but it may be important for me to find out, so I hope you'll bear with me.

When answering, please remember that I am interested in your experience of what happened. You should also remember that whatever you have to say is completely confidential - between you and me. The whole interview will take about an hour.

1. So, first of all can you tell me how old you are?

.....years

2.Now I'd like you to tell me a bit about your early family situation. If you could start with where you were born, who was in your family, whether you moved around much, what your family did at various times for a living, OK?

Family experience

Now I'm going to be asking you about your experience of growing up in your family in a bit more detail.

3.On a scale of 1 to 10, where 1 is not at all, and 10 is very much, where would you put your mother in terms of how much she praised you as a child?

Probe: Can you tell me a bit more about that?

4.On a scale of 1 to 10, where would you put your father in terms of how much he praised you?

Probe: Can you tell me a bit more about that?

5.On a scale of 1 to 10, where 1 is not at all and 10 is very much, where would you put your mother in terms of how critical she was of you?

Probe: Can you tell me a bit more about that?

6.On a scale of 1 to 10, where would you put your father in terms of how critical he was of you?

Probe: Can you tell me a bit more about that?

7.What was expected of you in your family with regards to achievements of any kind?

8.From your point of view, how did family members express their feelings?

9.How would you say your family appeared to people outside?

10.All families argue at some time or another. What things did you argue about most with your family?

11. When did the arguments most likely happen - was there any specific time or situation?

Pubertal experience

Now I shall be asking you about specific events in your life and your feelings towards them.

12. How old were you when you started your periods?

.....years

13. What happened?

14. Who did you tell?

15. What were your feelings about this event?

16. What, in your view, was the attitude of other family members towards this event?

17. What about friends, how did they respond?

18. Overall, how would you describe your experience of puberty?

19. How would you describe your feelings now with regards to your periods?

Body dissatisfaction

20.Can you describe how you looked physically as a child?

21. Can you describe how you felt about your body as you were growing up?

22. Did your feelings about your body change at different times in your life?

23. How do you feel about your body now?

24. What, from your point of view did other family members feel about physical appearance and their own bodies?

25. What about friends, what was their attitude to physical appearance?

26. Bearing in mind your family and friends' views, how do you think your body compared?

27. How would you describe your attitude to people who are overweight?

Sexual experience

The following questions may be a little difficult to answer, and you may feel they don't apply to you, but it may be important that I find out, so please try and answer them as best you can.

28. How old were you when you had what you would regard as your first sexual experience? (This doesn't necessarily have to mean sexual intercourse)

.....years

29. What happened?

30. Who did you tell?

31. What were your feelings about it?

Sexual abuse

32. Looking back, can you think of any sexual experience of any kind that you would define as unwanted or abusive?

Probe: Exposure, touching of genitals, within a relationship, intrafamilial, use of force?

33. How old were you?

.....years

34. What happened?

35. Who did you tell?

36. What were your feelings about this?

37. Overall, how would you describe your present attitude to sex?

Disclosure:

Thank you for answering those questions. I hope that they haven't caused you too much distress. You may feel that you feel angry or sad, maybe without understanding why. Please let me know if you feel at all upset, either now or in the future. After the interview has finished, I will give you a contact number where you can reach me if you feel the need to do so.

There may be other experiences of this sort in your past. Some people forget; at other times they find it hard to talk at first. I hope that you will be able to let me know later if you feel that there is anything else of this sort that you want to talk about.

No disclosure:

Thank you for answering those questions. As I said, they aren't relevant to everybody that I see, but I think I need to ask them in case they are important.

Occasionally, people worry about talking about anything as intimate as sexual experiences. This means that sometimes they don't tell me about these experiences at this stage. Just in case there are things of this sort that you haven't talked about, perhaps we could come back to them when you feel it's safe to do so.

Current eating habits

38. Can you tell me what a normal day's eating pattern is like for you?

39. Are you happy with your eating patterns?

40. Is there anything you'd like to change about your pattern of eating?

Finally, I'd like to ask you about your future. Do you have any thoughts about the kind of life you would like to have?

Do you have any particular hopes or ambitions?

Thank you very much for taking the time to take part in this research.