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**APPEARANCE RELATED CONCERNS
ACROSS THE GENERAL AND
CLINICAL POPULATIONS**

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**Submitted in fulfillment of the requirements for the
DPsych degree**

**City University
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London**

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CONTENTS

		Page
ABSTRACT		12
SECTION A	GENERAL INTRODUCTION	13
SECTION B	RESEARCH: The extent and correlates of appearance dissatisfaction in young adults	
	Chapter 1: Introduction	19
1.1	Introduction	20
1.2	Body image defined	21
1.3	Exploring the satisfaction/dissatisfaction with appearance continuum	23
1.4	Assessment of (dis)satisfaction with appearance	25
1.5.1	Appearance Dissatisfaction: the extent of the problem	31
1.5.2	Women and (dis)satisfaction with appearance	31
1.5.3	Men and (dis)satisfaction with appearance	33
1.6.1	Moderating variables of appearance (dis)satisfaction	36
1.6.2	Self-esteem	36
1.6.3	Social support	38
1.6.4	Personality characteristics, depression, social class, and ethnicity	39
1.7.1	Psychological influences on body image	40
1.7.2	Perceptual influences	40
1.7.3	Developmental influences	41
1.7.4	Sociocultural influences	42
1.8.1	Cognitive approaches	44

1.8.2	Self-Related Cognition	45
1.8.3	Social Information-Processing Biases	46
1.8.4	Body Image and the Mental Encyclopedia	46
1.9	Integrative theoretical approaches	47
1.10	The present investigation	47
	Chapter 2: Methods of Inquiry: Quantitative and Qualitative Approaches	51
2.1	Introduction	52
2.2	Paradigm wars and mixed methodologies	52
2.3	The Current situation	56
2.4.1	A Taxonomy of Studies Using Different Methodological Approaches	58
2.4.2	Monomethod Studies	59
2.4.3	Mixed Method Studies	59
2.4.4	Mixed Model Studies	60
2.5	Interpretative Phenomenological Analysis	60
2.6	The methodology employed in the present investigation	66
	Chapter 3: Study 1: Method and Results	68
3.1	Introduction	69
3.2.1	Methods	69
3.2.1	Design	69
3.2.2	Participants	70
3.2.3	Instruments	71
3.2.4	The Appearance Schemas Inventory	71
3.2.5	Brief Symptom Inventory (BSI)	72
3.2.6	The Derriford Appearance Scale (DAS59)	74
3.2.7	The Rosenberg Self-esteem Scale	75
3.2.8	Short Form Social Support Questionnaire (1987)	77
3.3.1	Procedure	78
3.3.1	Pilot 1	78
3.3.2	Study 1	78

3.4	Data analysis	78
3.5.1	Results	79
3.5.1	Sample	79
3.5.2	Descriptive Statistics	79
3.5.3	Appearance dissatisfaction in young adults (Hypothesis 1)	80
3.5.4	Body parts (Dis)satisfaction (Hypothesis 2)	84
3.5.5	Appearance Dissatisfaction and Psychological Distress in relation to Self-Esteem, Social Support, and Appearance Schemata	86
3.5.6	Predicting appearance dissatisfaction and psychological functioning	87
3.5.7	The relationship between global psychological functioning, self-esteem, social support, and appearance schemata (Hypotheses H3, H6, H7)	87
3.5.8	The relationship between appearance dissatisfaction, self-esteem, social support and appearance schemata (Hypotheses H4, H5, H8)	90
	Chapter 4: Studies 2 and 3: Methods and Results	94
4.1	Introduction	95
4.2	Method	95
4.2.1	Design	95
4.2.2	Participants	95
4.2.2	Study 2	95
4.2.3	Study 3	96
4.2.4	Instruments	96
4.2.4	Studies 2 and 3	96
4.2.5	The subject interview schedule (SIS-I, II)	96
4.2.6	Procedure	97
4.2.6	Pilot 2	97
4.2.7	Studies 2,3	98
4.3.1	Data analysis	98
4.3.1	Studies 2 and 3	98

4.4.1	Results	99
4.4.1	Study 2	99
4.4.2	Childhood	100
4.4.3	Adolescence	101
4.4.4	Adulthood	102
4.4.5	Arguable assumptions	102
4.4.6	Preoccupation with appearance	102
4.4.7	Affective and physiological reactions	103
4.4.8	Behavioural strategies	103
4.4.9	Cognitive strategies	104
4.4.10	Perfectionism	106
4.5.1	Study 3	106
4.5.2	Childhood	107
4.5.3	Adolescence	107
4.5.4	Adulthood	107
4.5.5	An acceptance of diversity	108
4.5.6	Cognitive strategies	109
	Chapter 5: Discussion	111
5.1	Introduction	112
5.2	The contribution of the present investigation to appearance research	112
5.3	Appearance dissatisfaction in young adults	114
5.4.1	Multidimensionality of appearance (dis)satisfaction	117
5.4.2	Appearance dissatisfaction and psychological functioning	117
5.4.3	Schemata	118
5.4.4	Self-esteem	120
5.4.5	Social support	122
5.4.6	Parents	123
5.4.7	Peers	124
5.4.8	Media	125

5.4.9	Coping strategies	126
5.4.10	Perfectionism	127
5.5	A model for the development of appearance dissatisfaction	127
5.6	Limitations of the present investigation	130
5.7	Suggestions for future research	132
5.8	Conclusion	133
	Chapter 6: Implications for practice	135
6.1.	Introduction	136
6.2.1	Implications of the present investigation for research methodology	136
6.2.1	Mixed model studies: A diversity of imperfection	136
6.2.2	IPA: A bridge between social cognition and discourse Analysis	139
6.3.1	Implications of the present investigation for clinical practice	140
6.3.1	Prevention of appearance dissatisfaction	140
6.3.2	Psychological interventions for improving appearance satisfaction	144
	References	150
	Appendix 1	194
	Appendix 2	217
	Appendix 3	268
	Appendix 4	314
SECTION C	CONSULTATION: Audit of cleft lip and palate services in the UK. Psychosocial needs assessment	343
1	Background to the Present Project	343
2	Cleft Lip and Palate	344
3.1	The Recommendations	347
3.2	The Audit Process	348
3.3	Self-Report Measures	349

3.4	Level of Measurement and Scales	354
3.5	General Recommendations	356
3.6	Specific Recommendations	357
4	Conclusion	365
5	References	365
6	Appendix A	368
7	Appendix B	422
SECTION D	REVIEW PAPER: Body image and quality of Life in patients with head and neck cancer	426
	Search Strategies	426
1	Introduction	426
2	Body image	429
3	Assessment of body image in head and neck cancer	430
4	Measuring disfigurement in head and neck cancer	432
5	Existing studies of disfigurement in head and neck cancer	433
6	Quality of life in head and neck cancer patients	434
7	Conclusion	438
	References	439

LIST OF TABLES

	Page
Table 1.1. Measures of size estimation accuracy	26
Table 1.2. Silhouette measures of body satisfaction	27
Table 1.3. Questionnaire measures of body satisfaction	28
Table 1.4. Cognitive measures of appearance	30
Table 3.1. Mean and standard deviation for Appearance Schemas Inventory	72
Table 3.2. Mean (sd) of 18-30 years olds normal men and women concerned and not-concerned about their appearance	76
Table 3.3. Mean, mode and standard deviation for the Rosenberg Self-esteem Scale	80
Table 3.4. Mean and standard deviations of all variables for concerned and not-concerned about appearance male and female participants	82
Table 3.5. Number (percent) of female participants endorsing dissatisfaction for body parts (N=177)	84
Table 3.6. Number (percent) of male participants endorsing dissatisfaction for body parts (N=123)	85
Table 3. 7. Correlations among the variables used in the analyses for not-concerned men	86
Table 3. 8. Correlations among the variables used in the analyses for not-concerned women	86
Table 3.9. Correlations among the variables used in the analyses for concerned men	86
Table 3.10. Correlations among the variables used in the analyses for concerned women	86
Table 3.11. Model A1: Multiple regression analyses of psychological distress for not concerned individuals on appearance schemata and self-esteem	88
Table 3.12. Model A2: Multiple regression analyses of psychological distress for concerned individuals on appearance schemata and self-esteem	89

Table 3.13.	Model A3: Multiple regression analysis of psychological distress for concerned individuals on appearance schemata, self-esteem, social support 1, and social support and 2	89
Table 3.14.	Model B1: Multiple regression analyses of appearance dissatisfaction on appearance schemata for not concerned individuals	90
Table 3.15.	Model B2: Multiple regression analyses of appearance dissatisfaction on appearance schemata, psychological distress, social support 1 and social support 2 for concerned individuals	91
Table 3.16.	Model C1: The cubic relationship between appearance dissatisfaction and schemata for individuals who are not concerned with their appearance	92
Table 3.17.	Model C2: The cubic relationship between appearance dissatisfaction and schemata for individuals who are concerned with their appearance	92
Table 4.1.	Features that participants in study 2 were dissatisfied with	100

LIST OF FIGURES

	Page
Figure 1.1. From “Development and validation of a new body image assessment scale” by M.A. Thompson and J.J. Gray, 1995 <i>Journal of Personality Assessment</i> , 64, p.263	27
Figure 1.2. A body image schema and its relation to other areas of cognitive processing. From <i>Exacting Beauty</i> . Thompson, Heinberg, Altabe, Tantleff-Dunn. American Psychological Association, 1999.	45
Figure 1. 3. A model of historical and proximal influences. From "The Treatment of Body Image Disturbance" (p. 85), by T. F. Cash, in J. K. Thompson (Ed.), <i>Body Image, Eating Disorders, and Obesity.. An Integrative Guide for Assessment and Treatment</i> , 1996, Washington, DC: American Psychological Association	47
Figure 2.1. The research cycle	61
Figure 3.1. Mean GSI by gender and concern for appearance	83
Figure 3.2. Mean DASGT by gender and concern for appearance	83
Figure 3.3. Mean self-esteem by gender and concern for appearance	83
Figure 3.4. Mean appearance schemata by gender and concern for appearance	83
Figure 3.5. Mean social support S by gender and concern for appearance	83
Figure 3.6. Mean social support N by gender and concern for appearance	83
Figure 3.7. Lines of best fit between ASI and GSI for selected values of SE.	88
Figure 3.8. The cubic relationship between appearance dissatisfaction and schemata for concerned individuals	93
Figure 3.9. The cubic relationship between appearance dissatisfaction and Schemata for not concerned individuals	93
Figure 5.1. A model of the development and maintenance of appearance dissatisfaction	134

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Abstract

This thesis explores appearance related concerns across the general and clinical populations. Section A briefly describes the different parts comprising this thesis and discusses the common themes emerged. In Section B, a survey of 300 young adults is reported which was conducted with an aim to identify the nature, extent and correlates of appearance dissatisfaction in this population. It was found that a surprisingly large percent of men and women were dissatisfied with their appearance and that this discontent was not limited to shape/size concerns in women and muscularity concerns in men as has been suggested by previous investigators. In terms of predictors of appearance dissatisfaction, appearance schemata, social support and psychological distress were the stronger with investment in appearance (appearance schemata) being the most significant. This survey was followed up by two qualitative studies aiming to identify and explore in more depth the factors that contribute to the development or not of appearance dissatisfaction. Themes such as parental modelling, self-esteem social support, media influence emerged in the participants' discourse as important in the development or not of their dissatisfaction with appearance. In Section C the consultation revised the existing measures of appearance (dis)satisfaction and recommended the most developmentally appropriate and psychometrically rigorous for the assessment of individuals with cleft lip/palate condition. From the review of the relevant literature it became obvious that the assessment of appearance related aspects is still at an early stage. The consultation also briefly summarizes the effects on body image, self-concept, and social interaction of cleft lip/palate condition. Finally in Section D, a review paper critically summarizes the literature on body image and quality of life in patients with head and neck cancer and makes recommendations for further developments in research and clinical practice in this area.

Section A

This thesis explores appearance related concerns across the general and clinical populations. Despite the significant number of individuals affected by congenital and/or acquired disfigurement and the much bigger number of individuals in the general population who are dissatisfied with an aspect of their appearance and the enormous challenges facing those individuals in our appearance-oriented society relatively little research has been conducted on the assessment, prevention and treatment of appearance dissatisfaction and at a more theoretical level the conceptualization of body image. Parts of this gap in the literature the present doctoral submission aims to cover. In this section (Section A) the different parts comprising this thesis are briefly described and the common themes emerged are discussed. In section B a research study examining the nature and extent of appearance related concerns in young adults in the general population is presented. Section C reports a consultation undertaken on behalf of the Craniofacial Society of Great Britain and Ireland regarding the assessment of psychological status of individuals with cleft/lip and palate (a population with congenital disfigurement). The thesis concludes with Section D, which includes a review of the literature concerning appearance related issues and quality of life in adults with head and neck cancer (a population with acquired disfigurement). It is believed that this thesis has both theoretical and practical applications and enhances our understanding of appearance-related concerns which is still at a relatively early stage.

More specifically in Section B, a survey of 300 young adults is reported which was conducted with an aim to identify the nature, extent and correlates of appearance dissatisfaction in this population. It was found that a surprisingly large percent of men and women (79% and 82% respectively) were dissatisfied with their appearance and that this discontent was not limited to shape/size concerns in women and muscularity concerns in men as has been suggested by previous investigators. In terms of predictors of appearance dissatisfaction appearance schemata, social support and psychological distress were the stronger, with investment in appearance (appearance schemata) being the most significant. This survey was followed up by two qualitative studies aiming to identify and explore in more depth the factors that contribute to the development or not of appearance dissatisfaction. Themes such as parental modelling, self-esteem, social support, and coping strategies emerged in the participants' discourse as important in the development of their feelings towards their appearance.

In Section C the consultation revised the existing measures of appearance (dis)satisfaction and recommended the most developmentally appropriate and psychometrically rigorous for the assessment of individuals with cleft lip/palate condition. From the review of the relevant literature it became obvious that the assessment of appearance related variables is still at an early stage. The consultation also briefly summarizes the effects on body image, self-concept, and social interaction of cleft lip/palate condition.

Finally in Section D, a review paper critically summarizes the literature on body image and quality of life in patients with head and neck cancer and makes recommendations for further development in research and clinical practice in this area.

It is apparent in all three sections that there is a great prevalence of appearance related concerns across these populations of normal¹, acquired and congenitally disfigured appearance and that at present these concerns are not being assessed, prevented and managed satisfactorily. Moreover, what seems to emerge is that there is a continuum of satisfaction/dissatisfaction with appearance and that studies in clinical populations can inform studies of the general population and vice versa. Relatively little research has been conducted in the psychology of appearance and the existing studies are heavily influenced by the eating disorders literature. Below the themes emerged from these three sections are discussed in more detail:

a. Appearance dissatisfaction is widespread in both the general and clinical populations. Appearance dissatisfaction was found to be highly prevalent in the survey conducted in the general population of young adults (Section B, *Study 1*) and the literature on disfigured individuals (Section D) also attests to the extent of the problem. Evidence is accumulating and the notion of "normative" discontent with appearance is strengthened. Moreover, although females are thought to value physical appearance more than males, research shows that males and females are equally dissatisfied with aspects of their appearance.

b. The measurement and assessment of appearance related concerns is still primitive and highly influenced by the eating disorders literature and conceptualization of body image. The evaluation of appearance related concerns is

¹ Normal in this thesis are considered individuals who have not been diagnosed with an eating disorder (as these are described in the DSM-IV) or are disfigured (disfigurement is defined as a visible and negative alteration in appearance caused by disruption of skin, soft tissue, or bony structures).

complicated by the need to consider the many different types and body sites, the variability in severity and visibility, and the numerous personal, social, and situational characteristics affecting body image and adjustment. Currently, the assessment of body image is primarily, with few exceptions, following the eating disorders tradition and consequently the overwhelming majority of the existing measures are most appropriate for young females with weight/shape/size concerns. In the disfigurement literature Harris (1997) also notes that the individual's subjective perception of his or her appearance is a better predictor of psychological and body image disturbance than the view of a dispassionate observer.

c. Objective appearance seems to bear little relation to the actual feelings of the individuals and factors such as investment in appearance and social support are more important. Despite the variety of problems and the complexity of the variables involved, there is a remarkable similarity in the difficulties reported in the general and clinical populations. The most common concerns relate to negative self-perceptions and difficulties with social interaction. These problems frequently manifest in both the general and clinical populations as combinations of negative emotional reactions (e.g., social anxiety), behaviours (e.g., social avoidance), and/or thought patterns (e.g., selective interpretation of feedback from others). Macgregor (1979) describes visible disfigurement as a social disability implying that problems experienced by disfigured people set them apart from the general population and similar findings emerged from the discourse of individuals who were highly dissatisfied with their appearance (Section B, Study 2). Moreover, the degree of dissatisfaction with an aspect of appearance seems to be only marginally, if at all, determined by the degree of an individual's objective "beauty" in the normal population or "disfigurement" in the clinical populations. Factors that seem more important are self-esteem, social support, appearance schemata and general psychological functioning.

Differences in appearance (actual or perceived) commonly result in difficulties in social interactions. Robinson and colleagues (1996) reviewing the problems experienced by adults with congenital and other disfigurements, document difficulties meeting new people, making new friends, and anxieties about developing relationships. Similar difficulties were articulated by individuals with appearance dissatisfaction in this research programme who further stated that anticipation of negative reactions from others and/or misinterpretation of neutral or even positive messages lead them to avoid much valued social situations.

In summary people with disfigurements and/or a perceived defect in appearance seem to be more at risk for appearance dissatisfaction (self consciousness of appearance), low self-esteem, social interaction problems, and psychological distress usually manifested in the form of depression. However, large individual differences exist in the experiences of people with visible abnormalities and of people with "normal" looks. Whereas many experience difficulties, others find ways of coping effectively. The reasons behind this variation are unclear. Research and clinical experience clearly demonstrate that the severity and extent of the disfigurement or appearance "defect" consistently fail to predict distress levels (e.g. Lansdown *et al*, 1997).

Current evidence suggests that in a wide variety of physical and psychological disorders' negative outcomes are modified by the availability of social support and that seems to be true for dissatisfaction with appearance whether caused by disfigurement or not. Adaptive and maladaptive coping styles have been investigated in relation to the body image concerns and adjustment of people with disfigurements and research summarized in Lansdown and colleagues (1997) has demonstrated that people with visible differences who display good social skills (for example, taking the initiative in social interaction) have more self-confidence and are more satisfied with the quality and quantity of their social interactions. Similar adaptive coping strategies were articulated by individuals who were highly satisfied with their appearance in this research programme (Section B, *Study 3*) and the corresponding maladaptive strategies by individuals who were dissatisfied (Section B, *Study 2*).

d. There is a dearth of studies reporting the development and evaluation of appearance dissatisfaction prevention and treatment programmes. Despite the distress experienced by people who are dissatisfied with an aspect of their appearance very few programmes have been developed for the management of it both in the general and clinical populations. The existing preliminary results, however, are positive and they reinforce the need for further research (Cash, 1996). Similarly, very little, if any, research has been devoted to the important task of devising prevention programmes for individuals at risk for developing appearance dissatisfaction. Both types of programmes are crucial if we want to minimize the number of people suffering from appearance dissatisfaction and the severity of this suffering.

The conclusions reached in all three sections of this dissertation have striking similarities. Research in the area of appearance dissatisfaction is fraught with

methodological challenges, not least of which is the wide variation in aspects of appearance individuals are dissatisfied with and the disfiguring conditions and the small number of people affected by any one type. The majority of research focuses on samples of convenience, and little is known about the concerns of those who do not seek help, or about the needs of people from minority cultures. In addition, almost all the available research is cross-sectional and correlational. More research is needed to understand how appearance dissatisfaction develops in both the general and clinical populations, what is the best way to assess it (the challenges associated with measuring body image variables across conditions, developmental stages, and cultures remain) and what psychological interventions can prevent and treat appearance dissatisfaction after it has developed. This thesis sheds some much required light over these topics and can provide a foundation for the development of future studies in appearance dissatisfaction in the general and clinical populations. Moreover, it moves from the much accepted and pursued tradition of eating disorders and female subjects and broadens the horizon for a psychology of appearance.

A difference (actual or perceived) in physical appearance causes significant psychological distress to the affected person. It is not easy to explain why some people with disfigurements develop and maintain a positive body image and self-esteem, while others with "normal" appearance suffer from persistent problems. Among the greatest challenges facing researchers is the task of clarifying the multiplicity of factors and their interrelations influencing adjustment and acceptance of normal and/or disfigured appearance. In accordance with recent research this thesis tentatively suggests that the continuum of emotions, thoughts, and behaviours characteristic of people with disfigurements is not pathological but instead is part of the same continuum experienced by those dissatisfied with aspects of their presumably "normal" looks.

References

Cash T.F. (1996). The treatment of body image disturbances. In J.K. Thompson (Ed.), *Body image, eating disorders, and obesity: An integrative guide for assessment and treatment* (pp. 83-107). Washington, DC: American Psychological association.

Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (DSM-IV) (1994). Task Force on DSM-IV, American Psychiatric Association.

Harris, D. (1997). Types, causes and physical treatment of visible differences. In R. Lansdown, N. Rumsey, E. Bradbury T. Carr, and J. Partridge (Eds.), *Visible difference: Coping with disfigurement* (pp. 79-91). Oxford: Butterworth-Heinemann.

Lansdown R., Rumsey N., Bradbury E. Carr, A., and Partridge J. (Eds). (1997). *Visibly different: Coping with disfigurement*. Oxford: Butterworth-Heinemann.

Macgregor E C. (1979). *After plastic surgery: Adaptation and adjustment*. New York: J. E Bergin.

Robinson E, Rumsey N., and Partridge, J. (1996). An evaluation of the impact of social interaction skills training for facially disfigured people. *British Journal of Plastic Surgery*, 49, 281-289

Section B

Chapter One

Introduction

1.1. Introduction

Appearance-related concerns are reaching epidemic proportions in Western society, with people being increasingly interested and in many cases dissatisfied with their appearance. Body dissatisfaction has become normative in young people and adults in the Western world from the age of eight years upwards (Grogan, 1999), and this has a significant impact on behaviour such that most women try to change their shape and weight, and many women avoid activities that would involve exposing their bodies (Grogan, 1999). Western culture prescribes a narrow range of body shapes as acceptable for men and women, and those whose body size and shape falls outside this range may encounter prejudice. The magnitude and severity of the problem are such that people are even seeking surgical solutions to enhance an apparently normal appearance.

Currently, however, we do not know what factors predict those individuals who are and those who are not satisfied with their appearance in the general population. It would be crucial to identify “protective” factors that act as buffers against excessive appearance-related concerns and also predisposing factors that make individuals especially vulnerable to cultural pressure regarding appearance. This information could well be the key in an attempt to understand and eventually minimize the increased dissatisfaction with appearance and the related psychosocial consequences for individuals, providing information to facilitate changes in the health care system to more closely meet their needs. The present investigation attempts to cover this gap in the literature.

This chapter begins with a definition of body image and appearance dissatisfaction, and continues with a description of the societal idealization of appearance before supporting the notion that appearance dissatisfaction is better conceptualized as a continuum. After that, the most commonly used appearance satisfaction assessment methods are presented and the literature on the dissatisfaction of men and women is reviewed. This text looks at body image in individuals who have 'normal' relations with food rather than those who have been classified as anorexic or bulimic. The studies discussed here are ones that have looked at body image in young (18-30 years old) men and women picked at random, or on an opportunity basis, rather than those referred to professionals as a result of problematic relations with food or other psychopathology.

This population of young adults is of special significance given the prevalence of appearance dissatisfaction, the financial capabilities for dramatic alteration of appearance (e.g., cosmetic surgery, expensive crash diets) and the potential for development of severe dissatisfaction with appearance which can amount even to psychopathology in the form of body dysmorphic disorder, depression, or excessive anxiety. The chapter concludes with a review of the theories and factors that have been proposed as accounting for body dissatisfaction and a statement of the hypotheses and research questions of the present investigation¹.

1.2. Body image defined

Body image has been defined in numerous ways; however, most agree that body image is a multidimensional construct (Carr-Nangle, Johnson, Bergeron, & Nangle, 1994; Cash and Brown, 1989; Gleaves, Williamson, Eberenz, Sebastian, and Barker, 1995; Rosen, Reiter, and Orosan, 1995; Sands and Maschette, 1999; Wood, Becker, and Thompson, 1996), and includes physiological, psychological, and sociological components (Cash, 1994; Cash and Pruzinsky, 1990, 2002; Parks and Read, 1997). In general, body image is one's attitude towards one's body, particularly its size, shape, and aesthetics (Cash and Pruzinsky, 1990). Slade (1994) defines body image as:

"the picture we have in our minds of the size, shape and form of our bodies; and to our feelings concerning these characteristics and our constituent body parts"
(Slade, 1994)

Thompson (1990) believes that body image involves three principal components. The first is perceptual, reflecting a person's estimation of body size. The second is subjective, reflecting the individual's attitudes toward his or her body. Attitudes about the body are two-dimensional, consisting of both a valence (i.e., a measure of importance to one's self-esteem) and a value (i.e., the actual degree of satisfaction or dissatisfaction with one's body). The final component is behavioural and concerns the degree to which a person's behaviours are affected by perceptions or feelings about the body. Body image plays a central role in an individual's life.

Garner (1997) states:

¹ The body image literature is vast and an exhaustive review is impossible. Necessarily the present chapter will not attempt to review all the diverse literature on this subject. Rather it will review the most recent, relevant and influential studies that are related to the present investigation.

Body image is influenced by feelings and it actively influences much of our behavior, self-esteem, and psychopathology. Our body perceptions, feelings, and beliefs govern our life plan—who we meet, who we marry, the nature of our interactions, our day to-day comfort level. Indeed, our body is our personal billboard, providing others with first—and sometimes only—impressions. (p. 30)

Cash and Pruzinsky (1990) suggested that body image should be reconceptualized as "body images" to more accurately capture the diversity of the external/ objective and internal/subjective components. Body image is not a static concept. It is developed through interactions with people and the social world, changing across life span in response to changing feedback from the environment.

Body image has been the subject of much theoretical and empirical research in recent years. Many researchers (Thompson *et al.*, 1999) have stressed that global terms such as body image are umbrella terms and almost useless without a specification of which particular subjective, affective, behavioural, cognitive, or perceptual processes are intended and whether the foci are specific body sites or a more global aspect of overall appearance. Consequently the term appearance satisfaction which is defined as satisfaction with overall appearance (Thompson *et al.*, 1999) is the preferred concept in the present investigation and when the term "body image" is used is confined to a physical appearance-based definition².

Broadly speaking, body image research has taken two related but essentially independent forms of enquiry. On the one hand, body image research has examined subjective perceptions of, and attitudes to, the size and shape of one's body. In this area, studies have found that body dissatisfaction (even after controlling for body weight) is one of the strongest predictors of disordered eating in clinical and nonclinical research (see Davis, 1997b for a review). A second research area has examined the correlates and consequences of physical attractiveness as an objectively rated construct (see Berscheid and Walster, 1974; Feingold, 1992 for reviews).

The inferences that people make about others based on their physical appearance have been extensively studied by researchers. Many early studies (1970s and 1980s) of appearance used a social psychological approach. According to Eagly, Ashmore, Makhijani and Longo (1991) these studies primarily addressed the perception

² Given that numerous researchers have adopted and use the term body image, where this term is used in the literature review it is used in the sense intended by the respective investigators.

(e.g., social, intelligent), treatment (e.g., selection as a dating partner), and characteristics (e.g., personality traits, behavioral tendencies) of attractive and unattractive individuals. The economic effects of physical attractiveness have been more recently investigated. Generally, it has been found that less attractive people earn less than better-looking people (Frieze *et al.*, 1991; Hamermesh and Biddle, 1994; Roszell *et al.*, 1989).

In general, the studies conclude that beauty is good, meaning that physically attractive people will be successful in a multitude of endeavors, including professional and social. The 'beauty is good' theory suggests that beautiful people are perceived to have more favourable personal attributes than non-beautiful people. Extensive reviews of research on physical attractiveness stereotypes using meta-analysis were conducted by Feingold (1992) and Eagly *et al.* (1991). Feingold's (1992) review showed that physically attractive people were viewed as more sociable, dominant, sexually warm, mentally healthy, intelligent, and socially skilled than physically unattractive people. Whereas, "the correlation literature indicated generally trivial relationships between physical attractiveness and measures of ability" (Feingold, 1992, p. 304). Eagly *et al.*'s (1991) findings on the physical attractiveness stereotype traits were similar and concluded that "... the average magnitude of this beauty-is-good effect was moderate, and the strength of the effect varied considerably from study to study" (p.127). To some extent, both studies debunked the good-is-beautiful stereotype.

1.3. Exploring the satisfaction/dissatisfaction with appearance continuum

Because body image is neither a static nor a one-dimensional construct, it is helpful to situate the range of body image problems on a continuum. This enables us to see that body image issues vary in severity and effect but also to recognize they stem from common roots.

Body image satisfaction. Individuals with body image satisfaction would be thought to have an overall positive body image. Although they may dislike an aspect of their appearance, they are not greatly distressed by it.

Body image dissatisfaction. Potentially, there are several degrees of body image dissatisfaction, the first of which may be a dislike of an aspect of appearance. Such dislike may lead to relatively frequent distress or concern and be associated with

maladaptive behavioural change. Similarly, an individual may be dissatisfied with one aspect of his or her appearance, but may be satisfied with other features. At present, it is not clear at what point such dissatisfaction, whether specific to one appearance feature or more global, leads to body image disturbance.

Body image disturbance. The next level of dissatisfaction is body image disturbance (Thompson, 1990), or what also has been referred to as body image disorder (Rosen, 1992, 1996; Thompson, 1992). Such individuals experience greater affective distress and exhibit more profound behaviour change, including "camouflaging" the offending body part or refusing to allow others to view it. Others may exhibit cognitive or perceptual distortions of their appearance, resulting from a combination of irrational thoughts and unrealistic expectations about the body (Freedman, 1990). At present, the relationship between body image disturbance and more severe forms of body image psychopathology such as *anorexia nervosa*, *bulimia*, and *body dysmorphic disorder* is not well established.

Of particular interest to the present investigation is *disfigurement*. There is growing evidence that disfigurement (acquired or congenital) can have profound behavioural, emotional and cognitive impacts upon sufferers (Lansdown, Rumsey, Bradbury, Carr, and Partridge, 1997; Thompson and Kent, 2001). However, there is *no* straightforward relationship between severity of disfigurement or disease process on the one hand and the degree of psychosocial difficulties experienced on the other (Baker, 1992; Malt and Uglund, 1989; Porter and Boeuf 1991). Several studies have explored possible influences on this relationship and a variety of potential psychological factors have also been explored: coping strategies, social support and social skills have all received some limited support in being able to account for individual variation in adjustment (Moss, 1997).

An understanding of adjustment to disfigurement is important both theoretically and therapeutically. Theoretically, any model designed to explain the psychological consequences of disfigurement will need to provide an explanation of the relationship between disease and distress and be incorporated into a general model of appearance (dis)satisfaction. Therapeutically, it is possible that clinicians may have much to learn

from people who are able to deal with an altered appearance effectively (Thompson and Kent, 2001).

1.4. Assessment of (dis)satisfaction with appearance

According to Norton and Olds (1996) and Schlundt and Johnson (1993), assessment of body image falls into two broad classes. Firstly, there are instruments of a visuospatial nature measuring perceptual size estimation. These include manipulation of a photograph, video image, or mirror image (see Table 1.1 for a summary of the most widely used measures). Actual photographs and video images are employed for ecological validity (Tiggemann, 1996). Silhouettes or figure drawings representing physiques from thin to obese (see Table 1. 2 for a summary of the most widely used instruments and Figure 1.1 for an example) or adjusting widths of light beams have been most commonly used. This category has the most direct, objectively defined links with anthropometry. Problems prevail with this format as measures of two-dimensional line drawings fail to provide a total body perspective and do not adequately represent subcutaneous fat masses (Slade, 1994).

Secondly, the subject's appraisal of concern, value, or satisfaction is typically conveyed through questionnaire or interview format. These include body esteem, social physique anxiety, body cathexis, and body part by body part analyses (Schlundt and Johnson, 1993; Norton and Olds, 1996) (See Table 1.3 for a summary of the most widely used measures). More recent research (Norton and Olds, 1996; Slade, 1994) has indicated that body dissatisfaction analysis is more appropriate on a part-by-part basis than whole body analysis. However, Slade (1994) and Tiggemann (1996) report that problems persist with this analysis format as well. For example, feeling fat (affective outcome, compared with thinking one is fat) was found to provide greater overestimation of body size (Slade, 1994). Tiggemann (1996) also suggested that thinking and feeling were useful measures of body dissatisfaction in their own right.

Most of the established body satisfaction questionnaires have been designed to look at body dissatisfaction in women, standardization is limited almost wholly to young, female students and the item content is similarly dominated by the concerns of that population (i.e. weight and body-size) (Thompson *et al.*, 1990). These scales have clear

Table 1.1. Measures of size estimation accuracy.

Name of Instrument	Description	Standardization Sample
Adjustable light beam apparatus Thompson and Spana (1988)	Adjust width of four light beams projected on wall to match perceived size of cheeks, waist, hips, and thighs.	159 female undergraduates.
Body image detection device Ruff and Barrios (1986)	Adjust width of light beam projected on wall to match perceived size of specific body site.	20 normal and 20 bulimic undergraduates.
Movable caliper technique: visual size estimation Slade and Russell (1973)	Adjust distance between two lights to match perceived size.	14 female anorexics and 20 female postgraduates and secretaries.
Image marking procedure Askevold (1975)	Indicate one's perceived size by marking two endpoints on a life-size piece of paper.	College females.
TV-video method Gardner <i>et al.</i> (1987)	Adjust the horizontal dimensions of a TV image of oneself to match perceived size.	38 normal and eating disordered adults.
Video distortion method Probst <i>et al.</i> (1998)	Adjust a life-size image projected onto a screen with a video camera.	53 anorexia nervosa patients, 38 bulimia nervosa patients, and 36 controls.
Distorting video-camera Freeman <i>et al.</i> (1984)	Adjust a video image varied from 60% larger to 25% thinner.	20 eating-disordered females and 20 controls.
Distorting photograph technique Glucksman and Hirsch (1969)	Indicate one's size by adjusting a photograph that is distorted from 20% under to 20% over actual size.	Obese patients.
Distorting video technique Touyz <i>et al.</i> (1985)	Indicate one's size by adjusting photograph that is distorted by 50% under to 50% over actual size.	Eating disordered patients.
Distorting television method Bowden <i>et al.</i> (1989)	Photograph distorted by video camera to 50% over and under actual size.	Eating disordered patients and controls.
Distorting mirror Brodie <i>et al.</i> (1989)	Distorting mirror (thinner-fatter images).	29 female university students.

Note: Adapted from Thompson *et al.* (1999). *Exacting Beauty. Theory, Assessment and Treatment of Body Image Disturbance*. American Psychological Association. p. 294.

Table 1.2. Silhouette measures of body satisfaction.

Name of Instrument	Description	Standardization Sample
Figure Rating Scale Stunkard <i>et al.</i> (1983)	Select from nine figures that vary in size from underweight to overweight.	92 normal male and female undergraduates.
Contour Drawing Rating Scale Thompson and Gray (1995)	Nine male and nine female schematic figures, ranging from underweight to overweight.	40 male and female undergraduates.
Breast/Chest Rating Scale Thompson and Tantleff (1992)	Five male and five female schematic figures, ranging from small to large upper torso.	43 male and female participants.
Body Image Assessment Williamson <i>et al.</i> (1989)	Select from nine figures of various sizes.	659 female bulimic, binge eater, anorexic, normal, obese and atypical eating-- disordered participants.

Note: Adapted from Thompson *et al.* (1999). *Exacting Beauty. Theory, Assessment and Treatment of Body Image Disturbance.* American Psychological Association.p. 53.

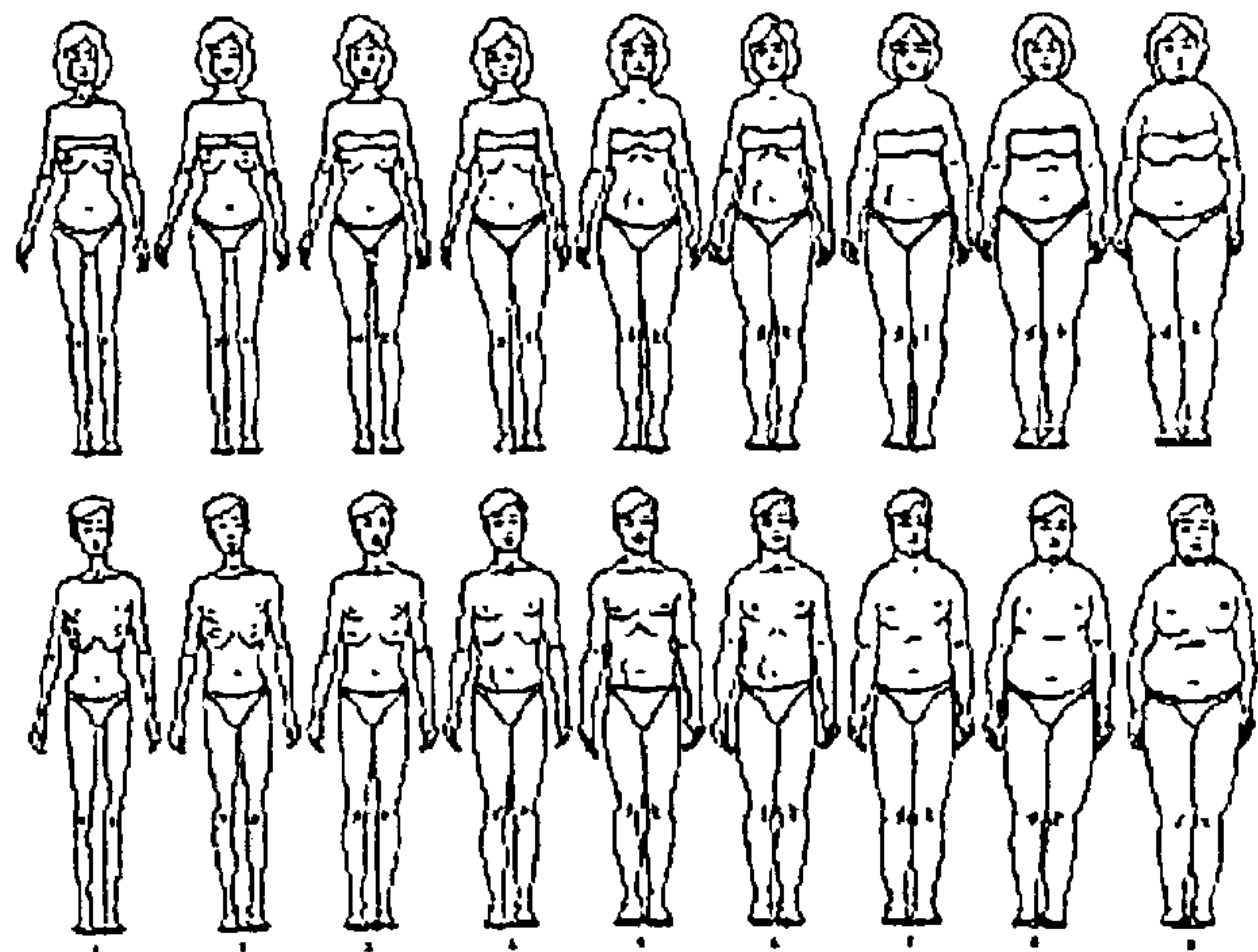


Figure 1.1. From Thompson and Gray (1995). Development and validation of a new body image assessment scale. *Journal of Personality Assessment*, 64, p.263.

Table 1.3. Questionnaire measures of body satisfaction.

Name of Instrument	Description	Standardization sample
Eating Disorder Inventory-Body Dissatisfaction Scale Garner <i>et al.</i> (1983)	Indicate degree of agreement with nine statements about body parts being too large.	113 female anorexic participants and 577 female controls.
Color-a Person Body Dissatisfaction Test Wooley and Roll (1991)	Use five colours to indicate level of satisfaction with body sites by marking on a schematic figure.	102 male and female college students, 103 bulimic patients.
Extended Satisfaction with Life Scale-Physical Appearance Scale Alfonso and Allison (1993)	Rate general satisfaction with appearance on a 7-point scale.	Male and female undergraduates.
Body Mapping Questionnaire and Colour the body task Huon and Brown (1989)	Rate feelings (strongly dislike-strongly like) about 21 body regions, colour red body sites "liked" and black body sites "disliked".	67 female bulimic and 67 female control participants.
Body Satisfaction Scale Slade <i>et al.</i> (1990)	Indicate degree of satisfaction with 16 parts.	Female undergraduate and nursing students and overweight, anorexic and bulimic patients.
Body-Esteem Scale Revised Mendelson <i>et al.</i> (1998)	23-item scale with three subscales: Appearance, Attribution, Weight.	Adults and adolescents.
Multidimensional Body Self-Relations Questionnaire-Appearance Evaluation Subscale Cash (1995, 1996, 1997)	7-item scale that measures overall appearance satisfaction and evaluation.	Over 2,000 male and female students.
Body Shape Questionnaire Cooper <i>et al.</i> (1987)	34 items on one's concern with one's body shape.	Bulimic participants and several control groups.
Physical Appearance State and Trait Anxiety Scale Reed <i>et al.</i> (1991)	Rate the anxiety associated with 16 body sites (8 weight related, 8 non-weight related); trait and state versions available.	Female undergraduate students.
Derriford Appearance Scale Carr <i>et al.</i> (2000)	59-item scale that assesses self-consciousness of appearance and associated behaviours and distress.	1740 patients with problems of appearance and 1001 representative members of the general population.

Note: Adapted from Thompson *et al.* (1999). *Exacting Beauty. Theory, Assessment and Treatment of Body Image Disturbance*. American Psychological Association.p. 54.

utility in the field of eating disorders and with young, female samples, but are correspondingly of limited application to problems of appearance unrelated to weight and body-size, to males, or to samples of wider age-range and socio-economic status. Overall, existing measures suffer from low content validity, impracticability and limited psychometric development (Harris, 2002).

An exception is the Derriford Appearance Scale (DAS-59) which was used in the present investigation. DAS was developed to assess the difficulties experienced by people in living with a problem of appearance and was standardised in both clinical and non clinical populations. The scale measures what its authors have called “self-consciousness of appearance”. The scale covers the full range of dysfunction and distress arising from problems of appearance, from patients whose lives are dominated by their self-consciousness of appearance to people for whom physical appearance is unimportant (Carr *et al.*, 2000).

The existing assessment instruments for the cognitive component of body image fall into two categories. The first includes those that assess the typical cognitions of an individual with body image disturbance. The second category involves assessment techniques that allow for the assessment of self and body schemas from the individual's own perspective (Table 1.4 contains more information about available scales). Mizes and Christiano (1995) and Cooper (1997) recently reviewed measures relevant to the different aspects of cognitive theory. They concluded that a few psychometrically-sound instruments have been developed particularly for automatic thoughts, cognitive processing errors, beliefs and schemata. They note that in most instances, authors of existing measures are unclear as to which aspect or type of cognition their measure is designed to assess (see also Vitousek, 1996). Most cognitive measures are not well-defined or theoretically grounded, and thus contain items that assess a "scattershot" or mixture of automatic thoughts, cognitive processing errors, eating and weight regulation behaviours, and emotions, and also simultaneously include items from a range of content domains.

Despite their limitations, the most relevant to the present investigation were the ASI and the Beliefs About Appearance Scale (BAAS; Spangler and Stice, 2001). The first, the Appearance Schemas Inventory (Cash and Labarge, 1996) assesses beliefs about

Table 1.4. Cognitive measures of appearance.

Instrument	Description	Standardization procedure
Bulimia Cognitive Distortions Scale-Physical Appearance Subscale Schulman <i>et al.</i> (1986)	Indicate degree of agreement with 25 statements that measure physical appearance-related cognitions.	55 outpatient bulimic women and 55 controls (ages 17-45).
Body-Image Automatic Thoughts Questionnaire Cash <i>et al.</i> (1987)	Indicate frequency with which one experiences 37 negative and 15 positive body image cognitions.	33 bulimic women and 79 female undergraduates.
Apperance Schemas Inventory Cash and Labarge (1996)	14 items assess appearance schemata.	274 female undergraduates.
Body-Image Ideals Questionnaire Cash and Szymanski (1995)	Rate one's personal ideal and actual rating on 10 attributes related to weight/appearance and strength/importance of attribute.	284 female undergraduates.
Body-Image Ideals Questionnaire-Expanded Szymanski and Cash (1995)	Rate one's specific attributes from own viewpoint and that of romantic partner based on "ideal" and "ought".	143 female undergraduates.
Commentary Interpretation Scale Wood, Altabe and Thompson (1998)	16-item scale measuring the negativity of interpretation of neutral statements.	Female college students.
Modified Distressing Thoughts Questionnaire Clark <i>et al.</i> (1989)	24-item scale containing anxious- depression-, and weight related thought statements; individuals rate each statement for frequency and emotional intensity.	42 bulimic and 20 anorexic clients, 165 student nurse controls.
Physical Appearance Discrepancy Questionnaire Altabe and Thompson (1995)	Based on Higgin's discrepancies questionnaire: indicate the physical appearance traits associated with one's actual ideal and cultural ideal self.	108 male and female undergraduates.
Repertory Grid for Eating Disorders Butow <i>et al.</i> (1993)	Expands on prior method from George Kelly by focusing on eating situations and weight related themes.	53 anorexic, 45 bulimic, 65 restrained eater, 68 control participants.
Beliefs about Appearance Scale Spangler and Stice (2001)	20-item scale that measures dysfunctional attitudes about bodily appearance.	579 college students and 231 adolescent females.

Note: Adapted from Thompson *et al.* (1999). *Exacting Beauty. Theory, Assessment and Treatment of Body Image Disturbance*. American Psychological Association.p. 286.

the importance of physical appearance. It is based in part on Markus's (1977) *self-schema* definition. It was used in the present investigation because the BAAS (although better validated) was not available at the time this investigation commenced.

1.5.1. Appearance dissatisfaction: the extent of the problem

The 1997 *Psychology Today* Body Image Survey revealed that Americans have more discontentment with their bodies than ever before. Fifty-six percent of women surveyed said they are dissatisfied with their appearance in general. The main problem areas about which women complained were their abdomens (71 percent), body weight (66 percent), hips (60 percent) and muscle tone (58 percent). Many men (almost 43 percent) were also dissatisfied with their overall appearance.

Up until recently, research has focused primarily on women. There are a number of reasons for this. Research indicates that women make up 90–95% of the individuals with eating disorders (Thompson *et al.*, 1999) and although obesity occurs in both sexes it is more likely to be perceived as a problem by women (Salmon, 1997). Even in children as young as 8-10 years old, females had higher levels of body image dissatisfaction and lower levels of self-esteem than males (Wood, Becker, and Thompson, 1996). However recent research has pointed to the fact that both sexes experience body image dissatisfaction, and that in certain aspects the mechanics behind this operate in similar ways (Vartanian, Giant, and Passino, 2001).

1.5.2. Women and (dis)satisfaction with appearance

Research has shown that the trends of the ideal woman have gotten consistently slimmer over time, but with larger breasts (Garner, Garfinkel, Schwartz, and Thompson, 1980; Fallon, 1990). The problem with these developments is that the ideal body is getting thinner and thinner making it more difficult to achieve. Furthermore the ideal breasts are not reducing proportionally to the figures but are actually increasing. It is therefore very unnatural and almost impossible for women to achieve such a figure.

Women's dissatisfaction with their bodies has reached epidemic proportions and been termed by some as "normative discontent" (Thompson, Heinberg, Altabe, and Tantleff-Dunn, 1999). At the same time, unhealthy eating practices have also become the

norm for women in the United States to the extent that some call dieting “normal” for women (Polivy and Herman, 1987).

Studies using *silhouettes* have found that women show a reliable tendency to pick a thinner ideal than their current figure and that normal weight young women tend to feel fat and want to loose weight. This effect has been replicated in the United States (Fallon and Rozin, 1985; Lamb *et al.*, 1993), Australia (Tiggemann and Pennington, 1990; Htion and colleagues (1990), and Britain (Wardle *et al.*, 1993).

Questionnaire studies suggest that many women are dissatisfied with their bodies, particularly the lower half of the body (stomach, hips and thighs) (Cash *et al.*, 1986). These data support the results of silhouette studies, and also add detail on the specific body areas that present cause for concern. One of the problems with the silhouette work is that women are forced to make a choice of whole body silhouette, which obscures perception of individual body parts. Questionnaires that ask specifically about different body parts allow a more detailed assessment of satisfaction with different parts of the body, and reveal that most women participants in the studies may be quite satisfied with the top half of the body while being dissatisfied with the lower torso and thighs (Furnham and Greaver, 1994).

Interviews with women across a wide age range (Charles and Kerr, 1986; Grogan, 1999) have shown that most women are dissatisfied with their body size, in particular the lower torso. Many report comparing themselves to models or actresses, and most have a body ideal that is skinny but shapely. Being slim is being linked with self-confidence for most of the women, and most believe that their life would change for the better if they lost weight (irrespective of current body size).

Studies using *body size estimation* techniques show that the majority of women tend to perceive their body as heavier than it actually is. Thompson *et al.* (1990), on the basis of a review of the available literature, argue that anorexic and 'normal' women overestimate to a similar extent. Stage within the menstrual cycle also has an effect, when the size of the waist is overestimated in the days prior to menstruation (Thompson *et al.*, 1990). It is important to bear this tendency to overestimate body size in mind when assessing the data from studies of body satisfaction, because they need to be understood in the context of the fact that most women have unrealistic images of their body,

particularly their waist, hips and thighs. These data also emphasise the importance of focusing on women's perceptions of body size, and discrepancy from the slim ideal, rather than on objective size.

Estimates of the frequency of *dieting* in American and British women show that about 95 per cent of women have dieted at some stage in their lives (Ogden, 1992); and that about 40 per cent of women are dieting at any one time (Horm and Anderson, 1993). According to the 1991/2 nationwide Health and Lifestyle UK Survey, about 50 percent of women under 40 engage in some form of *exercise*. Positive effects are not limited to changes in muscle tone and fitness (although this might be what motivates in the first place). Researchers have argued that women who exercise experience positive changes in body image and self-concept (Furnham *et al.*, 1994). Moreover, in the 1990s has been a significant increase in the number of women receiving *cosmetic surgery* in Britain and the United States, especially liposuction and breast augmentation procedures (Gillespie, 1996; Viner, 1997). Some investigators contend that these patients obtain much of their self-esteem from their appearance and that when their self-esteem declines, they seek surgical change (Napoleon and Lewis, 1989). Others have argued that patients are psychologically healthy "doers" (Goin and Goin, 1987) who are highly motivated to improve their appearance, even with the risks of anaesthesia and surgery, as well as substantial out-of-pocket expense.

1.5.3. Men and (dis)satisfaction with appearance

The study of male body image is a fairly recent phenomenon. Researchers in the 1980s and 1990s have started to be interested in men's body image largely due to the fact that the male body is becoming more "visible" in popular culture, leading to interest in the psychological and sociological effects of this increased exposure. Additional interest in male body image has been aroused by studies of eating disorders in athletes and body image disturbances and anabolic steroid abuse in bodybuilders (Pasman, Thompson, 1989; Olivardia, Pope, Mangweth, and Hudson, in press). Even in studies of male students without eating disorders, the prevalence of body dissatisfaction is often striking (Mintz and Betz, 1986; Drewnowski and Yee, 1987; Dwyer, Feldman, Seltzer, and

Mayer, 1967). Estimates of body dissatisfaction among males, range from 50 to 70% (Raudenbush and Zellner, 1997; Drewnowski and Yee, 1987).

Men are increasingly being given the message that they need to achieve a mesomorphic, "V-shape" body (Abell and Richards, 1996; Blouin and Goldfield, 1995; Grogan, 1999; Grogan *et al.*, 1996; Parks and Read, 1997) characterised by average build with well developed muscles on chest, arms and shoulders, and slim waist and hips, rather than the ectomorphic (thin) or endomorphic (fat) build. Research has shown that there is a general cultural prejudice in favour of the mesomorphic body shape. Mansfield and McGinn (1993) argue that 'muscularity and masculinity can be, and often are, conflated' (p. 49).

Studies using male *silhouette* figures have produced interesting findings. Some researchers in the US (Fallon and Rozin, 1985; Zellner *et al.*, 1989; Lamb *et al.*, 1993) and Australia (Tiggemann, 1992) found that men expressed no discrepancy between their ideal and current body. However, Grogan (1999) strikes a note of caution: in these studies the researchers base their conclusions on scores averaged across their samples. Although body dissatisfaction in women usually relates to feeling overweight, body dissatisfaction in men may relate to feeling either overweight or underweight. Averaging has the effect of combining together men who believe they are either overweight or underweight compared to their ideal, so that on average they appear to have no discrepancy between their ideal and current body. Studies which took this methodological problem into account (Mishkind *et al.*, 1986) found that 75 per cent of men reported that their ideal was discrepant from their current body size. Roughly half wanted to be bigger (build muscle mass in contrast to put on body fat) than they were and half wanted to be thinner than they were.

Studies relying on men picking out a silhouette within a scale displaying various degrees of muscularity, strongly show that men chose an ideal figure that is much more muscular than their current shape. These findings appear across most research conducted in Western cultures (Pope, Gruber, Mangweth, Bureau, deCol, Jouvent and Hudson, 2000). Another major finding in this line of research is that men are under the impression that women are looking for a degree of muscularity in their ideal man which is far greater

than that which they currently possess (Furnham and Lim, 1997, Demarest and Allen, 2000)

In the UK Donaldson (1996) administered body image *questionnaires* to 100 primarily white male 18-43 years of age, undergraduates. She found that 27 per cent of the sample were dissatisfied with their weight. However, 38 per cent were dissatisfied with their muscle tone, 25 per cent were dissatisfied with lower torso, 28 per cent with mid-torso and 37 per cent with upper torso. When asked how often they felt depressed about their body image, only 47 per cent said that they 'never' felt depressed about their looks, with 4 per cent saying they 'often' did, and 1 per cent 'very often'. These data show that these men are clearly more satisfied with their bodies than equivalent groups of women, but nevertheless show some dissatisfaction with body shape and size. Similar results were found by Furnham and Greaves (1994). Some studies report much higher estimates of dissatisfaction in British men. For instance, a survey commissioned by *Men's Health* magazine was completed by 1,000 of the magazine's readers. A total of 75 per cent were not happy with their body shape. Most wished their bodies were more muscular. About half were worried about their weight, ageing and going bald (Chaudhary, 1996).

Ogden (1992) reports *interviews* with men in which she asked them to talk about their bodies. She found that the men she interviewed were clear on how the ideal man should look. He should be tall, well-built, with wide shoulders, V-shaped back, firm bottom and flat stomach. Men emphasised fitness and health as being important, and linked the slim, muscular ideal with being confident and in control. These findings have been replicated by Grogan *et al.* (1997) both for *young* (19-25) and *teenage* men (16-17).

Dieting is significantly less frequent amongst men than amongst women. Most sources estimate that about 25 per cent of men diet at some time in their lives (Rozin and Fallon, 1988; Donaldson, 1996). Only about 2 per cent of members of 'Weight Watchers' are men (Ogden, 1992). Proportions of male students who diet in the United States may be higher than among British students (Grogan, 1999). Similarly in men who are particularly sensitive to health issues, dieting may be more frequent than in the general male population (Chaudhary, 1996). Men are increasingly likely to have *cosmetic surgery* to change the way they look. The Belvedere Clinic reports that, in 1989, only 10

per cent of its clients were male, whereas the proportion had risen to 40 per cent by 1994 (Baker, 1994). The most popular form of surgery is rhinoplasty, closely followed by breast augmentation to swell the pectoral muscles and liposuction on the waist. In Donaldson's (1996) study, 65 per cent of her respondents reported engaging in *sport* specifically to improve their body image. Baker (1994) reports that 500,000 British men regularly use weights to get into shape, and an increasing number use steroids to accelerate the effects of exercise.

1.6.1. Moderating variables of appearance (dis)satisfaction

A number of variables have been proposed in the literature (Rumsey, 2002) as moderating of appearance dissatisfaction. The ones that have received most empirical support (although albeit limited for some of them) and which are the focus of the present investigation are discussed below.

1.6.2. Self-esteem

Self-esteem has been defined as the self-appraisal of one's significance, worth, competence, and success, as compared to others (Coopersmith, 1967). Self-esteem is comprised of two distinct dimensions: *competence* and *worth* (Gecas 1982; Gecas and Schwalbe 1983). The competence dimension (efficacy-based self-esteem) refers to the degree to which people see themselves as capable and efficacious. The worth dimension (worth-based self-esteem) refers to the degree to which individuals feel they are persons of value.

Self-esteem has generally been investigated in three ways, each of which has been treated almost independently of the others. First, self-esteem has been investigated as an *outcome*. Here, scholars have focused on processes that produce or inhibit self-esteem (e.g., Coopersmith, 1967; Harter 1993; Peterson and Rollins, 1987; Rosenberg, 1979). Second, self-esteem has been investigated as a *self-motive*, noting the tendency for people to behave in ways that maintain or increase positive evaluations of the self (Kaplan, 1975; Tesser, 1988). Finally, self-esteem has been investigated as a *buffer* for the self, providing protection from experiences that are harmful (Pearlin and Schooler, 1978; Longmore and DeMaris, 1997; Spencer, Josephs, and Steele, 1993; Thoits, 1994).

According to the *buffering hypothesis* when individuals are unable to verify their identities, the self-esteem produced by previous successful efforts at self-verification "buffers" or protects individuals from the distress associated with a lack of self-verification, thereby preserving threatened structural arrangements (Burke, 1991; 1996). In protecting the self against distress while the situation is "resolved" (Thoits, 1994), however, self-esteem is depleted. Exactly how self-esteem operates as a buffer is less clear in the literature. Some have suggested that self-esteem works to maintain positive self-views by processing feedback in a self-serving way (Baumeister, 1998): individuals with high self-esteem are more likely than those with low self-esteem to perceive feedback as consistent with their positive self-views, to work to discredit the source of the feedback, and to access other important aspects of the self to counteract negative feedback (Blaine and Crocker, 1993; Spencer *et al.*, 1993; Steele, 1988). Others argue that those with high self-esteem have a more stable sense of self and are more emotionally stable both of which provide an "emotional anchor", for those with high self-esteem (Baumeister, 1998; Campbell, 1990; Campbell, Chew, and Scratchley, 1991). People with high self-esteem appear to have more "cognitive resources" at their disposal enabling them to deal more effectively with unsatisfactory circumstances (Baumgardner, Kaufman, and Levy, 1989; Spencer *et al.*, 1993; Steele, 1988).

Among the most popular and commonly used measures of self-esteem are: The Rosenberg Self-Esteem Scale (Rosenberg, 1965); the Tennessee Self-Concept Scale (Fitts, 1965); and the Self-Esteem Inventory (Coopersmith, 1967). In line with recent studies examining body dissatisfaction and self-esteem the Rosenberg Self-Esteem Scale was utilized in the present investigation.

Self-esteem has generally been found to correlate highly with body dissatisfaction (McAllister and Calabiano, 1994; Tiggemann, 1996). A review of the studies in this area, not surprisingly, proved a link between body image and self-esteem, showing that women with lower self-esteem displayed more dissatisfaction with their bodies (Ben-Tovim and Walker, 1991). For men the relationship between self-esteem and body dissatisfaction is not as clear-cut. Mintz and Betz (1986) found a significant positive relationship between body satisfaction and self-esteem in both men and women. However, Furnham and Greaves (1994) in a British study found that self-esteem was

more closely linked to body satisfaction in women than in men. Some authors (e.g., Ogden, 1992) have gone even further and suggested that for men, body satisfaction is independent of self-esteem. Findings in this area at least for women are very consistent. Of course, the evidence we have to date only shows that the two variables are linked, and does not tell us whether high self-esteem leads to higher body image (feeling good about oneself, generally, leads to feeling good about one's body) or whether feeling good about the body leads to higher self-esteem, or whether some other factor is involved.

1.6.3. Social support

The term social support is a broad one and has been defined and described in a number of ways. Social support has been defined by House (1981) as

“an interpersonal transaction involving one or more of the following: (1) emotional concern (liking, love, empathy), (2) instrumental aid (goods or services), (3) information (about the environment) or (4) appraisal (information relevant to self-evaluation)” (p.39).

Cohen and Wills (1985) have distinguished the following four different functions of social support:

- (i) *Esteem support*, which refers to the effects of others in promoting someone's feelings of self-esteem (such as being valued by others);
- (ii) *Informational support* refers to the useful or necessary information which may be gained from social contacts;
- (iii) *Instrumental support* refers to the physical support (for example financial, material) which can be gained from others;
- (iv) *Social companionship* refers to the support derived from spending time with others in leisure and other recreational activities.

An additional but important distinction is usually made between perceived support (subjectively rated adequacy of supports) and actual or received support (numbers of individuals), with the former usually found to be a more useful or predictive measure.

Social support is commonly regarded as a resource or asset, which may be mobilized in times of crisis to protect against threat. This popular view has been called the *buffering* or *stress-specific* hypothesis, suggesting that social support is selectively operative under stress, and that it is only under such conditions that those individuals with higher levels of support will fare better than their counterparts with low levels. This

is also known as the *interactive effect* model. However, there is also empirical support for an alternative, *universal effect model* (Cohen, 1988) that predicts that high levels of social support will be associated with better health even in the absence of stressors. Two additional models have also been proposed (Singer and Lord, 1984). An absence of social support in itself may be regarded as a stressor; this view is complementary to the main effect model, but differs in suggesting that a lack of social support is associated with ill-effects, rather than the presence of social support having beneficial effects. Finally, a loss of social support may also act as a stressor. In his model of stress, Hobfoll (1988) also maintains that a loss of support represents a major loss of a resource and hence is a major stressor.

There is a wide range of measures available for measuring social support (Payne and Graham-Jones, 1987). Some researchers have concentrated on structural aspects of support, which can be inferred from the number, type and organization of someone's social contacts. In contrast, more recent research makes use of qualitative and functional approaches, which are concerned both with the different support functions provided by social contacts and the adequacy or value of these for the individual (e.g., Social Support Questionnaire, Sarason *et al.*, 1987a).

The quality of perceived social support has been found to be particularly important in relation to adjustment *to disfigurement* in a number of studies (Baker, 1992; Blakeney, Portman, and Rutan, 1990; Browne *et al.*, 1985). However, it remains unclear as to how social support actually assists with adjustment, and how individual differences might mediate the uptake of such support (Moss, 1997a).

1.6.4. Personality characteristics, depression, social class, and ethnicity

Research investigating *personality characteristics* has particularly emphasized the important role of neuroticism and perfectionism, a set of traits that is believed is very relevant to understanding how physical attractiveness comes to play a part in the etiology of the eating disorders (Blatt, 1995; Davis, 1997a; Kaye, 1997). Similar evidence is not available for normal, non-eating disordered individuals.

Several studies have demonstrated a significant association between body dissatisfaction and *depression* in community-based samples of preadolescent (McCabe

and Marwit, 1993; Keel *et al.*, 1997), adolescent (Allgood-Merten, Lewinsohn, and Hops, 1990; Leon, Fulkerson, Perry, and Cudeck, 1993; Rierdan and Koff, 1997), and adult females (Taylor and Cooper, 1986; Roth and Armstrong, 1993; Joiner, Schmidt, and Singh, 1994).

Body dissatisfaction research amongst different *social classes* although limited has produced mixed results. High levels of weight concern in schools with high socio-economic background have been found (Wardle and Marsland, 1990; Striegel-Moore *et al.*, 1986) however, other studies failed to show these results (Toro *et al.*, 1989; Robinson *et al.*, 1996). Robinson *et al.*'s reason is that body shape ideals are accessible to most in magazines, billboards, film and television in today's society.

Regarding weight-related body image *Caucasians* appear in most studies (Rosen *et al.*, 1991; Furnham and Alibhai, 1983; Furnham and Baguma, 1994; Ford, Dolan, and Evans, 1990; Allan, Mayo, and Michel, 1993) to be more concerned about weight than other ethnic groups. As far as non-weight-related body image is concerned, Rucker and Cash (1992) found that when compared with African-Americans, Caucasian-Americans had more negative body cognitions and evaluations of general physical appearance.

1.7.1. Psychological influences on body image

Several investigators have outlined the potential psychological influences on body image (Cash, 1996; Heinberg, 1996). Heinberg (1996) has divided the theories of body image disturbance into three categories - perceptual, developmental, and sociocultural. At present, these theories have been applied primarily to individuals who suffer from eating disorders and/or with excessive weight and shape concerns.

1.7.2. Perceptual influences

Heinberg (1996) described three perceptual theories of body image - the cortical deficit theory, the adaptive failure theory, and the perceptual artifact theory. The *cortical defect theory* suggests that body size overestimation results from an interaction between visual spatial defects and both cognitive and affective influences (Dolce, Thompson, Register, and Spana, 1987; Thompson and Spana, 1988). The *adaptive failure theory* suggests that individuals' perceptions of body size do not change at the same rate as their

actual size changes as a result of weight gain or loss (Heinberg, 1996). Similarly, the *perceptual artifact theory* suggests that the tendency to overestimate one's body size is related to one's actual body size (Penner, Thompson, and Coover, 1991).

The perceptual theories of body image appear to have little empirical support beyond the studies cited. Furthermore, they are most frequently used to explain dissatisfaction with one's overall body size or shape (Heinberg, 1996). Thus, their applicability to individuals who have concerns with a discrete feature of their appearance is unknown. Perceptual aspects of body disturbance, once nearly defining the field of body image, fell into disfavour for several years but are now being re-examined within a cognitive framework.

1.7.3. Developmental influences

Developmental theories of body image disturbance focus on the contribution of childhood and adolescent experiences to adult body image. The *theory of puberty and maturational timing* suggests that girls who have early menarche are more likely to have a negative body image (Heinberg, 1996), as evidenced by body size overestimation (Fabian and Thompson, 1989) and their reports of body image dissatisfaction (Brooks-Gunn and Warren, 1985). However, this relationship may only exist in normal weight individuals, as it was not observed in obese women (Sarwer, Wadden, and Foster, 1997). Models of body image and verbal criticism from the mother have been found to be associated with body image disturbance in adolescents and young adults, particularly for girls (Baker, Whisman, and Brownell, 2000; Moreno and Thelen, 1993; Pike and Rodin, 1991; Smolak, Levine, and Schermer, 1999; Striegel-Moore and Kearney-Cooke, 1994; Thelen and Cormier, 1995). Verbal teasing from peers has also been found to be correlated with body image disturbance (Edlund, Halvarsson, Gebre-Medhin, and Sjoden, 1999; Oliver and Thelen, 1996; Shisslak *et al.*, 1998; Stormer and Thompson, 1996). Body image disturbance has often been found associated with preschool body image difficulties in social relationships with peers (Oates-Johnson and DeCourville, 1999; Tantleff-Dunn and Thompson, 1995; Wiederman and Hurst, 1997) and disorders of food acceptance (Noll and Fredrickson, 1998).

There is not enough literature on the family characteristics of individuals who are satisfied and individuals who are dissatisfied with their appearance. However, the literature concerning eating disorders and family functioning certainly indicates that families with low cohesion, lack of emotional expression and high conflict are potentially at risk for eating disorders (Laliberte *et al.*, 1999). One cannot claim, however, that this specific combination of characteristics is a formula for the aetiology of an eating disorder. It is more logical to assume that family dysfunction has a greater, and nonspecific, link to individual psychopathology, rather than to eating disorders alone. In fact, recent literature suggests that the disturbed family functioning may be more closely related to depression (i.e., Thienemann and Steiner, 1993).

1.7.4. Sociocultural influences

Sociocultural theories have stressed the influence of social norms and expectations on both the aetiology and maintenance of body image disturbance (Heinberg, 1996). As a whole, these theories emphasize the interaction of the mass media and cultural ideals of appearance (which frequently portray unrealistic, exaggerated, or unattainable body image models) with tenants of both self-ideal discrepancy (Thompson, 1992) and social comparison theory (Festinger, 1954). This collection of theories has wide intuitive appeal and has received some correlational support (e.g., Heinberg, Thompson, and Stormer, 1995; Mazur, 1986). A number of these theories are briefly described below, before cognitive theories which form the theoretical foundation of the present investigation and which are therefore described in more detail.

Social Comparison Theory (Festinger, 1954) claims that when people feel unable to evaluate themselves directly, they look to others for comparison; this process results in favourable comparisons (downward comparisons) where the evaluator judges himself as higher, or unfavourable comparisons (upward comparisons) where the evaluator judges himself as lower. In the context of media images, this theory infers that people may use those depicted in the media as reference points for comparison. Major *et al.* (1991) indicated that as long as people consider these figures to be fairly similar to them, on relevant dimensions (aside from body image and realism), then it can be expected that upward comparisons could be made leading to body dissatisfaction.

Recent studies have provided convincing evidence that media images play a significant role in how women feel about their bodies (Grogan, 1999; Grogan, Williams, and Conner, 1996; Stice, Schupak-Neuberg, Shaw, and Stein, 1994). Specifically, the media's portrayal of a slim "ideal" body for women has been linked to the increasing prevalence of dieting disorders and body image disturbance in general (Anderson and DiDomenico, 1992; Tiggemann and Pickering, 1996; Stice *et al.*, 1994)). Although the exact nature of this link has not been satisfactorily determined, it is clear that the media are not the sole cause of dieting disorders, as the majority of women with exposure to the media do not develop such a disturbance. Two models have been devised from research, the 'Effects Model' and the 'Uses and Gratifications Model'. The 'Effects Model' implies that the individual is passive and helpless against propaganda. The 'Uses and Gratifications Model' asks people why they consume a certain medium and what effects they think it has on their behaviour, making the viewer active rather than passive in accepting and rejecting parts of the media (Klapper, 1960).

Some feminist researchers (Brownmiller, 1984; Chapkis, 1986; Bordo, 1993) see women as victims of a society that controls women through their bodies. Chapkis (1986) argues that women are oppressed by a 'global culture machine' (made up of the advertising industry, communications media, and the cosmetic industry) which promotes a narrow, Westernised ideal of beauty to women all over the world. Orbach (1993) argues that women are taught from an early age to view their bodies as commodities. In contrast, writers such as Bartky (1990) and Smith (1990) see women as actively engaging with the representation of the female body. Smith (1990) sees women in an active role in interpreting cultural messages. She argues that women 'do femininity' in an active way. Women objectify their bodies and are constantly planning, and enacting measures to bring them closer to the ideal.

For men, Chapman (1988) argues that the 'new man' (nurturant and narcissistic) was largely the result of the style culture of the early 1980s, promoted by the style press. The culture legitimised men's concern with their bodies and the consumerism necessary to adopt the role. The 'new man', she argues, is not a major departure from the traditional, John Wayne-style macho man, but is simply an adaptation of the role which is better

suited to survival in a culture that now rejects obvious machismo, largely due to the power of feminism.

1.8.1. Cognitive approaches

According to general cognitive theory, several types or levels of cognition are involved in the aetiology and maintenance of psychopathology (Beck, 1967; Kwon and Osei, 1994; Segal, 1988). Distinctions are drawn between how information is organized, processed, and its content (Beck, 1967; Segal, 1988). Cognitive theory posits that individuals form schemas (i.e., knowledge structures) about the self, world and future that guide attention to and interpretation of stimuli. Schemas consist of both structure (i.e., associative networks) and content (i.e., beliefs or principles). Pathology develops and is maintained via the way information is organized in the schema (e.g., organization of information and strength of connection between information nodes in a network), processed by the schema (e.g., overgeneralization, selective abstraction), and by the content of the schema (e.g., dysfunctional attitudes). An additional distinction is drawn between dysfunctional attitudes and automatic thoughts. Automatic thoughts are situation-specific, moment-to-moment, unplanned thoughts that often reflect distorted processing and dysfunctional content. In contrast, dysfunctional attitudes are more stable, cross-situational, underlying beliefs that give rise to automatic thoughts and processing errors, and shape the meaning of and behavioural response to stimuli and events (Hollon and Kriss, 1984).

Furthermore, cognitive theory posits that different forms of psychopathology may share in common schematic organization dysfunction (such as overly rigid connections between nodes) or cognitive processing errors (such as selective abstraction); however, the *content* of dysfunctional cognitions for each disorder is theorized to be unique. Beck termed this aspect of the theory the "cognitive content-specificity hypothesis" which states that each psychological disorder has distinctive or unique cognitive content (Beck, 1967, 1987),

Figure 1.1 depicts a current cognitive model of body image schema, which is defined as an organization of information about one's physical self.

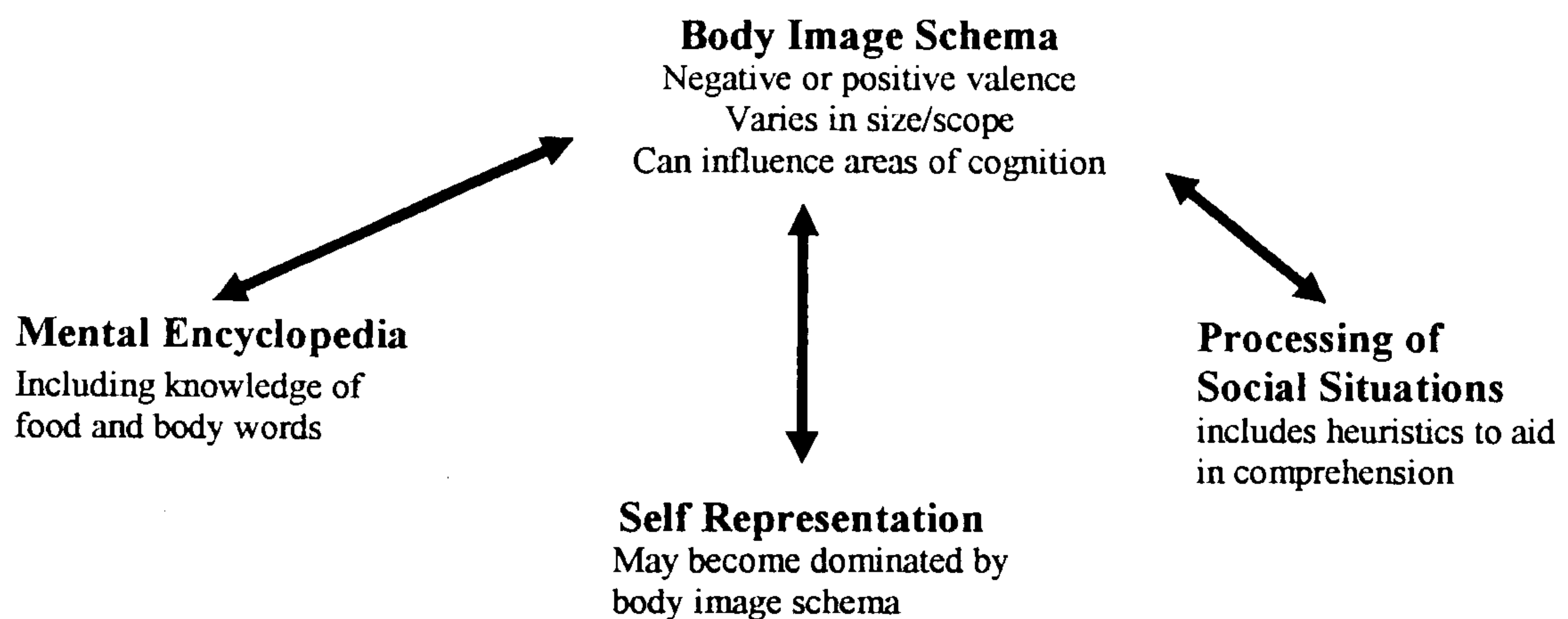


Figure 1.2. A body image schema and its relation to other areas of cognitive processing. From Thompson *et al.* (1999). *Exacting Beauty. Theory, Assessment and Treatment of Body Image Disturbance*. American Psychological Association.

1.8.2. Self-Related Cognition

One early model of body image, based in self-schema theory, is that of Markus, Hamill, and Sentis (1987)³. Markus (1977) describes self-schemas as

“cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual’s social experiences” (p: 64).

Individuals are said to be schematic on a particular dimension if they regard the dimension as a central and salient feature of their self-concept and aschematic if they do not regard the dimension as central to the self. Thus, an individual may have been called “ugly duckling” as a child and will continue to self-label themselves as “ugly.” With repetition, the individual becomes faster and more efficient at seeing themselves as ugly, until the point that a minimal time is spent considering the label and “ugly” itself is an automatic thought in response to a variety of situations. The schema for “ugliness” becomes so ingrained that the individual consistently self labels themselves as ugly and resists any counterinformation. Such a person would be described as *schematic* for ugliness. A person without these characteristics would be described as *aschematic*.

³ Another model for understanding self-related cognition in body image is Higgins's (1987) self-discrepancy model. Briefly, Higgins proposes that if a discrepancy exists between the perception of what we are (e.g., actual body image) and our “ideal” view and/or between our actual and “ought” (social norms) view of self, then this may lead to feelings of dissatisfaction and frustration in the former case and social physique anxieties and discontent in the latter.

In an empirical test of these ideas, Markus *et al.* (1987) found that individuals schematic for fatness were faster when asked to decide if heavy silhouettes were like them than they were to decide if thin silhouettes were like them. Aschematic individuals showed no difference in judgment time. However, the group difference was not seen for responses to the words *fat* and *thin*, which led the authors to question whether any female American student could be aschematic for body weight. This is an important point to consider when trying to discriminate typical from pathological body image cognition.

1.8.3. Social information-processing biases

Investigating the role of heuristics in body image disturbance, Jackman, Williamson, Netemeyer, and Anderson (1995) compared the interpretations of weight-preoccupied and asymptomatic women for appearance and health-related sentences that could be interpreted either positively or negatively. Participants were asked to recall these sentences. As expected, weight-preoccupied women recalled the appearance-related sentences as negative but did not show a bias for control sentences. The authors concluded that the weight-preoccupied women showed an information-processing bias that was consistent with their negative view of their own body. Similar results have been found by Cooper (1997) in the interpretations of ambiguous interpersonal situations, by Tantleff-Dunn and Thompson (1998) in the selective attention and recall of information and by Wood, Altabe, and Thompson (1998) in the completion of ambiguous appearance- and non-appearance-related sentences.

1.8.4. Body image and the mental encyclopedia

The heightened importance of food information to a person with body image disturbance make him or her either more efficient at recognizing a food related word (*facilitation effect*) (von Hippel, Hawkins, and Narayan, 1994) or slow him/her down when processing the word (*interference effect*) (Fairburn, Cooper, Cooper, McKenna, and Anastasisades, 1991; Cooper and Fairburn, 1992). There, the valence of the information is important; there may be a bias toward negative body-relevant stimuli (Rieger *et al.*, 1998; Freeman *et al.*, 1991).

1.9. Integrative theoretical approaches

Cash has proposed a cognitive-behavioural model of body dissatisfaction (Cash, 1996; Cash and Labarge, 1996), illustrated in Figure 1.3, which is perhaps the most unified current model. Its central feature is a separation of historical and proximal influences. This model suggests that people have schemas about physical appearance, derived from past experience and influenced by personality and physical attributes. Environmental stimuli about appearance from any number of sources could activate this appearance-related or body image schema, which then, in turn, influence affect and behaviour (Cash and Labarge, 1996). According to Cash and Labarge (1996), in persons with such a schema, self-esteem is closely tied to feelings about physical appearance.

Although Cash's model has not yet received empirical testing, various researchers have evaluated certain components of the model (Veron-Guidry, Williamson, and Netemeyer, 1997; J. K. Thompson, Covert, *et al.*, 1995; Williamson *et al.*, 1995; Stice, Shaw and Nemeroff, 1998)

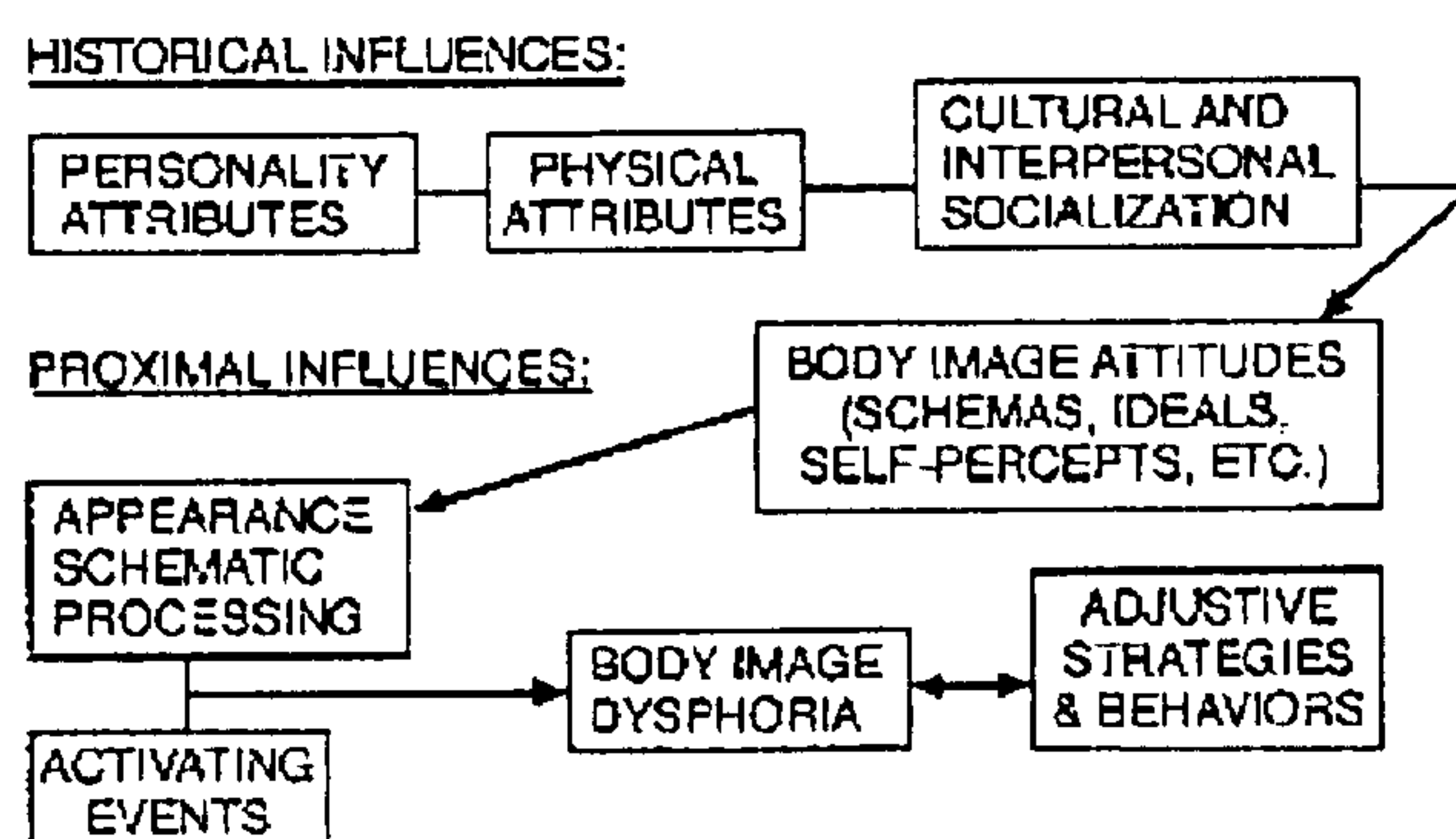


Figure 1. 3. A model of historical and proximal influences. From "The Treatment of Body Image Disturbance" (p. 85), by T. F. Cash, in J. K. Thompson (Ed.), *Body Image, Eating Disorders, and Obesity. An Integrative Guide for Assessment and Treatment*, 1996, Washington, DC: American Psychological Association.

1.10. The present investigation

Descriptive data suggest that dissatisfaction with appearance is endemic in young adults in Western societies. Previous studies have identified gender-related differences in body satisfaction with women being significantly more dissatisfied with their appearance. Research on body image in men is still at an early stage.

The participants in most of the studies so far have been groups of white, middle class college students between the ages of 18 and 25 years. Although most psychological research relies on this participant group due to convenience for the academic investigator (Chistensen, 1997), results are necessarily limited in generalisability. Similarly, findings from magazine surveys need to be interpreted with caution, since the readers of specific magazines (e.g., *Men's Health*, *Psychology Today*) may be a group of individuals who are particularly sensitive to body image issues and whose views are not representative of the general population.

There is a growing need for further research into male body image concerns (McCreary and Sasse, 2000). Male body image issues are likely to increase in the future. As more emphasis is being placed on beauty in general in men, the gulf between actual and ideal appearance is widening with possible detrimental consequences in terms of the development of eating disorders, body dysmorphic disorder and general body dissatisfaction in the male population (McCreary and Sasse, 2000, Pope, Gruber, Mangweth, Bureau, deCol, Jouvent, and Hudson, 2000).

In the light of previous concerns the aim of the present research was to investigate the extent and nature of appearance-related concerns in young adults (18-30 years of age) and identify those factors, which predict increased incidence of appearance-related concerns using both a student and a community sample. On the basis of previous research it was predicted that women would be more dissatisfied with their appearance than men. Of particular interest was determining the specific body parts with which young adults seem to be most dissatisfied as previous research has focused primarily on weight/shape dissatisfaction. It was expected that the dissatisfaction would parallel those areas emphasized in the media. Therefore, it was hypothesized that men would be more dissatisfied with their upper bodies, whereas women would be more dissatisfied with their middle/lower bodies. It was predicted on the basis of previous research that appearance dissatisfaction would be negatively correlated with self-esteem for women (Tiggemann, 1997). Given the disagreement in the literature, a tentative hypothesis was made that self-esteem will be negatively correlated with body dissatisfaction in men as well.

This investigation was designed not only to update information regarding appearance dissatisfaction in men and women, but also to provide further information about what explains it. Recent investigations yield great advances in theoretical explanations for the onset and development of body image disturbance and have identified a number of factors that affect body image. The cognitive model of appearance dissatisfaction provides the theoretical framework for this study. This model holds great promise and has not been empirically tested yet. An integrative model consisting of the diverse factors that have received some empirical and theoretical support as affecting body image was tested. It was hypothesized that four sets of factors (schemata, self-esteem, social support, and global psychological functioning) would act as “causal determinants” and explain appearance dissatisfaction. However, it is acknowledged from the outset that the data analyses presented are cross-sectional and do not permit causal inference.

To summarize the following research hypotheses were formulated:

H1: Women will be more dissatisfied with their appearance than men

H2: Women will be more dissatisfied with features of their lower and middle body while men will be more dissatisfied with features of their upper body

H3: Individuals with high appearance schematicity will be more emotionally distressed than those with low appearance schematicity

H4: Individuals with high appearance schematicity will be more dissatisfied with their appearance than those with low appearance schematicity

H5: Individuals with high self-esteem will be less dissatisfied with their appearance than those with low self-esteem

H6: Individuals with high self-esteem will be less emotionally distressed than those with low self-esteem

H7: Individuals being satisfied with the social support they receive will be less emotionally distressed than those who are not satisfied

H8: Individuals being satisfied with the social support they receive will be less dissatisfied with their appearance than those who are not satisfied.

Most previous research in this area has largely used theory-led quantitative methodologies, taking an 'outsider perspective' by viewing (dis)satisfaction with

appearance from outside the experience itself (Conrad, 1990). It can be argued that this approach can reduce the chances of discovering how individuals actually make sense of their appearance, adapt and perceive themselves and their relationships. The dearth of qualitative research within the appearance literature is unfortunate, as the increased flexibility provided by the use of such methodologies could yield rich information on the process of accepting and being satisfied with one's appearance or extremely unhappy about it. This investigation uses Interpretative Phenomenological Analysis (IPA; Smith, 1995) to strengthen the research in this area. The specific aim of this research was to achieve an understanding of how individuals thought about, and dealt with, their appearance. It sought to examine the processes by which the participants arrived at their current level of functioning and how they managed ongoing concerns. Two research questions were formulated:

- What makes individuals dissatisfied with their appearance?
- What characteristics do individuals who are satisfied with their appearance have?

Recent advances in assessment methods and treatment (Butters and Cash, 1987; Dworkin and Kerr, 1987; Fisher and Thompson, 1994; Grant and Cash, 1995; Rosen, Cado, Silberg, Srebn, and Mlendt, 1990; Rosen, Saltzberg, and Srebrtik, 1989) give clinicians a variety of tools to work with clients having different body image problems. Cognitive therapy has been found effective in the treatment of body dissatisfaction (Cash, 1997) however, little research is available on how lasting the improvements are from such treatment programs. Therefore, prevention efforts may be more cost-effective and save individuals years of unhappiness and missed opportunities. The design of such prevention programs would be enhanced by knowing what variables seem most predictive of its development and also what strategies are employed by individuals who are satisfied with their appearance.

Chapter 2

Methods of Inquiry: Quantitative and Qualitative Approaches

2.1. Introduction

The present chapter discusses the research methodology adopted in the investigation and argues the position that given the importance and predominance of the research question over the paradigm, researchers should use appropriate methods from both quantitative and qualitative approaches to address their research question. For most applications in the social and behavioural sciences, these research questions are best answered with mixed method or mixed model (which is the model adopted in the present investigation) research designs rather than with a sole reliance on either the quantitative or the qualitative approach (Creswell, 1995).

The chapter begins by summarizing the literature on the paradigm “wars”, continues by discussing the philosophical underpinnings and describing the methods and strategies of mixed method and mixed model research and goes on to introduce and discuss Interpretative Phenomenological Analysis which is the qualitative method employed in the present investigation. This is contextualized within current debates, particularly in social cognition and discourse analysis. The chapter concludes with a critical discussion of the methodology employed in the present investigation and its theoretical underpinnings.

2.2. Paradigm wars and mixed methodologies

During the past three decades, several debates or “wars” (e.g., Datta, 1994; Gage, 1989; Guba and Lincoln, 1994; House, 1994; Rossi, 1994) have dominated the social and behavioural sciences literature regarding the superiority of one or the other of the two major social science paradigms. These two paradigms are known alternately as the *positivist/empiricist* approach or the *constructivist/phenomenological* orientation (e.g., Cherryholmes, 1992; Guba and Lincoln, 1994).

Paradigms may be defined as the worldviews or belief systems that guide researchers (Guba and Lincoln, 1994). The importance currently attributed to paradigms in the social and behavioural sciences derives from Kuhn's (1970) influential book titled *The Structure of Scientific Revolutions*. In this book, he argues that paradigms are the models that are imitated within any given field, and that competing paradigms may exist

simultaneously, especially within immature sciences (Kneller, 1984; Kuhn, 1970).

Thomas Kuhn described scientific paradigm as

...accepted examples of actual scientific practice, examples which include law, theory, application, and instrumentation together (that) provide models from which spring particular coherent traditions of scientific research. Men whose research is based on shared paradigms, are committed to the same rules and standards for scientific practice. (p. 18).

A paradigm never remains static, rather it changes and evolves as new knowledge is accumulated and ideas are conceived, causing a paradigm shift.

The positivist paradigm underlies *quantitative methods*, while the constructivist paradigm underlies *qualitative methods* (e.g., Guba and Lincoln, 1994; Howe, 1988; Lincoln and Guba, 1985). Therefore, the debate between these two paradigms has sometimes been called the qualitative-quantitative debate (e.g., Reichardt and Rallis, 1994). Although these are the two major opposing points of view, several philosophical orientations or paradigms, have been posited and defended (e.g., Greene, 1994; Guba, 1990; Guba and Lincoln, 1994) including: logical positivism, postpositivism, pragmatism, and constructivism (other variants of which are known as interpretivism, and naturalism).

Positivism's (also called logical positivism or logical empiricism) origins date back to nineteenth-century French philosopher August Comte. According to positivism, there are only two sources of knowledge: logical reasoning and empirical experience. A statement is meaningful if and only if it can be proven true or false, at least in principle, by means of the experience (verifiability principle). Metaphysical statements and indeed traditional philosophy are thus forbidden as meaningless. The only reliable approach to knowledge accumulation according to this epistemology, is empirical falsification through objective hypothesis-testing of rigorously formulated causal generalizations. Lincoln and Guba (1985) ascribed several "axioms" to positivism:

1. *Ontology*¹: There is a single reality.

2. *Epistemology*²: The knower and the known are independent.

3. *Axiology*³: Inquiry is value-free.

¹ Ontology: Nature of reality.

² Epistemology: The relationship of the knower to the known.

³ Axiology: Role of values in inquiry.

4. *Generalizations*: Time- and context-free generalizations are possible.

5. *Causal linkages*: There are real causes that are temporally precedent to or simultaneous with effects.

Goetz and LeCompte (1984) and Patton (1990) have added a sixth distinction:

6. *Deductive logic*: There is an emphasis on arguing from the general to the particular, or an emphasis on *a priori* hypotheses (or theory).

Logical positivism was discredited as a philosophy of science after World War II (e.g., Howe, 1988; Phillips, 1990; Reichardt and Rallis, 1994). With the advent of quantum mechanics and chaos theory in physics and evolutionary theory in the biological sciences, growing numbers of scientists came to reject the Parmenidean worldview in favor of the Heraclitean conception of flux (Toulmin, 1990). From quantum theory and its postulate of indeterminacy it was learned that various aspects of the atomic level of reality are so influenced (or co-determined) by other dimensions of the same phenomena that such processes can no longer be described as determinate or predictable. Moreover, such research led some physicists to argue that the explanation of the behavior of a particle depends in significant part on the vantage point from which it is observed (Galison, 1997). That is, in explaining important aspects of the physical world, where you stand can influence what you see. Relatedly, chaos theory has demonstrated that an infinitesimal change in any part of a system can trigger a transformation of the system at large (Kellert, 1993; Gleick, 1987). Such empirical phenomena are thus better defined as "participatory interminglings" than perceptions of objective things standing apart from human subjectivity. In short, the traditional understanding of the physical world as a stable or fixed entity was no longer adequate. For logical positivism, this posed a fundamental problem: it lost its firm epistemological anchor.

Dissatisfaction with the axioms of positivism (especially with regard to ontology, epistemology, and axiology) became increasingly widespread throughout the social and behavioural sciences during the 1950s and 1960s, giving rise to postpositivism. Landmark works of postpositivism (e.g., Hanson, 1958; Popper, 1959) appeared in the late 1950s, and they quickly gained widespread credibility throughout the social scientific community. While many quantitative oriented researchers continued to follow the tenets

of positivism in the 1950s and 1960s, Reichardt and Rallis (1994) convincingly argued that some of the most influential quantitative methodologists of that period (e.g., Campbell and Stanley, 1966) were "unabashedly postpositivist" in their orientation. According to Reichardt and Rallis, these quantitative methodologists were postpositivists because their writings indicated that they agreed with the following tenets of that philosophy:

Value-ladenness of inquiry: Research is influenced by the values of investigators.

Theory-ladenness of facts: Research is influenced by the theory or hypotheses or framework that an investigator uses.

Nature of reality: Our understanding of reality is constructed.

Reichardt and Rallis (1994) claim that these postpositivist tenets are currently shared by both qualitatively and quantitatively oriented researchers because they better reflect common understandings regarding both the "nature of reality" and the conduct of social and behavioural research.

The discrediting of positivism resulted in the increasing popularity of paradigms more "radical" than postpositivism. These paradigms have several names (constructivism, interpretivism, naturalism), with constructivism being the most popular. Theorists associated with these paradigms borrowed from postpositivism but then added dimensions of their own to the models (e.g., Denzin, 1992; Gergen, 1985; Goodman, 1984; Hammersley, 1989; LeCompte and Preissle, 1993; Schwandt, 1994). Constructivism has its roots in Kant's synthesis of rationalism and empiricism. According to constructivism, knowledge is not passively received either through the senses or by way of communication, but is actively built up by the cognizing subject. The function of cognition is adaptive and serves the subject's organization of the experiential world, not the discovery of an objective ontological reality.

Lincoln and Guba (1985) set up a series of contrasts between the positivist and naturalist (their version of constructivism) paradigms. Referring back to the five axioms of positivism described above, they posited the following five axioms of the naturalist paradigm:

1. *Ontology*: There are multiple, constructed realities.
2. *Epistemology*: The knower and the known are inseparable.
3. *Axiology*: Inquiry is value-bound.
4. *Generalizations*: Time- and context-free generalizations are not possible.
5. *Causal linkages*: It is impossible to distinguish causes from effects.

Similarly to positivism a sixth distinction has been noted:

6. *Inductive logic*: There is an emphasis on arguing from the particular to the general, or an emphasis on "grounded" theory.

Given such strong contrasts between positivism and constructivism, it was inevitable that paradigm debates would occur between scholars convinced of what Smith (1994) has called the "paradigm purity" of their own position. For example, Guba (1987) stated that one paradigm precludes the other "just as surely as the belief in a round world precludes belief in a flat one" (p. 31). Guba and Lincoln (1990, 1994) have repeatedly emphasized the differences in ontology, epistemology, and axiology that exist among the paradigms, thus reinforcing the paradigm debates. Smith (1983) stated the incompatibility thesis as follows:

One approach takes a subject-object position on the relationship to subject matter; the other takes a subject-subject position. One separates facts and values, while the other sees them as inextricably mixed. One searches for laws, and the other seeks understanding. These positions do not seem compatible (p. 12).

Paradigm "purists" have further posited the incompatibility thesis with regard to research methods: Compatibility between quantitative and qualitative methods is impossible due to the incompatibility of the paradigms that underlie the methods. According to these theorists, researchers who try to combine the two methods are doomed to failure due to the inherent differences in the philosophies underlying them.

2.3. The current situation

There have been numerous attempts in the social and behavioural sciences to reconcile the two major paradigmatic positions. Many influential researchers have stated that the differences between the two paradigms have been overdrawn, and that qualitative and quantitative methods are, indeed, compatible. For example, House (1994) concluded that this dichotomization springs from a "misunderstanding of science" as he pointed out

strengths and weaknesses of both the positivist and the constructivist traditions. House further contended that there "is no guaranteed methodological path to the promised land" (pp. 20-21).

In education and evaluation research (e.g., Howe, 1988; Reichardt and Rallis, 1994), authors have presented the compatibility thesis based on a different paradigm, that of *pragmatism*⁴. Howe (1988) states the pragmatist response to the importance of paradigm (and of the paradigm-methodology) as follows:

But why should paradigms determine the kind of work one may do with inquiry any more than the amount of illumination should determine where one may conduct a search?...Eschewing this kind of "tyranny of method" (Bernstein, 1983)-of the epistemological over the practical, of the conceptual over the empirical-is the hallmark of pragmatic philosophy. (p.13).

Nielsen (1991) suggests that pragmatism is a "reactive, debunking philosophy" (p. 164) that argues against dominant systematic philosophies, making mocking critiques of metaphysical assertions such as "the grand Either-Or". Consequently pragmatism is the paradigm that justifies the use of mixed method and mixed model studies which contain elements of both the quantitative and qualitative approaches (Howe, 1988).

Brewer and Hunter (1989), have noted that most major areas of research in the social and behavioural sciences now use multiple methods as a matter of course:

"Since the fifties, the social sciences have grown tremendously. And with that growth, there is now virtually no major problem-area that is studied exclusively within one method" (p. 22).

Datta (1994), writing within the evaluation discipline, has given five convincing, practical reasons for "coexistence" between the two methodologies and their underlying paradigms:

- Both paradigms have, in fact, been used for years.

⁴Pragmatism is a philosophical movement, developed in the United States, which holds that both the meaning and the truth of any idea is a function of its practical outcome. Fundamental to pragmatism is a strong antiabsolutism: the conviction that all principles are to be regarded as working hypotheses rather than as metaphysically binding axioms. In a paper on "How To Make Your Ideas Clear," contributed to the *Popular Science Monthly* in 1878, Charles Sanders Peirce first used the word pragmatism to designate a principle put forward by him as a rule for guiding the scientist and the mathematician. The principle is that the meaning of any conception in the mind is the practical effect it will have in action.

- Many evaluators and researchers have urged using both paradigms.
- Funding agencies have supported both paradigms.
- Both paradigms have influenced policy.
- So much has been taught by both paradigms.

Brewer and Hunter (1989) describe monomethod designs as "a diversity of imperfection" in the following quote:

Social science methods should not be treated as mutually exclusive alternatives among which we must choose.... Our individual methods may be flawed, but fortunately the flaws are not identical. A diversity of imperfection allows us to combine methods ... to compensate for their particular faults and imperfections. (pp. 16-17).

Similarly, Cook and Campbell (1979), in a discussion of the threats to the validity of research results, point out the shortcomings of monomethods in measuring underlying constructs. These influential quantitative methodologists describe *monomethod bias* as one of the threats to the *construct validity of putative (i. e., reputed) causes and effects*. They contend that if a construct was measured using only one method, then it would be difficult to differentiate the construct from its particular monomethod operational definition.

Nevertheless, it should be acknowledged that pragmatists have often employed imprecise language in describing their methodologies, using some rather generic terms (e.g., *mixed methods*) to connote several different ways of conducting a study or a series of studies. Datta (1994) recently referred to what she called "mixed-up models" that are derived from the "lack of a worldview, paradigm, or theory for mixed-model studies," concluding that "such a theory has yet to be fully articulated" (p. 59).

2.4.1. A taxonomy of studies using different methodological approaches

The taxonomy of methodological approaches in the social and behavioural sciences includes three broad categories: monomethods (dating from the emergence of the social sciences in the nineteenth century through the *1950s*), mixed methods (emerging in the *1960s* and becoming more common in the *1980s*), and mixed model studies (emerging as a separate type in the *1990s* but having earlier precursors). Each of

these basic types of studies is further divided into subcategories. In this section, brief definitions of these different methodological approaches will be provided.

2.4.2. *Monomethod studies*

Monomethod studies are studies conducted by researchers working exclusively within one of the predominant paradigms. The subdivision of the monomethod studies into the purely qualitative and the purely quantitative follows.

2.4.3. *Mixed method studies*

Mixed method studies are those that combine the qualitative and quantitative approaches into the research methodology of a single study. All mixed method designs use triangulation techniques. In 1978, Denzin applied the term *triangulation* (i.e. defined as the convergence of results) in a book on sociological methods. Denzin's concept of triangulation involved combining data sources to study the same social phenomenon. He discussed four basic types of triangulation: *data triangulation* (the use of a variety of data sources in a study), *investigator triangulation* (the use of several different researchers), *theory triangulation* (the use of multiple perspectives to interpret the results of a study), and *methodological triangulation* (the use of multiple methods to study a research problem).

Creswell (1995) notes four mixed-method designs: (a) *sequential* studies, in which the researcher begins with generating quantitative data and then gathers qualitative data (or vice versa) in two distinct phases; (b) *parallel/simultaneous* studies, where the quantitative and qualitative phases occur simultaneously; (c) *equivalent status* designs, where both quantitative and qualitative approaches are used with more or less equal emphasis in order to understand the phenomenon being studied; and (d) *dominant less dominant* studies, where either the quantitative or qualitative approach provides the dominant paradigm and the other approach is a small, supplementary component of the study.

Creswell (1995) has recently noted that mixed method designs now serve purposes beyond triangulation. In an extensive literature review, Greene *et al.* (1989) reviewed 57 mixed methods studies from the 1980s and listed five purposes for these

studies: (a) *triangulation*, or seeking convergence of results; (b) *complementarity*, or examining overlapping and different facets of a phenomenon; (c) *initiation*, or discovering paradoxes, contradictions, fresh perspectives; (d) *development*, or using the methods sequentially, such that results from the first method inform the use of the second method; and (e) *expansion*, or mixed methods adding breadth and scope to a project.

2.4.4. *Mixed model studies*

In 1995 Creswell asked a basic question regarding the application of the paradigm-method link to other phases of the research process apart from methodology:

The most efficient use of both paradigms would suggest another step toward combining designs: Can aspects of the design process other than methods-such as the introduction to a study, the literature and theory, the purpose statement, and research questions-also be drawn from different paradigms in a single study? (p. 176)

His answer was in the affirmative and he moved on to define "mixed methodology designs" as follows:

This design represents the highest degree of mixing paradigms ... The researcher would mix aspects of the qualitative and quantitative paradigm at all or many ... steps" (pp. 177-178).

He discussed how this mixing might happen in writing an introduction, using literature and theory, writing a purpose statement and hypotheses or research questions, describing the methods, and describing the results. Creswell (1995) concluded,

This approach adds complexity to a design and uses the advantages of both the qualitative and the quantitative paradigms. Moreover, the overall design perhaps best mirrors the research process of working back and forth between inductive and deductive models of thinking in a research study. (p. 178) [see Figure 2.1].

2.5. Interpretative phenomenological analysis

Interpretative Phenomenological Analysis (IPA) is a qualitative analytic method derived from phenomenology and symbolic interactionism and affiliated with social cognition. While the interpretative phenomenological approach is currently underrepresented in mainstream psychology, it has a long tradition in medical sociology. From Glaser and Strauss (1967) onwards, contemporary sociology has found a place for

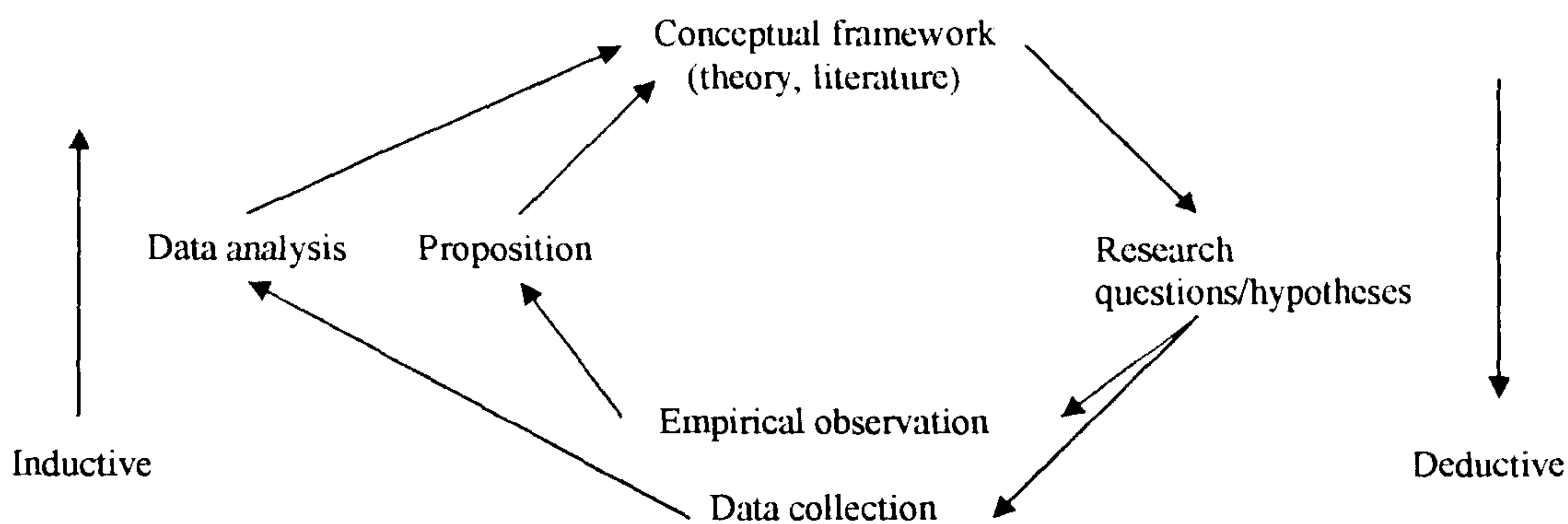


Figure 2.1. The research cycle.

research on health related issues using a range of non-quantitative methodologies (including- phenomenological interviewing, participant observation, and ethnography) to address a wide range of issues, for example, lay perceptions of health and illness, doctor patient communication, institutionalization (see Silverman 1985 and Conrad 1987). The approach has been championed in health psychology by Smith J.A. (1991, 1994, 1996) and what follows is necessarily, to a great extent, a restatement of his views.

According to Smith (Smith 1991, 1994, 1996) the aim of Interpretative Phenomenological Analysis (IPA) is to explore in detail the participant's view of the topic under investigation. Thus the approach is phenomenological in that it is concerned with an individual's personal perception or account of an object or event as opposed to an attempt to produce an objective statement of the object or event itself. What is important to know, what constitutes an appropriate and legitimate focus for social inquiry, is the phenomenological meaningfulness of lived experience-people's interpretations and sense making of their experiences in a given context. As Smith J.K (1989) notes, this process is inevitably hermeneutical because "investigators, like everyone else, are part of the circle of interpretation" (p. 136). IPA recognizes that the research exercise is a dynamic process. One is trying to get close to the participant's personal world, to take, in Conrad's (1987) words, an 'insider's perspective' but one cannot do this directly or completely. Access depends on, and is complicated by, the researcher's own conceptions and indeed these are required in order to make sense of that other personal world through a process of interpretative activity. Social reality is viewed as significantly socially constructed, "based on a constant process of interpretation and reinterpretation of the intentional,

meaningful behaviour of people-including researchers” (Smith J.K., 1989, p.85). Hence the term interpretative phenomenological analysis is used to signal these two facets of the approach.

The theoretical foundations for IPA are phenomenology⁵ and symbolic interactionism⁶. Phenomenological psychology, following from Husserl's (1970) philosophy, is concerned with an individual's personal perception or account of an object or event as opposed to an attempt to produce an objective statement of the object or event itself. Symbolic interactionism emerged in the USA in the 1930's, was influenced both by phenomenology and pragmatism and represented an explicit rejection of the positivist paradigm beginning to take hold in the social sciences. Blumer (1969) notes:

The term "symbolic interaction" refers, of course, to the peculiar and distinctive character of interaction as it takes place between human beings. The peculiarity consists in the fact that human beings interpret or "define" each other's actions instead of merely reacting to each other's actions. Their "response" is not made directly to the actions of one another but instead is based on the meaning which they attach to such actions. Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the meaning of one another's actions. This mediation is equivalent to inserting a process of interpretation between stimulus and response in the case of human behavior. (p. 180).

⁵ The founder of phenomenology, the German philosopher Edmund Husserl, introduced the term in his book *Ideas: A General Introduction to Pure Phenomenology* (1913; trans. 1931). As formulated by Husserl phenomenology is the study of the structures of consciousness that enable consciousness to refer to objects outside itself. This study requires reflection on the content of the mind to the exclusion of everything else. Husserl called this type of reflection the phenomenological reduction. Because the mind can be directed toward nonexistent as well as real objects, Husserl noted that phenomenological reflection does not presuppose that anything exists, but rather amounts to a “bracketing of existence”, that is, setting aside the question of the real existence of the contemplated object. What Husserl discovered when he contemplated the content of his mind were such acts as remembering, desiring, and perceiving and the abstract content of these acts, which Husserl called meanings. These meanings, he claimed, enabled an act to be directed toward an object under a certain aspect; and such directedness, called intentionality, he held to be the essence of consciousness.

⁶ Perhaps the most important and enduring sociological perspective from North America it traces its roots in the pragmatist philosophers such as Peirce, Dewey, Cooley, and Mead. As Plummer notes, "it seeks to unify intelligent thought and logical method with practical actions and appeals to experience" (p. 227). Symbolic Interactionism is based on three assumptions: communication occurs through the creation of shared significant symbols, the self is constructed through communication, and social activity becomes possible through the role-taking process.

According to Blumer, the characteristics of this approach are (i) human interaction, (ii) interpretation or definition rather than mere reaction, (iii) response based on meaning, (iv) use of symbols, and (v) interpretation between stimulus and response.

IPA has strong theoretical affiliation with social cognition. All socio-cognitive approaches adhere to the notion of internal mental representation. The basic philosophical presupposition underlying those approaches is that there is a cognitive life world to be explored and delineated, both its content and associated mental mechanisms. From this perspective cognition is conceptualized as prior to language. Language is viewed primarily as a communication medium through which cognition finds expression. While different theoretical approaches vary in the extent to which they emphasize the constructivist nature of human thought, all subscribe to a realist epistemology: that there is a knowable domain of facts about human experience and consciousness which can be discovered through the application of reason and rationality. Social cognition has an epistemological and ontological commitment to mentalism and overwhelmingly a methodological commitment to quantification. Thus when a social cognitive researcher assesses the response to a questionnaire items or calculates the result from an attitude scale, it is assumed that the data collected, numerical or verbal, reflects either directly or indirectly the cognitive activity of the participant (Smith, 1996).

IPA can be distinguished from discourse analysis⁷ (for example Potter and Wetherell, 1987). "Discourse analysis", in a generic sense, describes a number of social psychological approaches, which are predominantly concerned with analyzing the socially constitutive nature of language. However, we will rely heavily of Potter and Wetherell's (1987) *Discourse and Social Psychology: Beyond Attitudes and Behaviour*, and their more recent book, *Mapping the Language of Racism* (Whetherell and Potter, 1992) as points of reference because these provide the clearest expression of the differences between their brand of discourse analysis and social cognitive approaches.

⁷ It should be noted that there are a number of discourse analytic approaches, which differ philosophically from each other (Burman, 1991; Potter and Wetherell, 1987). In his *Discourse Analysis Manual* Zellig Harris characterized discourse analysis as follows: "Discourse analysis is a method of seeking in any connected discrete linear material, whether language or language-like, which contains more than one elementary sentence, some global structure characterizing the whole discourse (the linear material), or large sections of it".

Potter and Wetherell (1987) utilize the theoretical and empirical foundations of speech act theory, ethnomethodology⁸ and semiology⁹ to arrive at their own approach to the analysis of discourse. Based on Austin's¹⁰ speech act theory, a central emphasis running through their approach is that people use language "to do things", to achieve certain ends. Words are not simply abstract tools used to state or describe things: they are also used to make certain things happen. People use language to justify, explain, blame, excuse, persuade and present themselves in the best possible light. Thus language is functional. Potter and Wetherell are interested in how people use language to understand and make sense of everyday life. Like ethnomethodology, the focus is on the ordinary everyday use of talk, which has practical consequences for participants. Language is viewed as reflexive and contextual, constructing the very nature of objects and events as they are talked about. This emphasizes the constructive nature and role of language. Furthermore, words do more than just name things; they are complex relations of meaning which are taken for granted in the words and language that we use.

A pervasive theme in Potter and Wetherell's work is the variability of people's talk. What people say depends on the particular context in which it is spoken and the function it serves. In the flow of everyday life the context within talk occurs and its accompanying function continually shifts and changes. As people are engaged in conversation with others, they construct and negotiate meanings, or the very "reality"

⁸ Ethnomethodology was founded by the American sociologist Harold Garfinkel in the early 1960s who set out the main ideas behind it in his book *Studies in Ethnomethodology* (1967). Ethnomethodology is the study of common social knowledge, in particular as it concerns the understanding of others and the varieties of circumstance in which it can take place. Ethnomethodologists start out with the assumption that social order is illusory. They believe that social life merely appears to be orderly; in reality it is potentially chaotic. For them, social order is constructed in the minds of social actors as society confronts the individual as a series of sense impressions and experiences which she or he must somehow organise into a coherent pattern. Garfinkel suggests that the way individuals bring order to, or make sense of their social world is through a psychological process, which he calls "the documentary method". This method firstly consists of selecting certain facts from a social situation, which seem to conform to a pattern and then making sense of these facts in terms of the pattern. Once the pattern has been established, it is used as a framework for interpreting new facts, which arise within the situation.

⁹ In his *Course in General Linguistics*, first published in 1916, Saussure postulated the existence of a general science of signs, or Semiology, of which linguistics would form only one part. Semiology therefore aims to study any system of signs, whatever their substance and limits; images, gestures, musical sounds, objects, and the complex associations of all these, which form the content of ritual, convention or public entertainment: these constitute, if not languages, at least systems of signification.

¹⁰ Speech act theory was developed by the Oxford philosopher J.L. Austin whose 1955 lectures at Harvard University were published posthumously as *How to Do Things with Words* (1975).

which they are talking about. In contrast to sociocognitive approaches which look for stability, consistency and order in people's attitudes and accounts Potter and Wetherell stress the inherent variability of what people say. In fact, from a discourse perspective, people are expected to demonstrate considerable variability and inconsistency, as content is seen to reflect contextual changes and functional purposes of the immediate moment. Discourse analysis is not attempting

to recover events, beliefs and cognitive processes from participants' discourse, or treat language as an indicator or signpost to some other state of affairs but looking at the analytically prior question of how discourse or accounts of these things are manufactured. (Potter and Wetherell, 1987; p. 35).

More importantly, Potter and Wetherell challenge the epistemological status of the 'attitude' concept itself. The theoretical notion of an attitude and the assumption that it can be encapsulated by how a person responds to a questionnaire assumes the existence of internal cognitive entities which are relatively enduring. Potter and Wetherell argue that such cognitive assumptions are problematic. They prefer to suspend and refrain from cognitivistic assumptions by analyzing what people have to say discursively about particular issues paying attention to the variability in their language and the function that this variability serves. Their approach to the functional and contextual nature of discourse is summarized thus:

We do not intend to use the discourse as a pathway to entities or phenomena lying beyond the text. Discourse analysis does not take for granted that accounts reflect underlying attitudes or disposition and therefore we do not expect that an individual's discourse will be consistent and coherent. Rather the focus is on the discourse itself: how it is organized and what it is doing. Orderliness in discourse will be viewed as a product of the orderly functions to which discourse is put. (Potter and Wetherell, 1987; p. 4; original emphasis).

While IPA shares with discourse analysis a commitment to the importance of language and qualitative analysis, where IPA researchers would typically differ from discourse analysts is in their perception of the status of cognition. IPA while recognizing that a person's thoughts are not transparently available from, for example, interview transcripts, engages in the analytic process in order, hopefully, to be able to say something about that thinking (Smith, 1996).

2.6. The methodology employed in the present investigation

A mixed model design combining the qualitative and quantitative approaches within different phases of the research process (planning of the study, data collection, and data analysis and inference) was adopted in the present investigation. This approach combines the rigor and precision of experimental (or quasi-experimental) designs and quantitative data with the in depth understanding of qualitative methods and data. The paradigm of pragmatism is the philosophical underpinning for using a mixed model, such as the present one, especially with regard to issues of epistemology, axiology, and ontology. Pragmatism rejects the "either-or" decision points associated with the paradigm debates. In a pragmatic approach, questions of method are secondary to the adoption of an overriding paradigm or worldview guiding the investigation. Thus, it is possible to mix research hypotheses of a confirmatory nature with general questions of an exploratory nature, scales that are quantitative with open-ended interviews that are qualitative, and methods of analysis that draw upon both traditions to expand the meaningfulness of the findings. The question determines the design of the study, the data collection approach, and so on. The best method is the one that answers the research question(s) most efficiently, and with foremost inference quality (trustworthiness, internal validity). Mixed methods are often more efficient in answering research questions than either the qualitative or the quantitative approach alone.

In the present investigation there was a mix of both research hypotheses (indicating a confirmatory study; i.e., "Individuals with high appearance schematicity will be more emotionally distressed than those with low appearance schematicity"; "Individuals with high appearance schematicity will be more dissatisfied with their appearance than those with low appearance schematicity") and very general research questions (indicating an exploratory study; i.e., "What makes individuals dissatisfied with their appearance?") when planning the project. Consequently, when conducting the study there was a mix in the collection of both qualitative (semi-structured interviews) and quantitative (questionnaires) data sources. The most widely used sequence of quantitative-qualitative analysis was used, in this case, the qualitative follow-up of individuals that are initially identified on the basis of their *extreme responses*. Detailed qualitative data were then collected in the form of semi-structured interviews with these

individuals in a search for a richer understanding of the factors that led to their initial high (or low) quantitative scores. The qualitative data was then analyzed through IPA. The analysis and interpretation of qualitative and quantitative data sources was mixed in an iterative fashion designed to expand the meaning of the numerical results using the narrative results, and vice versa. Overall, it was reasoned that while the quantitative research would operate at a macro level, constructing broad models of cognition and behaviour relationships, qualitative research would work at the micro level, exploring the content of particular individuals' beliefs and responses and illuminating the processes operating within the models.

IPA was selected, as the method to analyze the qualitative data of this study as the technique most directly relevant to the present investigation. Following a social cognition theoretical stance, it can be argued that the present study is generally premised on the belief that people think about their appearance and that their talk about this appearance in some way relates to those thoughts. So, for example, when considering a questionnaire completed by a person about their appearance, it is assumed that there is a chain of connection between verbal response and cognition. Therefore, an IPA researcher may choose to explore how two people with normal appearance may talk very differently about themselves and their appearance, precisely because this may help to illuminate the subjective perceptual processes involved when an individual tries to make sense of his or her physical and psychological self (See Abraham and Sheeran, 1993 for related discussion of the parallel chain between account, cognition, and behaviour).

Chapter 3

Study 1: Method and Results

3.1. Introduction

This chapter is devoted to *Study 1* of the present investigation. It begins with a brief discussion of the design of the *Study* and continues with a description of the sample employed and a detailed report of the procedural steps followed. An extensive discussion of the psychometric tests used and their psychometric properties is provided. The Chapter concludes with the presentation of the findings of *Study 1* in three subsections: descriptive statistics, correlations, and finally 4 regression models are discussed.

3.2.1. Methods

3.2.1. Design

This investigation adopted a mixed model research design combining quantitative and qualitative research methodologies (Creswell, 1995).

In Study 1, a cross-sectional survey, correlational and multiple regression design was adopted. The results provided data on prevalence and type of appearance-related concerns in young adults (18-30 years old) and examined the relationship between such concerns and measures of self-esteem, social support, dysfunctional appearance schemata and psychological distress. It was ascertained that a minimum of 85 participants was required to obtain reliable estimates of regression parameters [Medium effect size, $f^2=0.15$, Alpha=0.05, Power= 0.80, four predictors, Critical $F(4, 80)= 2.4859$, Lambda= 12.7500; GPower; Erdfelder *et al.*, (1996)].

The population of young adults is of special significance given the prevalence of appearance dissatisfaction in this population, the financial capabilities for dramatic alteration of appearance (e.g., cosmetic surgery, expensive crash diets) and the potential for development of severe dissatisfaction with appearance which can amount even to psychopathology in the form of body dysmorphic disorder, depression, or excessive anxiety. An extensive body of literature exists for this population, which allows for the present thesis to be based and informed by, but at the same time a number of unanswered questions remain since the majority of previous literature focuses on shape and size concerns in young adults at the expense of other appearance related concerns.

3.2. 2. Participants

300 young adults, 18-30 years old (123 male, 177 female, mean age= 23.77, sd= 3.62) participated in the present investigation. 80 of the participants were psychology students from the University of Wales, Swansea, 45 were students from various departments of the University of Wales, Swansea (33 male, 92 female, mean age= 21.51, sd= 2.31) and the remaining 175 (90 male, 85 female, mean age= 25.38, sd= 3.53) were young adults living and working in the broader Swansea area. The psychology students were recruited by announcing the research in Departmental lectures and tutorials. The non-psychology University students were informed about the study by posters being put up in various parts of the University. Data were also collected from a mail survey and by house-to-house collections in residential areas of Swansea. Care was taken to collect data from a range of different socioeconomic groups, and this issue was born in mind when selecting areas for the postal survey and the house-to-house data collection. Inclusion criteria for this research were: age 18-30 years old and good command of the English language (both written and verbal). The exclusion criteria were: a psychiatric diagnosis in the past 3 years, and visible disfigurement.

More specifically, for the mail survey 100 research packs were sent out. Each recipient was mailed the study questionnaires along with an explanatory letter, a consent form¹ and a stamped, addressed envelope. 53 individuals responded within two weeks and 22 after a second reminding letter was sent out two weeks after the first one. This makes the response rate to this survey 75%. This response rate is satisfactory and demonstrates that the questions asked were relevant to issues and concerns that people were facing in their lives.

For the house-to-house surveys 150 households were approached by the researcher. 100 households accepted to participate in the study making the response rate 66.6% which is deemed as satisfactory given the personal and sensitive nature of the information requested from the participants. 27 were absent from their houses or unable to complete the questionnaires because they were doing something else at the time and 23 refused to participate after they had been explained the topic and purpose of the investigation. Reasons for refusal included: uncertainty over confidentiality, doubt whether the researcher was from the social services, suspicion that the

¹ Copies of the information sheet and consent form are included in Appendix 1.

investigator was sent by the person's ex-spouse with whom they were in the middle of a custody battle for their young children.

Both for the postal and the house-to-house surveys there were no significant differences in terms of age, sex, command of the English language or disfigurement status between those who agreed to participate in the study and those who did not.

3.2.3. Instruments

The measures used in *Study 1* (the quantitative phase of the present investigation) included The Appearance Schemas Inventory, The Brief Symptom Inventory, The Derriford Appearance Scale, The Rosenberg Self-esteem Scale, and the Short Form Social Support Scale and are presented below. These instruments were selected on the basis of their psychometric properties and ease of administration². A further advantage is that some of them have already been used in the past with normal and clinical populations (i.e. visibly disfigured individuals) (Carr *et al.*, 2000; Rumsey, Unpublished data) and this will permit direct comparisons between the present and previous studies.

3.2.4. The Appearance Schemas Inventory

Cash and Labarge (1996) developed a self-report questionnaire, the Appearance Schemas Inventory (ASI)³, to assess people's *dysfunctional* schemata associated with their physical appearance. This refers to core cognitive beliefs or assumptions about the importance, meaning, and influence of one's appearance in one's life. The ASI consists of 14 items which sample appearance-related self-representations or cognitive structures of varying availability and accessibility and tap several content domains including: (a) self-attentional focus on one's appearance, (b) emotional/identity investment in one's appearance, (c) beliefs concerning the historical, developmental influences of one's appearance, (d) beliefs regarding the current and future interpersonal impact of one's appearance, and (e) the internalization of appearance-based social stereotypes (Cash and Labarge, 1996).

The ASI's response format is a 5-point Liker-type scale, anchored at each value from 1 = Strongly Disagree to 5 = Strongly Agree. For scoring the ASI, all items are keyed in the same direction, with the composite score computed as the mean

² See Chapter 1.

³ A copy of the ASI is provided in Appendix 1.

across the 14 items. Thus, scores potentially range from 1 to 5, with higher scores reflecting the stronger endorsement of dysfunctional schemas. Cash and Labarge (1996) report that the ASI has good internal consistency for both sexes and is also acceptably stable over a 1-month interval [Internal Consistency: (Cronbach's alpha) Mdn = 0.82(men) Mdn = 0.86 (women) Stability (1-month) $r(30) = 0.76(\text{men})$ $r(114) = 0.72(\text{women})$]. The norms for ASI are provided in Table 1⁴.

Table 3.1. Mean and standard deviation for Appearance Schemas Inventory.

	<i>Mean (sd)</i>
Men	2.59 (0.61) [N=332]
Women	2.65 (0.62) [N=1349]

As detailed by Cash and Labarge (1996), the ASI shows a consistent and moderately high pattern of correlations with other standardized measures of body image for women—including body-image evaluation (e.g., satisfaction-dissatisfaction and self ideal discrepancies; see also Cash, 2000a; Szymanski and Cash, 1995), body-image investment (e.g., importance of physical ideals), body-image affect (i.e., dysphoric body image emotions in situational contexts; Cash, 2000b), and body-image behaviours (e.g., avoidance). With respect to discriminant validity, Cash and Labarge (1996) reported a modest negative correlation (-.27) between the ASI and the Social Desirability Scale short-form. To date, all investigations have been done with college samples and except to say that the 14 items were “*based on key themes in the body image literature*” (p.39) the process of item generation is unclear. There does not appear to have been a stage of endorsement of the item set by other judges or key respondents, nor the subsequent refinement of the original item-set.

3.2.5. *Brief Symptom Inventory (BSI)*

The BSI⁵ (Derogatis, 1993) is a 53-item, self-report symptom inventory designed to reflect the psychological symptom patterns of psychiatric and medical patients as well as community nonpatient respondents. It is essentially the brief form of the SCL-90 (Derogatis *et al.*, 1975). Each item of the BSI is rated on a five-point scale of distress (0-4), ranging from “not at all” (0) at one end to “extremely” (4) at

⁴ The norms reported here were obtained from Prof Cash’s web site (<http://www.body-images.com/> accessed 13/6/2002). Detailed psychometric evaluation of the ASI has been published *only* for a sample of 274 female college students.

⁵ A copy of the BSI along with the scoring sheet and norms are provided in Appendix 1.

the other. The BSI is scored and profiled in terms of nine primary symptom dimensions and three global indices of distress. The three global indices, nine dimensions, and 53 items reflect the three principal levels of interpretation of the BSI, descending from general subordinate measures of psychological status, through syndromal representations, to individual symptoms. The BSI requires 8 to 12 minutes to complete.

The primary symptom dimensions are as follows:

1. *Somatization (SOM)*. The Somatization dimension reflects distress arising from perceptions of bodily dysfunction.

2. *Obsessive-Compulsive (O-C)*. This measure focuses on thoughts, impulses, and actions that are experienced as unremitting and irresistible by the individual, but are of an ego-dystonic nature.

3. *Interpersonal Sensitivity (I-S)*. The Interpersonal Sensitivity dimension focuses on feelings of personal inadequacy and inferiority, particularly in comparison with others.

4. *Depression (DEP)*. The symptoms of the Depression dimension reflect a representative range of the indications of clinical depression such as dysphoric mood and affect, lack of motivation, and loss of interest in life.

5. *Anxiety (ANX)*. General signs of nervousness and tension are included in the Anxiety dimension such as panic attacks, and feelings of terror along with cognitive components, and somatic correlates of anxiety.

6. *Hostility (HOS)*. The Hostility dimension includes thoughts, feelings, or actions that are characteristic of anger.

7. *Phobic Anxiety (PHOB)*. The items of this dimension focus on Phobic Anxiety which is defined as a persistent fear response to a specific person, place, object, or situation that is irrational and disproportionate to the stimulus and leads to avoidance or escape behaviour.

8. *Paranoid Ideation (PAR)*. The Paranoid Ideation dimension represents paranoid behaviour fundamentally as a disordered mode of thinking.

9. *Psychoticism (PSY)*. The Psychoticism scale provides a graduated continuum from mild interpersonal alienation to dramatic psychosis.

Three global indices have been developed and added to provide more flexibility in overall assessment of the individual's psychopathological status and to

provide psychometric appraisal at a third, more general level of psychological well-being (Derogatis, Yevzeroff, and Wittelsberger, 1975; Wood, 1986).

The global indices are:

- Global Severity Index (GSI)
- Positive Symptom Total (PST)
- Positive Symptom Distress Index (PSDI)

Raw scores for the BSI are derived by first summing the values (i.e., 0-4) for the items in each of the nine symptom dimensions and four additional items (i.e. “Poor appetite”, “trouble falling asleep”, “thoughts of death or dying”, “feelings of guilt”). The sum for each symptom dimension is then divided by the number of endorsed items in that dimension. To calculate the GSI, the sums of the nine symptom dimensions and the additional items are added together and then divided by the total number of responses (i.e., 53 when there are no missing items).

According to Derogatis (1993) alpha coefficients for all nine dimensions of the BSI are very good ranging from a low of 0.71 on the Psychoticism dimension to a high of 0.85 on Depression. Test-retest reliability coefficients range from a low of 0.68 for Somatization to a high of 0.91 for Phobic Anxiety. The GSI also reveals an excellent stability coefficient of 0.90. Impressive convergent validity for the BSI with the MMPI has been reported in the literature [Coefficients ≥ 0.9 , (Dahlstrom, 1969)].

3.2.6. *The Derriford Appearance Scale (DAS59)*

The DAS(59)⁶ is a self-report scale which has been designed to generate a comprehensive assessment of the disruption to everyday living, difficulties with personal relations, lowering of self-esteem and emotional distress caused by living with problems of appearance, ranging from clearly visible disfigurements and deformities to aesthetic problems of appearance (Carr *et al.*, 2000). The DAS (59) is presented as a series of 59 statements and questions with response categories in a Likert format to measure frequency of behaviours and experience and levels of associated distress. The introductory section gathers relevant demographic information and identifies the aspect of appearance that is of greatest concern to the respondent. This is referred to as the respondent’s “feature” in the body of the scale. It also identifies any other aspects of appearance about which the respondent may also

⁶ A copy of DAS (59) is provided in Appendix 1.

be concerned. Fifty-seven items in the body of the scale assess relevant psychological distress and dysfunction and 2 items assess physical distress and physical dysfunction. The format of the introductory section and a “Not Applicable” response category for most items makes the scale available to respondents who are not concerned about appearance such as those in the general population and patients following treatment (Carr *et al.*, 2000).

The DAS (59) generates six measures of psychological distress and dysfunction (a full-scale score and five factor scores) as well as a measure of physical distress and dysfunction. The measures that can be obtained from DAS are as follows:

- The DAS (59) full-scale score.
- Factor 1. General self-consciousness of appearance (GSC).
- Factor 2. Social self-consciousness of appearance (SSC).
- Factor 3. Self-consciousness of sexual and bodily appearance (SBSC).
- Factor 4. Negative self-concept (NSC).
- Factor 5. Self-consciousness of facial appearance (FSC).
- Physical distress and dysfunction.

For all measures the higher the score, the greater is the respondent’s level of distress and dysfunction. The scale has good psychometric properties with high internal consistency ($\alpha=0.98$) and good test-retest reliabilities (three months) (0.75 general population and 0.86 patients) (Carr *et al.*, 2000). Table 3.2. shows a selection of normative and comparative data for males and females, younger and older responders relevant to the sample of the present investigation (Carr and Harris, 2000).

3.2.7. The Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale⁷ (RSE; Rosenberg 1965) is an attempt to achieve a unidimensional measure of global self-esteem. It was designed to be a Guttman scale, with items representing a continuum of self-worth statements ranging from statements that are endorsed even by individuals with low self-esteem to statements that are endorsed only by persons with high self-esteem. Rosenberg (1965) scored his 10question scale using four response choices, ranging from "strongly agree" to “strongly disagree” as a six-item Guttman scale.

⁷ A copy of the RSE scale and scoring guidelines followed is provided in Appendix 1.

Table 3.2. Mean (sd) of 18-30 years olds normal men and women concerned and not-concerned about their appearance.

	W-S	GSC	SSC	NSC	SBSC	FSC
Women-not concerned	41.1 (26.0)	9.8 (9.2)	10.6 (9.8)	5.3 (5.3)	10.1 (3.6)	2.2 (3.0)
Women-concerned	85.7 (36.9)	33.9 (14.2)	17.3 (12.6)	14.1 (8.9)	13.9 (4.2)	2.6 (2.9)
Men-not concerned	33.1 (18.3)	6.6 (5.6)	7.9 (7.9)	3.5 (4.2)	10.0 (3.4)	1.5 (1.8)
Men-concerned	84.1 (34.6)	32.6 (13.6)	20.6 (12.5)	9.9 (6.2)	13.6 (4.2)	3.2 (3.3)

Note. W-S: The DAS59 full-scale score; GSC: General self-consciousness of appearance; SSC: Social self-consciousness of appearance; NSC: Negative self-concept; SBSC: Self-consciousness of sexual and bodily appearance; FSC: Self-consciousness of facial appearance.

Multiple studies have been conducted to investigate the validity and reliability of the RSE. Whereas some studies have shown that the scale is a valid and reliable unidimensional measure of self-esteem, others have found that the RSE is comprised of two factors. Goldsmith (1986) suggested that the RSE factor structure depends on age and other characteristics of the sample. Investigations that used high school or college students supported the scale's unidimensionality (Crandal 1973; McCarthy and Hoge, 1982), or obtained factors that were interdependent and had similar patterns of correlates (Rosenberg, 1979; Hagborg, 1993). In contrast, analyses completed with adults identified two meaningful and, sometimes, independent dimensions of personality (Kaplan and Pokorny, 1969; Shahani *et al.*, 1990). The identified dimensions were mostly defined by negatively worded vs. positively worded RSE items and were called self-derogation and self-enhancement (Shahani *et al.*, 1990).

Not all studies that employed the RSE have used Guttman scaling to obtain a self-esteem score. Many researchers have preferred to calculate the scale's total score by summing subjects' responses across all ten RSE questions (Kaplan and Pokorny, 1969; McCarthy and Hoge, 1982; Shahani *et al.*, 1990; Hagborg, 1993). Further, the investigators have differed in the number of points that they have included in the response scale for each question. For example, McCarthy and Hoge (1982), similarly to Rosenberg, used a 4-point scale, whereas Shahani *et al.* (1990) employed a 6-point scale. Empirical evidence has been provided for the reliability of all these later versions of the RSE.

In the present investigation, the Rosenberg Self-Esteem Scale (RSE) (1989) used consisted of ten items to which the participant responded on a four-point scale of

agreement (1= strongly agree, 4 = strongly disagree) with a range of 10 to 40. The final score was calculated as the sum of the ratings assigned to all the items after reverse scoring the positively worded items. High scores indicate high self-esteem.

3.2.8. Short Form Social Support Questionnaire

The Short Form Social Support Questionnaire (SSQ6)⁸ is a self-administered scale which has been developed by Sarason and colleagues (1987a) and is a six-item version of the original 27-item SSQ (Sarason *et al.*, 1983). The SSQ6 yields one quasi-structural measure (SSQ6-N; number of supports) and one global functional measure (SSQ6-S; satisfaction with support). For each of the six questions, respondents are required to list all the individuals known to them who provide the particular type of support described in that question. Up to nine individuals can be listed and consequently the total score ranges from 0 to 54 for the number of supporters. The respondents then have to rate (on a six-point scale) their level of satisfaction with this type of support. Similarly for each question, the satisfaction with support score ranges from 1 (very dissatisfied) to 6 (very satisfied) and consequently the total score ranges from 6 to 36 for all six items. SSQ6 takes approximately ten minutes to complete.

There are no norms available for the SSQ6 and the scores provide relative measures, which can be used as independent or dependent variables in studies. Sarason and colleagues do not recommend combining the two scores since they provide information about the two separate aspects of social support. The SSQ6 is reported by Sarason *et al.* (1987a) to show satisfactory psychometric properties, with high internal consistency for both the number and satisfaction subscales ($\alpha=0.90$ to 0.93), high test-retest reliability and a single factor accounting for the majority of the variance in each of the subscales respectively.

Sarason *et al.* (1983) report considerable evidence on the validity of the original scale, including positive correlations between SSQ-N scores and numbers of positive life items experienced, locus of control internality and self-esteem. In addition SSQ-S scores were negatively related to reported numbers of negative life events and positively related to self-esteem. Also Sarason *et al.* (1987b) have compared the SSQ with a number of other social support measures, concluding that

⁸ A copy of the Short Form Social Support Questionnaire is provided in Appendix 1.

their own scale displays a superior sensitivity to other scales. However, the SSQ6 does not attempt to distinguish between types of social support, for example emotional or practical, which is a feature of other social support scales.

3.3.1. Procedure

3.3.1. Pilot 1

Twenty students from the University of the West of England, Bristol (8 male, 12 female, mean age=20.7, sd= 1.94) were asked to complete the study questionnaires and give feedback on their experience. Some individuals reported that the content of the scale was irrelevant but not disturbing. Some others were grateful to know that their problems were recognized and fully represented.

3.3.2. Study 1

In Study 1, young adults who agreed to participate in the study were asked to read the information sheet, sign a consent form and complete the study questionnaires. The questionnaires were presented in different order to different participants to control for order effects (randomization of the questionnaires with the use of random numbers tables was used). Participants were requested, if they wished, to give their contact details so that they could be contacted at a later stage and asked to participate in Studies 2 or 3, a semi-structured interview regarding their appearance. All participants were assured that their answers would remain confidential and if any quotes were going to be used this would happen without any identifying information.

3.4. Data Analysis

Gender and group differences on the Derriford Appearance Scale, the Appearance Schemas Inventory, the Rosenberg Self-Esteem Scale, the Brief Symptom Inventory and the Social Support Questionnaire were examined using two way between subjects ANOVA. Bivariate correlation analysis was used to explore the relationships between scores on the Derriford Appearance Scale, the Appearance Schemas Inventory, the Rosenberg Self-Esteem Scale, the Brief Symptom Inventory and the Social Support Questionnaire. Multiple linear regression was used to relate self-esteem, social support appearance schemata and psychological distress scores to scores on the Derriford Appearance Scale, and also to relate self-esteem, appearance

schemata and social support scores to psychological distress. For all analyses SPSS v.11 was used.

3.5.1. Results

3.5.1. Sample

A total of 300 individuals completed the survey materials; 225 (75%) were white, 55 (18.3%) Asian and 20 (6.7%) other. 113 (37.7%) were married or living with a partner, 34 (11.3%) were living alone and 153 (51%) were living with relatives/friends. The final sample consisted of 175 men and women from the community and 125 University students.

3.5.2. Descriptive statistics

In line with previous studies⁹ in all analyses the following measures were used Appearance Schemas Inventory (ASI), Self-esteem (SE), Social Support N (SS-N), Social Support S (SS-S), Derriford Appearance Scale Grant Total (DASGT), and Global Severity Index (GSI). Table 1 summarizes the mean and standard deviation for all the variables measured by group (community or student) and gender (male or female)¹⁰.

By using an independent t-test (two-tailed) it was found that there was no difference in the mean scores between student males and community males on ASI ($t = 0.058$, $df = 121$, $p > 0.1$), self-esteem ($t = 1.629$, $df = 121$, $p > 0.1$), social support N ($t = 0.175$, $df = 121$, $p > 0.1$), social support S ($t = 0.593$, $df = 121$, $p > 0.1$), DASGT ($t = 0.012$, $df = 121$, $p > 0.1$) and GSI ($t = 0.932$, $df = 121$, $p > 0.1$). Student males and community males differed on age by approximately 3 years ($t = 4.597$, $df = 121$, $p < 0.001$). The responses for the male sample on ASI, SE, SS-N, SS-S, DASGT and GSI suggest a homogeneous group and as such they were collapsed and treated as one sample for all subsequent analyses.

⁹ See Chapter 1.

¹⁰ All raw data and the SPSS output for the regression analyses performed is included in Appendix 2.

Table 3.3. Mean (SD) for all the variables by group and gender.

	<i>Male</i>		<i>Female</i>	
	<i>Community</i> <i>N=90</i>	<i>Student</i> <i>N=33</i>	<i>Community</i> <i>N=85</i>	<i>Student</i> <i>N=92</i>
Age	24.96 (3.62)	21.79 (2.61)	25.83 (3.4)	21.42 (2.2)
Appearance Schemas Inventory	3.65 (1.06)	3.66 (0.92)	3.76 (0.83)	3.79 (0.9)
Self-esteem	30.33 (5.5)	32.18 (5.79)	31.36 (5.47)	30.37 (5.51)
Social Support N	29.1 (10.36)	28.73 (10.78)	29.02 (9.86)	28.61 (10.01)
Social Support S	30.22 (5.58)	30.88 (5.02)	31.19 (4.54)	30.54 (5.37)
Dasgt	85.04 (32.01)	84.97 (29.26)	86.48 (28.42)	86.7 (28.6)
Global Severity Index	59.79 (11.93)	57.48 (12.74)	59.55 (9.12)	59.65 (10.32)

Similarly, by using an independent t-test (two-tailed) it was found there was no difference in the mean scores between student females and community females on ASI ($t = 0.206$, $df = 175$, $p > 0.1$), self-esteem ($t = 1.206$, $df = 175$, $p > 0.1$), social support N ($t = 0.277$, $df = 175$, $p > 0.1$), social support S ($t = 0.859$, $df = 175$, $p > 0.1$), DASGT ($t = 0.050$, $df = 175$, $p > 0.1$) and GSI ($t = 0.068$, $df = 175$, $p > 0.1$). Student females and community females differed on age by approximately 4 years ($t = 10.303$, $df = 175$, $p < 0.001$). The responses for the female sample on ASI, SE, SS-N, SS-S, DASGT and GSI suggest a homogeneous group and as such they were collapsed and treated as one sample for all subsequent analyses.

3.5.3. Appearance dissatisfaction in young adults (Hypothesis 1)

81.9% (145 out of 177) of the females and 78.9% (97 out of 123) of the males reported dissatisfaction with at least one aspect of their appearance. The difference between these percentages did not reach statistical significance ($\chi^2 = 0.435$, $df = 1$, $p \approx 0.509$). In what follows, the group of respondents dissatisfied with at least one aspect of their appearance is referred to as “concerned” and the other as “not concerned”. Table 2 lists the means and standard deviations for all variables used in the analyses and their subscales¹¹.

¹¹ The values of subscales are included for information only, as they were not used in any of the analyses.

Differences between groups were assessed via six 2×2 between subjects two-way analysis of variance (ANOVAs)¹². Concern with appearance consisted of two levels (concerned and not concerned) and gender consisted of two levels (male and female). Male and female participants have been treated separately in all previous studies and concern or not with a physical attribute was considered a defining characteristic of individuals. Having a specific concern about appearance implies focused, sustained, and substantial dissatisfaction while individuals who do not report a specific feature as “problematic”, are overall, more or less, satisfied with their appearance without any discontent serious and specific enough to be expressed.

For GSI, the reported mean score for the “concerned population” is significantly larger than the mean for the “not concerned population” ($F(1, 296) = 31.37, df = 296, MSE = 105.501, p < 0.001$) but there is no evidence of a main effect due to gender ($F(1, 296) = 1.527, df = 296, MSE = 105.501, p > 0.1$) and only marginal evidence of an interaction between gender and concern ($F(1, 296) = 3.395, df = 296, MSE = 105.501, p < 0.1$) (see Figure 4.1).

For DASGT, the reported mean for the “concerned population” is significantly larger than the mean for the “not concerned population” ($F(1, 296) = 85.59, df = 296, MSE = 682.014, p < 0.001$) but there is no evidence of a main effect due to gender ($F(1, 296) = 0.059, df = 296, MSE = 682.014, p > 0.1$) and no evidence of an interaction between gender and concern ($F(1, 296) = 0.038, df = 296, MSE = 682.014, p > 0.1$) (see Figure 4.2).

For ASI, the reported mean in the “concerned population” is significantly larger than the mean ASI score for the “not concerned population” ($F(1, 296) = 116.959, df = 296, MSE = 0.625, p < 0.001$) but there is no evidence of a main effect due to gender ($F(1, 296) = 0.774, df = 296, MSE = 0.625, p > 0.1$) and no evidence of an interaction between gender and concern ($F(1, 296) = 0.106, df = 296, MSE = 0.625, p > 0.1$) (see Figure 4.3).

For SE, the reported mean in the “concerned population” is significantly smaller than the mean SE score for the “not concerned population” ($F(1, 296) = 17.919, df = 296, MSE = 29.108, p < 0.001$) but there is no evidence of a main effect due to gender ($F(1, 296) = 0.417, df = 296, MSE = 29.108, p > 0.1$) and no evidence

¹² Analysis of variance (ANOVA) is sufficiently robust to account for the unequal n between groups (Howell, 1997).

of an interaction between gender and concern ($F(1, 296) = 1.724$, $df = 296$, $MSE = 29.108$, $p > 0.1$) (see Figure 4.4).

Table 3.4. Mean and standard deviations of all variables for concerned and not-concerned about appearance male and female participants.

	<i>Men-not-concerned</i> (N=26)	<i>Women-not-concerned</i> (N=32)	<i>Men-concerned</i> (N=97)	<i>Women-concerned</i> (N=145)
Age	23.34 (3.84)	23.81 (3.56)	24.3 (3.59)	23.49 (3.61)
Appearance Schemas Inventory	2.63 (1.02)	2.77 (1.01)	3.93 (0.83)	3.99 (0.64)
Self-esteem	34.3 (4.01)	32.75 (4.16)	29.86 (5.63)	30.42 (5.67)
Social Support N	32.15 (9.78)	32.87 (9.04)	28.15 (10.47)	27.91 (9.89)
Social Support S	31.42 (3.81)	33.56 (3.16)	30.12 (5.76)	30.25 (5.12)
Derriford Appearance Scale Dasgt	56.34 (21.92)	58.03 (26.35)	92.71 (28.76)	92.89 (24.84)
Factor 1	12.69 (7.13)	12.84 (7.62)	34.28 (11.73)	34.33 (10.26)
Factor 2	16.61 (7.89)	17.06 (8.37)	23.84 (10.34)	22.92 (7.78)
Factor 3	7.92 (4.96)	9.5 (6.84)	13.25 (6.72)	13.93 (6.15)
Factor 4	11.19 (3.03)	10.46 (3.71)	14.17 (4.32)	13.87 (3.63)
Factor 5	3.5 (2.77)	4.56 (3.91)	4.39 (3.38)	4.45 (3.21)
Physical distress and dysfunction	0.53 (0.9)	0.43 (0.84)	2.63 (1.73)	2.55 (1.4)
Brief Symptom Inventory				
Somatisation	47.46 (7.76)	51.18 (6.52)	55.02 (9.94)	55.94 (8.97)
Obsessive	51.84	55.34	61.31	60.8
Compulsive	(10.88)	(9.31)	(11)	(9.19)
Interpersonal	46.65	55.09	59.76	59.17
Sensitivity	(8.14)	(10.49)	(11.25)	(11)
Depression	52.11 (8.34)	52.87 (8.73)	60.64 (10.43)	59.88 (8.85)
Anxiety	46.76 (9.33)	51.81 (9.84)	59.26 (11.91)	57.26 (10.51)
Hostility	50.26 (12.38)	55 (11.3)	58.78 (11.65)	57.47 (10.81)
Phobic Anxiety	48.34 (5.45)	49.5 (8.08)	55.1 (10.44)	53.16 (9.53)
Paranoia	51.42 (7.64)	55.06 (11.38)	59.22 (8.54)	58.45 (10.25)
Psychotism	57.15 (11.22)	57.43 (11.43)	62.7 (10.55)	61.19 (9.82)
Global Severity	50.3	54.96	61.54	60.62
Index	(12.27)	(11.28)	(11.01)	(9.08)
Positive Symptom	48.84	51.68	58.53	58.41
Distress Index	(9.65)	(11.01)	(9.74)	(7.72)
Positive Symptom	50.42	54.5	61.81	61.35
Total	(10.87)	(9.43)	(10.03)	(9.54)

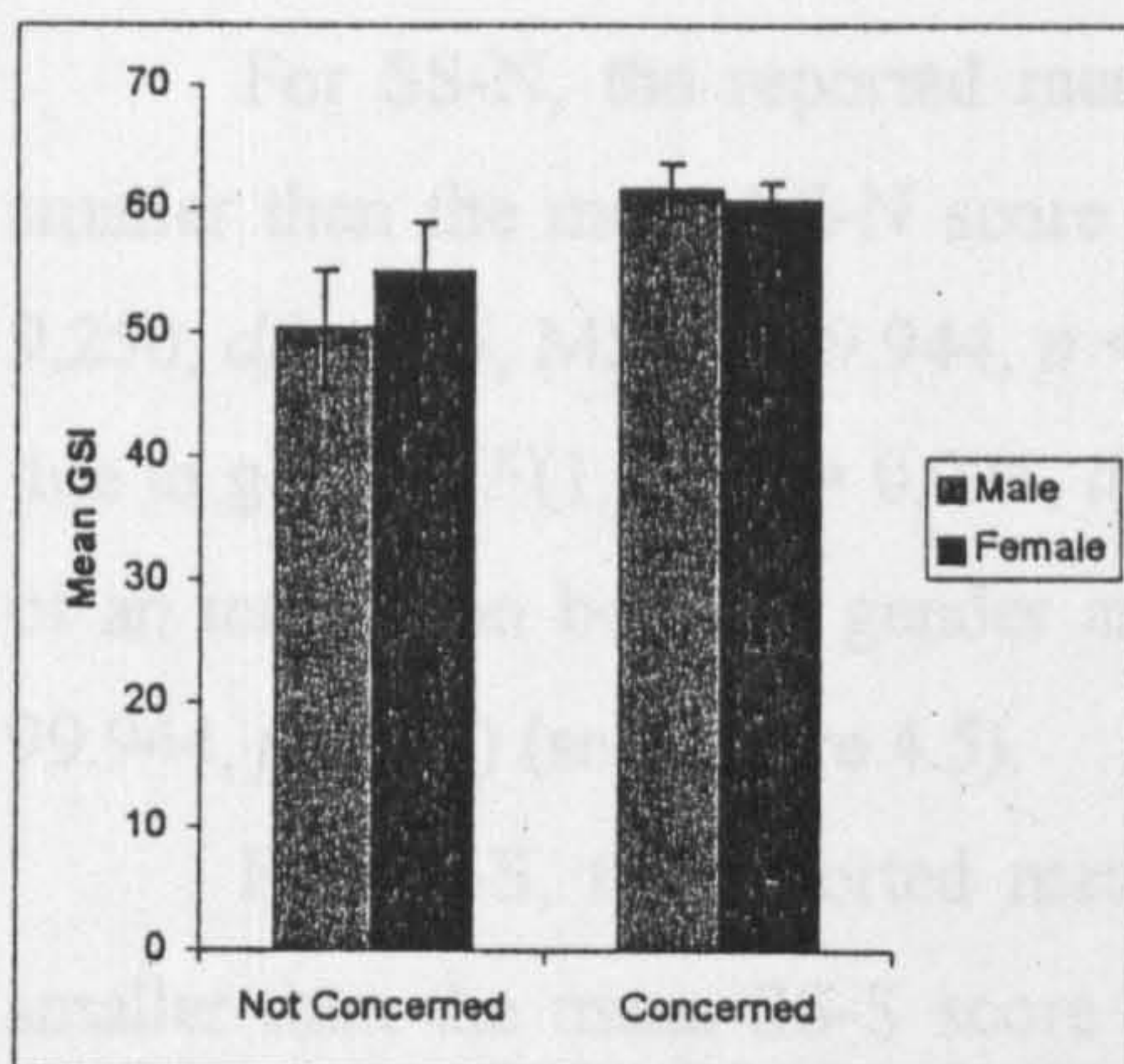


Figure 3.1. Mean GSI by gender and concern for appearance.

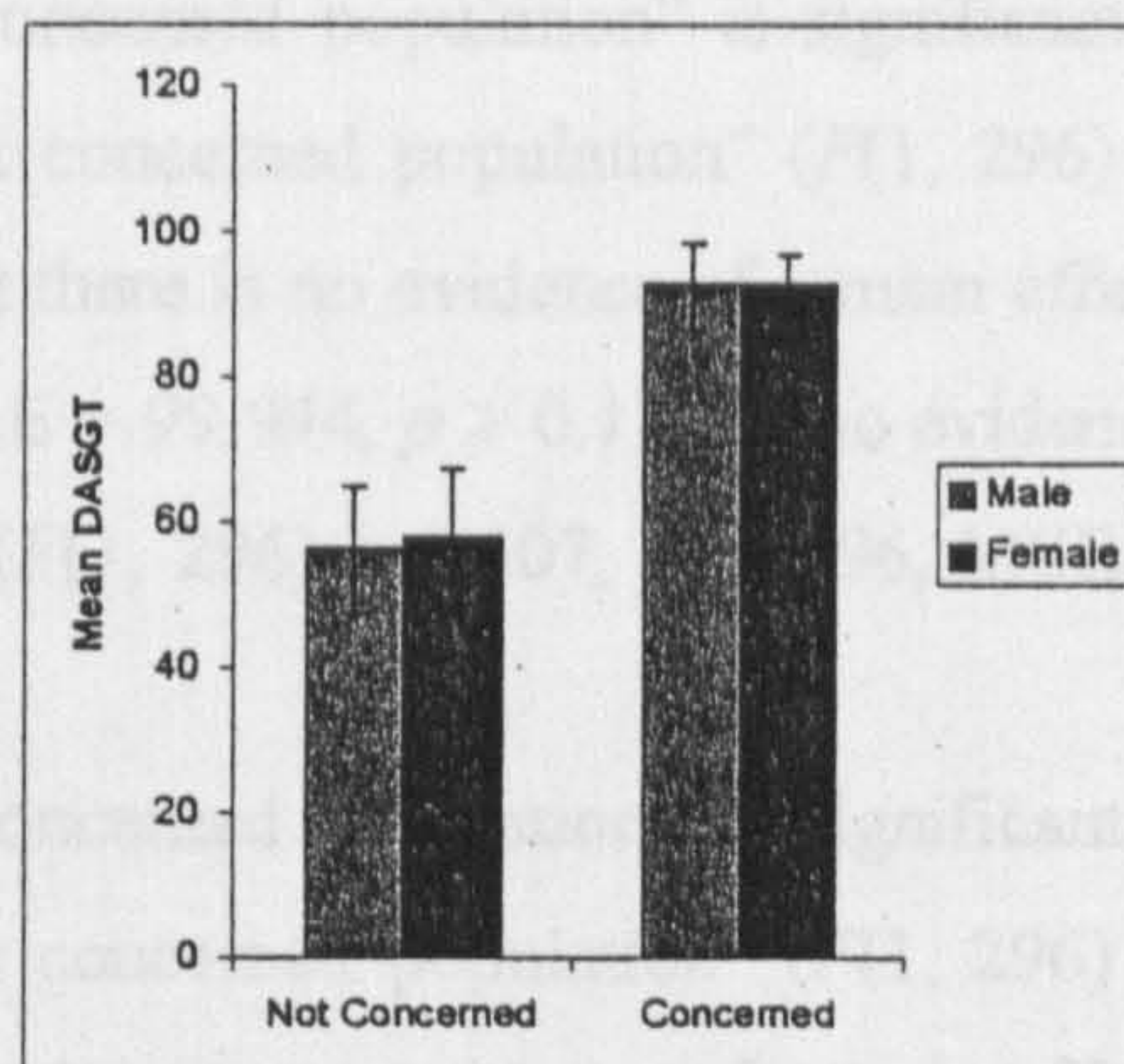


Figure 3.2. Mean DASGT by gender and concern for appearance.

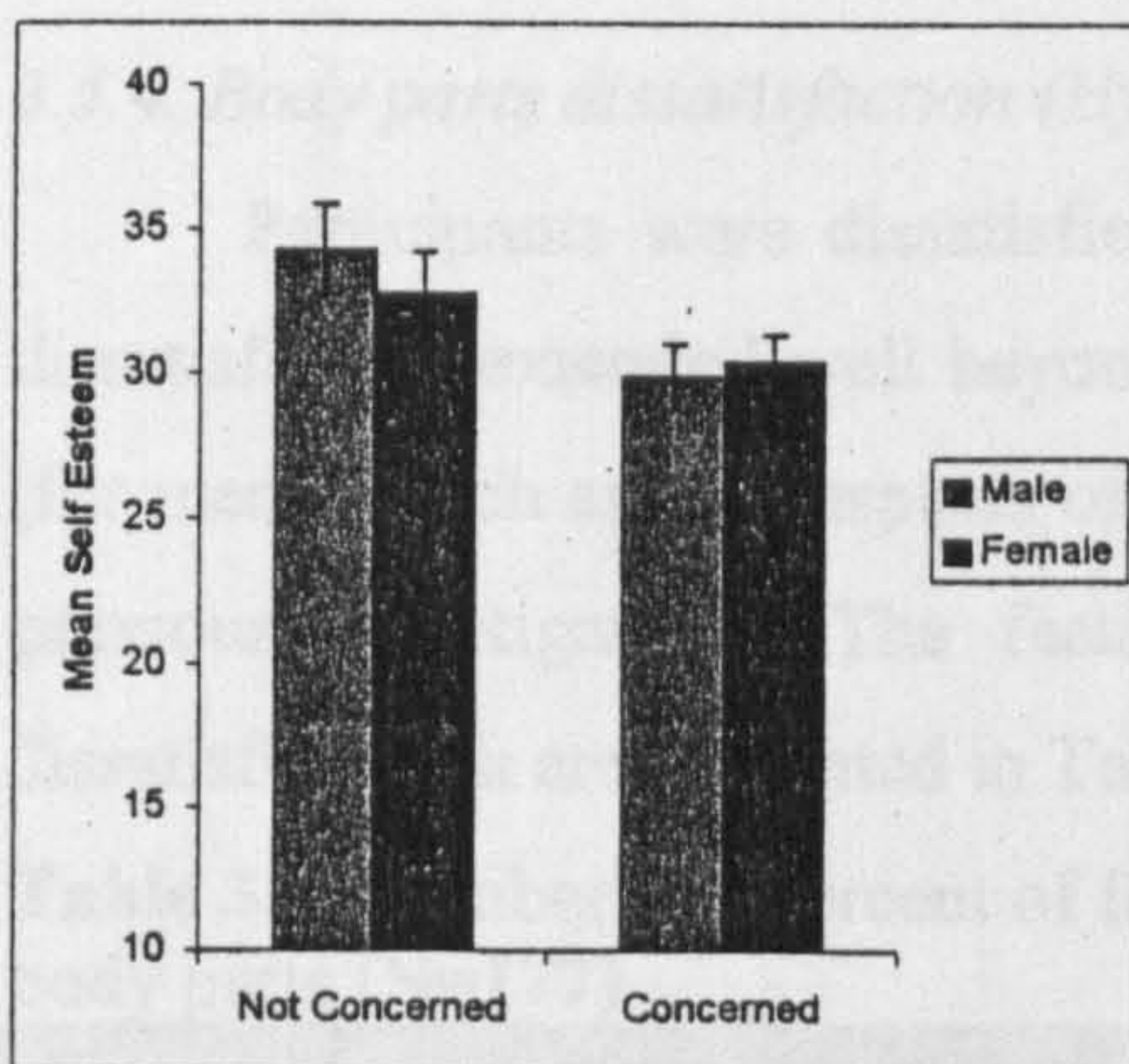


Figure 3.3. Mean self-esteem by gender and concern for appearance.

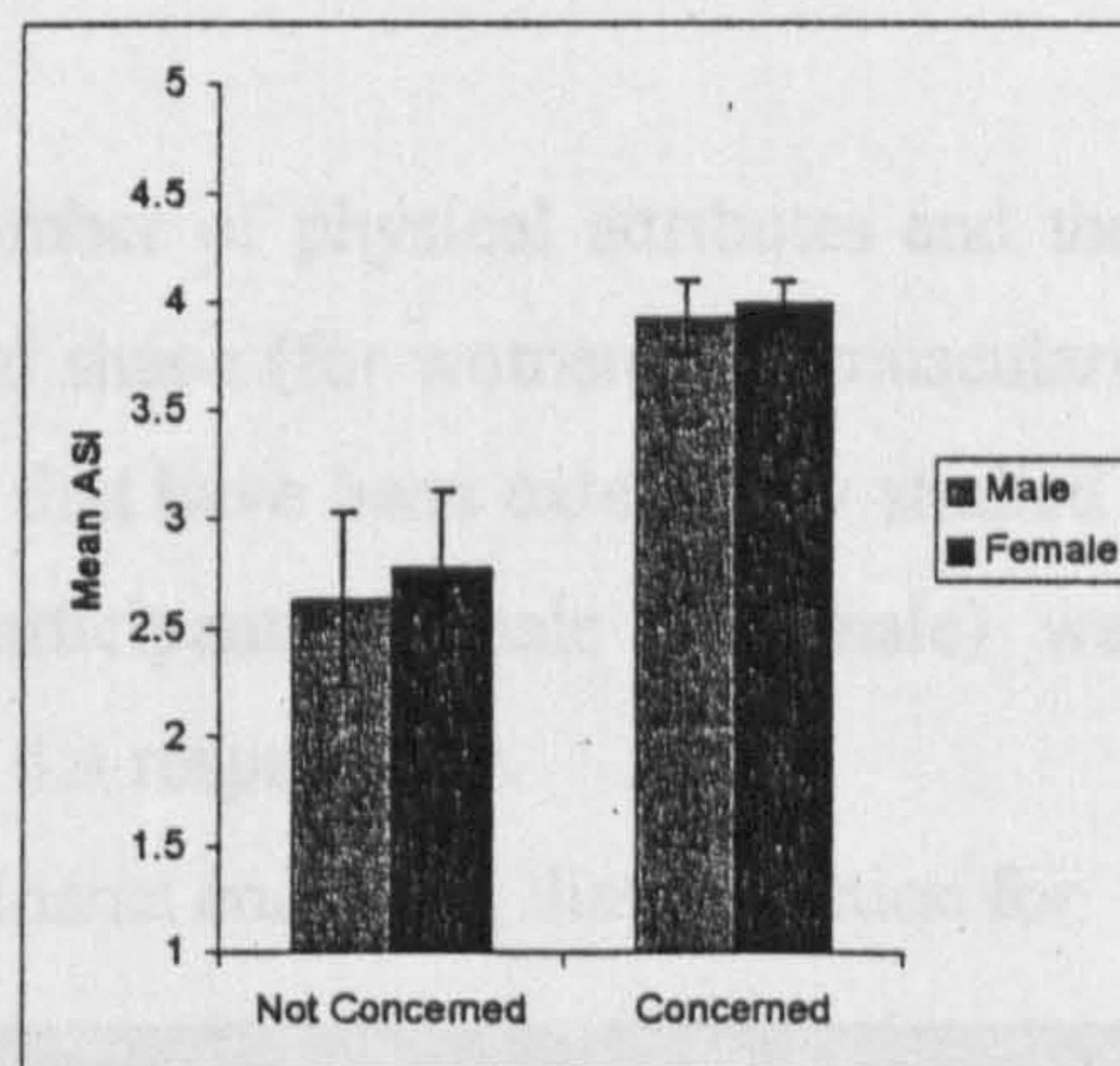


Figure 3.4. Mean appearance schemata by gender and concern for appearance.

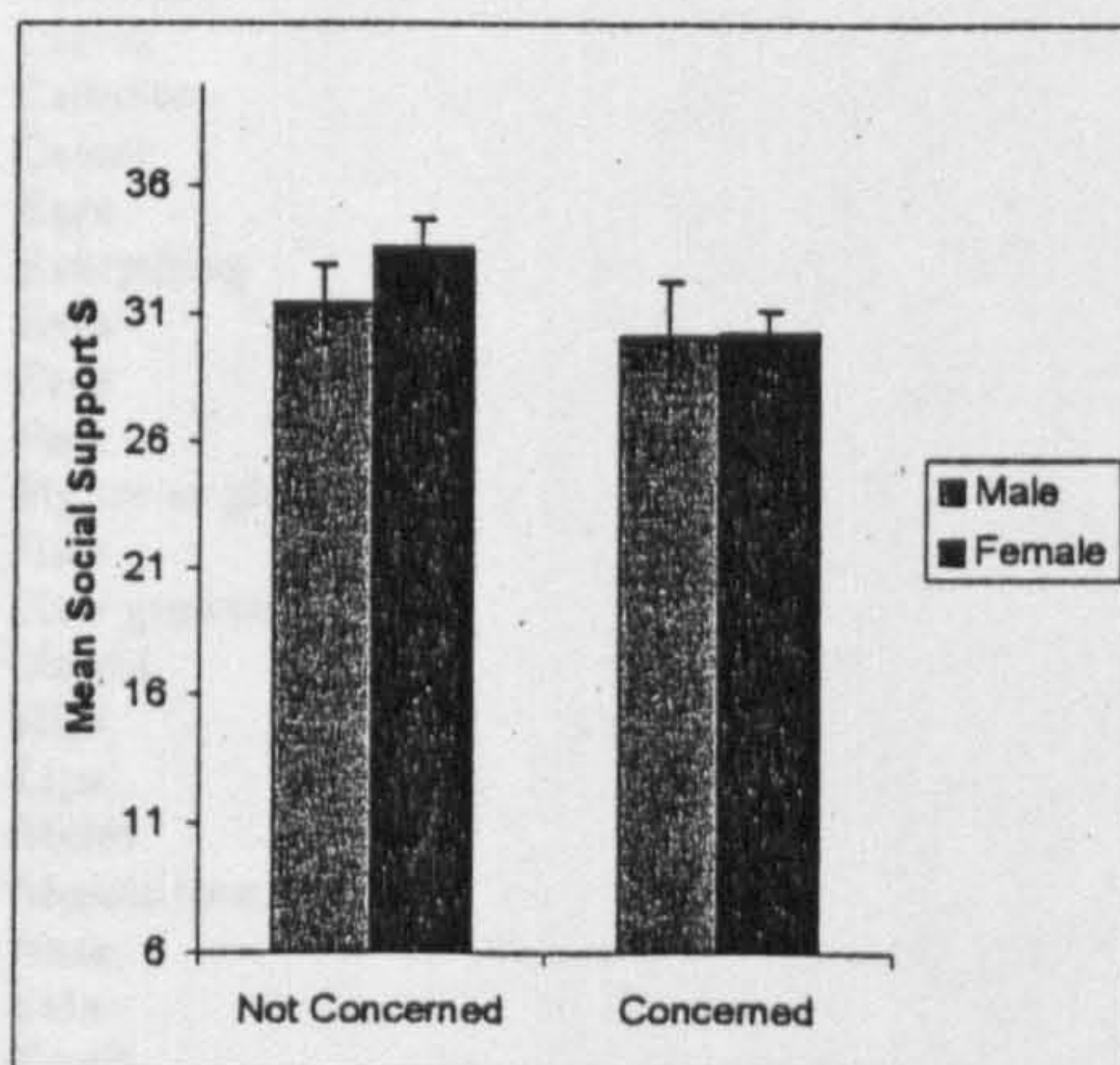


Figure 3.5. Mean social support S by gender and concern for appearance.

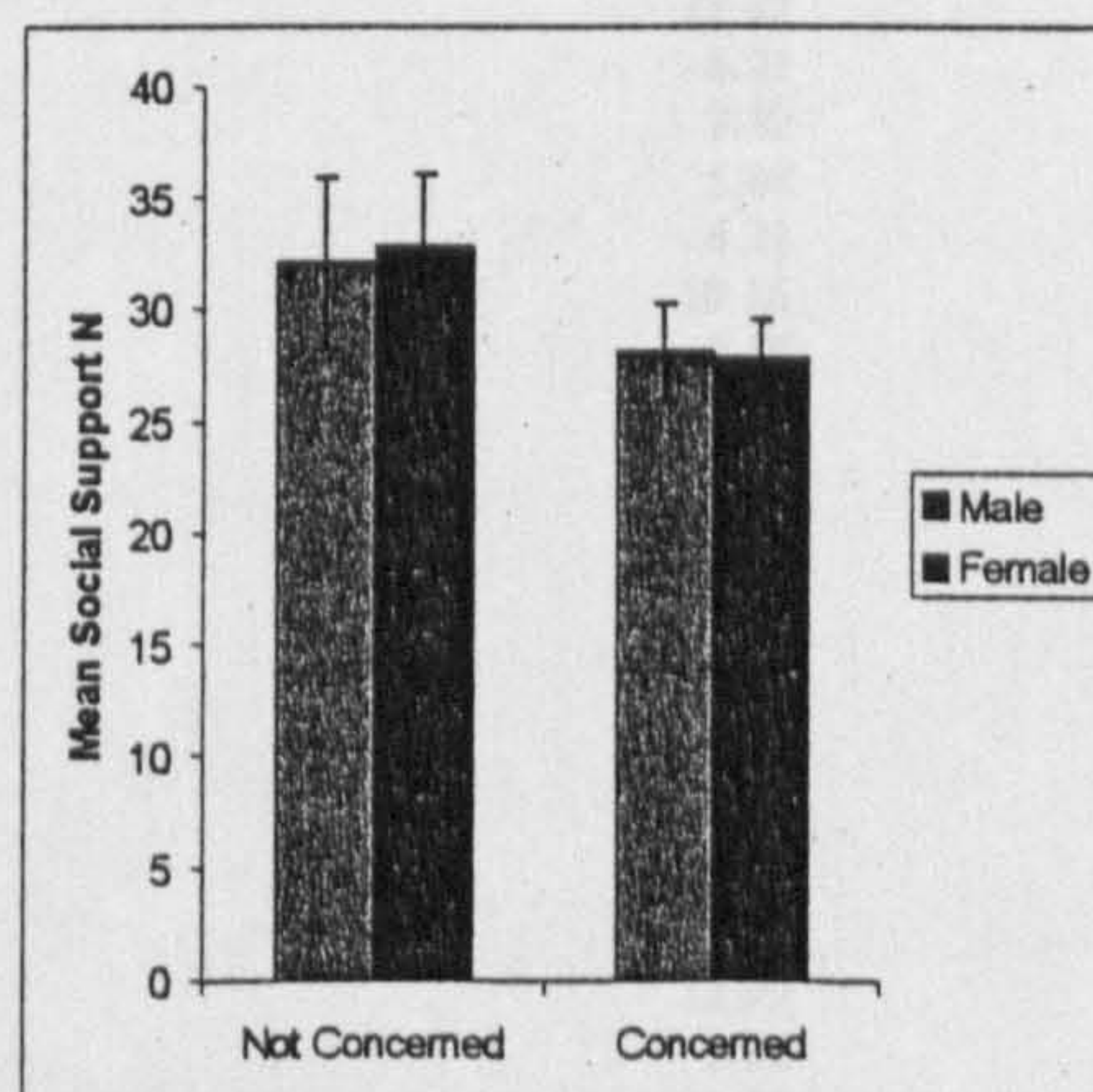


Figure 3.6. Mean social support N by gender and concern for appearance.

For SS-N, the reported mean in the “concerned population” is significantly smaller than the mean SS-N score for the “not concerned population” ($F(1, 296) = 9.250$, $df = 296$, $MSE = 99.944$, $p < 0.001$) but there is no evidence of a main effect due to gender ($F(1, 296) = 0.026$, $df = 296$, $MSE = 99.944$, $p > 0.1$) and no evidence of an interaction between gender and concern ($F(1, 296) = 0.107$, $df = 296$, $MSE = 99.944$, $p > 0.1$) (see Figure 4.5).

For SS-S, the reported mean in the “concerned population” is significantly smaller than the mean SS-S score for the “not concerned population” ($F(1, 296) = 9.457$, $df = 296$, $MSE = 25.819$, $p < 0.001$) but there is no evidence of a main effect due to gender ($F(1, 296) = 2.298$, $df = 296$, $MSE = 25.819$, $p > 0.1$) and no evidence of an interaction between gender and concern ($F(1, 296) = 1.797$, $df = 296$, $MSE = 25.819$, $p > 0.1$) (see Figure 4.6).

3.5.4. Body parts dissatisfaction (Hypothesis 2)

Participants were dissatisfied with a number of physical attributes and their dissatisfaction extended well beyond weight and shape (for women) and muscularity (for men), which are the aspects of appearance that have been extensively studied in previous investigations. The features that participants (female and male) were dissatisfied with are presented in Tables 4.3 and 4.4 respectively.

Table 3.5. Number and percent of female participants endorsing dissatisfaction for body parts (N=177).

Feature	Numbers	Percent
Abdomen	8	4.51
Arms	33	18.64
Breasts	25	14.12
Buttocks	52	29.37
Calves	22	12.42
Cellulite	11	6.21
Colour	5	2.82
Ears	9	5.08
Everything	11	6.21
Eyes	18	10.16
Face	1	0.56
Feet	3	1.69
Figure or physique	5	2.82
Hair	20	11.29
Hair growth (less)	5	2.82
Height	13	7.34
Hips	33	18.64
Lips	5	2.82
Moles	3	1.69
Muscle tone	31	17.51
Nose	28	15.81
Skin	23	12.99
Teeth	7	3.95
Thighs	70	39.54
Waist	38	21.46
Weight (less)	61	34.46

Note: The overall percentage is more than 100% because many of the participants reported dissatisfaction with more than one feature.

A significantly higher percentage of females reported dissatisfaction with their waist than males (female dissatisfaction 21.5%, male dissatisfaction 2.4%, $\chi^2 = 22.27$, $df = 1$, $p < 0.001$). The percentage of female respondents reporting dissatisfaction with their nose was significantly higher than the corresponding percentage for males (female dissatisfaction 15.8%, male dissatisfaction 4.1%, $\chi^2 = 10.241$, $df = 1$, $p < 0.001$). Likewise the percentage of females reporting dissatisfaction with their weight was significantly greater than the corresponding percentage for males (female dissatisfaction 34.5%, male dissatisfaction 23.6%, $\chi^2 =$

Table 3.6. Number (percent) of male participants endorsing dissatisfaction for body parts (N=123).

Feature	Number	Percent
Abdomen	5	4.06
Arms	15	12.19
Body build (muscularity)	52	42.27
Chest	17	13.82
Ears	11	8.94
Everything	4	3.25
Eyes	5	4.06
Feet	4	3.25
Genitals	15	12.19
Hair line	14	11.38
Hair growth (not enough)	5	4.06
Height	13	13.4
Nose	5	4.06
Skin	9	7.31
Teeth	3	2.43
Waist	3	2.43
Weight (less)	12	9.75
Weight (more)	17	13.82

Note: The overall percentage is more than 100% because many of the participants reported dissatisfaction with more than one feature.

4.10, $df = 1$, $p \approx 0.043$). There is marginal evidence that the percentage of females reporting dissatisfaction with their eyes differs from the corresponding percentage for males (female dissatisfaction 10.2%, male dissatisfaction 4.1%, $\chi^2 = 3.82$, $p = 0.051$). The percentage of females reporting dissatisfaction with their arms does not significantly differ from the corresponding percentage of males (female dissatisfaction 18.6%, male dissatisfaction 12.2%, $\chi^2 = 2.25$, $df = 1$, $p \approx 0.134$). The same applies to the percentage reporting dissatisfaction with ears (female dissatisfaction 5.1%, male dissatisfaction 8.9%, $\chi^2 = 1.736$, $df = 1$, $p = 0.188$) and also to the percentage reporting dissatisfaction with everything (female dissatisfaction 6.2%, male dissatisfaction 3.3%, $\chi^2 = 1.341$, $df = 1$, $p = 0.217$).

3.5.5. *Appearance dissatisfaction and psychological distress in relation to self-esteem, social support, and appearance schemata*

Tables 4.5, 4.6, 4.7, 4.8 present the zero order correlations (Pearson's r) between all the variables by gender and concern about appearance.

Table 3.7. Correlations among the variables used in the analyses for not-concerned men.

	<i>ASI</i>	<i>SE</i>	<i>SS-N</i>	<i>SS-S</i>	<i>DASGT</i>
ASI					
SE	-0.17NS				
SS-N	-0.2NS	-0.41*			
SS-S	-0.41*	-0.03NS	0.29NS		
DASGT	0.87***	-0.23NS	-0.02NS	-0.38*	
GSI	0.491**	-0.71***	0.43*	-0.41*	0.51**

Notes: NS: non significant; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3.8. Correlations among the variables used in the analyses for not-concerned women.

	<i>ASI</i>	<i>SE</i>	<i>SS-N</i>	<i>SS-S</i>	<i>DASGT</i>
ASI					
SE	0.03NS				
SS-N	0.19NS	-0.183NS			
SS-S	-0.12NS	0.02NS	0.21NS		
DASGT	0.9***	0.03NS	0.14NS	-0.26NS	
GSI	0.61***	-0.54***	0.38*	-0.12NS	0.629***

Notes: NS: non significant; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3.9. Correlations among the variables used in the analyses for concerned men.

	<i>ASI</i>	<i>SE</i>	<i>SS-N</i>	<i>SS-S</i>	<i>DASGT</i>
ASI					
SE	-0.57***				
SS-N	-0.28**	0.36***			
SS-S	-0.38***	0.48***	0.5**		
DASGT	0.9***	-0.57***	-0.42***	-0.5***	
GSI	0.44***	-0.69***	-0.41***	-0.44***	0.49***

Notes: NS: non significant; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3.10. Correlations among the variables used in the analyses for concerned women.

	<i>ASI</i>	<i>SE</i>	<i>SS-N</i>	<i>SS-S</i>	<i>DASGT</i>
ASI					
SE	-0.57***				
SS-N	-0.29***	0.3***			
SS-S	-0.46***	0.48***	0.48**		
DASGT	0.89***	-0.57***	-0.4***	-0.56***	
GSI	0.41***	-0.59***	-0.43***	-0.5***	0.51***

Notes: NS: non significant; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In participants (male and female) who are concerned about their appearance DASGT and GSI are correlated strongly and reliably (negative correlation) with ASI, SE, SS-N and SS-S. Similar correlations are not observed in individuals who are not concerned about any aspect of their appearance. These findings are consistent with cognitive theory and previous research studies with disfigured and normal populations. However, in this study there is also a positive correlation between social support N and global severity index for both males ($r = + .431$, $n = 26$, $p < 0.05$) and females ($r = + .384$, $n = 32$, $p < 0.05$) in respondents who are not concerned with their appearance.

Previous research suggests that the mechanism behind concern and not concern should be the same for both men and women. Taken in combination with the small numbers in the four separate groups it was decided to treat concerned individuals (men and women) and not concerned individuals (men and women) as two separate groups and develop separate regression models for predicting psychological distress and dissatisfaction with appearance in those two groups.

3.5.6. Predicting appearance dissatisfaction and psychological functioning

Four multiple linear regression models were tested, two for psychological functioning (one for individuals expressing a concern for their appearance and one for those who do not) and two for appearance dissatisfaction (similarly, one for individuals expressing a concern for their appearance and one for those who do not). Backward elimination and forward selection techniques were used to identify a parsimonious hierarchically balanced regression for predicting GSI and DASGT.

3.5.7. The relationship between global psychological functioning, self-esteem, social support, and appearance schemata (Hypotheses H3, H6, H7)

Table 4.9 summarizes the resulting fitted model based on the data for those not expressing a concern about their appearance. Extending the model to take into account the main effects due to Social Support N (SS-N) does not significantly improve the model fit ($F(1, 53) = 3.03$, $MSE = 36.1$, $p > 0.05$), nor does the inclusion of a main effect due to Social Support S ($F(1, 53) = 1.45$, $MSE = 33.7$, $p > 0.10$), nor does the inclusion of a main effect due to gender ($F(1, 53) = 1.80$, $MSE = 36.9$, $p > 0.10$) and hence these terms do not feature in the fitted Model A1. An examination of the residuals and studentized residuals under this fitted model (A1) does not suggest

the model specification is incorrect and the inclusion of higher order terms does not significantly improve the model fit.

Table 3.11. Model A1: Multiple regression analyses of psychological distress for not concerned individuals on appearance schemata and self-esteem.

Independent variable	<i>R</i> ²	Beta	<i>t</i>	<i>p</i>
ASI	35.49	3.03	4.94	<0.001
SE	0.81	0.28	1.26	0.21
ASI × SE	-0.88	-2.62	-4.12	<0.001

$R^2=0.748$, $F(3, 54)=53.4$, $p<0.001$

Since the two-way interaction¹³ involving ASI and SE is statistically significant then the effect of ASI on GSI can be said to be moderated by, or depend upon, the level of SE. (Equivalently, the effect of SE on GSI depends upon the level of ASI). Figure 4.11 shows the lines of best fit from model A1 between ASI and GSI for selected values of SE (SE = 30, 34, and 38). In each instance the fitted model captures a positive trend between the global severity index (GSI) and appearance schemata inventory (ASI). Moreover, the effect of ASI on GSI is lower at higher values of self-esteem (compare for instance, the line of best fit when SE = 38 with the line of best fit when SE = 30). That is to say, the model captures the trend of a positive relationship between ASI and GSI but the impact of dysfunctional appearance schemata on psychological distress is less at the higher levels of self-esteem.

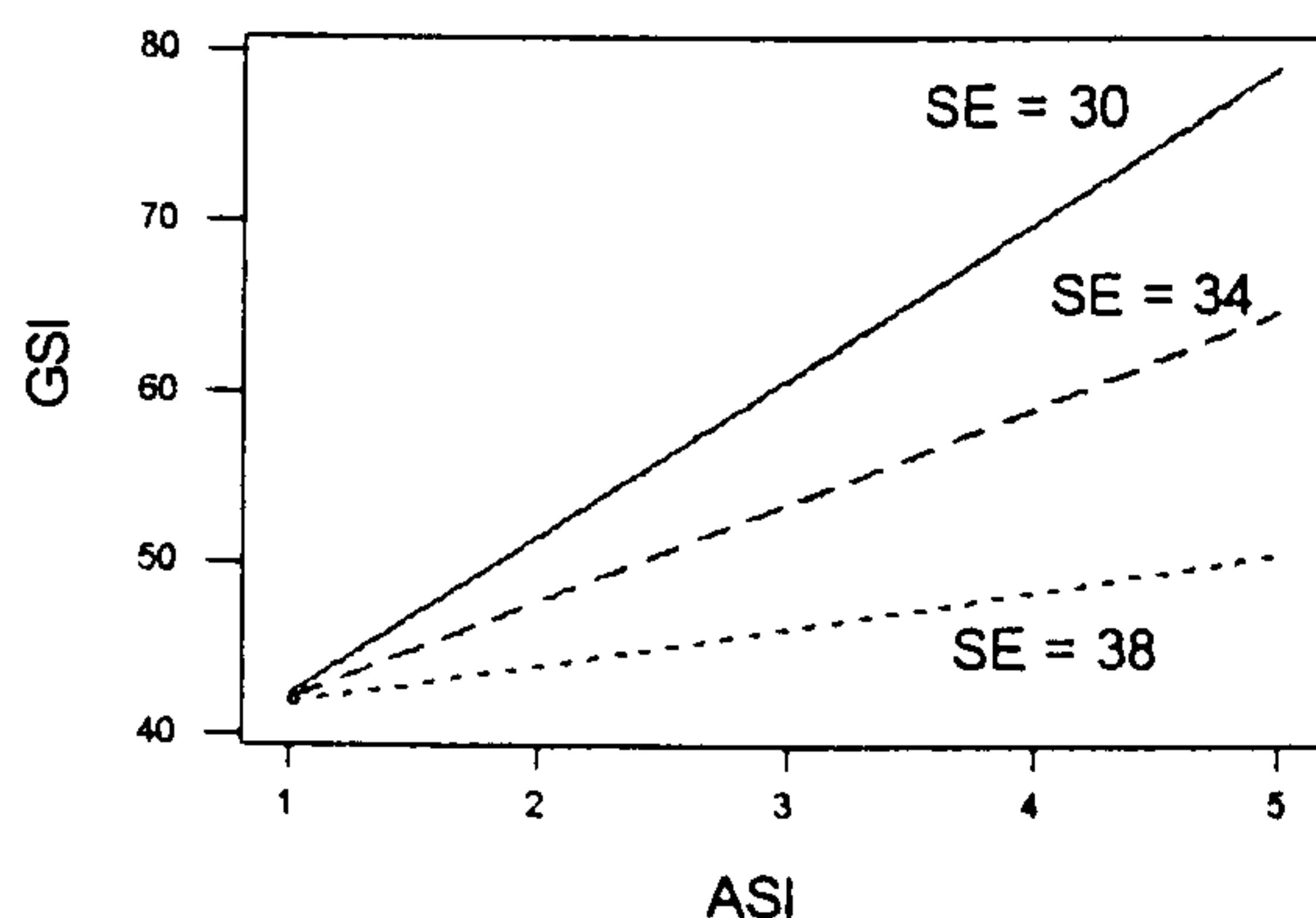


Figure 3.7. Lines of best fit between ASI and GSI for selected values of SE.

¹³ An interaction occurs when the effect of one independent variable on a dependent variable differs according to the level of another independent variable (Aiken and West, 1991). It is also known as a moderation effect, although some people (Baron and Kenny, 1986) have more strict criteria for moderation than for interaction. Typically, when results are inconsistent across contexts, one looks an interaction with some third variable to explain the difference (McClelland and Judd, 1993).

Model A2 is the fitted model for those participants expressing a concern with their appearance using ASI, SE and their interaction as potential predictors (see Table 4.10). There is no statistical evidence of a difference between the coefficients for the interactions in models A1 and A2 ($t = 1.34$, $df = 292$, $p > 0.1$), that the coefficients for the main effects due to ASI in models A1 and A2 differ ($t = -1.79$, $df = 292$, $p > 0.1$), that the coefficients for the main effects due to SE in models A1 and A2 differ ($t = 0.32$, $df = 292$, $p > 0.1$), and that the constants in models A1 and A2 differ ($t = 0.14$, $df = 292$, $p > 0.1$). Thus there is no statistical evidence of a difference between models A1 ("not concerned with appearance") and A2 ("concerned with appearance").

Table 3.12. Model A2: Multiple regression analyses of psychological distress for concerned individuals on appearance schemata and self-esteem.

Independent variable	B	Beta	T	P
ASI	18.3	1.34	3.84	<0.001
SE	1.13	0.644	1.88	0.06
ASI \times SE	-0.5	-1.17	-3.61	<0.001

$R^2 = 0.438$, $F(3, 238) = 61.74$, $p < 0.001$

However, model A2 can be improved upon by including the additional predictors of social support N (SS-N), social support S (SS-S), self esteem (SE) and the two way interaction involving self-esteem and social support S. Including a main effect due to gender does not significantly improve the model fit ($F(1, 234) = 0.22$, $MSE = 50.7$, $p > 0.10$). The improved fitted model (Model A3) is summarized in Table 4.11.

Table 3.13. Model A3: Multiple regression analysis of psychological distress for concerned individuals on appearance schemata, self-esteem, social support N, and social support S.

Independent variable	B	Beta	t	P
ASI	22.55	1.65	4.11	<0.001
SE	4.45	2.54	4.23	<0.001
SS-N	-0.17	-0.17	-3.19	0.002
SS-S	2.21	1.2	4.38	<0.001
ASI \times SE	-0.64	-1.51	-4.05	<0.001
SS-S \times SE	-8.57	-2.4	-4.68	<0.001

$R^2 = 0.512$, $F(6, 235) = 41.16$, $p < 0.001$

This model provides statistical evidence of a decreasing trend between SS-N and GSI ($t = -3.20$, $df = 235$, $p < 0.05$) after allowing for the effects due to ASI, SE and SS-S. From Model A3 there is statistical evidence of a decreasing trend between SS-S and GSI, and the rate of change of GSI with SS-S is moderated by the level of

self-esteem. The negative coefficient (-0.0858) in the model for the interaction between SS-S and SE captures the trend of GSI decreasing with increasing values of SS-S and for the rate of decrease to be greater at higher levels of self-esteem (i.e., there is a greater benefit through SS-S at higher levels of self esteem than at low levels of SS-S).

From Model A3, there is evidence of a positive relationship between ASI and GSI and the effect of ASI on GSI depends upon the level of self-esteem. Although GSI tends to increase with increasing values of ASI the negative coefficient (-0.6429) for the interaction between ASI and SE shows that the rate of increase in GSI with ASI tends to be lower in those individuals with high self-esteem compared with those with low self-esteem.

In Model A3, the trend between SE and GSI depends upon the level of ASI and social support. For relatively high values of ASI ($ASI \geq 3$) and scores on SS-S of 30 or more then the model captures a negative trend between SE and GSI. This latter case covers 68% of the respondents expressing a concern with appearance. In this case with ASI held fixed, SS-S and SE work in tandem with increases in SS-S being associated with lower mean levels of GSI and simultaneously increasing the rate of decrease in GSI with increasing levels of self-esteem ($SE > 29$). Further with SS-S held fixed, ASI and SE work together with increases in ASI being associated with higher mean levels of GSI and at these levels there is a greater reduction in GSI scores associated with increasing self-esteem ($SE > 29$).

3.5.8. *The relationship between appearance dissatisfaction, self-esteem, social support, and appearance schemata (Hypotheses H4, H5, H8)*

The models obtained are summarized in Tables 4.12 and 4.13 where Model B1 relates to those individuals who did not express a concern with their appearance and Model B2 to those that did express a concern.

Table 3.14. Model B1: Multiple regression analyses of appearance dissatisfaction on appearance schemata for not concerned individuals.

<i>Independent variable</i>	<i>B</i>	<i>Beta</i>	<i>t</i>	<i>P</i>
ASI	21.26	0.89	14.46	<0.001

$R^2=0.789$, $F(1,56) = 209.24$, $p<0.001$

Table 3.15. Model B2: Multiple regression analyses of appearance dissatisfaction on appearance schemata, psychological distress, social support N and social support S for concerned individuals.

Independent variable	B	Beta	t	P
ASI	28.72	0.79	26.8	<0.001
SS-N	-0.27	-0.10	-3.36	0.001
SS-S	-0.59	-0.12	-3.73	<0.001
GSI	0.17	0.06	2.10	0.037

$R^2=0.845$, $F(4, 237) = 322.90$, $p<0.001$

Model B1 captures a simple positive trend between ASI and DASGT which is statistically significant ($t = 14.48$, $df = 56$, $p < 0.001$). In developing Model B1 it was found that the inclusion of a main effect for self-esteem did not improve the model fit ($F(1,55) = 0.0625$, $MSE = 129$, $p > 0.1$), neither did the inclusion of a main effect due to social support N ($F(1,55) = 1.10$, $MSE = 126$, $p > 0.1$) or social support S ($F(1,55) = 1.72$, $MSE = 125$, $p > 0.1$) or gender ($F(1,55) = 0.18$, $MSE = 128$, $p > 0.1$), or GSI ($F(1, 55) = 2.22$, $MSE = 124$, $p > 0.1$).

In Model B2 there is statistical evidence of a negative relationship between SS-N and DASGT ($t = -3.38$, $df = 237$, $p = 0.001$, two-sided) and between SS-S and DASGT ($t = -3.72$, $df = 237$, $p < 0.001$, two-sided) after allowing for the effects due to ASI and GSI. That is to say, those concerned individuals who reported higher levels of social support tended to give responses producing lower DASGT scores. Likewise in Model B2 there is very strong statistical evidence of a positive trend between ASI and DASGT ($t = 28.71$, $df = 237$, $p < 0.001$, two-sided) and evidence of a positive relationship between GSI and DASGT ($t = 2.11$, $df = 237$, $p < 0.05$, two-sided). Including the main effect for self-esteem in Model B2 does not produce an improved model fit ($t = 0.83$, $df = 236$, $p > 0.1$, two-sided), nor does including gender as a predictor variable ($t = 1.10$, $df = 236$, $p > 0.2$, two-sided).

An examination of the residuals and studentized residuals under models B1 and B2 may suggest a possible misspecification of the multiple regression models. Extending the models to allow for higher order terms led to the finding of a cubic relationship between ASI and DASGT. The cubic relationship for those individuals who did not express a concern with their appearance (Model C1) and the cubic relationship for those individuals who did express a concern with their appearance (Model C2) are summarized in Tables 4.14 and 4.15 and shown graphically in Figures 4.12 and 4.13 respectively.

Table 3.16. Model C1: The cubic relationship between appearance dissatisfaction and schemata for individuals who are not concerned with their appearance.

<i>Independent variable</i>	<i>B</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
ASI	196.75	8.22	6.19	<0.001
ASI ²	-70.33	-15.65	-5.63	<0.001
ASI ³	8.71	8.45	5.62	<0.001

$R^2=0.867$, $F(3, 54) = 117.408$, $p<0.001$

Table 3.17. Model C2: The cubic relationship between appearance dissatisfaction and schemata for individuals who are concerned with their appearance.

<i>Independent variable</i>	<i>B</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
ASI	225.56	6.19	13.23	<0.001
ASI ²	-73.28	-14.14	-13.11	<0.001
ASI ³	8.21	9.05	14.37	<0.001

$R^2=0.923$, $F(3, 238) = 948.1$, $p<0.001$

The cubic relationships in Model C1 and Model C2 demonstrate that a fixed difference in ASI scores between individuals does not give a fixed difference in DASGT. For instance, consider Model C1 and consider two individuals with ASI scores of 1.2 and 1.3 (difference of 0.1). In this case their predicted values for DASGT under Model C1 are 17.83 and 23.98 which differ by 6.15. Likewise for ASI scores of 3.2 and 3.3 (difference 0.1) the predicted DASGT values under Model C1 are 62.95 and 64.54 respectively (difference 1.59). Further, for ASI of 4.6 and 4.7 the predicted DSAGT values under Model C1 are 133.14 and 143.92 respectively (a difference of 10.78). Thus, small increments in ASI scores at the low end of the scale give comparatively large changes in DASGT scores. Small changes in ASI in the middle of the range give comparatively small changes in DASGT scores and small increments in ASI scores at the top end of the scale give comparatively large changes in DASGT scores. This qualitative description applies to both Model C1 and Model C2. In comparing Model C1 with Model C2, there is no statistical evidence that the constants in the two models differ from one another, ($t = -1.43$, $df = 292$, $p > 0.1$), there is no statistical evidence that the coefficients for the linear terms differ from one another ($t = 0.92$, $df = 292$, $p > 0.1$), there is no statistical evidence that the coefficients for the quadratic terms differ from one another ($t = -0.27$, $df = 292$, $p > 0.1$) and there is no statistical evidence that the coefficients for the cubic terms differ from one another ($t = -0.33$, $df = 292$, $p > 0.1$). Hence, there is nothing to suggest that the two fitted cubics differ.

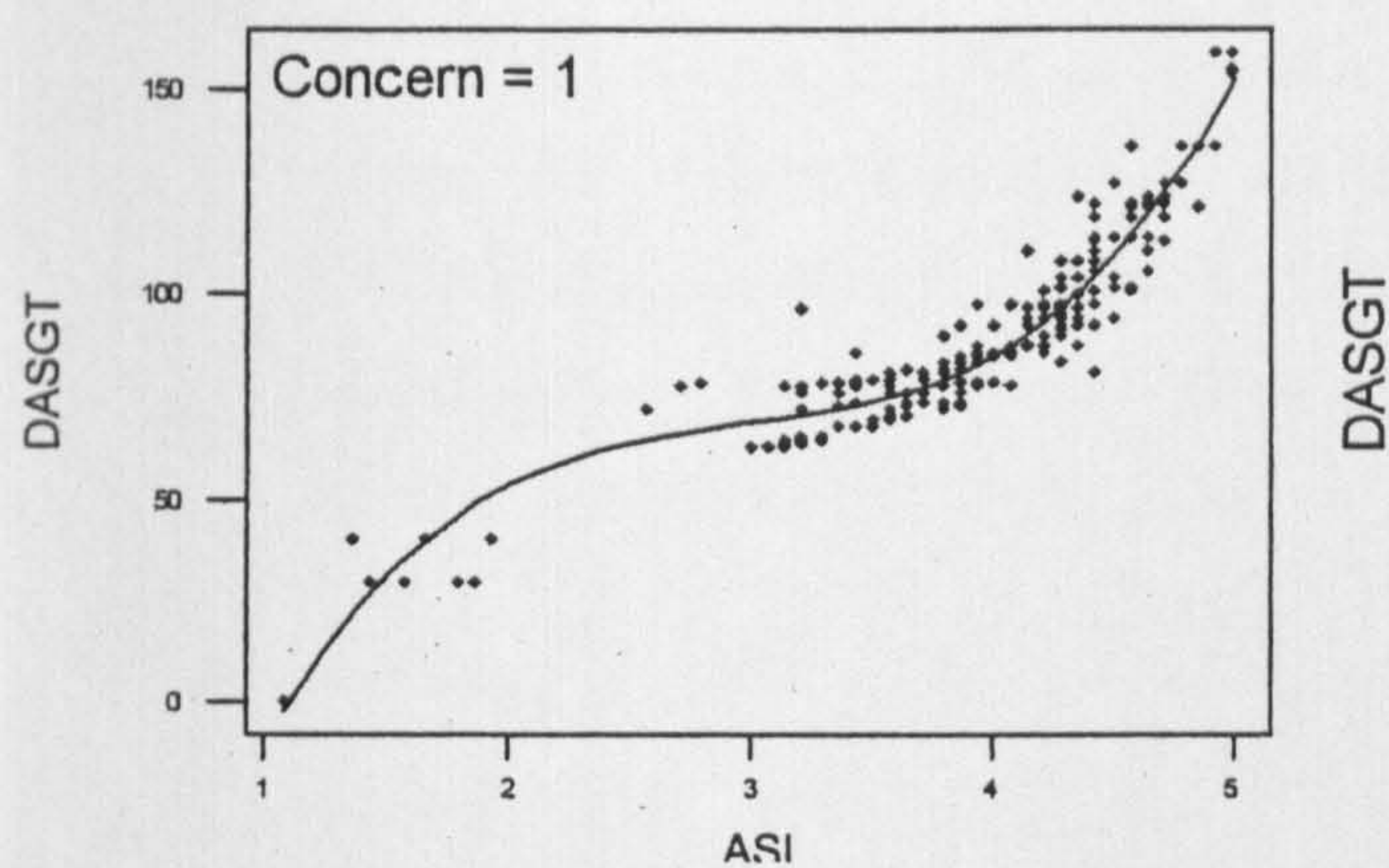


Figure 3.8. The cubic relationship between appearance dissatisfaction and schemata for concerned individuals.

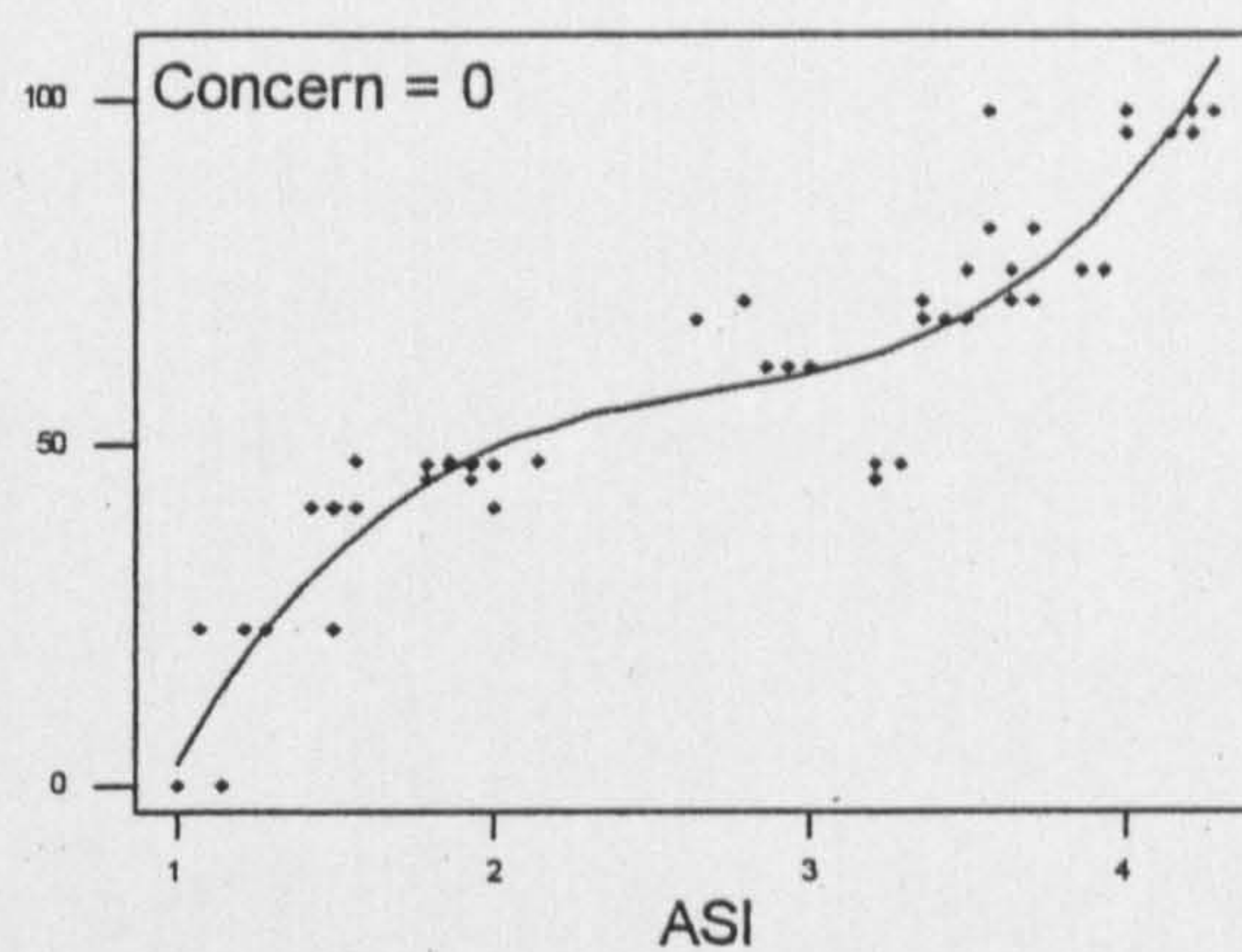


Figure 3.9. The cubic relationship between appearance dissatisfaction and schemata for not concerned individuals.

Chapter 4

Studies 2 and 3: Method and Results

Chapter 4

Studies 2 and 3: Method and Results

4.1. Introduction

This chapter is devoted to *Studies 2* and *3* of the present investigation. It begins with a brief discussion of the design of the Studies, continues with a description of the sample employed, followed by a detailed report of the interview guides used and procedural steps followed and concludes with the presentation of the results of *Studies 2* and *3*.

4.2. Method

4.2.1. Design

This investigation adopted a mixed model research design combining quantitative and qualitative research methodologies (Creswell, 1995).

Studies 2 and *3*, qualitative investigations, followed up from study 1 with a sample selected from *Study 1* participants. For *Study 2* subjects were selected among the very self-conscious regarding appearance individuals. For *Study 3* subjects were selected among the least appearance-conscious individuals. Detailed semi-structured interviews aimed to ascertain how participants perceive their appearance and construct their self-image. The results of these studies were used to gain an in-depth understanding of the issues surrounding those factors generated in *Study 1* as being implicated in appearance-related (dis)satisfaction. Based on the literature (Smith *et al.*, 1999) it was decided that in total 8 participants belonging to the very self-conscious regarding appearance category and 8 individuals belonging to the least self-conscious regarding appearance category would be interviewed.

4.2.2. Participants

4.2.2. Study 2

246 participants of *Study 1* agreed in principle to participate in *Studies 2* or *3* and provided their contact details. From them, the 8 most distressed regarding their appearance were contacted and asked to participate in an hour-long, semi-structured interview with the investigator. 3 of the very distressed individuals contacted to take part in the interviews refused. Reasons for refusal included other family or professional commitments at the time. They were substituted with the next three most distressed individuals.

4.2.3. Study 3

The 8 least distressed about their appearance individuals, as identified in *Study 1*, were contacted and asked to participate in an hour-long, semi-structured interview with the investigator. 1 of the least distressed individuals contacted to take part in the interviews refused. Reason for refusal was not provided. The next least distressed individual was contacted and accepted to participate in the *Study*.

4.2.4. Instruments

4.2.4. Studies 2 and 3

For the qualitative part of this research the investigator used a modified form of the Patient Interview Schedule used by the Centre for Appearance and Disfigurement Research. The Subject Interview Schedule (Forms I and II) used in the present investigation is described below.

4.2.5. The Subject Interview Schedule (SIS-I, II)

The Subject Interview Schedule (SIS-I, II)¹ is a modification of the Patient Interview Schedule used by the Centre for Appearance and Disfigurement Research (CADR) at the University of the West of England, Bristol. Two versions were developed for the present investigation, SIS-I and SIS-II, one for individuals who are dissatisfied with their appearance and the other for individuals who are happy with their appearance respectively. SIS-I aims to identify factors such as what makes individuals feel dissatisfied with their appearance, when the preoccupation started, how it developed throughout the years, how it is now, what makes the individual feel better about their appearance, what makes them feel worse, what coping strategies they are using. SIS-II aims to identify protective factors such as what helps individuals accept and feel satisfied with their appearance, the role of the family and social support and individual coping strategies. Overall, the aim with both SIS-I and SIS-II was to give the participants the opportunity to talk about their appearance in detail and get an in depth understanding of the individual's concerns. The stimulus questions were designed primarily as a starting point with the aim to encourage the individual to talk freely about their experience and guide the direction of the interview. Both interview schedules start with some background questions, or what

¹ A copy of the Subject Interview Schedule (I, II) is attached in Appendix 1.

Spradley (1979) calls “grand tour” questions. Opening with a biographical question “Please tell me a bit about yourself...” helped the individuals feel more comfortable with the researcher and established rapport.

A first draft interview guide was generated, used in five interviews, and then revised to accommodate participants’ advice about the questions. I sought out “key informants” (Patton, 1990; Taylor and Bogdan, 1984) to whom to speak; included were three postgraduate psychology students who had an interest in appearance research and two other young adults who used to be very preoccupied about their appearance. All together were in a position to utilize their cumulative knowledge to help me inform my thinking. In brief, I conducted purposive sampling (Glaser and Strauss, 1967) to maximize my preliminary feedback. These early interviews were all highly interactive. Participants were encouraged to give as much direction as possible about what they thought I was asking, what I should be asking, and how to ask it. I continued to revise the interview guide with my first participants for the study. In this sense, then, the interview guide was “pre-tested”.

To summarize, I used an inductive, iterative process to generate my interview guide over several stages of development, always guided by a conceptual framework. I matched my hunches about what makes people (dis)satisfied with their appearance with the literature and observations of key individuals. Then I revised my questions until no additional information emerged to support further changes, a process roughly parallel to saturation in grounded theory (Glaser and Strauss, 1967). Even after I settled on the semi-structured guides, I used them only as guides. These interview guides may be misleading in that they appear to lend themselves to an invariant administration. This was not the case either in intent or in actuality. Probes/prompts were introduced and time was allowed for participants to pursue these freely, and these probes differed from one interview to another. Often participants anticipated forthcoming questions inadvertently and introduced relevant information on their own. With 3 participants I laid aside the interview guide and just asked individuals to share their stories.

4.2.6. Procedure

4.2.6. Pilot 2

5 students from the University of Wales, Swansea (2 men, 3 women) were asked to participate in the semi-structured interviews and give feedback. All

participants agreed that the interview was relevant, interesting and not disturbing in any way.

4.2.7. *Studies 2, 3*

In *Studies 2* and *3*, participants were asked to participate in a semi-structured interview where they were asked to elaborate on how they perceive their appearance. The Subject Interview Schedule I constituted the basis for the interview in *Study 2* and the Subject Interview Schedule II in *Study 3*. Permission to audiotape the interviews was obtained and all participants were offered a copy of the tape of their interview if they wished.

4.3.1. Data Analysis

4.3.1. *Studies 2 and 3*

The qualitative data generated in the semi-structured interviews of *Studies 2* and *3* was tape-recorded, transcribed and analyzed, separately for *Studies 2* and *3*, using Interpretative Phenomenological Analysis. Smith *et al* (1999) provide a detailed description and examples on the process of analysis and the present investigation followed their recommendations closely. Briefly, following an idiographic approach to analysis, beginning with particular examples and slowly working up to more general categorization or theory (see Smith, Harre and Van Langenhove, 1995) I began by looking in detail at the transcript of each interview before incorporating others. I read and re-read the transcript closely a few times in order to become as intimate as possible with the account. As recommended by Smith *et al* (1999) I was using the left hand side of the margin to note anything that struck me as interesting or significant from what the participant was saying. Some of my comments were attempts at summarizing, others were associations or connections, and some were preliminary interpretations. The right-hand margin was used to document emerging theme titles. At this initial stage the entire transcript was treated as potential data and no attempt was made to omit or select particular passages for special attention.

Following that, on a separate sheet, I listed the emerging themes and looked for connections between them. I found that some of them clustered together and that some could be regarded as superordinate concepts. As new clustering of themes emerged, I checked back the transcript to make sure the connections worked for the primary source material- what the person actually said. The next stage was to produce

a coherent master list or table of the themes. In line with the Smith *et al.* (1999) guidelines, care was taken at this point to ensure that each theme was represented in the verbatim transcript and not to let my own bias distort the selective process although I acknowledge that, inevitably, I interpreted the text. The master list also identified the sub-themes that went with each subordinate theme.

For every interview transcript I began the process anew, going through the stages outlined above and producing a master list for every interview. The master lists for each interview were then read together and a consolidated list of master themes for the group produced. As Smith *et al.* (1999) emphasize the themes were not selected purely on the basis of their prevalence within the data. Other factors, including the richness of the particular passages, and how the theme helps illuminate other aspects of the account, were also taken into account. The process followed was cyclical. If new themes emerged in subsequent interviews, they were tested against earlier transcripts. The small number of participants in each study enabled me to retain an overall mental picture of each of the individual cases and the location of themes within them. Finally, a second experienced qualitative researcher repeated the same process with 3 transcripts of each study and generated similar, and in many cases, identical themes.

4.4.1. Results

4.4.1. Study 2

The central issue reported by the participants was their current preoccupation and discontent with their appearance². They described how their anxiety developed, when first became self-conscious of their appearance in late childhood and early adolescence. A growing sense of hurt and of being overwhelmed by the social implications of appearance in general and of their own “defective” appearance developed. Subsequently, participants struggled and are still struggling to modify and alter their appearance and also manage the effects of their appearance preoccupation in their lives using a number of cognitive and behavioural strategies, which in their majority are dysfunctional and in essence perpetuate the distress.

Participants were preoccupied with a variety of aspects of their appearance (Table 4.1)³.

² The complete interview transcripts are included in Appendix 3.

³ All identifying information has been altered in order to protect confidentiality.

Table 4.1. Features that participants in study 2 were dissatisfied with.

<i>Participant's Name</i>	<i>Feature</i>
Alex	Weight
Claire	Thighs
Jonathan	Muscle tone
Kate	Everything
Maggie	Ears
Rebecca	Nose
Rhiannon	Weight
Sam	Genitals

Most individuals objectified their body and were able to describe what is “wrong” with it with no difficulty, but found it difficult to identify any part that is satisfactory. Some individuals realized that their concerns might be exaggerated, while others lacked such insight⁴.

Kate: I am not happy with my looks...I suspect people’s negative attitude to my physical presence comes from a combination of my looks, my yellow crooked teeth, how skinny I am, body odours, body language, choice of clothes, and the less than perfect way I string words together in spontaneous speech, I often feel as if people think I am ugly, but I suppose the object truth is more neutral and I simply don’t physically attract people. When I think of all the deformities and handicaps that are possible, I know I have much to be grateful for and my psychological suffering is rather senseless. (p.276, 16, 30-34)

Claire: Every morning I stand in front of the mirror wondering if my thighs look any thinner. I stare into the mirror for ages while slapping my thighs with my hands to make them smaller, to make the fat I see disappear. (299, 15-18)

Rebecca: I am extremely unhappy with the appearance of my nose; it is too large and quite ugly with a bump on the bridge and enormous nostrils, disgusting really. (285, 6-7)

4.4.2. *Childhood*

Dissatisfaction with appearance became apparent for most participants during childhood and got worse in adolescence and young adulthood. Initially, the realization of a defect in appearance was highly distressing. Participants described how they first became aware of the importance of appearance in life as young children by the influence of their parents and the media. This was reinforced by instances of bullying and negative comments from their peers.

Rhiannon: My parents themselves were preoccupied with appearance and weight. They were constantly dieting, exercising and expressing dislike towards their own bodies. I was forced to be on diet as a child. Not only is that not right, it’s cruel. In my family there was

⁴ Transcript notation. Material in italic in brackets is clarifactory information added by the researcher. Where material has been left out, because it is not relevant to the account and to save space, it is indicated by three dots (...).

a double standard when it came to boys and girls. My parents were encouraging my brother to eat so that he can become big and strong, but discouraged me from having seconds or having dessert so that I will have a petite and slim figure. (309, 16-23)

Claire: My mother gave the message that the only way I will be happy and find a man, is if I am thin. (299, 21-22)

Alex: Everyone in physical education used to say 'Go on fatty', "What size bra do you take?" and children calling me names like "hippo". It definitely did hurt me. (306, 2-4)

Kate: Society and the media also send the message that being thin and beautiful is important and necessary. You just have to turn on the TV Saturday mornings and see just how commercials give them (*children*) that message. Children are not only told that they need to be wearing the newest in designer clothing, but they must also look perfect in them. Children at a very young age are already striving to attain society's unattainable "ideal" body image. It also doesn't help that their favourite toy is probably Barbie. Barbie herself sets a very bad example to children. They look at her and feel that all women should look like her. I personally feel it's time for Barbie to retire and clear the way for a new era of Barbie dolls that would come in all different shapes, sizes and colours (277, 14-24).

4.4.3. Adolescence

In adolescence dissatisfaction with appearance was first better recognized and established in the participants as they started dating but also due to adolescence and young adulthood being a time when being 'normal' and part of peer groups was crucial for well-being (Coleman, 1974):

Rhiannon: I don't think I was too bothered, not initially, but once I started being interested in boys I sort of got upset by my weight and I was really self-conscious. I was trying to cover up by wearing buggy clothes. (309, 25, 27-29)

Sam: I'm quite a shy person and as a child I was even worse. I much preferred to be part of a group and not stick out in any way positive or negative. I was just afraid that the first thing my football mates were going to notice about me in the showers was my genitals. I had to stop football practice altogether although I loved football. (296-297, 34, 1-4)

A variety of emotional and behavioural reactions followed. Some participants were angry but the predominate reactions were worry about being "ugly" and finding, because of financial restriction at the time, that they were unable to control their appearance by cosmetic surgery or expensive diets.

Maggie: I was really devastated at the time...but I could not afford the money for cosmetic surgery... (281, 11-12)

4.4.4. Adulthood

At the time of the interview as young adults, participants still felt dissatisfied with their appearance. All of them described their conviction of the importance of appearance in life and their attempts to control their appearance by various means including diet, exercise, and cosmetic surgery. Similarly to the disfigurement literature (Baillie *et al.*, 2000) and as Moss and Schaefer (1984) would predict, a variety of behavioural and cognitive strategies were used to minimize the impact of dissatisfaction with appearance on their lives and a variety of affective and physiological reactions were exhibited. However, the majority of these strategies were maladaptive.

4.4.5. Arguable assumptions

Participants expressed many of what Cash (1997) has labelled as *arguable* assumptions:

Rebecca: The first thing that people notice about me is my nose

Jonathan: Physically attractive people have it all...women, money...the whole world is on their feet (p.273, 16-17).

Kate: If I could look just as I wish, my life would be much happier. (279, 8-9)

4.4.6. Preoccupation with appearance

Most of the participants believed their appearance was undesirable and were preoccupied with it, to the extent that it might be thought of as, defining their identity. Feeling confident and feeling beautiful was intrinsically linked for most of them:

Rhiannon: It makes me feel like I shouldn't be on this earth. (311, 22)

Rebecca: Sometimes it feels, as Rebecca is nothing else but a big ugly nose.(289, 4)

Jonathan: I certainly do not feel as confident as other people (p.273, 19)

Sam: I am not as man as my brother...it is a pity really but I am not...(a tear comes in his eye) (297, 27-28)

All of the participants believed that their life would change for the better in some way if they could alter their appearance as in losing weight, usually identified as an increase in self-confidence.

Rhiannon: I'd completely change. My clothes, everything. I'd be a different person.

The preoccupation was difficult to control and was thought to become more intense in social situations in which the person felt self-conscious. Dissatisfaction with appearance varied over time, depending on several factors. These included the season (summer when lighter clothing is worn), times of transition (such as going to university and making new friends) and psychological factors such as anxiety and depression (mood fluctuation):

Claire: On a good day, I try to remember they look (*thighs*) OK in jeans, but if I'm feeling a bit low, I hate them. (299, 31-32)

Kate: How desperate I am about my appearance depends a lot on my mood if you know what I mean. If I feel down then I feel ugly. Other times when I am happy I do not even think of it for days. (278, 30-33)

4.4.7. *Affective and physiological reactions*

Participants tend to experience a mixture of emotions, which they found difficult to articulate or unravel. They feel disgust at their body, which becomes stronger whenever they are exposed to cues that are associated with their perceived defect. They may also feel anxiety and physiological arousal, which is increased in social situations. There is a high frequency of depressive symptoms.

Kate: I feel lonely, sad, tired, overwhelmed, depressed, scared, confused...the list is endless (278, 23-24)

4.4.8. *Behavioural strategies*

Most participants described a variety of behaviour-based strategies that they used to reduce the chances of being discredited by others (Goffman, 1963) and were attempts at impression management (Leary and Kowalski, 1995). Most perceived themselves as having no control over the situation. Behaviours were either excessive, in terms of hours of self-inspection and checking in mirrors or other reflective surfaces such as shop windows or consisted of avoidance behaviours in social situations, which essentially perpetuated the distress. A number of different checking and repeating rituals were identified including:

Camouflage checking. Repeated checking of the perceived defect in a mirror, which was directed, at ensuring that any camouflage (for example, loose trousers) is adequately hiding the perceived defect in public (*thighs*). This type of checking would also include seeking reassurance from others that the defect was adequately hidden.

Checking for comfort. Repeated checking of a defect in an almost ritualistic manner, which was directed, at achieving a sense of inner satisfaction until the individual felt "comfortable". Rebecca who repeatedly powdered her nose until it felt "just right" provides an example of this.

Checking over-doubts. Checking of the perceived defect was also occurring because of doubts about its severity. In this regard, participants were mentally comparing their perceived abnormality with others or seeking reassurance from others about the severity of the defect.

This continuous vigilance over the body was a common feature of participants' discourse. Most reported dieting in cycles, losing weight by dieting for between two and six weeks, and then putting on the weight again when they started eating normally. Others were exercising to improve their appearance or had undergone or were planning to undergo cosmetic surgery.

Rebecca: I have undergone an initial surgical reconstruction of my nose with three subsequent revisions, one resulting from a postoperative wound infection. (285, 9-10)

Rhiannon: My whole life I think is going to be dieting and then non-dieting, then dieting, and I know it's not good for your health. (311, 19-20)

Avoiding situations where their feature would be visible, such as not engaging in sports (e.g. football) or not forming close relationships, which might lead to becoming sexually intimate, were common. Some participants also described escaping from situations where their feature had been noticed. Participants also expressed their ambivalence about relying on avoidance and camouflaging because they led to restriction of activities.

Sam: I think it restricts you from doing things...I don't play football anymore...and I love football. (297, 7-8)

Claire: I can't wear shorts....I go to the beach late in the evening when not so many people are there. I suppose I could really, but because you don't want people looking at you don't and things like that, because people stare ... (300, 2-4)

4.4.9. Cognitive strategies

Participants also described a number of cognitive strategies, which can serve to maintain and exacerbate their preoccupation with appearance. As is the case for other anxiety-based difficulties (Rapee and Heimberg, 1997), people with appearance

dissatisfaction can become hypervigilant to others' behaviour and there may be cognitive distortions in their thinking.

Kate: ...nevertheless the pain refuses to budge. Moreover, it explodes into a bigger problem than need be, whenever I am so foolish as to focus on myself instead of on others or whatever I am doing at the time. (277, 5-7)

All of the participants indicated that making social comparisons between themselves and others always made them feel inferior and inadequate:

Kate: I don't exaggerate, I am the ugliest of all the girls I know of. (278, 6-7)

Sam: Every man I have seen in magazines or the TV is bigger than me. (297, 28-29)

Another dysfunctional cognitive strategy involved an *attributional analysis* of staring or discrimination or negative events in general. In these instances the participants were making an internal attribution for the behaviour, seeing this as being due to a problem residing in them:

Jonathan: People deliberately stare to embarrass you. They say: look at him, not one muscle in his body, he is so weak, worse than a girl (p.273, 22-23).

Maggie: There are a lot of pretty people about ... its just that I am not one of them. Many times I can see people looking at me and taking the mickey out of my big ears. (282, 22-24)

Claire: I have recently found out that my husband has been having an affair for two years now...and you know what, it is my fault. He strayed because he no longer finds me attractive. If only I had been thin, Tom would not have been unfaithful. (300, 12-15)

Several cognitive distortions were evident in the participants accounts including emotional reasoning, over generalization, arbitrary inference, all-or-nothing, jumping to conclusions, fortune telling, mind-reading, selective negative focus, disqualifying the positive, magnification and minimization, catastrophizing, personalization, labeling, and should statements.

Kate: If I am feeling so ugly, I must be ugly... It is not just in my head... I am very ugly. (277, 13-14)

Rhiannon: So many children at school laughed at me. There must have been something wrong with me. It can't be that all of them were wrong...(312, 5-6)

Rebecca: People are always telling me my nose is nice and I've had two boyfriends who raved about it. I just think they're weirdos with a nose fetish. (286, 14-16)

Sam: I probably won't get a steady girlfriend in my life. Who wants to be with me, anyway?... they are shocked when they see me, they think I am inadequate. (297, 12-14)

4.4.10. Perfectionism

Participants reported that many, rather than few, roles (the “superwoman”, the “superman”) were important for their sense of self-worth and that perfectionism was definitely the most prominent of their personality characteristics.

Jonathan: I strive for perfection in everything I do, university, family, sports... I have to be perfect, there is no room for second best in my vocabulary... (274, 30-31)

Maggie: I guess I want things to be perfect at all times... including my appearance. (282, 26-27)

4.5.1. Study 3

The central issue reported by the participants was their satisfaction with their appearance that resulted from accepting and valuing their physical appearance with all its defects and strong points⁵. Societal prejudice in favour of beauty had actively been challenged from an early age and is being challenged until now. Social support and self-esteem along with functional cognitive and behavioural strategies helped participants develop and maintain a healthy body image and provided a sense of contentment with appearance.

Some of the participants thought of themselves as beautiful, others as average and still others as ugly. However, all of them stressed the subjectiveness of beauty and the significance of “inner” beauty.

Gerry: I guess I am a handsome man, but that’s not the point. It’s unfortunate, but in today’s society, people have forgotten that it’s what’s inside a person that counts, not what’s on the outside. We need to start loving and accepting each other for who we are, not what we look like. If we learn to love and accept ourselves, we will also begin to love our bodies, no matter what size, shape or colour we are. (326, 4-9)

Jennifer: In our modern, superficial society, nearly all of us ask the question “Am I ugly?” at one time or another. While we seek to know “how ugly am I”, and hope that the answer makes us feel good about ourselves, the honest truth is that we all are ugly in one sense or another. (333, 5-8)

Janet: It is often postulated that beauty is in the eye of the beholder. Similarly, ugliness is in the eye of everyone else. To a mother, her children -no matter how ugly- are beautiful. When emotion is considered into the beautiful/ugly equation, the results are biased and inaccurate. (330, 17-20)

George: No number on a scale and fitting into a smaller dress size will make you happy or worthy. Happiness and worthiness can only come from within. (322, 13-15)

⁵ The complete interview transcripts are included in Appendix 4.

4.5.2. Childhood

Interest in appearance emerged for most participants during late childhood and early adolescence and was consolidated in young adulthood. At that time the importance of appearance in everyday life was first recognized. Participants reported being satisfied with their appearance and instances of parental challenging of the societal stereotypes of beauty along with unconditional love and support.

Janet: My parents taught me it's what's on the inside of a person that counts, not what's on the outside. I was raised to accept people for who they are and not what they look like, and I knew that my parents were proud of who I was. If a child can love and accept who they are, they will be less likely to strive to attain society's definition of the "ideal" body image and they will love and accept their own bodies, no matter what size they are.

Robert: My parents provided me with unconditional love. They were very encouraging and supportive and helped to build my self-esteem. As a child and even now I know that they are proud of me and they love me for who I am, not what I look like. I strongly believe that if children are going to grow up to love and accept their bodies, they must be raised to love and accept themselves. (337, 10-14)

Ruth: My parents have taught me to be proud of who I am. They made it clear that people come in all shapes and sizes, and we need to accept everyone for who they are... Some of my friends at school were afraid of becoming fat. They didn't just learn this from the media, they also learned this from their parents. Their mothers were constantly dieting and expressing a desire to be thin, these young children started to believe they also needed to be thin. (340-341, 32-34, 1-3)

4.5.3. Adolescence

In adolescence, participants became even more aware of the importance of appearance in today's society and the pressure placed on adolescents, especially from the media, to conform:

Jennifer: Teenagers are under a lot of pressure to be thin. They are lead to believe that the only way they can be accepted and fit in is if they are thin. They resort to starving, vomiting and eating only diet foods to try and be thin. Television is a big influence on them. They watch shows like *Beverly Hills 90210* and *Melrose Place* and feel they need to look as thin as the actresses on these shows. Many actresses we see on TV have endured hours of exercise and have deprived themselves of the proper nutrition in order to maintain a thin figure. Some even resort to plastic surgery, liposuction and breast implants. You just have to watch an episode of *Baywatch* to know that statement is true. Society is brainwashing young people into believing that being thin is important and necessary. (334, 5-15)

4.5.4. Adulthood

All participants reported valuing their appearance and taking care of themselves (put make up on, shave, dress well, exercise, eat well) but at the same time did not put too much emphasis on it and were not being overconcerned. Some of the

participants admitted that at some point in their lives were worried about their appearance especially as a response to comments from peers. But they “grew out of it” with support from family and friends.

Gerry: I go to the gym three times a week...I like to put tidy clothes on when I go out...I shave...polish my shoes...but I do not spend ours looking in the mirror or dressing up. (326, 13-15)

Jennifer: I am going to the gym and I eat healthily because I want to be healthy and fit and feel good about myself. It's not because I feel under pressure to conform to the thin and beautiful stereotype. (333, 13-15)

Many participants felt that their self-confidence and self-esteem had helped them to come to terms with their appearance. They stressed that they derived most of their self-esteem from: (a) relational experiences with family and friends; (b) self-generated behaviours such as professional achievements, sports, and talents; and (c) personality or trait characteristics such as likeable, smart and kind.

Fay: Of real importance is what's in your head, not what's on your hips. It's not about having a perfect body; it's about being happy about and proud of what you have.

Ruth: I am an established professional...a good mother and wife... I refuse to put any energy into worrying about my appearance...but do not take me wrong, I look after myself. (341, 20-22)

Social support from others was a source of cognitive as well as behavioural change. Friends and relatives helped by encouraging participants to enter anxiety-provoking settings, by reassuring them that they are accepted regardless of their appearance and by making comments or explaining their viewpoints about the minor importance of appearance and their acceptance of diversity.

Claire: My husband said the other day: “OK, I may look at Jennifer Lopez but she is not the one I love, you are. And at the end of the day I wouldn't like you to be like her, spoiled and vain...spending every waking minute trying to be beautiful” (316, 21-24)

4.5.5. An acceptance of diversity

Participants were aware of the importance of appearance in today's society, and the double standards for men and women.

Robert: A while back I read a quote by Pauline Frederick, it went, “When a man gets up to speak, people listen then look. When a woman gets up, people look, then, if they like what they see, they listen”. Unfortunately that statement is very true. Women aren't yet taken seriously enough in the business industry and in their careers. A woman trying to

advance in her career may feel that in order to be taken seriously and have her ideas listened to, she must be thin and beautiful. (337, 17-23)

Claire: Society also puts women under a lot of pressure to be thin. Women are constantly being told that we must have a perfect marriage, be a perfect mother, and have the perfect career. We are given the message that in order to obtain all that, we must have the perfect body. Growing older in today's society is much different for women than it is for men. If a man's body changes or his hair starts to turn grey, he is considered to be "distinguished". If a woman's body changes and her hair starts to turn grey, she is considered to be "letting herself go". (316-317, 28-34, 1)

Participants were able to put their appearance into perspective. Acceptance of the reality of both their appearance and societal standards as being uncontrollable but not devastating was important.

Gerry: ... we are all different... (326, 11)

Janet: the way I look is part of me. Everyone has something that they do not like about themselves. (330, 5-6)

Participants reported using behavioural strategies, such as *confronting* others' negative reactions and preoccupation with appearance, *exposure* to stressful situations and *response prevention* (not questioning others about their appearance).

Robert: Sometimes I fight with my friends when they say "Hey, look at this fat girl." (337, 25-26)

Jennifer: I go everywhere I want to go without thinking whether anybody else will be thinner or more beautiful than I am. (335, 5-6)

Fay: I never ask my husband whether he thinks I am beautiful or not. I am who I am. (319, 4-5)

4.5.6. Cognitive strategies

Participants also described a number of functional cognitive strategies, which helped them maintain their satisfaction with their appearance. They challenged actively and passionately any prejudice and pressure to be beautiful and they thought it was their personal responsibility to be happy.

Ruth: Women need to take a stand and stop trying to live up to the standards that society has set for us... We need to constantly remind ourselves that we are a person of great value and our weight should not play a part in how we feel about ourselves. We spend too much time and money focusing on losing weight and trying to attain the "ideal" body. Instead, we need to focus on ourselves. We need to get off the diet roller coasters. Diets just don't work and losing weight will never bring you true happiness. (342, 4-10)

Jennifer: Every time you walk into a store you are surrounded by the images of emaciated models that appear on the front cover of all fashion magazines. Teenagers need to realize that society's ideal body image is not achievable. The photos we see in magazines are not real either. Many people don't realize that those photos have gone through many touch ups and have been airbrushed to make the models look perfect. (334-335, 27-29, 1-3)

Gerry: The diet and fashion industries are not totally to blame for society's obsession with thinness. We are the ones keeping them in business. We buy into the idea that we can attain the "ideal" body image. We allow ourselves to believe the lies being thrown at us constantly. We buy their magazines, diet books and gym equipment. (326, 17-21)

Another cognitive strategy involved an *attributional analysis* of staring or negative events in general. When they encountered stigmatization the participants were able to make an external attribution for the behaviour, seeing this as being due to a problem residing in the other person, rather than in themselves:

Ruth: People pick on everything, it's just human nature. I mean its part of life. I do accept that. It doesn't make me feel better but I accept that no matter whether you are tall, short, fat or thin, blonde or brunette people will make negative comments about if they wish to. (341-342, 33-34, 1-2)

George: You usually find that those that persistently take the mickey out of others are the ones that are insecure and need to have someone to put down to try and make themselves bigger. (324, 9-11)

All of the participants indicated that making comparisons with others perceived to be in worse situations (life threatening illnesses, starvation or war) helped them to put their appearance into perspective and reduce the importance of appearance in their lives:

Fay: It's really easy to blow it (*appearance*) out of proportion, and there is always somebody worse off. I mean you only have to look at the news, all these children dying of starvation in Angola. (319, 7-9)

Chapter 5

Discussion

5.1. Introduction

This chapter discusses the results of the present investigation and is designed to accomplish several tasks. The first will be to suggest how this investigation is different from previous research exploring appearance dissatisfaction in the general population. It will indicate why those differences are important and discuss what contribution this investigation makes. Secondly, this chapter will situate the findings of this investigation within theoretical frameworks and previous research studies that help account for why men and women are likely to become (dis)satisfied with their appearance.

The Chapter begins by discussing the contributions of the present investigation to appearance research. It continues by reviewing the major findings of *Study 1*, the quantitative part of the investigation and discusses them in the light of current research and theory. Where these findings are supported and expanded by the results of the qualitative part of the investigation (*Studies 2 and 3*) these are incorporated. Subsequently, the results of *Studies 2 and 3* that are not directly relevant to the results of *Study 1* are reviewed. In view of the dearth of relevant studies the findings are discussed in relation to broader theory and research. Third, a model for the development of appearance (dis)satisfaction is proposed and elaborated. Finally, this chapter will acknowledge the limitations of this research and recommendations will be provided for further empirical research¹. It is concluded that in light of the high number of people dissatisfied with their appearance, and given the potential for psychological harm of excessive appearance-related concerns (e.g. the development of eating disorders) as well as benefit from a healthy body image, advances in relevant theory and research are urgently needed.

5.2. The contribution of the present investigation to appearance research

The first distinction between this and previous investigations of appearance (dis)satisfaction has to do with the subjects who were studied. Previous research has directed its attention on University undergraduate and graduate students or readers of specific magazines, with few exceptions. The appearance (dis)satisfaction heretofore documented has occurred in a selected population, who were, not necessarily, representative of the general population of young adults. Additionally, most research

¹ Chapter 6 will suggest the implications of this research in the real world of the at-risk individuals and those who may be attempting to assist them by designing and implementing prevention and treatment programmes.

has been conducted on women. This sample of subjects (including students and those in the community, from a range of areas representing various socio-economic classes and including men) is more reflective of the population than the studies that use solely the more convenient source of college students. Students may not be a good representation of the general public, where appearance is concerned (Grogan, 1999) being on average in their late teens and early twenties and of moderate to high socioeconomic status. Contrary to the research reported in Chapter 1, this investigation adopted a mixed model design and included a qualitative part, which focused on individuals who were either very satisfied or very dissatisfied with their appearance. It is believed that complex issues are unlikely to be well understood when studied exclusively using questionnaires which measure responses to predetermined items.

Of additional importance in understanding how this study differs from previous ones on appearance (dis)satisfaction is the focus of the research. The review of the literature provided earlier² suggests that past research has been concentrated almost exclusively on weight and shape related concerns in women and weight and muscularity concerns in men at the expense of other appearance-related concerns. Moreover, although a cognitive model of appearance dissatisfaction has been proposed, it has not as yet been empirically tested and refined. This investigation faces these challenges and addresses the shortcomings of the literature in these areas.

Finally, the previous research on appearance dissatisfaction has not included messages of satisfaction. It may seem logical that the antithesis of dissatisfaction is satisfaction, but there were no instances of this phenomenon in the previous research on appearance or the communication of that satisfaction. Studies in the past have focused primarily on the factors or combination of factors most likely to cause individuals to become dissatisfied with their appearance. This study is the first of a programme of study with an aim of understanding the means by which individuals develop and/or maintain satisfaction with their appearance. If approximately 70% are dissatisfied, 30% appear to manage their problems and are satisfied. It may be that the messages of satisfaction are inherent in the experiences of dissatisfied individuals, or it may have been an oversight of previous research, which was in need of correction. In either case, this research appears to be the first which reports this phenomenon.

² In Chapter 1.

within this context, and which contributes to our understanding of the development and maintenance of satisfaction with appearance as much as dissatisfaction.

To summarize, this research was designed to investigate a population, which heretofore has rarely been studied (the general population including men), does so in a manner, which has been underutilized (a combined quantitative and qualitative methods), and focuses on relatively unexplored areas (a variety of appearance concerns, appearance schemata, satisfaction with appearance) and likely moderating phenomena (social support and self-esteem). The next section of this chapter will provide a discussion of the respects in which the results of this study are consistent with previous research and those in which they differ. When they differ, possible interceding factors are suggested.

5.3. Appearance dissatisfaction in young adults

This study was designed to measure satisfaction with specific body parts and overall body appearance in male and female young adults and to understand some of the factors that contribute to the development of appearance satisfaction or dissatisfaction in this population.

Overall, the young men and women who participated in this study were surprisingly dissatisfied with their bodily appearance. Indeed, 79% of men and 82% of women indicated dissatisfaction with an aspect of their appearance. These percentages are significantly higher than those found for the general public in past surveys (Berscheid *et al.*, 1973; Cash *et al.*, 1986; Garner, 1997) and other surveys directed towards college-aged men and women (Donaldson, 1996; Grogan, 1999) but are consistent with those found in Raudenbush and Zellner (1997), Chaudhary (1996), Drewnowski and Yee (1987) and Silberstein *et al.* (1988) and also with the recent significant increase in the number of obese individuals and those pursuing cosmetic surgery³. These results also coincide with the notion that body image dissatisfaction is so prevalent that it is normative (Rodin, Silberstein, and Striegel-Moore, 1985). The results partially support past research indicating that women are typically more dissatisfied with their appearance than are men. There were more women than men reporting dissatisfaction but the difference did not reach statistical significance. This was unexpected and perhaps indicates that men by increasingly becoming the target of

³ In England, currently, over 50% of the adult population is overweight (BMI>25kg/m²) and 17% of men and 21% of women are obese (BMI>30kg/m²)³. An estimated 65,000 people (from a population of about 58 million) have cosmetic surgery annually in the UK.

the diet and cosmetic surgery industries and media's interest, increasingly develop dissatisfaction with aspects of their appearance. Male body dissatisfaction seems to be more widespread than previously thought but because this is only "first-generation" literature, any conclusions must be tentative.

The widespread occurrence in the sample of appearance related concerns illustrates the importance that people ascribe to physical appearance. This commonality of experience and behaviour has emerged as the primary factor of general self-consciousness of appearance in this study. Appearance dissatisfaction can be in the form of mild feelings of unattractiveness to extreme obsession with physical appearance that impairs normal functioning (Rosen, 1995). It is difficult to determine the point at which an individual's perceptions, attitudes, and behaviours regarding his or her body become problematic or psychopathological. At present, there is no accepted cut-off point between "normative discontent" and "pathological dissatisfaction". There can be little doubt that current media promotion of the ideal of youth, fitness and beauty is responsible for much contemporary unease about appearance (Rumsey, 1997). The culturally accepted ideal stereotype appears to promote a "societal obsession" with body shape, size, weight, virility, and appearance of one's body (Stice and Shaw, 1994).

Of particular interest in the present investigation was determining the specific body parts with which young adults seem to be most dissatisfied. It was expected that the dissatisfaction would parallel those areas emphasized in the media. Therefore, it was hypothesized that men would be more dissatisfied with their upper bodies, whereas women would be more dissatisfied with their middle/lower bodies. As hypothesized, it does seem to be true that men are most dissatisfied with their chest, and upper arms, features that are frequently emphasized in the media. These results (although little research has examined dissatisfaction with specific body parts in men) are consistent with those seen in Franzoi and Shields (1984) and then again in Garner (1997) and Grogan (1999), and reflect the emphasis on upper-body appearance that has been consistent for over 15 years. Men are increasingly expected to have a broad chest, "six-pack abs" and "bulging biceps". In line with previous studies male weight-related issues seem to be divided into two groups, men who perceive themselves as fat and wish to lose weight, and men perceiving themselves as thin and wishing to gain muscle bulk (Raudenbush and Zellner, 1997, Lynch and Zellner, 1999; Pope *et al.*, 2000). It appears that many men are discontented with their level of muscularity and

wish to be more mesomorphic (Tucker, 1985). However, the upper body was not the only area that was related to male body dissatisfaction in the present study; men were dissatisfied with a variety of features including genitals, hair line, height, nose, and eyes, indicating that men may be beginning to focus on their overall appearance more than they have in the past.

Meanwhile, women were much more dissatisfied with their middle and lower body-abdomen, waist, buttocks, and thighs. This is consistent with what was found by previous research (Cash *et al.*, 1986; Grogan, 1999; Garner, 1997; Garner and Kearney-Cooke, 1996; Monteath and McCabe, 1997). Not surprisingly, these are areas of the body where women store fat, and also areas, which are often the focus of media attention in advertisements for slimming products (Bordo, 1993) and “wonder exercises”. In addition, these are the exact areas most frequently referred to by individuals with eating disorders as their “fat” areas. In fact, there is some evidence from work on body size estimation that women also tend to over-estimate the size of these body parts (Thompson *et al.*, 1999). In addition, women were dissatisfied with their weight and overall muscle tone. These results confirm those reported in Jackson (1992) where it was determined that women are dissatisfied primarily because they perceive themselves to be overweight. As has been repeatedly shown, there is an extremely negative stereotype for overweight people in Western society (Monteath and McCabe, 1997; Thompson *et al.*, 1999). Body size is seen as one of the few personal attributes that is still an acceptable target of prejudice (Thompson *et al.*, 1999).

Overall, men and women expressed discontent with a variety of features some of which have not been reported previously. It would appear that the Derrifford Appearance Scale format (DAS-59) evoked a more perceptually “free” landscape to establish one’s own interpretive criteria for estimating body image and levels of satisfaction or dissatisfaction, unlike other measures of body image⁴, which “sensitize” the individual towards body shape and size concerns.

Paralleling “normative discontent”, a “normative adoption of dysfunctional schemata” was evident in the sample. Moreover, it was found that individuals concerned with appearance had higher levels of appearance schematicity and

⁴ See Chapter 1.

psychological distress and lower levels of self-esteem and social support than individuals who were not concerned about their appearance.

5.4.1. Multidimensionality of appearance (dis)satisfaction

From a conceptual standpoint, the research findings provide some unique and potentially important considerations. Substantial evidence supports the value of conceptualizing appearance (dis)satisfaction as a multidimensional construct. Evidence indicated that a combination of variables, as operationalized in this study, proved to be good predictors of appearance (dis)satisfaction: social support, psychological distress with the most significant predictor being appearance schemata. Below follows a discussion of each of these factors.

5.4.2. Appearance dissatisfaction and psychological functioning

A strong association between body dissatisfaction and psychological distress was found in this investigation. Psychological distress was predictive of body dissatisfaction in concerned individuals and in turn was predicted by appearance schemata, self-esteem, satisfaction with social support and their interaction in both concerned and non-concerned individuals.

The present findings replicated results of previous studies in demonstrating a significant association between body dissatisfaction and psychological distress (Joiner *et al.*, 1995, 1997; Cooper and Fairburn, 1993). Cooper and Fairburn (1993) proposed that body dissatisfaction is “a specific manifestation of the depressive symptom of “self-deprecation” rather than a core feature of *bulimia nervosa* (p. 387). The existence of this association in community samples (such as the present) suggests two possible conclusions. First, the association between body dissatisfaction and depression could exist independently of bulimic symptoms. Supporting this conclusion, an association between increased depression and decreased ratings of physical attractiveness in non-eating disordered individuals has long been recognized in the literature on depression (Noles, Cash, and Winstead, 1985). Alternatively, the relationship between body dissatisfaction and depression might not be independent of bulimic symptoms and their association within community samples could be due to undetected disordered eating within these nonclinical samples. If body dissatisfaction and depression share an association that is independent of bulimic symptoms, then depression may represent a factor that contributes to the development or maintenance

of body dissatisfaction which, in turn, contributes to the development or maintenance of bulimia nervosa.

The present investigation (*Study 2*) suggests that increased psychological distress may contribute to increased levels of body dissatisfaction. Most of the participants reported increased levels of depression and noted that their dissatisfaction with their appearance increases considerably when they are distressed. Negative affect may serve as a general risk factor for psychopathology and in cultures in which beauty is an aesthetic and moral ideal might feelings of dysphoria become funnelled into extreme body dissatisfaction. This represents a departure from explanations made by McCarthy (1990) and Joiner *et al.* (1995) who proposed that body dissatisfaction increased vulnerability to depression. Notably, there may be a reciprocal relationship between body dissatisfaction and depression in which they contribute to each other. Future research may benefit from exploring the possible causal relationship between depression and body dissatisfaction in experimental designs.

5.4.3. Schemata

Appearance schemata was the most significant predictor of appearance dissatisfaction in both concerned and not concerned with appearance individuals and also contributed to the prediction of psychological distress. Interestingly, the schematic-aschematic distinction was evident in the cubic relationship demonstrated between ASI and DASGT. The results imply that young adults placing more cognitive importance on appearance (high in appearance schematicity) are more vulnerable to negative feelings (Markus, 1977) and to actual dissatisfaction with their appearance. Taken together, the current findings are consistent with hypotheses from cognitive theory regarding the existence and pervasiveness of dysfunctional beliefs about appearance, particularly in those persons expressing dissatisfaction with their appearance. These findings are consistent with hypotheses of cognitive theorists (e.g., Cooper, 1997) that the content of appearance-related dysfunctional attitudes includes the belief that appearance determines personal worth or self-view; however, the findings also go beyond these hypotheses by suggesting that the existence of appearance schemata determines feeling state. From Cash and Labarge's (1996) explanation, however, it appears that only certain individuals have an appearance-related or body image schema. Alternatively, it may be that we all have a

body image schema, but that it has a differential influence that determines its relative importance to the development of appearance (dis)satisfaction.

Individuals who are concerned with their appearance have a view of the self that is dominated by physical appearance traits and, in turn, associate body image ideals with "good" person values. In the social realm, the person discounts positive social feedback. For example, in *Study 2*, one of the participants (Rebecca) readily dismisses positive feedback about her appearance. The body image schema itself becomes interconnected with positive qualities, such as goodness and virtue—a connection first noted by Vitousek and Hollon (1990). An aschematic individual might say, "Yes, I'm unhappy with my body, it could be much better but it is not that important". A person with appearance dissatisfaction might say, "I gained weight. I'm a bad person. I feel awful". Thus, an individual with appearance dissatisfaction may think badly about his or her body in response to a variety of situations, confirming the negative beliefs about his or her body. That negative view dominates even the sense of self as a whole. Rhiannon, in *Study 2*, characteristically exclaims: "(My appearance) makes me feel like I shouldn't be on this earth". A related tenet of self-discrepancy theory is the concept of chronically accessible cognitions (Higgins and Brendl, 1995). For individuals with chronically negative cognitions, the negative self-beliefs are always active. Such a state has been related to depression (Segal, 1988) and explains the contribution of appearance dissatisfaction in predicting psychological distress in the present investigation.

Should support for the role of dysfunctional schemata accrue, several potential uses of the ASI are possible. The ASI could be used clinically to identify dysfunctional attitudes endorsed by individuals, and administered at the beginning of cognitive-behavioural therapy (CBT) for appearance dissatisfaction. The ASI could also be used as a research measure to evaluate both the outcome and mechanisms of action of CBT for body image dissatisfaction. Moreover, as noted above, the ASI could be used to evaluate key theoretical assumptions of the cognitive model of appearance (dis)satisfaction, and thus help guide theory. However, the ASI clearly needs further standardization and psychometric development⁵ including data on males and a range of clinical samples. According to Carr (2002) there is always the possibility that the item content, and thus the content validity, for the relevant

⁵ Prof. Cash is currently revising the ASI.

participant and patient groups, will be limited by the item generation process with obvious implications for the discriminatory power of the scale and its sensitivity to change. These limitations of the scale may partially account for the high correlation found in the present investigation between ASI and DASGT.

5.4.4. Self-esteem

A significant correlation was found between the Rosenberg self-esteem scale and appearance dissatisfaction in both men and women who were self-conscious of an aspect of their appearance. These results are consistent with the meta-analysis of all the previous findings that have shown low self-esteem is associated with low body image (Ben-Tovim and Walker, 1991). This process could work in both directions. An individual who is dissatisfied with their appearance may extend this dissatisfaction to other aspects of self, evaluating them more negatively and experiencing lower overall self-esteem (i.e., negative appearance-related self-evaluation). Similarly, an individual who is satisfied with their appearance may evaluate other aspects of self more positively, and experience higher overall self-esteem (i.e., positive appearance-related self-evaluation). Although positive appearance-related self-evaluation has not received any attention in the literature, negative *weight-related* self-evaluation has been posited to play an important role in both the development and maintenance of eating disorders (Vitousek and Hollon, 1990).

Interviews with participants in *Study 3* also supported the notion that positive body-image is reliably linked with positive feelings about the self, and feelings of self-confidence and power in social situations⁶ and were consistent with other interview work with women carried out by Charles and Kerr (1986), and by others on women and men of different ages (Grogan and Wainwright, 1996; Grogan *et al.*, 1997). Self-esteem was not a significant predictor of body dissatisfaction in concerned individuals, it was, however, a significant predictor of psychological distress in both concerned and non-concerned individuals. Moreover, it was found that self-esteem moderated the relationship between appearance schemata and psychological distress, with individuals with high self-esteem being less emotionally distressed than individuals with low self-esteem even when they were placing equally high significance on appearance.

⁶ Similarly negative body-image is reliably linked with negative feelings about the self.

It is suggested that self-esteem works as a type of defense mechanism. While self-verification⁷ increases feelings of competency and worth, disruption of the self-verification process has been shown to have negative emotional consequences in the form of depression and anxiety (Burke, 1991, 1996; Higgins, 1989), jealousy (Ellestad and Stets, 1998) and anger (Bartels, 1997). Thus, when self-verification becomes problematic and an individual would normally experience distress, self-esteem provides a buffer against the negative emotions associated with disruption in the self-verification processes. Self-esteem protects the individual from potentially debilitating emotions as they work to reestablish and maintain a match between standards and perceptions (Burke, 1991, 1996). Self-esteem can buffer the individual from these negative effects both directly and indirectly. Not only should self-esteem be associated with higher levels of well-being (direct buffering effect), but self-esteem should also *moderate* the effects of a lack of self-verification (indirect buffering effect). In this case, self-esteem moderates the effects of appearance schemata on psychological distress. But, because self-esteem is used up in the process, there are limits to this buffering effect. There, the role of social relationships is important in contributing to self-verification and maintaining self-esteem. When individuals receive self-verifying feedback within the group (through reflected appraisals and social comparisons), feelings that one is accepted and valued by others within the group are reinforced, increasing worth-based self-esteem (Brown and Lohr, 1987; Burke and Stets, 1999; Ellison, 1993). This helps explain why social support was found to work in conjunction with self-esteem in protecting individuals high in appearance schematicity from emotional distress.

Moreover, research has found that psychologically healthy individuals account for negative situations by attributing the cause to external factors (e.g., Snow and Anderson, 1992), selectively comparing themselves to those worse off (e.g., Wood and Taylor, 1991), and by limiting interaction to those who support a positive conception of themselves (e.g., Epstein and Morling, 1995). The first two strategies are clearly articulated by the individuals who are satisfied with their appearance in this investigation (*Study 3*).

⁷ Self-verification theory (Swann, 1990) assumes that stable self-views provide people with a crucial source of coherence, an invaluable means of defining their existence, organizing experience, predicting future events and guiding social interaction. People enlist two classes of self-verification activities in their search for self-verifying evaluations: people work to create social environments that reinforce their self-views and through biased information processing develop perceptions of reality that are more compatible with their self-views than is warranted by the objective evidence.

5.4.5. Social support

In agreement with studies with disfigured individuals (Rumsey, 2002) lower levels of social support (both the number of supportive relationships and satisfaction with received social support) was a significant predictor of appearance dissatisfaction. Moreover, lower satisfaction with social support was predictive of emotional distress, with social support acting in conjunction with self-esteem to protect individuals from distress even when they held dysfunctional appearance schemata.

It may be that social support assists individuals by increasing their sense of being accepted (Baumeister and Leary, 1995) or by encouraging effective coping (Carver and Scheier, 1981). The qualitative reports of this investigation's participants were consistent with Carver and Scheier's (1981) conclusion that social support can serve to facilitate the development of problem-focused (behavioural) and emotion-focused (cognitive) coping strategies. Social support may be particularly important in both encouraging exposure to feared situations and developing types of self-talk, which facilitate the reduction of distress. By acting as sources of helpful self-statements, significant others may assist individuals, accept their physical appearance. An example of this process is evident in the discourse of Claire, in *Study 3*, when she reports her husband's realistic assessment of her appearance as imperfect but also his acceptance and unconditional affection. These types of support are complementary to Baumeister and Leary's (1995) position, in which social support is important because it involves acceptance into a social group.

Depending on the type of problem, it is to friends that persons often first turn when in need of social support (Young, Giles, and Plantz, 1982). This seemed especially true of the subjects in the current study. Albrecht *et al.* (1987) suggest that friends serve four distinctive functions: "referral, relief, reintegration, and reliance" (p. 124). Consistent with these functions, for participants in *Study 3* friends functioned in the capacity of referral, relief, and reliance (there were no reports of friends serving the reintegration function). Primary among the messages of support, reported as being received, were expressive messages of acceptance and assurance.

Perhaps the single most important construct guiding an interpretation of the results of this research is that social support is a matter of perceptions and perceptions are socially constructed through the communication persons have with others. That is, meanings do not exist objectively in the words being sent and received, but are in the perceptual processes of the individuals communicating. Thus, what is considered to

be supportive communication is construed as such only insofar as it is assigned that meaning by the receiver, regardless of the intent of the sender. Persons in need of support may receive messages of support from a variety of sources, but perceive as supportive only some messages, or perhaps none, depending upon a variety of mediating factors⁸.

Apart from expanding the quantitative results, the interviews (*Studies 2 and 3*) provided some further insight into the private world of dissatisfied and satisfied with appearance individuals. These insights are discussed below.

5.4.6. Parents

The data from *Studies 2 and 3*, suggest that parents' direct comments about child's appearance and modelling of appearance concerns through their own behaviour can impact on the child's (and especially girls') satisfaction with appearance. Past research with older children and young adults suggests that models of body image and verbal criticism from the mother are significant predictors of the daughters' body image (Baker *et al.*, 2000; Moreno and Thelen, 1993; Pike and Rodin, 1991; Smolak *et al.*, 1999; Striegel-Moore and Kearney-Cooke, 1994; Thelen and Cormier, 1995). Through socialization, children of both sexes learn girls' bodies are to be made more beautiful while boys' bodies are to be developed and strengthened (Rindskopt and Gratch, 1982; Quoted in Freedman, 1984).

The family functions in a variety of ways: as a collector and disseminator of information about the world, feedback guidance system, source of ideology, guide and mediator in problem solving, source of practical service and concrete aid, haven for rest and recuperation, reference and control group, and source and validator of identity (Caplan, 1982). While adults are freer to pick and choose those who help them construct their social worlds, children are not. Berger and Luckmann (1967) write that, "every individual is born into an objective social structure within which he encounters the significant others who are in charge of his socialization" (p. 131). Those significant others (parents) are the ones who define the world for her or him and provide the initial filters through which the objective world is apprehended (perceived or understood). However, it is ever an accident of nature who one receives as her or his parents, and thus, "the child does not internalize the world of his

⁸ Later in the Chapter the role of cognitive distortions is discussed.

significant others as one of many possible worlds...he internalizes it as the world" (Berger and Luckmann, 1967, p. 134). It is through interactions with parents that values, attitudes, and perspectives are formed and the consequences of this primary socialization are profound especially in terms of developing appearance schemata.

Consistent factors do emerge (from this and previous research on eating disorders) as significant family characteristics associated with appearance dissatisfaction: perceptions of the family's concern for weight and shape, perceptions of the family's concern for social appearances, and perceptions of the family's emphasis on achievement. One cannot claim, however, that this specific combination of characteristics is a formula for the aetiology of dissatisfaction with appearance. It may be that family dysfunction has a greater, and non-specific link to individual psychopathology, rather than to appearance dissatisfaction. In fact, recent literature suggests that the disturbed family functioning may be more closely related to depression (i.e., Thienemann and Steiner, 1993). In a recent study, Laliberte *et al.* (1999) point out that family distress creates an individual who is generally vulnerable to mental illness. The authors suggest that the specific content of what is "expressed, valued, and modelled" will be strongly associated with the specific symptoms expressed.

5.4.7. Peers

Although parents provide the primary socialization for a child and act as preeminent sources of values and attitudes, adolescence marks a point in the life of a child when "the social network changes as s/he gradually disengages from his/her family of orientation and prepares for future roles" (Dickens and Perlman, 1981, p. 104). Early adolescence then, would appear to be the beginning point of this transitional period. It is probable that friends increase in importance because they are individuals who share the conditions experienced by the children and "share a common meaning of environmental symbols" (Albrecht and Adelman, 1984, p. 7). That is, through their interactions with others like themselves, these children begin to socially construct what it means to be an individual. Consequently the effect of negative verbal commentary (teasing) about appearance can be pivotal in the development of a view of self as "defective". The importance of the peer group at this stage of life is clearly articulated by Alex, in *Study 2*: "It definitely did hurt me" when he describes his experience of being teased about his weight by his schoolmates.

5.4.8. Media

The findings of this investigation (*Studies 2 and 3*) that media influence were reported as an influence on body image is supported by prior research (cf. Kolb and Albanese, 1997; Shaw and Waller, 1995). Children watch an average of four hours of television every day. By the time they reach secondary school, they have watched approximately 15,000 hours of TV compared to the 11,000 hours they have spent in school. They have seen 350,000 advertisements, half of which are selling food. Over half of these commercials stress the importance of being thin and beautiful (Above statistics reported in Moe, 1991). Only 15 minutes of exposure to beauty advertisements causes girls to perceive that beauty is even more important to their popularity with boys (Tan, 1979).

The results of the present investigation, support conclusions reached by Wood *et al.* (1996) and Maloney, McGuire, Daniels, and Specker (1989). They believe that for females, dissatisfaction with their bodies begins before adolescence. It also appears that this is the case for men. Tiggeman and Pennington (1990) and Hill *et al.* (1992) found body dissatisfaction in 9-year-old girls, and concluded that children 'consume' adult beliefs on body image especially from visual media such as television and are susceptible to its influence of determining beliefs concerning correct and incorrect body sizes. Body dissatisfaction has been found to occur a lot in adolescents. This age group is particularly vulnerable to media effects due to physical changes such as fat and weight gain and psychological changes such as searching for identity experienced through puberty (Carruth and Goldberg, 1990), making them concerned about their bodies, wishing to be 'normal' thus turning to role models of the media (Tiggeman and Pennington, 1990). Grogan and Wainwright (1996) believe their compliance with the media is because they are still learning what it means to be a woman in society, thus are impressionable due to lack of understanding and not being able to effectively challenge cultural representations of femininity.

It has to be acknowledged that, while body image often is seen as a "psychological" phenomenon, the physical reality of appearance lays the foundation for an individual's body image. Physical appearance is a potent determinant of person perception, as it is typically among the first sources of information available to others to guide social interaction (Alley, 1988). Furthermore, one's physical appearance is malleable in response to stimuli both within (such as changes in muscle and fat mass) and beyond our control (such as physical insults and aging) (Alley, 1988). Thus, the

physical reality of appearance at any given point in time "sets the stage" for the psychological influences on body image.

5.4.9. Coping strategies

Paralleling Leventhal's (1970) comment that coping involves both management of the external setting and management of thoughts and emotions, Pruzinsky (1992) has noted that people with a disfiguring condition face two challenges: dealing with their own emotional responses to the condition, and dealing with others' behaviour. In *Study 2* of this investigation participants with appearance dissatisfaction managed similar challenges by using both behavioural and cognitive strategies.

Like previous work on disfigurement, body dysmorphic disorder, and social anxiety, the participants reported that they often used avoidance and concealment as strategies to manage the impression they made on other people (Leary and Kowalski, 1995), but there was much expressed ambivalence about their use. That these strategies were used, despite this ambivalence, illustrates the overriding concerns about social exclusion (Goffman, 1963). The effects of coping on social support are largely unexamined. Billings and Moos (1981) found that people who used avoidant coping reported having fewer social resources. The excessive self-focused attention on the negative body image leads the person to assume that others have exactly the same view of themselves and the avoidance of social situations or the use of excessive camouflage. Learning theory would predict that the avoidance of social situations is reinforcing and prevents an individual from habituating to his fear and making a more realistic appraisal of the social threat and disconfirming evidence. Checking behaviour and reassurance seeking are also reinforcing because they may provide a short-term reduction in discomfort. The "rituals" maintain the dysfunctional beliefs and selective attention in a vicious circle analogous to obsessive compulsive disorder and other phobic behaviour.

In the interviews with women and men it was found that women particularly compared their bodies explicitly with those of other women (models, friends, family members) in their accounts, and (often) found their bodies wanting, leading to lowered body satisfaction. Social comparison theory (Festinger, 1954) would predict that women would have lower self-esteem if they compare themselves to images in the media, and see themselves as falling short. Research has supported this

hypothesis, indicating that women do feel guiltier, anxious, and depressed after viewing thin-build models (Cusumano and Thompson, 1997; Grogan *et al.*, 1996; Kalodner, 1997; Stice and Shaw, 1994). Brownmiller (1984) and Wolf (1991) emphasise how women, in this constant strive for attaining their ideal, look to other women such as friends, family, and the public for self-monitoring and see it as a form of competition as well as a check for normality.

Results from this study also substantiate Pipher's (1994, 1995) contentions that children and adolescents must learn to value and evaluate themselves from a multidimensional perspective, rather than by their physical appearance alone.

5.4.10. Perfectionism

Based on the results of *Study 2*, it is proposed that women and men who are goal directed, for whom many, rather than few, roles (the "superwoman") are important for their sense of self-worth and who set high personal standards are also more likely to be dissatisfied with their appearance. Previous research has also indicated that high perfectionism is a central feature of many psychological disturbances, including depression and eating-related disorders (Shafran and Mansell, 2001; Bastiani, Rao, Weltzin, and Kaye, 1995; Blatt, 1995; Slade, 1982). These findings mesh with evidence that perfectionism correlates positively with weight preoccupation and body dissatisfaction among young women in the general population (Hewitt, Flett, and Ediger, 1995; Minarik and Ahrens, 1996). As a general principle, neurotically perfectionistic individuals will tend to set themselves excessively high, and often unattainable, standards in whatever goals help them to achieve and to continue validating their self-esteem. This will be no less true where physical beauty is the main source of self-regard.

5.5. A model for the development of appearance dissatisfaction

Below, a biopsychosocial model⁹ is presented of the multiple factors, as identified by the present investigation that prevent or promote dissatisfaction with appearance. The current investigation suggests that a number of variables at the level of individual, family, and societal level are important for the development (or non

⁹ It refers to a higher-order theory, a representational system at a higher level of abstraction that can inform and be informed by alternative theories (close to the framework or worldview) that helps guide researchers and has been identified as a "paradigm" by Thomas Kuhn (1962).

development) of appearance dissatisfaction. Borrowing from several reviews of the psychology of body image (e.g., Cash and Pruzinsky, 1990, 2002; Thompson, 1990, 1996), the model considers both physical and psychological influences.

Dissatisfaction with appearance is generally viewed as a multi-determined syndrome with a variety of interacting factors, biological, psychological, familial and socio-cultural. It is important to recognize that each factor plays a role in predisposing, precipitating, or maintaining the problem¹⁰. Specifically, in common with other cognitive behavioural theories, it is proposed that the core schemata in individuals regarding appearance develop through a mixture of biological predispositions (such as physical attributes), personality attributes, and early childhood experiences. Early childhood experiences might include three core sources of influence: peers, parents, and media, which lead to social comparisons regarding appearance and internalisation of societal values (internalisation is also affected indirectly by social comparison). A critical event or series of events such as comments or teasing by others (precipitating factors) during late childhood or adolescence might activate the schema resulting in appearance dissatisfaction.

This model also suggests that beliefs about one's body (weight, size, shape, function, capacities, and appearance) are invariably related to an individual's global self-esteem including the feelings, concerns, and values we hold about ourselves. Moreover, individuals with high social support and low in emotional distress are less vulnerable to factors that produce an awareness of appearance pressures and thus are more likely to engage in social comparison and internalization, leading to body dissatisfaction (protective factors). Body dissatisfaction, has a reciprocal relationship with dysfunctional cognitive and behavioural coping strategies (maintaining factors).

Dysfunctional appearance schemata and subsequently appearance related concern affect information processing, perception, and attention. Body image appears to act like a form of self-representation. Personal and physical appearance values can become intertwined. Clearly, the presence of a body image concern is associated with interpretive biases for social information. General social situations are interpreted as appearance-related, and appearance-related situations are interpreted more negatively.

¹⁰ A distinction can be made between *predisposing (risk) factors* that predispose individuals to develop appearance dissatisfaction, *precipitating factors* which trigger the onset or marked exacerbation of appearance dissatisfaction and related psychological distress, *maintaining factors* which perpetuate appearance dissatisfaction once has been developed, and *protective factors* which prevent further deterioration and have implications for "prognosis" and "response to treatment".

These biases are likely to be self-reinforcing: The more individuals make negative appearance interpretations, the more likely they are to continue to view the world in those terms. The same may be said of many of the self-related cognitive processes: The more one refers to oneself as fat or ugly, the more likely the thought will come to mind. Not only are individual cognitive distortions self-reinforcing, but they also reinforce each other, and block the formation of healthier thinking processes. The model suggests that once the dysfunctional schemata have been developed, a person selectively attends to the perceived defect and develops a heightened sensitivity to appearance.

These individuals compare their perceived body image with an impossible ideal of perfection (media, social pressure) which they demand. The large discrepancy between the perceived body image and the unrealistic goal is associated with emotional distress. Furthermore, the meaning of this discrepancy becomes distorted out of proportion to its importance and reinforced by assumptions about the importance of appearance. In common with other emotional disorders, people tend to ignore or distort information that does not fit in with their beliefs (Padesky, 1994).

Selective attention is an important factor in the maintenance of several emotional disorders (Wells and Matthews, 1994). There is some similarity in what dissatisfied individuals say with the model of social phobia in which there is an excessive self-focused attention (Clark and Wells, 1995). When social phobics think they are in danger of negative evaluation by others, they shift attention to detailed monitoring and observation of themselves. They appear to use the information produced by self-focus to construct a belief or image, which they then assume other people hold about them. Instead of being involved in the external world and attending to other people or what they are saying, the social phobic turns inwards for information about himself and assumes that others are evaluating him in the same way. This is described by various thinking errors, namely "emotional reasoning" ("because I *feel* ugly, it is fact that I am ugly) and "mind reading" (assuming that others think the same way without the evidence). Within a cognitive-behavioural framework, Young (1999) has suggested that behavioural avoidance (engaging in escape behaviors) has the short-term benefit of reducing the likelihood that core beliefs will be triggered, thus reducing the high levels of aversive emotion associated with that belief. However, such avoidance maintains those core beliefs in the long term because they are never challenged (Young, 1999).

Predisposing Factors

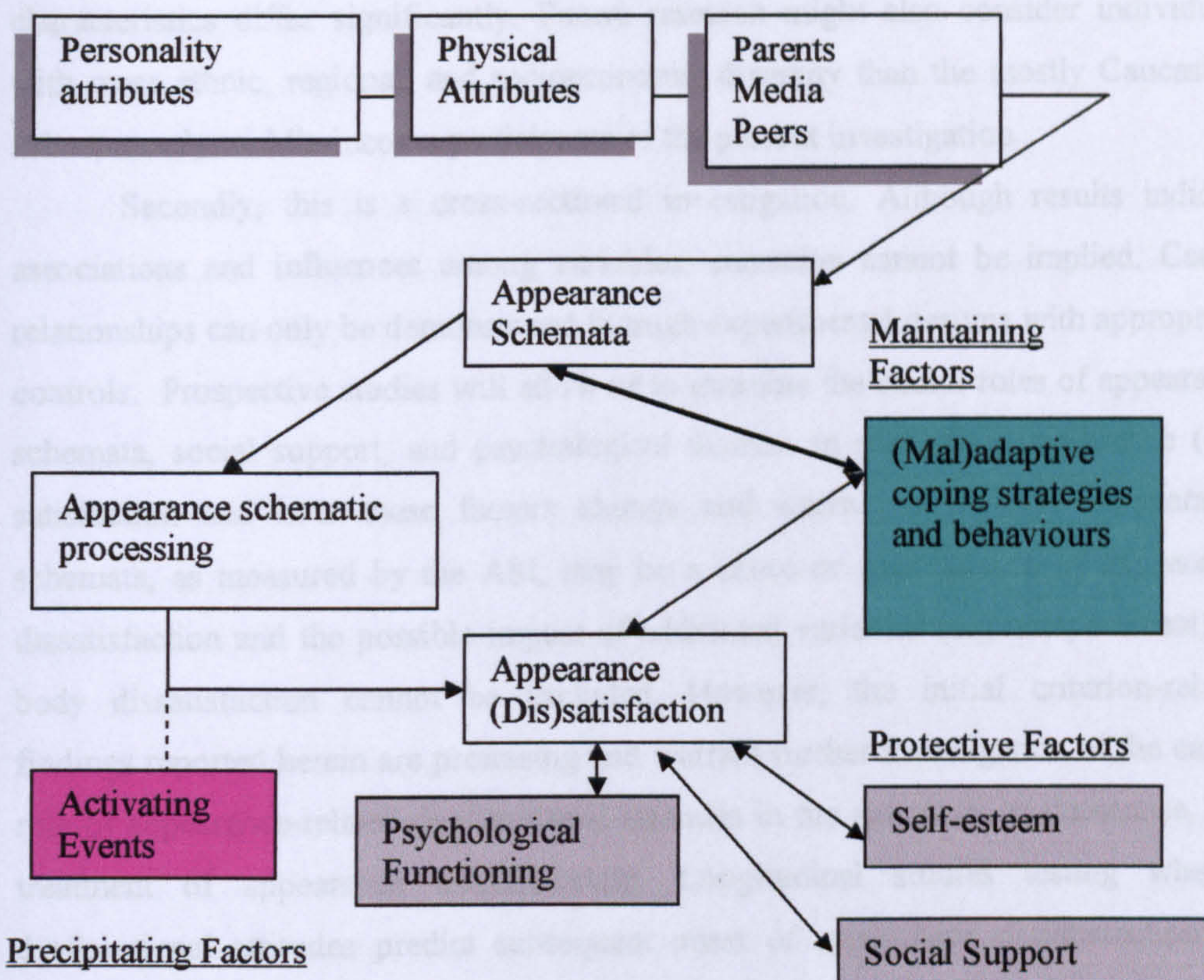


Figure 5.1. A model of the development and maintenance of appearance dissatisfaction.

Any model of appearance (dis)satisfaction needs to be integrated with other body image disorders to account for the continuum of body image dissatisfaction why, for example, one individual may be emotionally well adjusted to severe burns, whilst another patient with a small hump on his nose is emotionally disturbed and can psychologically benefit from cosmetic surgery. This model appears to account well for the concept of a continuum of body image dissatisfaction but is clearly in need of further empirical testing and refinement.

5.6. Limitations of the present investigation

Despite a number of strengths in the present investigation, a number of limitations should also be noted. First, the use of a sample of convenience may have resulted in bias. Furthermore, those who took the time to complete the survey may have been a nonrepresentative sample of individuals who either have some or no concerns about their appearance. Because of these issues, the results of this

investigation may not generalize to the population in general and caution should be employed in generalizing these results to samples in which demographic characteristics differ significantly. Future research might also consider individuals with more ethnic, regional, and socioeconomic diversity than the mostly Caucasian, urban, mostly middle-income participants of the present investigation.

Secondly, this is a cross-sectional investigation. Although results indicate associations and influences among variables, causation cannot be implied. Causal relationships can only be demonstrated through experimental designs with appropriate controls. Prospective studies will allow us to examine the causal roles of appearance schemata, social support, and psychological distress in predicting appearance (dis)satisfaction and how these factors change and interact over time. Appearance schemata, as measured by the ASI, may be a cause or consequence of appearance dissatisfaction and the possible impact of additional variables (e.g. temperament) on body dissatisfaction cannot be excluded. However, the initial criterion-related findings reported herein are promising and warrant further investigation of the causal role of appearance-related dysfunctional attitudes in the aetiology, maintenance, and treatment of appearance dissatisfaction. Longitudinal studies testing whether dysfunctional attitudes predict subsequent onset of appearance dissatisfaction are needed, as are studies which examine the role of dysfunctional attitude change in recovery from appearance dissatisfaction.

Furthermore, the study used to assess its central construct of appearance schemata the ASI, an instrument that had not previously been widely applied in studies and that does not have well-established community norms. It was vulnerable to *extremity bias* (the tendency to pick the end points of a response scale). This may have restricted the range in assessing schemata severity and thus inflated its contribution to variance in body dissatisfaction.

Finally, perhaps the main limitation of this study involves the use of self-report; this is particularly relevant to the findings from the qualitative part of the investigation. There is a blurring of the distinction between assessing the phenomenology (or experience of the participants) and demonstrating relationships about variables in the world. For example, in this study on possible factors that influence individuals and lead to appearance dissatisfaction, participants identified factors that contributed to their current satisfaction/dissatisfaction with their appearance. The detailed interviews were quite informative, yield a provocative

insight to the phenomenon, as already noted, and convey how individuals perceived or experienced the onset, development, and maintenance of appearance (dis)satisfaction. Yet, self-report has inherent limitations whether in a qualitative or quantitative domain. It could be argued that people are not necessarily in a position to comment on what changed their lives to move in one direction or another, by the virtue of human limitations (cognitive heuristics, implicit attitudes, impact of learning experiences at different stages, temperamental influences). Yet, when seeking the actual thoughts and feelings of an individual, direct information can only be given by the individual.

5.7. Suggestions for future research

Understanding the aetiology of appearance dissatisfaction is a complicated issue, as teasing apart cause and consequence can be extremely difficult. Identifying a pattern of specific risk and protective factors would be an extremely useful tool in recognizing those vulnerable for developing appearance dissatisfaction and also helping the ones who have already developed it. While research has been unable to paint an entirely complete picture of characteristics, certain traits surface as typical to the appearance dissatisfied individuals. Unfortunately, much of the existing literature relies upon correlational data, as longitudinal controlled studies are difficult to conduct in this context. Nevertheless, it would be useful to examine any significant factors from a developmental, longitudinal perspective.

In addition, most of the available measures of body image focus on weight concerns for women and muscularity for men, so future research should consider other dimensions of body concept such as concerns about body proportions, skin, hair, and body performance (Allison, 1995; Falconer and Neville, 2000; Stein, Bracken, Haddock, and Shadish, 1998; Thompson, Altabe, Johnson, and Stormer, 1994).

How individuals feel and think about their bodies and its parts together with their resulting satisfaction varies depending on the situation. Hence, the usually assumed dispositional nature of the construct of body image needs to be questioned. Consequently, researchers need to explicitly acknowledge that body esteem scores are liable to reflect to some extent the situation in which they are collected. Haimovitz *et al.* (1993) suggest that body esteem most likely has both stable and dynamic components. As such, body image falls into the conceptualization of other personality variables that have for a long time acknowledged the interactionist paradigm (Carver and Scheier, 1996). In this regard, the conceptualization and measurement of body

image have seriously lagged behind other personality research, notwithstanding Pruzinsky and Cash's (1990) earlier urging.

It would be helpful to know more about why people choose particular coping skills over others, the situations in which they are chosen, and the advantages and disadvantages of each. Future work could also be directed at understanding how premorbid personality characteristics, such as shyness and social anxiety might interact within the development of appearance dissatisfaction. The current results suggest that being satisfied with appearance, with lower levels of anxiety and depressed mood involves an acceptance of difference and the use of particular cognitive strategies, hypotheses which are open to testing through quantitative research. In all these ways, future studies could contribute to the alleviation of the high levels of distress reported by people with appearance dissatisfaction.

Lastly, given the rapidly increasing scientific interest in body image among men, and growing attention to the subject in the popular media (Hall, 1999), further studies in this area would be particularly welcome. The first-generation studies like the present one, have established that body image problems in men are common. These body image problems are often associated with impaired self-concept and self-esteem and frequently focus on bigness and muscularity rather than thinness. Second-generation studies are needed to dissect more carefully the indices of fat, muscularity and other body attributes and to assess more systematically men's level of associated pathology.

5.8. Conclusion

Research and clinical work in the area of appearance dissatisfaction is now proceeding at a phenomenal pace. Once located firmly within the domain of the field of eating disorders, body image has clearly transcended those narrow borders. Currently research into the perceptual and subjective components of physical appearance-related body image disturbance includes basic as well as applied investigations. A number of populations are being vigorously studied, including non-clinical adults and adolescents, athletes, obese individuals, and eating-disordered populations, and people with congenital or acquired disfigurement. This investigation is an important contribution to this effort to understand the development and maintenance of appearance (dis)satisfaction in the normal population. It has identified certain factors that may affect why some individuals more than others attach great

importance to their appearance and engage in behaviours to enhance their physical selves. It also argues for a more positive attitude towards people whose concerns about appearance appear to be 'out of proportion' or not justified by adequate visible cause.

Chapter 6

Implications for practice

6.1. Introduction

Based on the findings of the present investigation and previous studies, recommendations are made in this Chapter for professional practice, both research and clinical. First, a discussion of the importance of mixed model methodologies in appearance research and psychological science in general is presented. This is followed by some reflections on the significance of Interpretative Phenomenological Analysis (IPA) for health psychology and how this method can form a bridge between social cognition and discourse analysis. Finally, the last section discusses how the results of this investigation can inform prevention and treatment programmes of appearance dissatisfaction. These findings have important implications as they may assist in preventing body dissatisfaction in future generations from rising to the high incidence which is found in men and women of the 1990s and also for developing treatment interventions that enhance positive body image in individuals who are already dissatisfied with their appearance.

6.2.1. Implications of the present investigation for research methodology

6.2.1. Mixed model studies: A diversity of imperfection

As noted in Chapter 2, mixed model studies may be of two general types: those that have single applications of quantitative and qualitative approaches, or those that have multiple applications of approaches, across all phases of the research process. The present investigation adopted a mixed model design:

- It mixed both research hypotheses (indicating a confirmatory study) and very general research questions (indicating an exploratory study) when planning the research project¹.
- When conducting the study, both quantitative (questionnaires) and qualitative (semi-structured interviews) data were collected².
- The analysis and interpretation of qualitative and quantitative data sources was combined in an iterative fashion designed to expand the meaning of the numerical results using the narrative results³.

¹ See Chapter 1, pp.22, 23.

² See Chapters 3 and 4.

Consequently, this study extends the philosophical and methodological "bridges" that are under construction between the qualitative and quantitative research traditions and demonstrates that mixing these approaches to research is not only possible but also quite beneficial in the study of appearance (dis)satisfaction and possibly in other research areas in psychology. To mix only methods is too limiting. Careful reading of much of the recent literature in the social and behavioural sciences indicates that researchers are already mixing paradigms across several stages of their studies, even if there is no well-developed taxonomy for the types of designs that they are using. A taxonomy of mixed models is needed, due to the conceptual confusion that currently characterizes much of the literature in the area.

One of the points emphasized here is the preeminence of the *research question* over considerations of either method or paradigm. The question determines the design of the study, the data collection approach, and so on. The best method is the one that answers the research question(s) most efficiently, and with foremost inference quality. Mixed models are often more efficient in answering research questions than either the qualitative or the quantitative approach alone. One of the conclusions of this investigation is that the paradigm of pragmatism can be employed as the philosophical underpinning for using mixed models, especially with regard to issues of epistemology, axiology, and ontology.

Mixing the quantitative and qualitative approaches throughout several phases of an investigation more accurately reflects the research cycle, which involves switching iteratively between deductive and inductive reasoning (Creswell, 1995). For example, in this investigation the quantitative part (*Study 1*) tested hypotheses derived from the cognitive theory of appearance and previous studies in the areas of body image and disfigurement. The qualitative part (*Studies 2, 3*), was designed to describe, interpret, and understand individual experiences with appearance (very negative and very positive) and to elaborate the meaning that this experience has to the participants. It also aimed to identify areas of inquiry that will be explored at a later stage with further quantitative studies.

³ See Chapter 5.

Mixed model methodology can make a special contribution to appearance research and to dominant research methods in general. First, the qualitative part makes a *unique contribution to knowledge and understanding* by elaborating the nature of experience and its meaning. The information and level of analysis does not replace or compete with that yield from the quantitative part. The information from quantitative studies, however important, omits the richness of individual experience and what it is like, for example, to be (dis)satisfied with one's appearance. Also, the quantitative research tradition by necessity has to omit many variables to study in more depth some. The qualitative approach emphasizes many variables in their multiplicity and context and brings to bear another level of analysis by elaboration and consideration of the details.

Second, the qualitative part can elaborate possible causal relations and paths over the course of development. Quantitative approaches have made enormous gains in identifying multiple factors and their contribution to a particular outcome. The findings are valid at the level of group analyses. It is important to know the general variables that are likely to yield a particular outcome, but also to view these in the contexts in which they may or may not operate. The possible causal sequence and path leading to an outcome for *individuals* is not really addressed in quantitative research. Literature can provide intriguing accounts and generate many hypotheses about the individual, but a more systematic approach to elaborating the richness of individual experience is needed. Qualitative analyses provide a systematic way of looking at potential causal paths, unfolding of events, and dynamic and reciprocal influences of events for individuals (Miles and Huberman, 1994).

Finally, the qualitative part can contribute directly to quantitative research. Much of qualitative research is discovery oriented; by detailing human action and experience in ways that can generate theory and hypotheses. Knowing a phenomenon in-depth permits one to generate hypotheses about what the key constructs are for understanding that phenomenon and what the likely causal paths and influences are. Becoming deeply involved with the subject matter without restricting oneself to a very small set of constructs as measured in a narrow way is an excellent strategy for beginning quantitative research.

6.2.2. IPA: A bridge between social cognition and discourse analysis

It is possible to look to interpretative phenomenological analysis as a mediator between the opposed positions of social cognition and discourse analysis^{4,5}. Thus, an investigation such as the present one employing IPA along with questionnaires derived from the sociocognitive tradition might well enrich the literature of an area such as appearance dissatisfaction previously only or primarily studied quantitatively. While underpinned by different theoretical traditions and employing different research methods, the emphasis on cognition facilitates a convergence between qualitative IPA studies like *Studies 2* and *3* of the present investigation and social cognition work such as *Study 1*. The two styles of work do place differing emphasis on the understanding of specific historical or ethnographic cases as opposed to general laws of social interaction. But the two styles also imply one another. Every analysis of a case rests, explicitly or implicitly, on some general laws, and every general law supposes that the investigation of particular cases would show that law at work. Thus, for example, while societal accounts may provide valid explanations for the distribution, and extent and nature of appearance dissatisfaction (e.g., sociocultural theories), the individual still provides an exemplary unit for determining the process and mechanism for the actual discontent (schema theory). At the same time, the interpretative phenomenological approach's recognition of the importance of context and language in helping to shape participants' responses means that IPA can also engage in a meaningful dialogue with discourse analysis.

It is suggested, therefore, that a social-cognitive model of appearance can be strengthened by looking in detail at how individuals talk about their appearance, and how they cope with it, and by close consideration of the meanings they attach to it. Such work should enable us to gain a much richer picture of what appearance dissatisfaction actually means and how it develops and its potency as a construct will thereby be enhanced.

It should be made clear that IPA recognizes that a gap exists between an object and the individual's perception of it, and is interested in elucidating the nature of that gap. Similarly, IPA recognizes the degree of interpretative work required to address the

⁴ Both approaches have been described in detail in Chapter 2.

⁵ See Smith (1995) for an in depth discussion of possible links between phenomenological and discursively oriented approaches.

corresponding gap between personal account and underlying cognitions (Smith et al., 1999). Overall, it is believed that IPA research has the potential to supplement, expand and greatly enrich the existing corpus of research in health psychology in general and appearance (dis)satisfaction in particular.

6.3.1. Implications of the present investigation for clinical practice

6.3.1. Prevention of appearance dissatisfaction

The beginning of the twenty first century is undoubtedly a time of increased concern with appearance. Scientific developments in fields such as plastic surgery, dieting and pharmacology (e.g., anabolic steroids) have given people in Western culture, at least, the potential to change the ways their body and face look. The representation of a narrow range of body shapes in the mass media leaves the viewer in no doubt as to how they are expected to look. The cultural homogeneity of the ideal body shape and size for men and women, added to the fact that people now feel that they have the power to change their bodies, leads to social comparison, body dissatisfaction, lowered self-esteem, perceptions of lack of control, and guilt in many people. A reduction in the objectification of the body, a shift in body aesthetics to encompass a variety of body shapes and sizes (in the long term and at the societal level), and social support for alternative body types to the prevailing aesthetic (in the short term and at the individual level) would prove useful in the prevention of appearance (dis)satisfaction and more serious disorders associated with it.

People most at risk for body dissatisfaction are those who belong to identified at-risk groups (white young women, and increasingly men), who have low self-esteem, strong appearance schemata, limited perceived social support, and who have been brought up in families that place emphasis on appearance and achievement. Cultural representations of the slender, beautiful ideal (slender and muscular for men) may lead those individuals to unfavourable social comparisons, and may result in dissatisfaction. Moreover, interview work (*Study 3*) suggests that individuals who are satisfied with their appearance in particular, are cynical about media portrayal of the 'ideal body' and want to see more realistic images in the media.

Based on what we do know about men's and women's body image, we can conclude that the way forward in terms of developing positive body images must be a reduction in the objectification of the body (both male and female) and the development of body ideals based on function as well as aesthetics. In particular, the cultural acceptance of the wide variety of body shapes and sizes that represent the normal range, and the de-stigmatization of overweight and "ugly", may help to reduce dissatisfaction. Cultural factors are hugely important in determining people's experience of their bodies, and current evidence from cultural groups that do not stigmatize obesity, for example, suggests that acceptance of diversity may be expected to lead to a reduction in body dissatisfaction (Bartky, 1990; Wolf, 1991).

At an individual level, it is suggested that programmes be implemented which teach individuals at risk to have a more realistic view of the media and of the people presented. Many authors have suggested incorporating techniques into prevention programs which teach females to distinguish between the images presented in magazines and on television, and the actual size of a biologically normal and healthy "real" woman (Murray, Touyz, and Beumont, 1996; Stice and Shaw, 1994).

Much criticism has been afforded to the media regarding the notion that the media's continual use of slender, angular-shaped women has promoted in society a thin ideal body standard for women (Anderson and DiDomenico, 1992; Tiggemann and Pickering, 1996). As yet, however, this portrayal of women has not been conclusively linked to the increase in eating disturbances in the general population. Although it is necessary to determine if this link does in fact exist, it is perhaps more important, at the present time, especially keeping prevention strategies in mind, to determine the role the media play in the maintenance of body dissatisfaction and in the transition from body dissatisfaction to dieting disorders. Drawing on the results of the present investigation, it is proposed that the media are not necessarily entirely to "blame" for the maintenance of body dissatisfaction. Rather, it appears to be each individual's own perception of the media (appearance schematic processing), and the images they present, which causes different women to be affected differently by similar amounts of media exposure. The media may contribute to body dissatisfaction initially. It is proposed, however, that once

this dissatisfaction develops, it is the distorted view of the media that serves to maintain it, rather than the mere exposure to thin media images.

Although there have been significant advances in our understanding of the risk factors for eating pathology in recent years (Killen *et al.*, 1996; Leon, Fulkerson, Perry, and Early-Zald, 1995; Stice and Agras, 1998), prevention efforts have met with little success (Striegel-Moore and Steiner-Adair, 1998). There have only been a few controlled evaluations of eating disorder prevention programs and no such programmes have been developed and evaluated for the prevention of appearance dissatisfaction. These types of programmes are important, given the prevalence of appearance dissatisfaction in the general population and the significance of such dissatisfaction in the development and maintenance of serious psychopathological conditions such as eating disorders and body dysmorphic disorder (Killen *et al.*, 1994; Patton, 1988; Stice and Agras, 1998; Stice, Killen, Hayward, and Taylor, 1998; Rosen, Cado, Silberg, Srebnik, and Wendt, 1990).

Preventive interventions for eating disorders have typically provided psychoeducational information about the symptoms of eating disorders, the consequences of these behaviours, the suspected risk factors for eating pathology, and healthy weight control techniques. Some interventions have also taught participants sociocultural pressure resistance skills. Unfortunately, most of these interventions resulted in no positive effects (Carter, Stewart, Dunn, and Fairburn, 1997; Mann *et al.*, 1997; Paxton, 1993) or only increased knowledge about eating pathology (Killen *et al.*, 1993; Smolak, Levine, and Schermer, 1998; Shisslak, Crago, and Neal, 1990).

Based on the lack of intervention effects of these programmes and the findings of the present investigation, a number of recommendations can be made for the development of appearance dissatisfaction prevention programmes. First, because the central component of existing interventions was psychoeducational information about eating disorders, it would appear that information alone does not impact eating pathology or risk factors for eating disturbances. This conclusion is consonant with the findings from the early substance abuse prevention literature, which also found minimal effects for psychoeducational interventions on behaviour change (Moskowitz, 1989). This suggests that it might be fruitful to develop a different type of intervention that departs

from psychoeducational approaches and actively identifies and challenges appearance schemata⁶.

Interventions to date are all universal (primary), rather than targeted (secondary), in nature. Prevention programs for other psychopathology suggest that maximal prevention effects occur for people who are at heightened risk for the problem (Short, Roosa, Sandler, and Ayers, 1995; Wolchik, West, Westover, and Sandler, 1993). It has been suggested that an intervention's effectiveness may be limited when the participant's experience forms no basis on which to relate to the curriculum (Maggs, Schulenberg, and Hurrelmann, 1996). Thus, as suggested by Killen *et al.* (1993), the effects of appearance dissatisfaction prevention programmes might be good if a targeted, rather than a universal, focus is adopted. This is feasible because studies such as the present have identified groups-at-risk for the development of body dissatisfaction.

Third, most previous interventions have explicitly discussed eating-disordered behaviours. It is possible that interventions produced negative findings because some of the participants with extreme body dissatisfaction may have learned maladaptive weight regulation techniques from the interventions. Such iatrogenic effects may mitigate against intervention effects and might explain the adverse effects of some of the programs (Mann *et al.*, 1997). Accordingly, it may be beneficial to use a covert approach to appearance dissatisfaction prevention, wherein information on unhealthy weight control tactics or attempts to alter appearance are not explicitly presented but instead functional and adaptive coping strategies are taught. Finally, the efficacy of a prevention effort might be further enhanced by a strong theoretical grounding in an articulated aetiologic model. Towards this end, this investigation has further developed and evaluated a cognitive model of appearance dissatisfaction.

It might be useful to test this targeted prevention programme on a large scale. Ideally, such a study would involve adolescent females and follow them for a long period of time, in an effort to assess whether this programme prevents the escalations in appearance dissatisfaction normally seen during this period. Experimental prevention

⁶ Techniques for the identification and challenge of appearance schemata are described in the following section.

trials that reduce putative risk factors for appearance dissatisfaction may be also be useful in advancing our understanding of aetiologic processes that give rise to such a discontent.

6.3.2. Psychological interventions for improving appearance satisfaction

The results of the present investigation and previous studies confirm the widespread preoccupation and discontent with appearance of young adults, men and women. This dissatisfaction is associated with considerable psychological distress, low self-esteem, and diminished social support. Moreover, dissatisfaction with one's body can be used as a diagnostic criterion for eating disorders, and negative body image assessment and treatment could be a key factor to the successful and permanent treatment of eating disordered patients (Rosen, 1995).

Since appearance (dis)satisfaction involves an "irrational" belief or conviction of an inferior appearance associated with considerable obsessiveness and anxiety, cognitive-behavioural psychotherapy may be beneficial. The false belief and obsession may respond to cognitive therapy. Aberrant social interaction and coexisting anxiety may respond to behavioural interventions. Indeed, cognitive behaviour therapy for body image has been proven an effective way to improve body dissatisfaction. It has been applied with positive results to persons with eating disorders, obesity, body dysmorphic disorder, and normal weight, all of whom have negative feelings toward their bodies (Grant and Cash, 1995; Rosen, Saltzberg and Srebnik, 1989). One of the most common and best empirically validated treatment strategies is the manual-based cognitive-behavioural intervention developed by Cash (1997). An essential aspect of this treatment is the identification and successful challenging of cognitive errors of appearance.

Therapeutically, the findings of this investigation illustrate that formal interventions such as social skills training for disfigured individuals (Robinson *et al.*, 1996) and cognitive-behavioural therapy (Grant and Cash, 1995) can mirror the kinds of help informally gathered from social networks or strategies spontaneously used by individuals who are satisfied with their appearance. The social skills approach increases the repertoire of possible behavioural coping strategies to include self-disclosure and the verbal skills needed to deal with stigmatization. Cognitive-behavioural interventions combine these with challenges to unhelpful and debilitating self-statements. The

participants in *Study 3*, of this investigation, described how their friends and families were providing similar types of help and how themselves were actively challenging societal ideals of appearance.

Extrapolating from the results of the present investigation and previous studies some recommendations are made about the possible aims and structure of appearance dissatisfaction treatment programmes. The aim of therapeutic programmes for individuals with appearance dissatisfaction is improvement on all four dimensions (perception, cognition, behaviour, affect) of body image. More specifically the following areas should be targeted:

- Appearance-schematicity,
- Negative thoughts about body image,
- Cognitive errors in evaluating appearance,
- Dysfunctional behavioural strategies employed,
- Psychological distress about being “ugly”.

This body image therapy should also enhance self-esteem, decrease social anxiety, and increase social support.

Every cognitive oriented treatment programme starts by teaching the patients the fundamental concepts of cognitive therapy (A-B-C's of Cognitive Therapy) and the cognitive theory of the development of appearance dissatisfaction (figures such as Fig. 5.2 can be used):

A. Activating Event. Something that seems to cause the feeling the individual is experiencing. It could be a comment from someone; a disappointing interaction with someone; a TV film; a random unexpected event, or a disaster.

B. The individual's belief about the event. This is what the person says to himself or herself about the event. Often, it is this belief that is really what produces the troubling feeling. “I'm ugly. No one wants to be with me”.

C. The emotional and/or behavioural consequences of the belief. If I really believe I am ugly, how will the person feel about himself or herself? How will they act around others?

Following the familiarization of the individuals with the cognitive model comes assessment. The assessment strategies developed thus far, such as the Appearance Schemas Inventory are able to assess typical cognitive distortions, social interpretive biases, and body image self-concept. In addition, a tool such as the ASI may be useful for monitoring the progress in treatment.

Two techniques commonly used to help identify irrational beliefs are the downward arrow technique and the use of thought records to find common themes. The downward arrow technique consists of challenging statements people make about what they think is causing their negative mood states by repeatedly asking the question, "If that were true, what would it mean to you? Why would it be so upsetting?" Thought records are a common form of homework given to people in cognitive behavioural therapy that requires they record their automatic thoughts associated with problem situations (e.g., social avoidances or fears) during the week.

These irrational beliefs are all based on flawed logic and have the potential to be highly maladaptive for the person who holds them. One of the typical maladaptive consequences of these irrational beliefs is a negative mood state such as anxiety, depression or anger. Other maladaptive consequences are the fact that these beliefs often interfere with a person's ability to solve problems and may lead to behaviours such as avoidance, which in turn create further difficulties and perpetuate the problem.

Anne Kearney-Cooke (in DeAngelis, 1997) believes that clients should identify times when they feel out of control (through writing a body image log), so that this can be used to identify environmental triggers leading to lowered self-efficacy and body dissatisfaction. She believes that many people use the body as a screen upon which they project their feelings of ineffectiveness. She argues that, when people find ways of dealing with the situations or other people that make them feel ineffective in a direct way, the feelings of body dissatisfaction become less extreme. Cash (in DeAngelis, 1997) uses a similar technique, encouraging perceptions of control, and using relaxation techniques and exercise to make people feel better about their bodies. He suggests that the "high" produced by exercise makes it easy to persuade clients to take up exercise and maintain an exercise regime that focuses on how the body feels rather than how the body works.

Subsequently, traditional cognitive therapy techniques, such as challenging the beliefs and testing the assumptions, can be brought to bear. Cognitive restructuring can help to build new connections between self-values and physical appearance beliefs. Very often clients have self-schemas that are dominated by physical appearance traits. The therapist may notice that the client with appearance dissatisfaction has a view of the self that is dominated by physical appearance traits and, in turn, associates body image ideals with "good" person values. In the social realm, the person discounts positive social feedback. The wider goal of cognitive restructuring is to develop alternative beliefs that include accepting that beauty is subjective and that human beings are far too complex to evaluate on the sole basis of a defect (perceived or real) in their appearance.

In some cases, it can be counterproductive to challenge directly the patient's subjective judgement of aesthetics about appearance. Such judgements may not be amenable to challenge by empiricism or logic and are likely to be based upon emotional reasoning. In this respect, cognitive therapy of appearance dissatisfaction may resemble that of obsessive compulsive disorder in challenging not the obsessions themselves but the meaning of them (Salkovskis, 1985; Van Oppen and Arntz, 1994). This will include work on assumptions such that individuals have to be perfect in appearance or that if they are ugly, they are worthless or unlovable.

The process of attitude change may be assisted by:

1. Collecting positive and neutral information about patients' assumptions that is normally discounted or distorted to build more realistic assumptions about body image (Padesky, 1994).
2. Encouraging the use of a continuum to rate patients' ugliness or defectiveness so that they appear like most people in the middle of a continuum. For example "Quasimodo" may be at one extreme of their continuum and a popular beauty model at the other extreme.
3. Reversed role-play as described by Newell and Shrubb (1994) and Cromarty and Marks (1995) in which the patient argues the case for alternative beliefs such as beauty being subjective.

4. The therapist plays "Devil's advocate" by arguing the case for the patient's previous beliefs. The strategy is sometimes used in cognitive therapy for personality disorders-but usually later in therapy to consolidate alternative beliefs (Padesky, 1994).

5. The experimental technique in which the patient does an experiment to test the validity of a negative thought. For example, if a woman believes that her friends do not love her because she is ugly, she could test this belief by explicitly asking them or by observing their behaviour towards her.

6. The survey method. The patient does a survey to find out if his or her thoughts and attitudes are realistic. A man who believes that he is the only person worrying about various aspects of his appearance can ask some of his well adjusted close friends if they have similar doubts sometimes.

7. Re-Attribution. Instead of blaming themselves entirely for problems that are beyond their control, patients identify all the factors that contributed to the problems.

8. The Socratic method. The therapist asks a series of questions that lead the patient to the inconsistency of the negative belief.

9. The Semantic method. The patient substitutes language that is less emotionally loaded. This is especially helpful for "should statements" and "labeling." Instead of labeling himself as "an ugly witch" the patient could think, "I am not the prettiest woman on earth but is there something I can learn from this?"

10. The Acceptance Paradox. Instead of defending themselves against their own self-criticisms, patients find truth in these criticisms and accept them with a sense of peacefulness or humor.

11. Straightforward Cost-Benefit Analysis. The patient is asked to list the advantages and disadvantages of a negative feeling (such as anger or anxiety), a negative thought (such as "I'm inferior"), a self-defeating belief (such as "I must be perfect all the time") or a self-defeating behavior (such as avoiding situations). The patient weighs the advantages against the disadvantages on a 100-point basis (for example, 50 -50, 60 - 40, etc.).

In common with other disorders, cognitive restructuring is most likely to be effective when there is some emotional arousal (but not too high or the individual is unlikely to be able to develop a case for an alternative belief). Patients may therefore

need to practice developing alternative beliefs when confronting themselves in the mirror, being stared at close-up by their therapist or in social situations that usually make them self-conscious.

Behavioural techniques that can be used are daily exposure and response prevention. Daily exposure might involve entering social situations without the use of camouflage or a means of hiding their perceived defect and this can be combined with a relaxation technique. Response prevention strategies include not questioning others about the perceived defect and training the relatives not to respond to requests for reassurance. If the person were checking the defect in reflective surfaces, then they would be encouraged to resist.

Finally, work on self-esteem and self-efficacy suggests that low self-esteem and low perceptions of personal control may be related to body dissatisfaction. Raising self-esteem and self-efficacy through assertiveness training may help to improve body satisfaction. For women, information about social pressures to achieve an unrealistically slender body shape may help to improve body image. Huon's (1994) work suggests that merely engaging in discussion of strategies for developing a more positive body image (taking up sport, identifying goals, learning to value individuality) may be sufficient to improve body satisfaction, so long as participants feel that the issues they are discussing are within their control. Other work has suggested that training in self-efficacy (perceived competence) in relation to body image may improve perceptions of control along with self-esteem, and reduce body dissatisfaction (Lewis *et al.*, 1992). In order to improve perceived self-efficacy, group discussions (and the resulting social support) may be necessary.

References

Abell S.C., and Richards M.N. (1996). The relationship between body shape satisfaction and self-esteem: An investigation of gender and class differences. *Journal of Youth and Adolescence*, 25, 691-703.

Abraham C. and Sheeran P. (1993). In search of a psychology of safer-sex promotion: Beyond beliefs and texts. *Health Education Research*, 8(2), 245-254.

Aiken L.S. and West S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks: Sage.

Albrecht S.L., Chadwick B.A., Jacobson C.K. (1987). *Social psychology* (2nd ed.). Upper Saddle River, NJ, US: Prentice-Hall, Inc.

Albrecht T.L. and Adelman M.B. (1984). Social support and life stress: New directions for communication research. *Human Communication Research*, 11(1), 3-32.

Alfonso V.C. and Allison D.B. (1993). Further development of the Extended Satisfaction with Life Scale. Paper presented at the 101st Annual Convention of the American Psychological Association, Toronto, Ontario, Canada.

Allan J.D., Mayo K., and Michel Y. (1993). Body size values of white and black women. *Research in Nursing and Health*, 16, 323-333.

Alley T.R. (1988). Physiognomy and social perception. In T.R. Alley (Ed). *Social and applied aspects of perceiving faces. Resources for ecological psychology* (pp. 167-186). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.

Allgood-Merten B., Lewinsohn P.M., and Hops H. (1990). Sex differences and adolescent depression. *Journal of Abnormal Psychology*, 99, 55-63.

Allison D.B. (1995). *Handbook of assessment methods for eating behaviors and weight-related problems: Measures, theory, and research*. Thousand Oaks, CA, US:

Altabe M.N. and Thompson J.K. (1995). Body image disturbance: Advances in assessment and treatment. In L. Vandecreek, S. Knapp, and T.L. Jackson (Eds.), *Innovations in clinical practice: A source book* (pp. 89-110). Sarasota, FL: Professional Resource Press.

Anderson A.E. and DiDomenico L. (1992). Diet versus shape content of popular male and female magazines: A dose-response relationship to the incidence of eating disorders. *International Journal of Eating Disorders*, 11, 283-287.

Askevold R. (1975). Measuring body image: Preliminary report on a new method. *Psychotherapy and Psychosomatics*, 26, 71-76.

Austin J. L. (1985). *How to Do Things with Words*. Harvard.

Baker C. (1992). Factors associated with rehabilitation in head and neck cancer. *Cancer Nursing*, 15, 395-400.

Baker C.W., Whisman M.A., and Brownell K.D. (2000). Study of inter-generational transmission of eating attitudes and behavior: Methodological and conceptual questions. *Health Psychology*, 19, 376-381.

Baker P. (1994). Under pressure: what the media is doing to men. *Cosmopolitan*, November, 129-32.

Baron R. M. and Kenny D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.

Bartels D.J. (1997). *An Examination of the Primary Emotions of Anger and Sadness in Marriage within the Context of Identity Theory*. Master's Thesis, Washington State University.

Bartky S. (1990). *Femininity and domination: studies in the phenomenology of oppression*. New York: Routledge.

Bastiani A.M., Rao R., Weltzin T., and Kaye W. H. (1995). Perfectionism in anorexia nervosa. *International Journal of Eating Disorders*, 17, 147-152.

Baumeister R. and Leary M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 112, 497 - 529.

Baumeister R.F. (1999). Self-concept, self-esteem, and identity. In V. Derlega, B. Winstead et. al. (Ed) *Personality: Contemporary theory and research* (2nd ed.). Nelson-Hall series in psychology. (pp. 339-375). Chicago, IL, US: Nelson-Hall Publishers.

Baumgardner A.H., Kaufman C. M., and Levy P.E. (1989). Regulating affect interpersonally: When low esteem leads to greater enhancement. *Journal of Personality and Social Psychology*, 56, 907-921.

Beck A.T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York: Harper Row.

Beck A.T. (1987). Cognitive models of depression. *Journal of Cognitive Psychotherapy: An International Quarterly*, 1, 5-37.

Ben-Tovim D. and Walker K. (1991). Women's body attitudes: A review of measurement techniques. *International Journal of Eating Disorders*, 10, 155-167.

Bernstein R. (1983). *Beyond objectivism and relativism*. Philadelphia: University of Pennsylvania Press.

Berscheid E., and Walster E. (1974). Physical attractiveness. In L. Berkowitz, *Advances in experimental social psychology* Vol. 7 (pp. 157-215). San Deigo: Academic Press.

Berscheid E., Walster E. and Bornstedt G. (1973) The happy American body: a survey report. *Psychology Today*, 7, 119-31.

Billings A.G., and Moos R.H. (1981). The role of coping responses and social resources in attenuating the impact of stressful life events. *Journal of Behavioral Medicine*, 4, 139-157.

Blaine B. and Crocker J. (1993). Self-esteem and self-serving biases in reactions to positive and negative events: An integrative review. In R.F. Baumeister (Ed) *Self-esteem: The puzzle of low self-regard*. Plenum series in social/clinical psychology. (pp. 55-85). New York, NY, US: Plenum Press.

Blakeney R., Portman S., and Rutman R. (1990). Familial values as factors influencing long-term psychological adjustment of children after severe burns injury. *Journal of Burn Care and Rehabilitation*, 11, 472-475.

Blatt S. J. (1995). The destructiveness of perfectionism. *American Psychologist*, 50, 1003-1020.

Bluin A.G. and Goldfield G.S. (1995). Body image and steroid use in male bodybuilders. *International Journal of Eating Disorders*, 18, 159-165.

Blumer H. (1955). Attitudes and the social act. *Social Problems*, 3, 59-65.

Bordo S. (1993). *Unbearable weight: Feminism, Western culture, and the body*. Berkeley, CA, US: University of California Press.

Bowden P.K., Touyz S.W., Rodriguez P.J., Hennsley R., and Beumont P.J.V. (1989). Distorting patient or distorting instrument? Body shape disturbance in patients with anorexia nervosa and bulimia. *British Journal of Psychiatry*, 155, 196-201.

Brewer L. and Hunter A. (1989). *Multimethod research: A synthesis of styles*. Newbury Park, CA: Sage.

- Brodie D.A., Slade P.D. and Rose H. (1989). Reliability measures in disturbing body image. *Perceptual and Motor Skill*, 69, 723-732.
- Brooks-Gunn J. and Warren M. P. (1985). Effects of delayed menarche in different contexts: Dance and nondance students. *Journal of Youth and Adolescence*, 14, 285-300.
- Brown B.B. and Lohr M.J. (1987). Peer-group affiliation and adolescent self-esteem: An integration of ego-identity and symbolic-interaction theories. *Journal of Personality and Social Psychology*, 52(1), 47-55.
- Browne G., Byrne G., Brown B., Pennock M., Streiner D., Roberts R., Eyles P., Truscott D., and Dabbs R. (1985). Psychosocial adjustment of burn survivors. *Burns*, 12, 28-35.
- Brownmiller S. (1984). *Femininity*, New York: Linden Press.
- Burke P. J. (1991). Identity processes and social stress. *American Sociological Review*, 56, 836-49.
- Burke P.J. (1996). Social Identities and Psychosocial Stress. In H. B. Kaplan (Ed.) *Psychosocial Stress: Perspectives on Structure, Theory, Life Course, and Methods*. Academic Press. pp. 141-74.
- Burke P.J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63, 224-237.
- Burke P.J. (2001). Relationships among Multiple Identities. Paper presented at Conference on Advances in Identity Theory, Bloomington, IN.
- Burke P.J. and Stets J.E. (1999). Trust and commitment through self-verification. *Social Psychology Quarterly*, 62, 347-60.
- Buss D. M. (1998). *The evolution of desire*. New York: Basic.

Butow P., Beumont P., and Touyz S. (1993). Cognitive processes in dieting disorders. *International Journal of Eating Disorders*, 14, 319-329.

Butters J.W. and Cash T. E. (1987). Cognitive-behavioral treatment of women's body image dissatisfaction. *Journal of Consulting and Clinical Psychology*, 55, 889-897.

Campbell D.X., and Stanley J. (1966). *Experimental and quasi-experimental design for research*. Chicago: Rand McNally.

Campbell J. D., Chew B., and Scratchley L.S. (1991). Cognitive and Emotional Reactions to Daily Events: The Effects of Self-Esteem and Self-Complexity. *Journal of Personality*, 59, 473-505.

Campbell J.D. (1990). Self-Esteem and clarity of the self-concept. *Journal of Personality and Social Psychology*, 59, 538-49.

Carr A.T and Harris D.L. (2000). The Derriford Appearance Scale (DAS59). Instructions on Scoring. Normative data for sub-groups of the general population and the clinical population. University of Plymouth.

Carr A.T. (2002). Body shame: Issues of assessment and measurement. In P. Gilbert and J. Miles (Eds) *Body shame. Conceptualisation, research and treatment*. Brunner-Routledge.

Carr T., Harris D., and James C. (2000). The Derriford Appearance Scale (DAS-59): A new scale to measure individual responses to living with problems of appearance. *British Journal of Health Psychology*, 5, 201-215.

Carr-Nangle R., Johnson W., Bergeron K., and Nangle D. (1994). Body image changes over the menstrual cycle in normal women. *International Journal of Eating Disorders*, 16, 267-273.

Carruth B.R. and Goldberg D.L. (1990). Nutritional issues of adolescents: Athletics and the body image mania. *Journal of Early Adolescence*, 10(2), 122-140.

Carter J.C., Stewart D.A., Dunn V.J., and Fairburn C.G. (1997). Primary prevention of eating disorders: Might it do more harm than good? *International Journal of Eating Disorders*, 22, 167-172.

Carver C. S. and Scheier M. (1981). *Attention and self-regulation: A control theory approach to human behaviour*. New York: Springer-Verlag.

Carver C.S. and Scheier M.F. (1996). *Perspectives in personality*. Needham Heights, MA: Allyn & Bacon.

Cash T.F. and Brown T. (1989). Gender and body images: Stereotypes and realities. *Sex Roles*, 21, 361-373.

Cash T.F. and Pruzinsky T. (1990). *Body images: Development, deviance and change*. New York: Guilford Press.

Cash T.F., Winstead B. A. and Janda, L. H. (1986). Body Image Survey report: The great American shape-up. *Psychology Today*, 24, 30-37.

Cash T.F. (1994). The multidimensional body-self relations questionnaire. Unpublished test manual, Old Dominion University, Norfolk, VA.

Cash T.F. (1995). *What do you see when you look in the mirror? Helping yourself to a positive body image*. New York: Bantam Books.

Cash T.F. (1996). The treatment of body disturbances. In J.K. Thompson (Ed.), *Body image, eating disorders, and obesity: An integrative guide for assessment and treatment* (pp. 83-107). Washington, DC: American Psychological Association.

Cash T.F. (1997). *The body image workbook: An 8-step program for learning to like your looks*. Oakland, CA: New Harbinger.

Cash T.F. (2000a). *Manual for the Body-image Ideals Questionnaire*. Available from the author at www.body-images.co.

Cash T.F. (2000b). *Manual for the Situational Inventory of Body-image Dysphoria*. Available from the author at www.body-images.co.

Cash T.F. and Labarge A. S. (1996). Development of the Appearance Schemas Inventory: A new cognitive body-image assessment. *Cognitive Therapy and Research*, 20, 37-50.

Cash T.F. and Pruzinsky T. (2002). *Body image. A handbook of theory, research, and clinical practice*. The Guilford Press.

Cash T.F. and Szymanski M.L. (1995). The development and validation of the Body-Image Ideals Questionnaire. *Journal of Personality Assessment*, 64, 466-477.

Cash T.F., Lewis R.J., and Keeton P. (1987). Development and validation of the Body-Image Automatic Thoughts Questionnaire: A measure of body-related cognitions. Paper presented at the meeting of the Southeastern Psychological Association, Atlanta, GA.

Chapkis W. (1986). *Beauty, secrets*, London: The Women's Press.

Chapman R. (1988). The great pretender: variations on the new man theme. In R. Chapman, R. and J. Rutherford (eds) *Male order... unwrapping masculinity* (225-48), London: Lawrence and Wishart.

Charles N. and Kerr M. (1986). Food for feminist thought. *The Sociological Review*, 34, 537-72.

Chaudhary V. (1996). The state we're in. *The Guardian*, 11 June, p.14.

Cherryholmes C.C. (1992). Notes on pragmatism and scientific realism. *Educational Researcher*, 21, 13-17.

- Christensen L. (1997) *Experimental methodology* (7th edn), London: Allyn and Bacon.
- Clark D.M., and Wells A. (1995). A cognitive model of social phobia. In R.G. Heimberg, D. Liebowitz, D. Hope, and F. Schneier (Eds.) *Social Phobia: Diagnosis, Assessment, and Treatment*. New York: Guilford Press.
- Clark D.A., Feldman J., and Channon S. (1989). Dysfunctional thinking in anorexia and bulimia nervosa. *Cognitive Therapy and Research*, 13, 377-387.
- Clark D.M. and Wells A. (1995). A cognitive model of social phobia. In R. G. Heimberg, D. Liebowitz, D. Hope and F. Schneier (Eds.), *Social Phobia: Diagnosis, Assessment, and Treatment*. New York: Guilford Press.
- Cohen S. (1988). Psychosocial models of the role of social support in the etiology of physical disease, *Health Psychology*, 7, 3, 269-97.
- Cohen S. and Wills T. A. (1985). Stress, social support, and the buffering hypothesis, *Psychological Bulletin*, 98, 310-57.
- Coleman J. (1974). *Relationships in adolescence*. London: Routledge.
- Conrad P. (1990). Qualitative research on chronic illness: A commentary on method and conceptual development. *Social Science and Medicine*, 30, 1257 - 1263.
- Conrad P. (1987). The experience of illness: Recent and new directions. *Research in the Sociology of Health Care*, 6, 1-31.
- Cook T. D. and Campbell D. T. (1979). *Quasi experimentation: Design and analysis issues for field settings*. Boston: Houghton Mifflin.
- Cooper M. J. and Fairburn C. G. (1992). Thoughts about eating, weight and shape in anorexia nervosa and bulimia nervosa. *Behavior Research and Therapy*, 30, 501-511.

Cooper M. J. (1997). Cognitive theory in anorexia nervosa and bulimia nervosa. A review. *Behavioural and Cognitive Psychotherapy*, 25, 113-145.

Cooper P.J., and Fairburn C.G. (1993). Confusion over the core psychopathology of bulimia nervosa. *International Journal of Eating Disorders*, 13, 385-389.

Cooper P.J., Taylor M.J., Cooper Z., and Fairburn C.G. (1987). The development and validation of the Body Shape Questionnaire. *International Journal of Eating Disorders*, 6, 485-494.

Coopersmith S. (1967). *The Antecedents of Self-Esteem*. San Francisco: Freeman.

Creswell J.W. (1995). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.

Cromarty P. and Marks L. (1995). Does rational role-play enhance the outcome of exposure therapy in dysmorphophobia? A case study. *British Journal of Psychiatry*, 167, 399-402.

Cusumano D.L. and Thompson J.K. (1997). Body image and body shape ideals in magazines: Exposure, awareness and internalization. *Sex Roles*, 37, 701-721.

Dahlstrom W.G. (1969). Recurrent issues in the development of the MMPI. In J.N. Butcher (Ed.), *MMPI: Research developments and clinical applications*. New York: McGraw-Hill.

Datta L. (1994). Paradigm wars: A basis for peaceful coexistence and beyond. In C. S. Reichardt and S. F. Rallis (Eds.), *The qualitative-quantitative debate: New perspectives* (pp. 53-70). San Francisco: Jossey-Bass.

Davis C. (1997a). Normal and neurotic perfectionism in eating disorders: An interactive model. *International Journal of Eating Disorders*, 22, 421-426.

Davis C. (1997b). Body image, exercise and eating behaviors. In K. Fox (Ed.), *The physical self: From motivation to well-being* (pp. 143–174). Champaign IL: Human Kinetics Publishers.

Demarest J. and Allen R. (2000). Body image: Gender, ethnic, and age differences. *Journal of Social Psychology*, 140(4), 465-472.

Denzin N. K. (1992). *Symbolic interactionism and cultural studies*. Cambridge: Basil Blackwell.

Denzin N.K (1994). The art and politics of interpretation. In N.K. Denzin and Y.S. Lincoln (Eds). *Handbook of qualitative research*. (pp. 500-515). Thousand Oaks, CA, US: Sage Publications, Inc.

Denzin N.K. (1989). *Interpretive interactionism*. Thousand Oaks, CA, US: Sage Publications, Inc.

Denzin N.K. (1978). The logic of naturalistic inquiry. In N.K. Denzin (Ed.) *Sociological methods: A sourcebook*. New York: McGraw-Hill.

Derogatis L. R. (1993). *Brief Symptom Inventory (BSI). Administration, Scoring, and Procedures Manual* (4th ed). National Computer Systems, Inc., Minneapolis.

Derogatis L.R., Rickels K., and Rock A. (1976). The SCL-90 and the MMPI: A step in the validation of a new self-report scale. *British Journal of Psychiatry*, 128, 280-289.

Derogatis L.R., Yevzeroff H., and Wittelsberger B. (1975). Social class, psychological disorders, and the nature of the psychopathologic indicator. *Journal of Consulting and Clinical Psychology*, 43, 183-191.

Dolce J.J., Thompson J.K., Register A., and Spana R.E. (1987). Generalization of body size distortion. *International Journal of Eating Disorders*, 8, 401-408.

Donaldson C. (1996) *A study of male body image and the effects of the media*. Unpublished BSc dissertation, Manchester Metropolitan University.

Drewnowski A. and Yee D.K. (1987). Men and body image: Are males satisfied with their body weight? *Psychosomatic Medicine*, 49(6), 626-634.

Dworkin S. H. and Kerr B. A. (1987). Comparison of interventions for women experiencing body image problems. *Journal of Counseling Psychology*, 34, 136-140.

Dwyer J.T., Feldman J.J., and Mayer J. (1967). Adolescent dieters: Who are they? *The American Journal of Clinical Nutrition*, 20, 1045-1056.

Eagly A.H., Ashmore R.D., Makhijani M.G., and Longo L.C. (1991). What is beautiful is good, but... A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin*, 110, 109-128.

Edlund B., Halvarsson K., Gebre-Medhin M., and Sjoden P. (1990). Psychological correlates of dieting in Swedish adolescents: A cross-sectional study. *European Eating Disorders Review*, 7, 47-61.

Ellestad J. and Stets J.E. (1998). Jealousy and parenting: Predicting emotions from identity theory. *Sociological Perspectives*, 41, 639-68.

Ellison C.G. (1993). Religious involvement and self-perception among black americans. *Social Forces*, 71, 1027-55.

Epstein S. and Morling B. (1995). Is the Self Motivated to Do More than Enhance and/or Verify Itself? In M. H. Kernis. *Efficacy, Agency, and Self-Esteem*. Plenum Press. pp. 9-29.

Erdfelder E., Faul F., and Buchner A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, and Computers*, 28, 1-11.

- Fabian L. J. and Thompson J.K. (1989). Body image and eating disturbance in young females. *International Journal of Eating Disorders*, 8(1), 63-74.
- Fairburn C.G., Cooper P.J., Cooper M.J., McKenna F.P. *et al.* (1991). Selective information processing in bulimia nervosa. *International Journal of Eating Disorders*, 10(4), 415-422.
- Falconer J.W. and Neville H.A. (2000). African American college women's body image: An examination of body mass, African self-consciousness, and skin color satisfaction. *Psychology of Women Quarterly*, 24(3), 236-243.
- Fallon A. (1990). Culture in the mirror: Sociocultural determinants of body image. In T.F. Cash and T. Pruzinsky (Eds.), *Body images, development, deviance and change* (pp. 80-109). New York: Guilford Press.
- Fallon A. and Rozin P. (1985). Sex differences in the perceptions of desirable body shape. *Journal of Abnormal Psychology*, 94, 102-105.
- Feingold A. (1992). Good-looking people are not what we think. *Psychological Bulletin*, 111, 304-341.
- Festinger L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Fisher E. and Thompson J.K. (1994). A comparative evaluation of cognitive-behavioral therapy (CBT) versus exercise therapy (ET) for the treatment of body-image disturbance: Preliminary findings. *Behavior Modification*, 18, 171-185.
- Fitts W.H. (1965). *Tennessee Self-Concept Scale Manual*. Nashville, TN: Counselor Recordings and Tests.
- Ford K.A., Dolan B.M., and Evans C. (1990). Cultural factors in the eating disorders: A study of body shape preferences of Arab students. *Journal of Psychosomatic Research*, 34, 501-507.

Franzoi S.L., and Shields S.A. (1984). The Body Esteem Scale: Multidimensional structure and sex differences in a college population. *Journal of Personality Assessment*, 48, 173-178.

Freedman R. (1990). Cognitive-behavioral perspective on body image change. In T.F. Cash and T. Pruzinsky (Eds.), *Body images: Development, deviance, and change* (pp. 272-295). New York: Guilford Press.

Freedman R.J. (1984). Reflections on beauty as it relates to health in adolescent females. *Women and Health*, 9(2-3), 29-45.

Freeman R., Touyz C.D., Sara G., Rennie C., Gordon E., and Beumont P. (1991). In the eye of the beholder: Processing body shape information in anorexic and bulimic patients. *International Journal of Eating Disorders*, 10, 709-714.

Freeman R.F., Thomas C.D., Solyom L., and Hunter M.A. (1984). A modified video camera for measuring body image distortion: Technical description and reliability. *Psychological Medicine*, 14, 411-416.

Frieze D., Bar-Te J., and Carroll J.S. (Eds.) (1991). *New approaches to social problems*. San Francisco: Jossey-Bass.

Furnham A. and Baguma P. (1994). Cross-cultural differences in the evaluation of male and female body shapes. *International Journal of Eating Disorders*, 15, 81-89.

Furnham A. and Greaver N. (1994). Gender and locus of control correlates of body image dissatisfaction. *European Journal of Personality*, 3, 183-200.

Furnham A. and Lim A.N. (1997). Cross cultural differences in the perception of male and female body shapes as a function of exercise. *Journal of Social Behaviour and Personality*, 12, 1037-1053.

Furnham A., and Alibhai N. (1983). Cross-cultural differences in the perception of female body shapes. *Psychological Medicine*, 13, 829-837.

Furnham A., Titman P., and Sleeman E. (1994). Perception of female body shapes as a function of exercise. *Journal of Social Behavior and Personality*, 9, 335-352.

Gage N. (1989). The paradigm wars and their aftermath: A "historical" sketch of research and teaching since 1989. *Educational Researcher*, 18, 4-10.

Galison P. (1997). *Image and Logic: A Material Culture of Microphysics*. Chicago: University of Chicago.

Gardner R.M., Martinez R., and Sandoval Y. (1987). Obesity and body image: An evaluation of sensory and non-sensory components. *Psychological Medicine*, 17, 927-932.

Garfinkel H. (1967). *Studies in Ethnomethodology*. Blackwell Publishers.

Garner D. M., Garfinkel P. E. (Ed) (1996). *Handbook of treatment for eating disorders*(2nded.).

Garner D.M., Garfinkel P.E., Schwartz D., Thompson M. (1980). Cultural expectations of thinness in women. *Psychological Reports*, 47(2), 483-491.

Garner D.M., Olmsted M.P., and Polivy J. (1983). Development and validation of a multi-dimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15-34.

Garner D.M.(1997). The 1997 body image survey results. *Psychology Today*, 30, 30-41.

Gecas V. (1982). The Self-Concept. *Annual Review of Sociology*, 8, 1-33.

Gecas V. and Schwalbe M.L. (1983). Beyond the looking-glass: Self, social structure and efficacy-based self-esteem. *Social Psychology Quarterly*, 46, 77-88.

Gergen K. J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40, 266-275.

- Gillespie R. (1996). Women, the body, and brand extension of medicine: cosmetic surgery and the paradox of choice. *Women and Health*, 24, 69-85.
- Glaser B. and Strauss A. (1967). *Discovery of grounded theory*. Chicago: Aldine.
- Gleaves D., Williamson D., Eberenz K., Sebastian S., and Barker S. (1995). Clarifying body-image disturbance: Analysis of a multi-dimensional model using structural modeling. *Journal of Personality Assessment*, 64, 478-493.
- Gleick J. (1987). *Chaos Theory: Making a New Science*. New York: Viking.
- Glucksman M. and Hirsch J. (1969). The response of obese patients to weight reduction: III. The perception of body size. *Psychosomatic Medicine*, 31, 1-17.
- Goetz J.R. and LeCompte M.D. (1984). *Ethnography and qualitative design in educational research*. New York: Academic Press.
- Goffman E. (1963). *Stigma: Notes on the management of spoiled identity*. London: Penguin.
- Goin J.M. and Goin M.K. (1987). Psychological aspects of aesthetic surgery. In M. Gonzalez-Ulloa, R. Meyer *et al.*, (Eds) *Aesthetic plastic surgery*. (pp. 1-12). Piccin Nuova Libreria.
- Goldsmith R.E. (1986). Dimensionality of the Rosenberg self-esteem scale. *Journal of Social Behavior and Personality*, 1, 253-264.
- Goodman N. (1984). *Of mind and other matters*. Cambridge, MA: Harvard University Press.
- Grant J.R. and Cash T.F. (1995). Cognitive-behavioral body image therapy: Comparative efficacy of group and modest-contact treatments. *Behavior Therapy*, 26, 69-84.

Greene J.C. (1994). Qualitative program evaluation. In N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 530-544). Thousand Oaks, CA: Sage.

Greene J.C., Caracelli V.J. and Graham W.F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11, 255-274.

Grogan S. (1999). *Body image*. London: Routledge.

Grogan S. and Wainwright N. (1996). Growing up in the culture of slenderness: Girl's experience of bodily dissatisfaction. *Women's Studies International Forum*, 19, (6), 665-673.

Grogan S., Donaldson C., Richards H., and Wainwright N. (1997). Men's body image: body dissatisfaction in eight- to twenty-five-year-old males. Paper presented to the European Health Psychology Annual Conference, Bordeaux, 3 September.

Grogan S., Williams Z., and Conner M. (1996). The effects of viewing same-gender photographic models on body-esteem? *Psychology of Women Quarterly*, 20(4), 569-575.

Guba E. G. (1987). What have we learned about naturalistic evaluation? *Evaluation Practice*, 8, 23-43.

Guba E. G. (1990). *The paradigm dialog*. Newbury Park, CA: Sage.

Guba E. G. and Lincoln, Y. S. (1990). *Fourth -generation evaluation*. Newbury Park, CA: Sage.

Guba E.G., and Lincoln Y. S. (1994). Competing paradigms in qualitative research. In N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks, CA: Sage.

Hagborg W.J. (1993). The Rosenberg Self-Esteem Scale and Harter's Self-Perception Profile for Adolescents: A concurrent validity study. *Psychology in the Schools*. Apr,

Haimovitz D., Lansky L.M., and O'Reilly P. (1993). Fluctuations in body satisfaction across situations. *International Journal of Eating Disorders*, 13, 77-84.

Hall S.S. (1999, August 22). The bully in the mirror. *New York Times Magazine*, pp. 30.

Hamermesh D.S. and Biddle J.E. (1994). Beauty and the labor market. *The American Economic Review*, 84(5), 1174-1194.

Hammersley M. (1989). *The dilemma of qualitative method: Herbert Blumer and the Chicago tradition*. London: Routledge Kegan Paul.

Hanson N.R. (1958). *Patterns of discovery: An inquiry into the conceptual foundations of science*. Cambridge: Cambridge University Press.

Harter S. (1993). Causes and Consequences of Low Self-Esteem in Children and Adolescents. In R. F. Baumeister (Ed.) *Self-Esteem: The Puzzle of Low Self-Regard*. Plenum. pp. 87-116.

Heinberg L.J. (1996). Theories of body image disturbance. In J.K. Thompson (Ed.), *Body image, eating disorders, and obesity* (pp.27-47). Washington, DC: American Psychological Association.

Heinberg L.J., Thompson J.K., and Stormer S. (1995). Development and validation of the sociocultural attitudes towards appearance questionnaire. *International Journal of Eating Disorders*, 17, 81-89.

Hewitt P.L., Flett G.L., and Ediger E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disordered attitudes, characteristics, and symptoms. *International Journal of Eating Disorders*, 4, 317-326.

Higgins E.T. (1989). Self-Discrepancy Theory: What Patterns of Self-Beliefs Cause People to Suffer? *Advances in Experimental Social Psychology*, 22, 93-136.

Higgins E.T. and Brendl C.M. (1995). Accessibility and applicability: Some "activation rules" influencing judgment. *Journal of Experimental Social Psychology*, 31(3), 218-243.

Higgins T. (1987) Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319-340.

Hill A., Oliver S., Rogers P. (1992). Eating in the adult world: The rise of dieting in childhood and adolescence. *British Journal of Clinical Psychology*, 31(1), 95-105.

Hobfoll S. (1988). *The Ecology of Stress*. New York: Hemisphere Publishing Corporation.

Hollon S.D. and Kriss M.R. (1984). Cognitive factors in clinical research and practice. *Clinical Psychology Review*, 4, 35-76.

Horm J. and Anderson K. (1993). Who in America is trying to lose weight? *Annals of Internal Medicine*, 119, 672-676.

House E.R. (1994). Integrating the quantitative and qualitative. In C.S. Reichardt and S.F. Rallis (Eds.), *The qualitative-quantitative debate: New perspectives* (pp. 1322). San Francisco: Jossey-Bass.

House J.W. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.

Howe K.R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational Researcher*, 17, 10-16.

Howell D.C. (1997). *Statistical Methods for Psychology*. Duxbury Press.

Huon G. F. (1994). Towards the prevention of dieting-induced disorders: Modifying negative food- and body-related attitudes. *International Journal of Eating Disorders*, 16(4), 395-399.

Huon G.F. and Brown L.B. (1989). Assessing bulimics' dissatisfactions with their body. *British Journal of Clinical Psychology*, 28, 283-284.

Husserl E. (1931). *Ideas: General Introduction to Pure Phenomenology*. (Library of philosophy, edited by J.H. Muirhead.) Translated by W.R. Boyce Gibson. London, Eng.: George Allen & Unwin Ltd. New York: The Macmillan Company.

Husserl E. and Gibson WRB (Trans) (1931 reprinted 1970). *Ideas: introduction to pure phenomenology*. Oxford, England: Macmillan.

Jackman L.P., Williamson D.A., Netemeyer R.G., Anderson D.A. (1995). Do weight-preoccupied women misinterpret ambiguous stimuli related to body size? *Cognitive Therapy and Research*, 19(3), 341-355.

Jackson L.A. (1992). *Physical appearance and gender: Sociobiological and sociocultural perspectives*. Albany: State University of New York Press.

Joiner T.E., Schmidt N.B., and Singh D. (1994). Waist-to-hip ratio and body dissatisfaction among college women and men: Moderating role of depressed symptoms and gender. *International Journal of Eating Disorders*, 16, 199-203.

Joiner T.E., Schmidt N.B., and Wonderlich S.A. (1997). Global self-esteem as contingent on body satisfaction among patients with bulimia nervosa: Lack of diagnostic specificity? *International Journal of Eating Disorders*, 21, 67-76.

Joiner T.E., Wonderlich S.A., Metalsky G.I., and Schmidt N.B. (1995). Body dissatisfaction: A feature of bulimia, depression, or both? *Journal of Social and Clinical Psychology*, 14, 339-355.

Kalodner C.R. (1997). Media influences on male and female non-eating disordered college students: A significant issue. *Eating Disorders: The Journal of Treatment and Prevention*, 5, 47-57.

Kaplan H. (1975). The Self-Esteem Motive. In H.B. Kaplan (Ed.) *Self-Attitudes and Deviant Behavior*. Pacific Palisades, CA: Goodyear. pp. 10-31.

Kaplan H.B. and Pokorny A.D. (1969). Self-derogation and psychosocial adjustment. *Journal of Nervous and Mental Disease*, 149, 421-434.

Kaye W.H. (1997). [Letter to the editor]. *American Journal of Psychiatry*, 154, 132.

Keel P.K., Fulkerson J.A., and Leon G.R. (1997). Disordered eating precursors in pre- and early adolescent girls and boys. *Journal of Youth and Adolescence*, 26, 203-216.

Kellert S.H. (1993). *In the Wake of Chaos: Unpredictable Order in Dynamic Systems*. Chicago: The University of Chicago Press.

Killen J.D., Taylor C.B., Hammer L., Litt I., Wilson D.M., Rich T., Hayward C., Simmonds B., Kraemer H., and Varady A. (1993). An attempt to modify unhealthful eating attitudes and weight regulation practices of young adolescent girls. *International Journal of Eating Disorders*, 13, 369-384.

Killen J.D., Taylor C.B., Hayward C., Haydel K.F., Wilson D.M., Hammer L., Kraemer H., Blair-Greiner A., and Strachowski D. (1996). Weight concerns influence the development of eating disorders: A four-year prospective study. *Journal of Consulting and Clinical Psychology*, 64, 936-940.

Killen J.D., Taylor C.B., Hayward C., Wilson D., Haydel K., Hammer L., Simmonds B., Robinson T., Litt I., Varady A., and Kraemer H. (1994). Pursuit of thinness in a community sample of adolescent girls: A three-year prospective analysis. *International Journal of Eating Disorders*, 16, 227-238.

- Klapper J.T. (1957). What we know about the effects of mass communication: The brink of hope. *Public Opinion Quarterly*, 21, 453-474.
- Kneller G.F. (1984). *Movements of thought in modern education*. New York: John Wiley.
- Kuhn T.S. (1962). *The structure of scientific revolutions*. University of Chicago Press: Chicago.
- Kwon S. and Oci T.P.S. (1994). The roles of two levels of cognitions in the development, maintenance, and treatment of depression. *Clinical Psychology Review*, 14, 331-358.
- Laliberte M., Boland F. J. and Leichner P. (1999). Family climates: Family factors specific to disturbed eating and bulimia nervosa. *Journal of Clinical Psychology*, 55(9), 1021-1040.
- Lamb C.S., Jackson L.A., Cassidy P.B. and Priest D.J. (1993). Body figure preferences of men and women: A comparison of two generations. *Sex Roles*, 28, 345-358.
- Lansdown R., Rumsey N., Bradbury E., Carr T., and Partridge J. (Eds.) (1997). *Visibly different* (pp. 121-130). Oxford: Butterworth-Heinemann.
- Leary M. R. and Kowalksi R. M. (1995). *Social anxiety*. New York: Guilford Press.
- LeCompte M. D. and Preissle L., with Tesch R. (1993). *Ethnography and qualitative design in educational research* (2nd ed.). New York: Academic Press.
- Leon G.R., Fulkerson J.A., Perry C.L., and Cudeck R. (1993). Personality and behavioral vulnerabilities associated with risk status for eating disorders in adolescent girls. *Journal of Abnormal Psychology*, 102, 438-444.

Leon G.R., Fulkerson J.A., Perry C.L., and Early-Zald M.B. (1995). Prospective analysis of personality and behavioral vulnerabilities and gender influences in the later development of disordered eating. *Journal of Abnormal Psychology*, 104, 140-149.

Leventhal H. (1970). Findings and theory in the study of fear communications. *Advances in Experimental Social Psychology*, 5, 119 - 186.

Lewis V., Blair A., and Booth D. (1992). Outcome of group therapy for body-image emotionality and weight-control self-efficacy. *Behavioural Psychotherapy*, 20, 155-65.

Lincoln Y. S. and Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Longmore M.A. and DeMaris A. (1997). Perceived inequity and depression in intimate relationships: The moderating effect of self-esteem. *Social Psychology Quarterly*, 60, 172-84.

Lynch S.M. and Zellner D.A. (1999). Figure preferences in two generations of men: The use of figure drawings illustrating differences in muscle mass. *Sex Roles*, 40(9-10), 833-843.

Maggs J.L., Schulenberg J., and Hurrelmann K. (1996). Developmental transitions during adolescence: Health promotion implications. In J. Schulenberg, J. Maggs, and K. Hurrelmann (Eds.), *Health risks and developmental transitions during adolescence* (pp. 522-543). New York: Cambridge University Press.

Major B., Testa M. and Bylsma W. (1991). Responses to upward and downward social comparisons: the impact of esteem relevance and perceived control. In J. Suls and T. Wills (Eds.) *Social comparison: contemporary theory and research* (pp. 237-260). Hillsdale, NJ: Erlbaum.

- Maloney M., McGuire J., Daniels S., and Specker B. (1989). Dieting behavior and eating attitudes in children. *Pediatrics*, 84, 482–488.
- Malt U. and Ugland U. (1989). A long-term psychosocial follow up study of burned adults. *Acta Psychiatrica, suppl*, 355, 94-102.
- Mann T., Nolen-Hoeksema S., Huang K., Burgard D., Wright A., and Hanson K. (1997). Are two interventions worse than none? Joint primary and secondary prevention of eating disorders in college females. *Health Psychology*, 16, 215–225.
- Markus H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35, 63–78.
- Markus H., Hamill R., and Sentis K.P. (1987). Thinking fat: Self-schemas for body weight and the processing of weight relevant information. *Journal of Applied Social Psychology*, 17(1), 60-71.
- Mazur A. (1986). US trends in feminine beauty and overadaptation. *The Journal of Sex Research*, 22, 281-303.
- McAllister R. and Caltabiano M.L. (1994). Self-esteem, body image and weight in noneating-disordered women. *Psychological Reports*, 75(3, Pt 1), 1339-1343.
- McCabe M., and Marwit S.J. (1993). Depressive symptomatology, perceptions of attractiveness, and body image in children. *Journal of Child Psychology and Psychiatry*, 34, 1117–1124.
- McCarthy J.D and Hoge D.R. (1982). Analysis of age effects in longitudinal studies of adolescent self-esteem. *Developmental Psychology*, 18(3), 372-379.
- McCarthy M. (1990). The thin ideal, depression and eating disorders in women. *Behaviour Research and Therapy*, 28, 205-15.

- McClelland G.H. and Judd C.M. (1993). Statistical difficulties in detecting statistical interactions and moderator effects. *Psychological Bulletin*, 114, 376-390.
- McCreary D. R. and Sasse D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health*, 48, 297-304.
- Mendelson B.K., White D.R., and Mendelson M.J. (1998). Manual for the Body-Esteem Scale for Adolescents and Adults. Unpublished manuscript, Center for Research in Human Development, Montreal, Quebec, Canada.
- Miles M.B. and Huberman A.M. (1994). *Qualitative data analysis: An expanded source book*. (2nd ed.). Thousand Oaks, CA: Sage.
- Miller W. L. and Crabtree B.F. (1994). Clinical research. In N.K. Denzin, Y.S. Lincoln (Eds). *Handbook of qualitative research*. (pp. 340-352). Thousand Oaks, CA, US: Sage Publications, Inc.
- Minarik M.L. and Ahrens A. H. (1996). Relations of eating behaviour and symptoms of depression and anxiety to the dimensions of perfectionism among undergraduate women. *Cognitive Therapy and Research*, 20, 155-169.
- Mintz L.B. and Betz N.E. (1986). Sex differences in the nature, realism, and correlates of body image. *Sex-Roles*, 15(3-4), 185-195.
- Mishkind M., Rodin J., Silberstein L., and Striegel-Moore R. (1986). The embodiment of masculinity: cultural, psychological, and behavioural dimensions. *American Behavioural Scientist*, 29, 545-562.
- Mizes J. S. and Christiano B. A. (1995). Assessment of cognitive variables relevant to cognitive behavioral perspectives on anorexia nervosa and bulimia nervosa. *Behavior Research and Therapy*, 33, 95-105.

Monteath S.A. and McCabe M. P. (1997). The influence of societal factors on female body image. *Journal of Social Psychology*, 137(6), 708-727.

Moreno A.B. and Thelen M.H. (1993). A preliminary prevention program for eating disorders in a junior high school population. *Journal of Youth and Adolescence*, 22, 109-124.

Moskowitz J.M. (1989). The primary prevention of alcohol problems: A critical review of the research literature. *Journal of Studies on Alcohol*, 50, 54-88.

Moss R. and Schaefer J. (1984). The crisis of physical illness: An overview and conceptual approach. In R. Moss (Ed.), *Coping with physical illness: New perspectives* (pp. 3 - 25). New York: Plenum.

Moss T. P. (1997a). *Individual differences in adjustment to perceived abnormalities of appearance*. Unpublished PhD Thesis, University of Plymouth.

Moss T. P. (1997b). Individual variation in adjustment to visible differences. In R. Lansdown, N. Rumsey, E. Bradbury, T. Carr, and J. Partridge (Eds.), *Visibly different* (pp. 121-130). Oxford: Butterworth Heinemann.

Murray S.H., Touyz S.W., and Beumont P.J.V. (1996). Awareness and perceived influence of body ideals in the media: A comparison of eating disorder patients and the general community. *Eating Disorders: The Journal of Treatment and Prevention*, 4, 33-46.

Napoleon K. and Lewis C. (1989). Psychological considerations in lipoplasty: the problematic or "special care patient". *Annals of Plastic Surgery*, 23, 430-432.

Newell R. and Shrubbs S (1994). Attitude change and behaviour therapy in body dysmorphic disorder: Two case reports. *Behavioural and Cognitive Psychotherapy*, 22(2), 163-169. US: Cambridge University Press.

Nielsen K. (1991). *After the demise of the tradition: Rorty, critical theory, and the fate of philosophy*. Boulder, CO: Westview.

Noles S.W., Cash T.F., and Winstead B.A. (1985). Body image, physical attractiveness, and depression. *Journal of Consulting and Clinical Psychology*, 53, 88-94.

Noll S.M., and Fredrickson B.L. (1998). A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly*, 22, 623-636.

Norton K. and Olds T. (Eds.). (1996). *Anthropometrica*. Sydney: University of New South Wales Press.

Oates-Johnson T. and DeCourville N. (1999). Weight preoccupation, personality, and depression in university students: An interactionist perspective. *Journal of Clinical Psychology*, 55, 1157-1166.

Ogden J. (1992). *Fat chance: the myth of dieting explained*. London: Routledge.

Olivardia R., Pope H.G., Hudson J.I. (in press). "Muscle dysmorphia" in male weightlifters: A case-control study. *American Journal of Psychiatry*.

Oliver K.K. and Thelen M.H. (1996). Children's perceptions of peer influence on eating concerns. *Behavior Therapy*, 27, 25-39.

Orbach, S. (1993). *Hunger strike... the anorectics struggle as a metaphor for our age*, London: Penguin.

Padesky C.A. (1994). Schema change processes in cognitive therapy. *Clinical Psychology and Psychotherapy*, 1, 267-278.

Parks P.S. and Read M.H. (1997). Adolescent male athletes: Body image, diet, and exercise. *Adolescence*, 32(127), 593-602.

Pasman L., and Thompson J. K. (1989). Body image and eating disturbances in obligatory runners, obligatory weight lifters, and sedentary individuals. *International Journal of Eating Disorders*, 7, 759-769.

Patton G.C. (1988). The spectrum of eating disorder in adolescence. *Journal of Psychosomatic Research*, 32, 579-584.

Patton M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Paxton S.J. (1993). A prevention program for disturbed eating and body dissatisfaction in adolescent girls: A 1-year follow-up. *Health Education Research*, 8, 43-51.

Payne R.L. and Graham-Jones J. (1987). Measurement and methodological issues in social support. In S.V. Kasl and C.L. Cooper (Eds.) *Stress and Health: Issues in Research Methodology*. Chichester: John Wiley.

Pearlin L. I. and Schooler C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 19, 2-21.

Penner L.A., Thompson J.K., and Coovert D.L. (1991). Size estimation among anorexics: Much ado about very little. *Journal of Abnormal Psychology*, 100, 90-93.

Peterson G.W. and Rollins B.C. (1987). Parent-Child Socialization. In M.B. Sussman and S.K. Steinmetz (Eds) *Handbook of Marriage and the Family*. Plenum Press. pp. 471-507.

Phillips D. C. (1990). Postpositivist science: Myths and realities. In E. Guba (Ed.), *The paradigm dialog*. Newbury Park, CA: Sage.

Pierce C.S. (1878). How to Make Our Ideas Clear. *Popular Science Monthly*, 12, 286-302.

Pike K.M. and Rodin J. (1991). Mothers, daughters, and disordered eating. *Journal of Abnormal Psychology*, 100, 198-204.

Pipher M. (1995 reprinted 1997). *Hunger pains: The modern woman's tragic quest for thinness*. New York, NY, US: Ballantine Books Inc. 120 pp.

Pipher M. (1994). *Reviving Ophelia: Saving the Selves of Adolescent Girls*. G.P. Putnam's Sons. New York.

Plummer K. (1991). *Symbolic Interactionism* (volumes 1 & 2). Aldershot: Edward Elgar.

Polivy J. and Herman C.P. (1987). Diagnosis and treatment of normal eating. *Journal of Consulting and Clinical Psychology*, 55, 635–644.

Pope H.J.Jr., Gruber A. Mangweth B., Bureau B., de Col C., Jouvent R., and Hudson, J. (2000). Body image perception amongs men in three countries. *American Journal of Psychiatry*, 157, 1297-1301.

Popper K. R. (1959). *The logic of scientific discovery*. New York: Basic Books.

Porter J. R. and Beuf A. (1991). Racial variation in reaction to physical stigma: A study of degree of disturbance by vitiligo among black and white patients. *Journal of Health and Social Behaviour*, 32, 192-204.

Potter J. and Wetherell M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. London: Sage.

Probst M., Vandereycken W., Vanderlinden J., and Van Coppenolle H. (1998). The significance of body size estimation in eating disorders: Its relationship with clinical and psychological variables. *International Journal of Eating Disorders*, 24, 167-174.

Pruzinsky T. (1992). Social and psychological effects of major craniofacial deformity, *Cleft Palate Craniofacial Journal*, 29, 578- 584.

Rapee R. M., and Heimberg R.G. (1997). A cognitive-behavioural model of anxiety in social phobia. *Behaviour Research and Therapy*, 35, 741-756.

Raudenbush B., and Zellner D.A. (1997). Nobody's satisfied: Effects of abnormal eating behaviors and actual and perceived weight status on body image satisfaction in men and women. *Journal of Social and Clinical Psychology*, 16, 95-110.

Reed D.L., Thompson J.K., Brannick M.T. and Sacco W.P. (1991). Development and validation of the Physical Appearance State and Trait Anxiety Scale (PASTAS). *Journal of Anxiety Disorders*, 5, 323-332.

Reichardt C. S. and Rallis S. F. (1994). Qualitative and quantitative inquiries are not incompatible: A call for a new partnership. In C. Reichardt and S. F. Rallis (Eds.), *The qualitative-quantitative debate: New perspectives* (pp. 85-92). San Francisco: Jossey-Bass.

Rieger E., Schotte D.E., Touyz S.W., Beumont P.J.V., Griffiths R., and Russell J. (1998). Attentional biases in eating disorders: A visual probe detection procedure. *International Journal of Eating Disorders*, 23, 199-205.

Rierdan J. and Koff E. (1997). Weight, weight-related aspects of body image, and depression in early adolescent girls. *Adolescence*, 32, 615-624.

Robinson E., Rumsey N., and Partridge J. (1996). An evaluation of the impact of social interaction skills training for facially disfigured people. *British Journal of Plastic Surgery*, 49, 281-289.

Rodin J., Silberstein, L., and Striegel-Moore R. (1985). Women and weight: A normative discontent. In T.B. Sonderegger (Ed.), *Psychology and gender* (pp. 267-307). Lincoln: University of Nebraska Press.

Rosen J. C., Srebnilc D., Saltzburg E., and Wendt S. (1991). Development of a body image avoidance questionnaire. *Journal of Consulting and Clinical Psychology*, 3, 32-37.

Rosen J. C. (1996). Body dysmorphic disorder: Assessment and treatment. In J. K. Thompson (Ed.), *Body image, eating disorders, and obesity: An integrative guide for assessment and treatment* (pp. 149-170). Washington, DC: American Psychological Association.

Rosen J., Reiter J., and Orosan P. (1995). Assessment of body image in eating disorders with the body dysmorphic disorder examination. *Behaviour Research Theory*, 1, 77-84.

Rosen J.C. (1992). Body image disorder: Definition, development and contribution to eating disorders. In J.H. Crowther D. L. Tennenbaum, S. E. Hobfoll, and M. A. P Stephens (Eds.), *The etiology of bulimia: The individual and family context* (pp. 157-177). Washington, DC: Hemisphere Publishers.

Rosen J.C. (1995). Body image assessment and treatment in controlled studies of eating disorders. *International Journal of Eating Disorders*, 20, 331-343.

Rosen J.C., Cado S., Silberg N.T., Srebnik D., and Wendt S. (1990). Cognitive behavior therapy with and without size perception training for women with body image disturbance. *Behavior Therapy*, 21, 481-498.

Rosen J.C., Saltzberg E., and Srebnik D. (1989). Cognitive behavior therapy for negative body image. *Behavior Therapy*, 20, 393-404.

Rosenberg M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rosenberg M. (1979). *Conceiving the self*. New York: Basic Books.

Rossi R. H. (1994). The war between the quals and quants: Is a lasting peace possible? In C. S. Reichardt and S. F. Rallis (Eds.), *The qualitative-quantitative debate: New perspectives* (pp. 23-36). San Francisco: Jossey-Bass.

Roszell P., Kennedy D., and Grabb E. (1989). Physical attractiveness and income attainment among Canadians. *The Journal of Psychology*, 123(6), 547-559.

Roth D. and Armstrong J. (1993). Feelings of Fatness Questionnaire: A measure of the cross-situational variability of body experience. *International Journal of Eating Disorders*, 14, 349-358.

Rozin P. and Fallon A. (1988). Body image, attitudes to weight, and misperceptions of figure preferences of the opposite sex: A comparison of men and women in two generations. *Journal of Abnormal Psychology*, 97(3), 342-345.

Saussure F. (1993). *Third Course of Lectures on General Linguistics (1910-1911)*. Pergamon Press.

Rucker C. E. and Cash T. F. (1992). Body images, body-size perceptions and eating behaviors among African-American and White college women. *International Journal of Eating Disorders*, 12, 291-299.

Ruff G.A. and Barrios B.A. (1986). Realistic assessment of body image. *Behavioral Assessment*, 8, 237-252.

Rumsey N. (1997). Historical and anthropological perspectives on appearance. In R. Lansdown, N. Rumsey, E. Bradbury, T. Carr, and J. Partridge (Eds.), *Visibly different* (pp. 91 - 101). Oxford: Butterworth-Heinemann.

Rumsey N. (1999). Audit of a burn service. University of the West of England, Bristol. Unpublished data.

Rumsey N. (2002). Body image and congenital conditions with visible differences. In T.F. Cash and T. Pruzinsky (Eds.) *Body image. A handbook of theory, research, and clinical practice*. The Guilford Press.

Salkovskis P.M. (1985). Obsessive-compulsive problems: A cognitive behavioural analysis. *Behaviour Research and Therapy*, 23, 571-583.

Salmon P.H. (1997). Weight control in university students. *Journal of The Royal Society of Medicine*, 80, 6-8.

Sands R. and Maschette W. (1999). Body image measurement: Digital image protocol. Conference Proceedings. "The body culture." Melbourne, Australia. Body Image and Health Inc., 78-88.

Sarason B.R., Shearin E.N., Pierce G.R., and Sarason I.G. (1987a). Interrelationships of social support measures: theoretical and practical implications. *Journal of Personality and Social Psychology*, 52, 813-32.

Sarason I.G., Levine H.M., Basham R.B., and Sarason B.R. (1983). Assessing social support: the Social Support Questionnaire. *Journal of Personality and Social Psychology*, 44, 127-39.

Sarason I.G., Sarason B.R., Shearin E.N., and Pierce G.R. (1987b). A brief measure of social support: practical and theoretical implications. *Journal of Social and Personal Relationships*, 4, 497-510.

Sarwer D.B., Wadden T.A., and Foster G.D. (1997). Assessment of body image dissatisfaction in obese women: Specificity, severity, and clinical significance. Unpublished manuscript.

Schlundt D. and Johnson W. (1993). *Eating disorders: Assessment and treatment*. Boston: Allyn and Bacon.

Schulman R.G., Kinder B.N., Power P.S., Prange M., and Gleghorn J.A. (1986). The development of a scale to measure cognitive distortions in bulimia. *Journal of Personality Assessment*, 50, 630-639.

Schwandt T. A. (1994). Constructivist, interpretivist approaches to human inquiry. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 118-137). Thousand Oaks, CA: Sage.

Segal Z.V. (1988). Appraisal of the self-schema construct in cognitive models of depression. *Psychological Bulletin*, 10(3), 147-162.

Shafran R. and Mansell W. (2001). Perfectionism and psychopathology: a review of research and treatment. *Clinical Psychology Review*, 21(6), 879-906.

Shahani C., Dipboye R.L., Phillips A.P. (1990). Global self-esteem as a correlate of work-related attitudes: A question of dimensionality. *Journal of Personality Assessment*, 54(1-2), 276-288.

Shaw J. and Waller G. (1995). The media's impact on body image: Implications for prevention and treatment. *Eating Disorders: The Journal of Treatment and Prevention*, 3(2), 115-123.

Shisslak C.M., Crago M., and Neal M.E. (1990). Prevention of eating disorders among adolescents. *American Journal of Health Promotion*, 5, 100-106.

Shisslak C.M., Crago M., McKnight K.M., Estes L.S., Gray N., and Parnaby O.G. (1998). Potential risk factors associated with weight control behaviors in elementary and middle school girls. *Journal of Psychosomatic Research*, 44, 301-313.

Short J., Roosa M., Sandler I., and Ayers T. (1995). Evaluation of a preventive intervention for a self-selected subpopulation of children. *American Journal of Community Psychology*, 23, 223-247.

Silberstein L.R., Striegel-Moore R.H., Timko C., and Rodin J. (1988). Behavioral and psychological implications of body dissatisfaction: Do men and women differ? *Sex Roles*, 19(3-4), 219-232.

Singer J. E. and Lord D. (1984). The role of social support in coping with chronic or life threatening illness. In: A. Baum, S. Taylor, and J. E. Singer (Eds.) *Handbook of Psychology and Health*, Vol. 4. Hillsdale N. J.: Erlbaum.

Slade P.D. (1982). Towards a functional analysis of anorexia nervosa and bulimia nervosa. *British Journal of Clinical Psychology*, 21, 167-179.

Slade P.D. (1994). What is body image? *Behavior Research and Therapy*, 32, 497-502.

Slade P.D. and Russell G.F.M. (1973). Awareness of body dimensions in anorexia nervosa: Cross-sectional and longitudinal studies. *Psychological Medicine*, 3, 188-199.

Slade P.D., Dewey M.E., Newton T., Brodie D. and Kiemle G. (1990). Development and preliminary validation of the Body Satisfaction Scale (BSS). *Psychology and Health*, 4, 213-220.

Smith J.A. (1996). Beyond the divide between cognition and discourse: Using interpretative phenomenological analysis in health psychology. *Psychology and Health*, 11(2), 261-271.

Smith D. (1990). *Texts, facts and femininity: exploring the relations of ruling*. New York: Routledge.

Smith J. K. (1983). Quantitative versus qualitative research: An attempt to clarify the issue. *Educational Researcher*, 12, 6-13.

Smith J.A. (1995a) Reflecting selves: Theories of persons and models of research in qualitative psychology. (submitted for publication).

Smith J.A. (1995b). Semi-structured interviewing and qualitative analysis. In J. A. Smith, R. Harre, and L. Van Langenhove (Eds.), *Rethinking methods in psychology* (pp. 9 - 26). London: Sage.

Smith J.A., Harre R., and Van Langenhove L. (1995). Idiography and the case study. In J.A. Smith, R. Harre, and L. Van Langenhove (eds), *Rethinking Psychology*. London: Sage, pp. 59-69.

Smith J.A., Jarman M., and Osborn M. (1999). Doing interpretative phenomenological analysis. In M. Murray and K. Chamberlain (1999) *Qualitative Health Psychology. Theories and methods*. Sage Publications.

Smith M.L. (1994). Qualitative plus/versus quantitative: The last word. In C.S. Reichardt and S.F. Rallis (eds), *The qualitative-quantitative debate: New perspectives* (pp. 37-44). San Francisco: Jossey-Bass.

Smolak L., Levine M., and Schermer F. (1998). A controlled evaluation of an elementary school primary prevention program for eating problems. *Journal of Psychosomatic Research*, 44, 339-353.

Smolak L., Levine MP., Schermer R. (1999). Parental input and weight concerns among elementary school children. *International Journal of Eating Disorders*, 25(3), 263-267.

Snow D. and Anderson L. (1992). *Down on Their Luck: A Study of Homeless People*. University of California Press.

Spangler D.L. and Stice E. (2001). Validation of the beliefs about appearance scale. *Cognitive Therapy and Research*, 25(6), 813-827.

Spencer S.J., Josephs R.A., and Steele C.M. (1993). Low Self-Esteem: The Uphill Struggle for Self-Integrity. In R. F. Baumeister (Ed.) *Self-Esteem: The Puzzle of Low Self-Regard*. Plenum. pp. 21-36.

Spradley J.P. (1979). *The ethnographic interview*. New York: Holt, Rinehart and Winston.

Steele C. M. (1988). The Psychology of Self-Affirmation: Sustaining the Integrity of the Self. In L. Berkowitz (Ed.) *Advances in Experimental Social Psychology*, Vol. 21. Academic Press, pp. 261-302.

- Stice E. and Agras W.S. (1998). Predicting onset and cessation of bulimic behaviors during adolescence: A longitudinal grouping analyses. *Behavior Therapy*, 29, 257–276.
- Stice E. and Shaw H. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. *Journal of Social and Clinical Psychology*, 13, 288–308.
- Stice E., Schupak N. E., Shaw H.E., Stein R.I. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. *Journal of Abnormal Psychology*, 103(4), 836-840.
- Stice E., Killen J.D., Hayward C., and Taylor C.B. (1998). Age of onset for binge eating and purging during adolescence: A four-year survival analysis. *Journal of Abnormal Psychology*, 107, 671–675.
- Stice E., Shaw H., Nemeroff C. 1998). Dual pathway model of bulimia nervosa: Longitudinal support for dietary restraint and affect-regulation mechanisms. *Journal of Social and Clinical Psychology*, 17(2), 129-149.
- Stormer S.M. and Thompson J.K. (1996). Explanations of body image disturbance: A test of maturational status, negative verbal commentary, social comparison, and sociocultural hypotheses. *International Journal of Eating Disorders*, 19(2),193-202.
- Striegel-Moore R.H. and Kearney-Cooke A. (1994). Exploring parents' attitudes and behaviors about their children's physical appearance. *International Journal of Eating Disorders*, 15, 377–385.
- Striegel-Moore R.H. and Steiner-Adair C. (1998). Primary prevention of eating disorders: Further considerations from a feminist perspective. In W. Vandereyken and G. Nordenbos (Ed.), *The prevention of eating disorders*. (pp. 1–22). London: Athlone.
- Striegel-Moore R.H., Silberstein L.R., and Rodin J. (1986). Toward an understanding of risk factors for bulimia. *American Psychologist*, 41, 246-63.

Stunkard A.J., Sorenson T.L., and Schulsinger F. (1983). Use of the Danish Adoption Register for the study of obesity and thinness. In S. Kety, L.P. Rowland, R.L. Sidman, and S.W. Matthysse (Eds.), *The genetics of neurological and psychiatric disorders* (pp. 115-120). New York: Raven press.

Swann W.B. (1990). "To Be Adored or to Be Known?" In R. M. Sorentino and E. T. Higgins (Eds.) *Motivation and Cognition*, Vol. 2, Guilford, pp. 408-48.

Szymanski M.L., and Cash T.F. (1995). Body-image disturbances and self-discrepancy theory: Expansion of the Body-image Ideals Questionnaire. *Journal of Social and Clinical Psychology*, 14, 134-146.

Tantleff-Dunn S. and Thompson J.K. (1995). Romantic partners and body image disturbance: Further evidence for the role of perceived-actual disparities. *Sex Roles*, 33, 588-605.

Taylor M.J., and Cooper P.J. (1986). Body size overestimation and depressed mood. *British Journal of Clinical Psychology*, 25, 153-154.

Taylor S.J. and Bogdan R.C. (1984). *Introduction to qualitative research methods: The search for meanings*. New York: John Wiley and Sons.

Tesser A. (1988). Toward a Self-Evaluation Maintenance Model of Social Behavior. In L. Berkowitz (Ed.) *Advances in Experimental Social Psychology*. New York: Academic Press. pp. 181-227.

Thelen M.H. and Cormier J.F. (1995). Desire to be thinner and weight control among children and their parents. *Behavior Therapy*, 24, 85-99.

Thoits P.A. (1994). Stressors and problem-solving: The individual as psychological activist. *Journal of Health and Social Behavior*, 35, 143-59.

Thompson A.R. and Kent, G. (2001). Adjusting to disfigurement: Processes involved in dealing with being visibly different. *Clinical Psychology Review*, 21, 663 - 682.

Thompson J. K. (1990). *Body Image Disturbance Assessment and Treatment*. New York, Pergamon Press.

Thompson J.L. (1992). Body image: Extent of disturbance, associated features, theoretical models, assessment methodologies, intervention strategies, and a proposal for a new DSM IV diagnostic category - Body image disorder. In M. Hersen, P.M. Eisler, and P. M. Miller (Eds.), *Progress in behavior modification* (Vol. 29, pp. 3-54). Sycamore, IL Sycamore Publishing Company.

Thompson J.K., Penner L., and Altabe M. (1990). Procedures, problems and progress in the assessment of body images. In T.F. Cash and Pruzinsky (Eds.), *Body images: Development, deviance, and change* (pp. 21-48). New York: Guilford Press.

Thompson J.K. (Ed.). (1996). *Body image, eating disorders, and obesity*. Washington, DC: American Psychological Association.

Thompson J.K. and Spana R.E. (1988). The adjustable light beam method for the assessment of size estimation accuracy description, psychometrics, and normative data. *International Journal of Eating Disorders*, 7, 521-526.

Thompson J.K. and Tantleff S.T. (1992). Female and male ratings of upper torso: Actual, ideal, and stereotypical conceptions. *Journal of Social Behavior and Personality*, 7, 345-354.

Thompson J.K., Altabe M., Johnson S., Stormer S.M. (1994). Factor analysis of multiple measures of body image disturbance: Are we all measuring the same construct? *International Journal of Eating Disorders*, 16(3), 311-315.

Thompson J.K., Coover M.D., Richards K.J., Johnson S., and Cattarin J. (1995). Development of body image, eating disturbance, and general psychological functioning in female adolescents: Covariance structure modelling and longitudinal investigations. *International Journal of Eating Disorders*, 18, 221-236.

Thompson J.K., Heinberg L.J., Altabe M., and Tantleff-Dunn S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington DC: American Psychological Association.

Thompson S.H. and Gray J.J. (1995). Development and validation of a new body-image assessment tool. *Journal of Personality Assessment*, 64, 258-269.

Tiggemann M. (1992). Body-size dissatisfaction: individual differences in age and gender, and relationship with self-esteem. *Personality and Individual*, 13, 39-43.

Tiggemann M. (1996). "Thinking" versus "feeling" fat: Correlates of two indices of body image dissatisfaction. *Australian Journal of Psychology*, 48, 21-25.

Tiggemann M. (1997). Dieting in moderation: The role of dietary restraint in the relationship between body dissatisfaction and psychological well-being. *Journal of Health Psychology*, 2, 501-507.

Tiggemann M. and Pennington B. (1990). The development of gender differences in body-size dissatisfaction. *Australian Psychologist*, 25(3), 306-313.

Tiggemann M. and Pickering A.S. (1996). Role of television in adolescent women's body dissatisfaction and drive for thinness. *International Journal of Eating Disorders*, 20, 199-203.

Toro J., Castro J., Garcia M., Perez O. and Cuesta L. (1989). Eating attitudes, sociodemographic factors and body shape evaluation in adolescence. *British Journal of Medical Psychology*, 62, 61-70.

Toulmin S. (1990). *Cosmopolis: The Hidden Agenda of Modernity*. Chicago: University of Chicago Press.

Touyz S.W., Beumont P.J.V., Collons J.K. and Cowie L. (1985). Body image perception in bulimia and anorexia nervosa. *International Journal of Eating Disorders*, 4, 261-265.

- Tucker L.A. (1985). Dimensionality and factor satisfaction in the body image construct: A gender comparison. *Sex Roles*, 12, 931-937.
- Van Oppen P. and Arntz A. (1994). Cognitive therapy for obsessive-compulsive disorder. *Behaviour Research and Therapy*, 32, 79-87.
- Vartanian L.R., Giant C.L., and Passino R.M. (2001). Ally McBeal vs. Arnold Schwarzenegger?: Comparing mass media, interpersonal feedback and gender as predictors of satisfaction with body thinness and muscularity. *Social Behaviour and Personality*, 29, 711-723.
- Veron-Guidry S., Williamson D.A., and Netemeyer R.G. (1997). Structural modeling analysis of body dysphoria and eating disorder symptoms in preadolescent girls. *Eating Disorders: The Journal of Treatment and Prevention*, 5, 15-27.
- Viner K. (1997). The new plastic feminism. *The Guardian*, 4 July, 5.
- Vitousek K.B. and Hollon S.D. (1990). The investigation of schematic content and processing in eating disorders. *Cognitive Therapy and Research*, 14, 191-214.
- Vitousek K. M. (1996). The current status of cognitive-behavioral models of anorexia nervosa and bulimia nervosa. In P.M. Salkovskis (Ed.), *Frontiers of cognitive therapy* (pp. 383-418). New York: Guilford Press.
- Von Hippel W., Hawkins C., and Narayan S. (1994). Personality and perceptual expertise: Individual differences in perceptual identification. *Psychological Science*, 5(6): 401-406.
- Wardle J. and Marsland L. (1990). Adolescent concerns about weight and eating: A social-developmental perspective. *Journal of Psychosomatic Research*, 34, 377-391.
- Wardle J., Bindra R., Fairclough B., Westcombe A. (1993). Culture and body image: Body perception and weight concern in young Asian and Caucasian British women. *Journal of Community and Applied Social Psychology*, 3(3), 173-181.

Wells A. and Matthews G. (1994). *Attention and Emotion*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Wetherell M. and Potter J. (1992). *Mapping the language of racism: Discourse and the legitimation of exploitation*. Hemel Hempstead: Harvester Wheatsheaf.

Wiederman M.W. and Hurst S.R. (1997). Physical attractiveness, body image, and women's sexual self-schema. *Psychology of Women Quarterly*, 21, 567-580.

Williamson D.A., Davis C.J., Bennett S.M., Goreczny A.J., and Gleaves D.H. (1989). Development of a simple procedure for assessing body image disturbances. *Behavior Assessment*, 11, 433-446.

Williamson D.A., Netemeyer R.G., Jackman L.P., Anderson D.A., Funsch C.L. and Rabalais J.Y. (1995). Structural equation modeling of risk factors for the development of eating disorder symptoms in female athletes. *International Journal of Eating Disorders*, 17, 417-439.

Wolchik S., West S., Westover S., and Sandler I. (1993). The children of divorce parenting intervention: Outcome evaluation of an empirically based program. *American Journal of Community Psychology*, 21, 293-331.

Wolf N. (1991). *The Beauty Myth: How Images of Beauty are Used Against Women*. William Morrow and Company, Inc. New York.

Wood J.V. and Taylor K.L. (1991). Serving self-relevant goals through social comparison. In J. Suls, T.A. Wills (Ed). *Social comparison: Contemporary theory and research*. (pp. 23-49). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc. xv, 431.

Wood K. C., Becker J. A. and Thompson, J. K. (1996). Body image dissatisfaction in preadolescent children. *Journal of Applied Developmental Psychology*, 17, 85-100.

Wood K.C., Altabe M., and Thompson J.K. (1998). The Commentary Interpretation Scale: A measure of judgment of neutral appearance commentary. Unpublished manuscript, University of South Florida.

Wood W.D. (1986). Patterns of symptom report on the Brief Symptom Inventory. *Psychological Reports*, 58(2), 427-431.

Wooley O.W. and Roll S. (1991). The Color-a-person Body Dissatisfaction Test: Stability, internal consistency, validity, and factor structure. *Journal of Personality Assessment*, 56, 395-413.

Young C. E., Giles D. E., and Plantz M.C. (1982). Natural networks: Help-giving and help-seeking in two rural communities. *American Journal of Community Psychology*, 10(4), 457-469.

Young J.E. (1999). *Cognitive therapy for personality disorders: A schema focused approach* (3rd ed.). Sarasota, FL: Professionals Resources Press.

Zellner D.A., Harner D.E. and Adler R.L. (1989). Effects of eating abnormalities and gender on perceptions of desirable body shape. *Journal of Abnormal Psychology*, 98(1), 93-96.