Psychosocial, Attitudinal and Developmental Factors
Associated with
Elective Major Body Cosmetic Surgery

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Psychosocial, Attitudinal and Developmental Factors Associated with Elective Major Body Cosmetic Surgery

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Section One

The literature review outlines the research on the psychological characteristics of individuals who seek cosmetic surgery. The review then focuses on the proposed body image constructs; social comparison, shame and developmental experiences (appearance related teasing) in relation to body image dissatisfaction. The final section reviews literature that incorporates the theoretical relationship of body image in relation to major elective body cosmetic surgery.

Section Two

The research report examines attitudes about cosmetic surgery in female undergraduates and the relationship between sociocultural, social comparison, cognitive schemas and developmental experiences. The relationship between shame and the aforementioned body image factors were explored in prospective female patients, seeking major body cosmetic surgery (breast augmentation, reduction mammoplasty and abdominoplasty). Differences were investigated between prospective cosmetic surgery patients, women who had not considered surgery in the future and women who had. Questionnaire measures were administered to 83 undergraduates and 27 prospective cosmetic surgery patients. The results indicated that attitudes about cosmetic surgery were significantly positively correlated with social comparison, media influences, appearance schemas, body shame and body dissatisfaction for the undergraduates. Regression analysis suggested that body shame predicted more favourable attitudes toward cosmetic surgery. For the prospective cosmetic surgery patients, shame was significantly positively correlated with social comparison, appearance schemas and a history of appearance related teasing. Prospective cosmetic surgery patients reported more favourable attitudes about cosmetic surgery, greater appearance schemas and higher levels of body shame compared to women who had not considered surgery in the future and women that had. The research highlights a potentially new direction of investigation; that of body shame in cosmetic surgery patients.

Section Three

The critical appraisal considers the process and experience of conducting the research. Learning points are discussed.
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Section one: Literature Review

A review of the literature on body image and cosmetic surgery.

Abstract

Over 4.6 million cosmetic surgical procedures were performed by plastic surgeons and dermatologists in 1999, according to the American Society for Aesthetic Plastic Surgery (ASAPS). The present literature review outlines the research on the psychological characteristics of individuals who seek cosmetic surgery, examined from a broad historical perspective. The studies can be defined by the different methodological approaches employed. Interview-based investigations revealed significant levels of psychopathology in cosmetic surgery patients, whereas studies that utilised standardised measurements found far less disturbance. However, such research produced inconsistent findings and was also found to be methodologically flawed. These are discussed.

Sarwer et al. (1998b) proposed that future studies of the psychology of cosmetic surgery need to focus on body image, a psychological construct closely connected to physical appearance. Various investigators consider that body image has multiple dimensions. The review outlines a research agenda that has looked at body image from three main theoretical conceptualisations; namely social comparison, shame and developmental influences (teasing). The majority of the body image research has investigated eating disorders. Nevertheless, the literature reviews from these perspectives to provide support for Sarwer's et al's. (1998b) proposed model of the relationship between body image dissatisfaction and cosmetic surgery.

More recent cosmetic surgery research has begun to incorporate the theoretical relationship of body image in relation to cosmetic surgery. Therefore the final part of the review shall explore current recent advances in the psychology of body image and cosmetic surgery. Research of this nature has only recently emerged. Drawing conclusions from the modest available literature is premature; however, it does offer hypotheses regarding the mechanisms underlying the development of body image dissatisfaction in cosmetic surgery.

Key words: Cosmetic surgery, body image, body dissatisfaction, social comparison, shame, teasing.
1.0 Introduction

The field of cosmetic surgery has evolved in many ways over the past decade. According to the American Society for Aesthetic Plastic Surgery (ASAPS) over 4.6 million cosmetic surgical procedures were performed by plastic surgeons and dermatologists in 1999 (ASAPS). Davies & Vernon (2002) reported an increase of 173% between 1997 and 2000, even after having already increased throughout the last two decades. Ultimately, cosmetic surgery procedures are undertaken to improve individuals’ satisfaction with their appearance and presumably, in a number of cases, their self-esteem. In this regard, cosmetic surgery can be considered a psychological intervention or, at least, a surgical procedure with psychological consequences (Sarwer, Wadden, Pertschuk & Whitaker, 1998b).

Surprisingly, little is understood about the psychological status of persons who seek cosmetic surgery or potential psychological changes following surgery. Reviews of the research on the psychological characteristics of individuals who seek cosmetic surgery have yielded contradictory findings, mainly because of the different methodological approaches employed.

1.1 Outline of Review

The present paper first discusses evolving psychological research on cosmetic surgery patients, which is generally limited in range and quality. It then discusses more recent developments in the psychology of body image. Sarwer et al. (1998b) propose a model of the relationship between body dissatisfaction and cosmetic surgery. Most
contemporary theorists believe that body image concerns are crucial to understanding cosmetic surgery patients; however there has been very little empirical study of this relationship.

1.2 Search Strategy

A number of electronic searches were conducted to identify relevant studies within the field of cosmetic surgery. The electronic databases that were employed were: PsychINFO, PsychLIT, MEDLINE, CINAHL, Elsevier's Embase, Ovid, Web of Science and Bath Information and Data Services (BIDS) from 1930 to 2005. References in published reviews and citations in articles were sought out. Search strategies were based on both cosmetic surgery and body image as discrete text words. The search then focused on using the following text words: ‘body disturbance’, ‘body dissatisfaction’, ‘body image’, ‘social comparison’, ‘shame ’, ‘developmental’, ‘teasing’, ‘cosmetic surgery’.

2.0 Psychological investigations of persons who undergo cosmetic surgery

Formal psychiatric evaluations of persons seeking elective cosmetic surgery first appeared in the literature during the 1940’s and 1950’s. Typically, these reports reflected the dominance of psychoanalytic thinking in American psychiatry and generally characterised patients as highly neurotic and/or narcissistic (e.g., Hill and Silver, 1950).
The majority of the psychological literature on cosmetic surgery patients have been published from 1960 to the present, and have focused on the psychological characteristics of patients seeking cosmetic surgery, to identify those who may be most psychologically appropriate for surgery. Investigations assessed the pre-operative and post-operative psychological status of the cosmetic surgery patients, and can be divided into those studies that used clinical interviews or psychometric measures (Sarwer et al., 1998b). These shall now be reviewed.

2.1 Psychological investigations before surgery - clinical interviews

Most studies that relied on clinical interview methods pre-operatively reported significant psychopathology in cosmetic surgery patients (Meyer, Jacobson, Edgerton and Canter, 1960; Edgerton, Jacobson, & Meyer, 1960). Meyer et al. (1960) studied thirty women patients presenting themselves for rhinoplasty surgery. They were clinically interviewed pre-operatively and given 'a battery of psychological tests'. However these were not included in the reference list therefore investigation into their psychometric properties could not be fully assessed, and may well not fulfil standards of reliability and validity necessary for generalisable conclusions to be made. Psychiatric diagnoses that were made were as follows; one was psychotic, two severely neurotic, one had major depression and one had an obsessive and phobic reaction. Eight were diagnosed as having obsessive-compulsive disorder personalities and four as schizoid personalities. The remaining patients, although no informal diagnosis was given, were reported as possessing obsessional-schizoid traits by the psychiatrist. Webb, Slaughter, Meyer, and Edgerton (1965) in their study of face-lift patients, and
Beale, Lisper, and Palm (1980) and Schlebusch and Levin (1983) in their studies of breast augmentation patients all reported similar descriptions of psychopathology.

However, methodological investigations of early studies relied mainly on clinical interviews which were conducted by predominantly psychoanalytically trained psychiatrists, thus placing a bias on the assessment and interpretation. Such studies did not use standardised assessment procedures and in most cases, the interviews were not described. Diagnostic criteria were not referred to, and control or comparison groups were not employed, thus making it difficult to establish if the level of psychopathology really was greater than patients undergoing non-cosmetic surgical procedures (Sarwer et al., 1998b).

The clinical literature reviewed above tended to report a high incidence of psychological disturbance in cosmetic surgery patients. However, later research which employed psychometric testing instead of clinical interviews tended to report a much lower incidence of psychopathology. These shall now be examined.

2.2 Psychological investigations before surgery – psychometric measures

Researchers using psychometric measures found less dramatic psychopathology compared with those that relied on clinical interviews. The most frequently used measure of psychopathology has been the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway & McKinley, 1942). Goin, Burgoyne, Goin and Staples (1980) reported no significant psychopathology for 50 female face-lift patients who completed
the MMPI pre-operatively. Similarly, Wright and Wright's (1975) study of 25 rhinoplasty patients found corresponding results.

Breast augmentation and reduction mammoplasty studies, using psychometric measures also found few symptoms of psychopathology (Baker, Kolin, & Bartlett, 1974; Shipley, O'Donnell, & Bader, 1977). Shipley, O'Donnell and Bader (1977) found that breast augmentation patients had less pathological personalities test scores than the control groups.

The above studies have come under scrutiny with regards to their methodological limitations. Sarwer, Wadden, Pertschuk and Whitaker (1998b) noted that the measures used were not designed to assess the types of psychopathology specific to cosmetic surgery patients. For example, the ‘psychasthenia’ scale on the MMPI provided a global measure of worry and obsessiveness. However, it may not have been sensitive enough to tap disturbances associated specifically with appearance concerns. Also, investigations that compared patients to normative samples frequently failed to describe similarities or differences on descriptive characteristics between the two groups; therefore the suitability of such comparisons is unclear (Sarwer et al., 1998b).

2.3 Psychological investigations after surgery – clinical interviews

Studies investigating post-operative psychological functioning using clinical interviews, (Meyer, Jacobson, Edgerton & Cantor, 1960; Edgerton, Jacobson, & Meyer, 1960) reported an increase of emotional disturbance symptoms after the cosmetic surgery. In contrast, Goin, Goin and Gianini (1977) in their breast augmentation study
and Ohlsen, Ponten and Hambert (1978) in their reduction mammoplasty study reported
significant psychological benefits with regards to depression and anxiety. One criticism
of such post-operative interviews is that they were conducted by the same interviewer.
This practice increases the potential for interviewer bias; therefore the reports of
positive psychological change following cosmetic surgery should be viewed cautiously,
despite their encouraging findings.

2.4 Psychological investigations after surgery – psychometric measures

Research that implemented psychometric investigation post-operatively has suggested
that patients experience psychological benefits. Goin and Rees (1991) found
psychological improvements in anxiety, depression and obsessiveness immediately
after surgery and at six months. Goin, Burgoyne, Goin and Staples (1980) found that
the majority of face-lift patients had increased self-esteem and felt better able to cope
with life.

Hollyman, Lacey, Whitfield and Wilson (1986) found reduction mammoplasty patients
displayed a tendency to over perceive their breast and body size. Post-operatively, this
effect was significantly reduced and was maintained at six months. The study
incorporated a control group; however, the patients were only followed up at six
months. A longer time span would have yielded more valid and informative results.

There are a number of methodological problems with post-operative investigations.
Some studies used both pre- and post-operative assessments (Goin et al., 1980;
Hollyman et al. 1986; Wright & Wright, 1975) and others (Ohlsen et al., 1978; &
Webb et al., 1965) used only post-operative assessments. Also, studies such as Hollyman et al. (1986) who used normative samples, failed to document similarities and differences between the two groups, therefore the reliability of the comparisons are unidentified. Finally, patients who agreed to participate in such research and oblige with clinical interviews, could be argued to represent a biased group.

More recent research has incorporated both clinical interviews that use established diagnostic criteria and psychometric assessments, both pre- and post-operatively. Two psychometric investigations have suggested improvements in psychological functioning. Rankin, Borah, Perry and Wey (1998) in their breast augmentation study attempted to overcome the common methodological hurdles and administered assessments both pre- and post-operatively. They also included a comparison group. They found women reported improvements in quality of life and depression after surgery. Ercolani, Baldaro, Rossi and Trombini (1999) in their follow-up study of 79 rhinoplasty patients found a significant reduction in anxiety and neuroticism both six months and five years after surgery.

2.4.1 Conclusion

Drawing firm conclusions from the literature is difficult. Clinical interview studies and psychometric investigations have reported different findings, as pre-operative clinical interviews tended to report more significant psychopathology than pre-operative psychometric investigations. Post-operative investigations of the psychological outcome of cosmetic surgery have also not yielded definitive results. Some studies that used clinical interviews reported generally favourable psychological outcome (Goin et
al., 1977; Ohlsen et al., 1978), while two observed negative consequences (Edgerton et al., 1960; Meyer et al., 1960). Few studies have used standardised tests to assess post-operative psychological outcome. Two studies showed positive changes (Goin & Rees, 1991; Hollyman et al., 1986) and one observed no change (Wright & Wright, 1975).

3.0 A new direction for research? The relationship between body image and cosmetic surgery

Given the overall limited number of studies and the absence of methodologically sound investigations, Sarwer et al. (1998b) proposed that future studies of the psychology of cosmetic surgery need to focus on body image, a psychological construct closely connected to physical appearance. Various investigators consider that body image has multiple dimensions, the first being perceptual (a person’s estimation of size), the second is subjective (attitudes about one’s body) and thirdly, a behavioural component (degree to which a person’s behaviours are affected by perceptions/feelings about one’s body). Cash and Pruzinsky (1990) recommended that body image should be reconceptualised as ‘body images’ to accurately denote the diversity of the external and internal components at play.

The theoretical model of the relationship between body image and cosmetic surgery, as proposed by Sarwer et al. (1998b) utilised existing research on body image (Cash & Pruzinsky, 1990; Cash & Thompson, 1996). An overview of the literature suggests a number of psychosocial influences that may bear significantly on the development and maintenance of body image dissatisfaction. These include sociocultural, social comparison, cognitive schemas and developmental experiences. Burgeoning body
image research also suggests shame has an important role in body image (Markham, Thompson & Bowling, 2004). At present these theories have been applied primarily to individuals who suffer from eating disorders and/or excessive weight and shape concerns (Heinberg, 1996). However Sarwer et al. (1998b) suggest they may be useful in understanding the relationship between body image and cosmetic surgery. Given the magnitude of research for each of the individual abovementioned theories, the present paper will only review literature on social comparison, shame and teasing as it relates to body image. These areas have been selected because over the last decade they have been implicated as important determinants of body image dissatisfaction. The paper shall then review recent research that has begun to integrate theories of body image and cosmetic surgery.

It is believed that persons who undertake cosmetic surgery do so to modify their physical appearance and presumably, their body image. More recent studies have begun to incorporate body image constructs to understand the experiences that women may be exposed to in early life that potentially influence the decision to seek cosmetic surgery. It should be acknowledged that one weakness in the literature is insufficient clarification at the outset of many of the studies as to whether the cosmetic surgery has been undertaken for aesthetic or physical health reasons. However, the definition of cosmetic surgery states that: “Cosmetic surgery is a procedure performed primarily to preserve or improve appearance rather than to restore the anatomy and/or functions of the body that are lost or impaired due to an illness or injury. Plastic surgery is a general term for operative manual and instrumental treatment which is performed for aesthetic reasons” (ASAPS, 1999). Therefore the studies reviewed in the present paper include elective cosmetic surgery procedures pursued for aesthetic objectives.
4.0 Aims of literature review

The first aim of this review therefore was to examine three areas that have been found to be important in body image issues; social comparison, shame and teasing. The second aim was to examine literature that has incorporated the theoretical relationship between body image in relation to cosmetic surgery.

4.1 Selection Criteria

Research that has investigated the body image constructs has mainly focused on female adults, therefore only female adults will be addressed in the following literature review. In addition, as social comparison, shame and developmental experiences have origins in early life, research that has investigated children will also be included. With regard to cosmetic surgery literature, only research investigating female adults will be included.

5.0 The theoretical and conceptual considerations associated with body image:

Social comparison

The formation of body image, whether healthy or disturbed, occurs within a social and cultural context. Powerful messages regarding standards of attractiveness and beauty are created and transmitted within a cultural framework. One factor considered to be a central contributor to body image is social comparison. The hypothesis that psychopathology is related to problems with perceiving oneself to be inferior to others and/or when an individual is placed in an unwillingly subordinate position, has gained increasing support over recent years (Gilbert, 1993).
Festinger (1954) developed the first comprehensive theory of social comparison. The theory purports that individuals engage in the comparison process to judge their standing on a variety of dimensions. Since the theory’s original formulation, it has been revised to include many dimensions such as physical appearance (Wheeler & Miyake, 1992). The affective consequences of the comparison process can be influenced by the direction of the comparison, either upward or downward and also by the characteristics of the target, whether it is universalistic or particularistic. Research has tended to show that on the dimension of physical appearance, social comparisons tend to be upward (against someone seen as more attractive than themselves) which ultimately produces a diminution in self-perceptions of attractiveness (Morrison, Kalin & Morrison, 2004).

Researchers have begun to offer hypotheses concerning the mechanisms underlying the development of clinically significant disturbances in body image (Thompson & Heinberg, 1993). In their study, Stormer and Thompson (1996) investigated four factors which have been hypothesized to lead to body image problems. These were maturational status, negative verbal commentary, awareness/internalisation of sociocultural pressures and social comparison. Although much has been written about these four explanations of body dissatisfaction (in particular the sociocultural approach), few studies have examined the direct influence of individual approaches in one study. This type of research has helped to identify influential factors in the development and/or maintenance of body image problems. It is beyond the scope of the present review to examine each explanation in detail here, however the findings of the study will be discussed.

One hundred and sixty-two female college students (predominantly white) took part in the study (Stormer & Thompson, 1996) and completed a range of questionnaire...
measures. Multiple regression analyses were utilised to determine significant predictors for the dependent variables of body image disturbance. They documented the importance of social comparison and teasing history as important contributors of body dissatisfaction. The results also add to previous research by supporting the hypothesised role of sociocultural factors. However, one feature of the social comparison process – size/weight – appeared to be more significant than ratings of the importance of others as comparison targets. This finding contradicted an earlier study by Thompson and Heinberg (1993) who found ratings of the importance of others as comparison targets were more important. However, the adaptation of the prior scale (Thompson, Heinberg & Tantleff, 1991) from a focus on overall appearance to specific size and weight comparison, may have accounted for the different findings. A history of teasing about appearance did not explain as much unique variance as was detected in an earlier study (Thompson & Heinberg, 1993), however there were a larger number of predictors in Stormer & Thompson’s (1996) study (Stormer & Thompson, 1996).

Stormer and Thompson (1996) suggest one reason for the strong predictive abilities of social comparison and societal attitudes may be that the measures contain some level of dissatisfaction, in that body dissatisfaction may lead to the tendency to engage in body comparison and/or internalise societal ideals. Therefore the role of teasing may have been underestimated.

Stormer and Thompson’s (1996) study highlighted some limitations which would help to enhance future research. The predictors were correlative, but not necessarily causative, therefore longitudinal and experimental designs would help to develop our understanding of factors that truly lead to the development of body dissatisfaction.
Presently, there is no longitudinal investigation that has attempted to examine social comparison and/or sociocultural variables. This would invariably lead to the future development of theoretical models of body image disturbance.

The empirical relationship between social comparison and body image has mostly been evaluated among college students, primarily women. The general finding has been that females who have reported increased levels of appearance-related social comparisons have been more likely to be dissatisfied with their body images. Correlational studies have found associations with comparison tendencies, body image disturbance and self-esteem (Heinberg & Thompson, 1992). Other investigations have examined important specific targets that are most influential. For example, Rieves and Cash (1996) found sibling appearance during childhood and adolescence explained significant body image disturbance in that having a more attractive sibling fostered a negative self-evaluation (and vice versa) in college women.

Jones (2002) investigated the relationship among body image satisfaction and social comparisons to either same-sex peers or media models with adolescent girls and boys. The results confirmed that both same-sex peers and models/celebrities were the targets of social comparisons for physical attributes. However, comparisons on personal and social attributes were more likely directed toward same-sex peers. Gender differences in social comparison suggested that girls reported more social comparisons across targets and attributes. Although the message from this research seems clear, in that comparisons to peers and models/celebrities are connected to negative body image for both girls and boys, the study does not establish the causal direction of this relationship.
Longitudinal studies and experimental research are needed to clarify the causal links between social comparison and body dissatisfaction.

6.0 The theoretical and conceptual considerations associated with body image:

Shame

Shame is generally recognised as an intense and incapacitating emotion involving feelings of self-consciousness, inferiority and powerlessness, along with the desire to conceal deficiencies (Andrews, Qian & Valentine, 2002). According to Lewis (1987), shame arises from the self's negative evaluation of the entire self. That is, after painful self-inspection, the individual observes themselves to be inadequate in some respect, provoking a sense of being worthless, wanting to hide away, or as Tangney, Wagner, and Gramzow (1992) noted, 'to sink into the floor and disappear'. Tangney, Burggraf and Wagner (1995; as cited in Burney & Irwin, 2000) found a range of adverse negative psychological symptoms, such as depression, anxiety, anger and hostility to be associated with shame.

The concept of 'body shame' is relatively new to the psychological literature, although the concept of 'body image disturbance' is not (Gilbert, 2002). According to McKinley (1999), who coined the term 'objectified body consciousness', the experience of bodily shame involves 'a state of self-consciousness and embarrassment evoked when individuals view their body or appearance as falling short of society's representation of the ideal' (p.690). When an individual experiences their physical bodies as in some way unattractive, undesirable and a source of a 'shamed self', they become more vulnerable to psychological distress and disorders (Thompson & Kent, 2001).
Gilbert (2002) proposed shame as a multifaceted experience that has a number of components:

- **A social or external cognitive component:** Social contexts can elicit shame affects and are associated with thoughts that the self is seen by others as inadequate.
- **An internal self-evaluative component:** Negative self-evaluation and self-critical thoughts that one is bad or flawed.
- **An emotional component:** There are diverse emotions experienced in shame but include anxiety, anger and disgust at the self.
- **A behavioural component:** Specific defensive behaviours such as ‘avoidance’, concealment, a strong urge to ‘not be seen’ have been associated with shame.

Some people appear to tolerate shame feelings without engaging in defensive behaviours such as those mentioned above, whereas others find them insufferable and will go to extreme lengths to avoid situations that are involved in bringing them to the surface and also the feelings of shame themselves (Gilbert, 2002).

The majority of the literature that has examined shame in relation to body dissatisfaction has tended to focus primarily on clients with eating disorders. However, Sanftner, Barlow, Marschall and Tangney (1995) investigated a non-clinical sample of undergraduate women. They found that proneness to shame was positively related to the severity of a wide range of eating disturbances, including body dissatisfaction and a drive for thinness, although the significance of the correlations was modest.
A potential limitation of the study by Sanftner et al. (1995) is that the measure used to indicate proneness to shame, the Test of Self-Conscious Affect (TOSCA) (Tangney, Wagner, & Gramzow, 1989), does not focus on shame associated with eating, body image or general eating disturbances, but provided a global assessment of proneness to self-conscious affects in everyday life. A measure of shame in eating-related contexts would have been more relevant to the degree of eating-disordered symptomatology, thus providing more reliable results.

In a community sample of young women, bulimic symptoms were significantly associated with a sense of shame about one’s body (Andrews, 1997). Burney and Irwin (2000) considered the relative contributions of general and specific shame and guilt in eating disorder symptoms in college women and found that a significant predictor of eating disturbance and body dissatisfaction was a body shame component. Swan and Andrews (2003) reported that the aforementioned research of eating disturbances and body dissatisfaction in students advocate the importance of including specific assessments of bodily shame in clinical eating disorders and body dissatisfaction investigations.

The inclusion of assessments of shame, related to behaviour and non-physical personal characteristics, have also been recommended as dimensions of shame have been shown to relate to other disorders such as depression (Andrews, Brewin, Rose, & Kirk, 2000). Swan and Andrews (2003) administered the Experience of Shame Scale (ESS) to women who had treatment for eating disorders and also controls. The questionnaire assessed areas of characterological, behavioural and bodily shame relating to experiential, cognitive and behavioural components. They demonstrated a relationship
between shame and eating disorders and highlighted the importance of bodily shame in women with eating disorders.

While research has established a critical relationship between body image shame and eating disorder symptomatology, examination of the factors that potentially contribute to body image shame have been sparse. Markham, Thompson and Bowling (2004) examined the contributions of internalisation of the thin ideal, appearance-related teasing, physical appearance-related comparisons, global self-esteem and teasing history with regard to body image shame. The results suggested that internalisation of the thin ideal was found to predict increases in body shame through appearance comparisons, while negative body image esteem indirectly predicted increased body-shame.

Leeming and Boyle (2004) suggest that ‘internal representations of the expression of affects, interpersonal needs, drives and competencies become linked with representations of shame, through repeated experiences of shaming, particular in childhood’ (p.377). As a result, it becomes impossible to experience these ‘affects, needs, drives and competencies’ without experiencing shame, therefore the child develops an overall sense of being worthless and inferior which continues into later life. They suggest that repeated experiences of shaming in childhood, such as teasing about appearance, can have potentially harmful effects on later psychological functioning, including body image. Therefore the developmental aspect of teasing and body image will now be reviewed.
7.0 The theoretical and conceptual considerations associated with body image:

Teasing

Studies examining the experience of teasing in children have shown that higher levels of peer oppression are related to higher levels of social anxiety (Storch, Nock, Masia-Warner, & Barlas, 2003), lower levels of social acceptance, social competence (Callaghan & Joseph, 1995) and global self-worth (Neary & Joseph, 1994). A wealth of correlational data has indicated that teasing experiences are significantly related to body image dissatisfaction and eating problems in adolescent and adult samples (Thompson & Smolak, 2001).

Levine, Smolak and Hayden (1994) found teasing and criticisms from family members predicted body dissatisfaction in a sample of adolescent girls, however this measure included a combination of parents and sibling influences. Schwartz, Phares, Tantleff-Dunn and Thompson (1999) found that appearance-related commentary is not only associated with body image, but overall psychological functioning. They found women received more criticism from fathers and the women’s overall psychological functioning was strongly associated with feedback from parental figures. This study also highlighted the importance of non-verbal means of appearance communication, which was found to occur more regularly than overt teasing incidents.

Mclaren, Kuh, Hardy and Gauvin (2004) reported that most of the research has focused on teasing during childhood and adolescence. While these early instances of body-related comments are significant, teasing is not necessarily confined to childhood and adolescence. It is possible that some women also receive comments in adulthood (e.g.
from spouse or partner), which may have an effect on their body image. Ogden and Tayler (2000) showed that within heterosexual couples, men expressed more dissatisfaction with their partners’ body than the women expressed with their partners’ bodies. This intimates that women’s bodies may be an object for disparagement within the context of relationships.

The literature suggests that body dissatisfaction has been shown to be widespread among women at midlife (Allaz, Bernstein, Rouget, Archinard & Morabia, 1998; Deeks & McCabe, 2001) and has been associated with negative health consequences such as depression (Roth, Coles, & Heimberg, 2002), avoidance of physical activity (Ransdell, Wells, Manore, Swan & Corbin, 1998) and use of unhealthy weight loss strategies (Allaz et al., 1998).

Mclaren et al. (2004) asked about comments received during adulthood from one’s romantic partner, in addition to childhood (from different sources) and investigating negative body-related comments from a large, nationally representative cohort of middle-aged British women. They found that women’s body esteem was affected by reported negative comments from their partner and from negative comments during childhood. Negative comments appeared to influence midlife body esteem, both while growing up and currently.

The methodological approaches of studies that have investigated teasing and body image have used self-report methods, which were retrospective. There are two significant flaws with this approach. Firstly, they rely on memory recall, which can be problematic and biased. Recall of comments could be affected by a woman’s present
body esteem, mood or degree of psychological distress, which may also be linked to her body esteem; hence individuals with a poor body image may recollect their past experiences differently (Mclaren et al., 2004). Secondly, the information is difficult to verify. Studies using experimental manipulation techniques of appearance-related scenarios, for example case vignettes or videos of social interactions, overcome the unreliability of retrospective reports. Furman and Thompson (2002) sought to experimentally examine the influence of teasing on an individual’s mood and body satisfaction by using written appearance-based scenarios. The results revealed that negative appearance and abilities elicited moderate levels of mood disturbance when compared to positive vignettes.

There appear to be consistent associations between appearance-related teasing and body image dissatisfaction. However, a variety of standardised measures were used in each of the studies included herein and there was no apparent clear consistent agreement on what constituted ‘teasing’. This may have been variable, thus affecting the generalisability and reliability of the subsequent findings. Nevertheless, the research strongly supports the importance of teasing in the development and maintenance of body image disturbance.

7.1 Summary of the theoretical and conceptual considerations associated with body image

To summarise, it would appear complex interrelationships produce and maintain negative feelings regarding one’s appearance. (See Appendix one for a summary of the research for social comparison, shame and teasing).
Recent research has begun to investigate body image in cosmetic surgery samples and the attitudes individuals hold about cosmetic surgery in non-clinical groups. The research has drawn on the body image literature to further understand body image in a different clinical population other than eating disorders. For the purposes of this review, only major body contouring procedures will be presented. This is because such procedures are available on the National Health Service, whereas facial cosmetic procedures are not.

8.0 Cosmetic surgery research and body image

Sarwer, LaRossa, Bartlett, Low, Bucky and Whitaker (2003) investigated the body image concerns of women who sought breast augmentation surgery compared with a sample of women not proceeding to surgery. The results indicated that the breast augmentation patients reported increased dissatisfaction with their breasts, but not overall body dissatisfaction. This suggests discontent with a specific body feature may differentiate cosmetic surgery patients from those not seeking surgery. Augmentation patients rated their breast size as significantly smaller and their ideal breast size as significantly larger than did controls. Sarwer et al. (2003) hypothesised that breast augmentation candidates may be more receptive to sociocultural ideals regularly depicted in the mass media, as they believe larger breasts are the ‘ideal’. The study also found patients reported a greater investment in their physical appearance and scored greater on scales measuring health and fitness, as measured by The Multidimensional Body-Self Relations Questionnaire (MBSRQ). Breast augmentation patients also reported more frequent use of psychotherapy prior to surgery and were found to have
experienced a greater frequency of teasing, as compared with controls (Sarwer et al., 2003).

In a similar study, Didie and Sarwer (2003) examined factors that motivated women to seek cosmetic surgery. Twenty-five breast augmentation surgery patients and controls completed measures of body image dissatisfaction, sociocultural influences on physical appearance and self-reports of their motivations for surgery. The two groups did not differ on the importance of their overall appearance in their lives, nor did they differ on the internalisation or awareness of sociocultural messages about physical appearance. The augmentation patients did not display greater body image dissatisfaction, greater investment in their appearance or greater appearance-related teasing, compared with women not interested in surgery. Overall, women interested in breast augmentation surgery reported appearance-related concerns as the primary motivating factor for surgery, rather than direct or indirect influence from external sources, such as romantic partners or sociocultural versions of beauty. These findings largely contradicted the work of Sarwer et al. (2003), who found investment in appearance and appearance-related teasing were significant body image influences in women seeking breast augmentation.

There were a number of methodological issues in both Sarwer et al.’s, (2003) and Didie and Sarwer’s (2003) study; mainly that the female controls were significantly younger and reported increased levels of education than the patient group. Strategies to ensure that patients and controls are matched appropriately with regards to age, education and physicality were recommended (Sarwer & Crerand, 2004).
8.1 Attitudes about cosmetic surgery

With the dramatic increase of cosmetic surgery in recent years, research has begun to examine factors that may help understand attitudes about cosmetic surgery. Attitudes regarding cosmetic surgery among the general population, the degree to which they may be changing over time and the factors related to such attitudes remain largely unexplored. In the first study that has attempted to help understand these issues, Sarwer et al. (2005) investigated female college students’ experiences with and attitudes about cosmetic surgery. Five percent of women reported undergoing cosmetic surgery and forty percent of respondents indicated that they would consider having a cosmetic procedure in the future.

The study also assessed the relationship between several aspects of body image and interest in cosmetic surgery. They found that attitudes were related to investment in appearance, the mass media’s influence on body image, physical comparison to others, symptoms of Body Dysmorphic Disorder (BDD) (extreme body dissatisfaction) and concern with being overweight. The attitudes about cosmetic surgery were unrelated to body image dissatisfaction. Sarwer et al. (2005) concluded that two main predictors explained unique variance in cosmetic surgery attitudes. These were investment in appearance and mass media influence on body image. Respondents with BDD symptoms reported a greater desire to have many cosmetic procedures in the future. In summary, the study highlighted the increase in interest in cosmetic surgery for college women, to help with body image concerns.
Henderson-King and Henderson-King (2005) have developed a measure to assess attitudes about cosmetic surgery, based on the motivation for seeking surgery. They conducted a number of studies utilising this measure. Eagly and Chaiken (1993; cited in Henderson-King & Henderson-King, 2005) have documented in the attitude change literature that 'people’s latitude of acceptance on a particular issue is positively related to their acceptance of more extreme positions' (p.6).

In one part of their study, Henderson-King & Henderson-King (2005) postulated that bodily alterations could be viewed in terms of the ‘possible selves’. This means that ideas about the self, projected into the future, could either motivate an individual to strive for the ideal self-image or seek to circumvent an unattractive notion of the self. They examined who would more readily accept cosmetic surgery, those who seek to avoid a ‘feared self’ or those who seek the desired self. They found from a sample of 168 undergraduates, cosmetic surgery seemed to serve the purpose of warding off the fear of becoming unattractive rather than achieving the perfect attractive self.

In a second part of their study, the Acceptance of Cosmetic Surgery Scale (ACSS) was used to investigate the relationship between acceptance of cosmetic surgery and objectified body consciousness. McKinley and Hyde’s (1996) measure of objectified body consciousness tapped three aspects of this construct: (a) body surveillance (b) body shame, and (c) control beliefs. McKinley and Hyde (1996) found that body shame was more strongly associated with body-esteem than were body surveillance or control beliefs. Therefore Henderson-King and Henderson-King (2005) hypothesised that body shame would be positively related to the ACSS. Forty-four female undergraduates were administered the measures. Both surveillance and control beliefs
were not associated with the ACSS; however body shame was correlated with accepting cosmetic surgery for intrapersonal and social reasons. (See Appendix two for a summary of cosmetic surgery research).

9.0 Conclusion and future research implications

Previous investigations of cosmetic surgery patients failed to identify a relationship between symptoms of psychopathology and the pursuit of cosmetic surgery. Studies using standardised clinical interviews that allow for the generation of unbiased psychiatric diagnoses are warranted (Sarwer et al., 2003). However, since the early studies, research has taken a different direction. The current focus is to understand the factors/influences that may lead to dissatisfaction with one’s body and how this may lead to the request for cosmetic surgery.

Interest in body image has developed over the last decade. Research on eating disorders has certainly provided the foundation for existing understanding of body image and has served as a framework for the direction of the field. One manifestation of the pervasiveness of body image issues is the significant growth in cosmetic surgery.

Based on the comparatively few studies of body image in cosmetic surgery patients, a number of speculative conclusions can be drawn. From the research, patients have tended to report increased dissatisfaction with the body part nominated for surgery, as opposed to overall body dissatisfaction. Studies have also suggested health and fitness play an important role in cosmetic surgery patients. Ambiguous results have been found with regard to appearance investment in cosmetic surgery patients, as compared with
controls. At least one study has suggested cosmetic surgery patients reported a greater frequency of appearance-related teasing and more psychotherapy input in the year prior to surgery. Thus for some individuals, the desire for cosmetic surgery may be associated with psychopathology, which may be more suitably helped by psychological interventions rather than surgery (Sarwer & Crerand, 2004).

Cosmetic surgery research has begun to investigate both the attitudes about cosmetic surgery among the general population and the development of body image among female cosmetic surgery patients. Nevertheless, there have been few studies that have incorporated the aforementioned body image constructs examined in the present literature review in cosmetic surgery samples. The review shall now summarise the potential areas for future research.

Social comparison theory suggests that individuals frequently compare their appearance to that of others, resulting in disappointment and increased dissatisfaction with their body image. From the reviewed literature, these theories have demonstrated correlational support. Cosmetic surgery has been portrayed in the media as the route to obtain the appearance of those advertised in magazines or on the television. To the author’s knowledge, no research has explored the influences of social comparison processes in cosmetic surgery patients, which may help to explain the dissatisfaction with appearance.

The magnitude of shame research and body dissatisfaction has again, been predominantly drawn from eating disordered populations. There has been no research to date that has specifically incorporated shame measures to investigate shame and
body shame in relation to seeking cosmetic surgery. More recently, Henderson-King and Henderson-King (2005) introduced body shame as a potential important factor in accepting cosmetic surgery for social and intrapersonal reasons. However, only student samples were investigated. In general, research could begin to focus on exploring the potential relationship of shame, in particular body shame, with other body image constructs in cosmetic surgery samples. This would help to develop an understanding of the difficulties that women seeking surgery may hope to address. This could also have implications for pre-operative psychological assessment and post-operative evaluation. The literature review found strong support for the importance of teasing in the development and maintenance of body image disturbance in samples of women with eating disorders. However, to date, only few studies have empirically investigated this aspect with regards to cosmetic surgery patients. Sarwer et al. (1998a) stated that being teased about a particular sensitive feature has a more damaging effect than more general teasing, posing a significant risk factor for the development of a negative body image, with a view to 'change' the object of the teasing. Cosmetic surgery patients often described derogatory comments from others fuelling their decisions to seek cosmetic surgery. Establishing a link between childhood teasing and the motivation to seek cosmetic surgery for body dissatisfaction will help inform investigators devising prevention and intervention strategies aimed at helping children and adolescents at the time teasing occurs.

Non-surgical treatment of body dissatisfaction has not been discussed in the present review; however the evidence-based research will hopefully inform alternative psychological interventions for body image problems. Research is still in its infancy with regard to body image issues and cosmetic surgery. Nevertheless, highlighting core
concepts of body image can help towards building a framework for conducting a comprehensive assessment to inform formulation and treatment planning, either instead of cosmetic surgery or alongside it.

Research has drawn from body image literature in an attempt to understand body image in cosmetic surgery patients. Primarily, body image dissatisfaction has been investigated in samples of women with eating disorders. However, as cosmetic surgical treatments continue to increase in popularity, the study of patients who seek these treatments is likely to develop as an important area of body image study. New hypotheses and treatments will no doubt develop as a result of this growing population, helping professionals working within this field comprehend and treat these and various other influences that may affect body image.
10.0 References.


Heinberg, L. J., & Thompson, J. K. (1992). The effects of figure size feedback (positive vs. negative) and target comparison group (particularistic vs. universalistic) on body image disturbance. *International Journal of Eating Disorders, 12*, 441-448.


Section 2

Research Report

Psychosocial, Attitudinal and Developmental Factors
Associated With
Elective Major Body Cosmetic Surgery
Section Two: Research Report

Psychosocial, Attitudinal and Developmental Factors Associated with Elective Major Body Cosmetic Surgery

Abstract

Objective:
The first aim was to examine attitudes about cosmetic surgery in female undergraduates. The second aim was to investigate the relationship between shame and several psychological influences of body image (sociocultural, social comparison, cognitive schemas and teasing about appearance) in prospective female patients seeking major body cosmetic surgery (breast augmentation, reduction mammoplasty and abdominoplasty). The third aim was to investigate the differences between prospective cosmetic surgery patients (seeking major body procedures), women who had not considered surgery in the future and women who had considered surgery in the future, on the body image measures.

Design:
A cross sectional questionnaire design was employed with concurrent measures of both dependent and independent variables.

Method:
A total of 83 university students and 27 elective pre-operative cosmetic surgery patients participated. They completed a number of questionnaire measures of social comparison (PACS), sociocultural influences (SATAQ-3), appearance schemas (ASI), shame (ESS), appearance teasing history (PARTS) and attitudes about cosmetic surgery (CSAQ).

Results:
The results indicated that attitudes about cosmetic surgery were significantly positively correlated with social comparison, media influences, appearance schemas, body shame and body dissatisfaction. Regression analysis suggested that body shame predicted more favourable attitudes toward cosmetic surgery. Shame was significantly positively correlated with social comparison, appearance schemas and a history of appearance related teasing in prospective cosmetic surgery patients. ANOVA results indicated that prospective cosmetic surgery patients reported more favourable attitudes about cosmetic surgery, greater appearance schemas and higher levels of body shame compared to women who had not considered surgery in the future and women that had.

Conclusions:
Body shame was related to more favourable attitudes towards cosmetic surgery. Prospective cosmetic surgery patients exhibited greater dysfunctional schemas and increased body shame experiences. The research highlights a potentially new direction of investigation; that of body shame in cosmetic surgery patients.
1.0 Introduction

Body image, which refers to one's perceptions and attitudes in relation to one's own physical characteristics, has become established as an important aspect of self-worth and mental health across the life span (Harter, 1991; as cited in Stein, 1996). One manifestation of society's preoccupation with body image and its disturbances is seen in the remarkable growth in cosmetic surgery seen in the last decade.

It remains unclear what factors lead to dissatisfaction with a person's body image and the request for cosmetic surgery. Sarwer Wadden, Pertschuk and Whitaker (1998) believe research needs to focus on body image as a psychological construct. These workers proposed a multi-faceted model of the relationship between body image and cosmetic surgery drawing evidence from sociocultural, social comparison, cognitive and developmental theories and several reviews of body image (Cash & Pruzinsky, 1990; Thompson, 1990, 1996). The model essentially considers the psychological influences on the development of body image. A more recent development in the field is the investigation of shame as a psychological construct as it related to body image (Markham, Thompson & Bowling, 2004) and cosmetic surgery (Henderson-King & Henderson-King, 2005).

At present, these theories have primarily informed eating disordered research (Thompson, 1996). Research has only begun to investigate psychological influences of body image in cosmetic surgery and with the increasing demand for cosmetic surgery it
has become increasingly important to reach an understanding of the psychological influences that lead to the decision to seek cosmetic surgery (Didie & Sarwer, 2003).

The theoretical and conceptual propositions associated with body image are presented in the following sections. In addition to the described research on populations that have an eating disorder, it will examine current research that has begun to integrate the body image model as it relates to cosmetic surgery.

1.1 Psychological influences on body image

An overview of the literature suggested a number of psychosocial influences which may bear critically on the development and maintenance of body image dissatisfaction; these include sociocultural, media influences, social comparisons, cognitive schemas, developmental experiences and shame.

1.1.1 Sociocultural influences

Sociocultural influences have been recognized as an important area in understanding the development and maintenance of body image dissatisfaction. Stice and Shaw (2002) suggest that internalisation of the thin ideal, that is, “the extent to which an individual cognitively buys into societal norms of size and appearance, to the point of modifying one’s behaviour in an attempt to meet these standards” is a risk factor for body dissatisfaction (Thompson, van den Berg, Roehrig, Guarda & Heinberg, 2003, p.294).
Correlational studies have found positive associations among media exposure, body dissatisfaction (Harrison & Cantor, 1997) and eating disturbances (Thompson & Stice, 2001). Experimental studies have found that direct exposure to media images of thinness and attractiveness produces an immediate increase in women’s body dissatisfaction (Posavac, Posavac & Posavac, 1998).

1.1.2 Social Comparison influences

Social comparison theory proposes that ‘individual differences in the tendency to compare oneself with others accounts for differing levels of body image disturbance within a context of a culture that endorses thinness and attractiveness’ (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999, p.126). This relationship has mainly been studied among female college students and has focused primarily on models and celebrities as targets for comparisons; however everyday life targets can also be selected (Jones, 2001). Females who reported more appearance-related social comparisons tended to be more dissatisfied with their body image (Faith, Leone, & Allison, 1997; Thompson, Coovert, & Stormer, 1999).

1.1.3 Cognitive schema influences

Cash and Labarge (1996) suggested that an individual’s core belief, assumptions about and investment in appearance reflect the importance of body image to self-esteem and self-concept. This then provides an organised framework for how the individual
processes body image related material. This framework has been referred to as a body image ‘schema’. This was examined by Reas and Grilo (2004) who showed that individuals heavily invested in appearance, notice and interpret body image related information in a biased manner during a ‘trigger’ situation (such as looking in a mirror).

Experimental research has demonstrated that individuals who invest more powerfully in their appearance have shown greater body dissatisfaction after exposure to schema-relevant information (Lavin & Cash, 2001; Altabe & Thompson, 1996). The role of cognitive-body image schemas has therefore been proposed as a useful construct to help understand the development of body image dissatisfaction.

1.1.4 Developmental influences

In recent years, there has been increased awareness regarding the potentially damaging effects of childhood teasing on later psychological functioning (Roth, Coles, & Heimberg, 2002), including both body dissatisfaction and eating disturbance in adulthood (Rieves & Cash, 1996; Thompson & Smolak, 2001), depression (Olweus, 1993), and anxiety (Roth et al., 2002). Additionally, prospective studies suggest that teasing may be related to the onset of eating and body image problems (Thompson, Coover, Richards, Johnson, & Catterin, 1995).

The literature suggests that negative childhood experiences may shape individuals’ pathological beliefs about appearance. Understanding these processes will help address
dysfunctional cognitions that potentially contribute to distress and impairment with regard to body image (Storch, Roth, Coles, Heimberg, Bravata, & Moser, 2004).

1.1.5 Shame

Shame was not proposed by Sarwer et al. (1998) in their original body image model. However, the present paper reviews the role of shame, in particular body shame and its important relationship with body image. A fundamental understanding of the shame experience is the belief that the self is appraised in a negative and critical manner by others, which can result in feelings of humiliation and shyness.

'Shame-proneness' has been identified in the literature as being an important vulnerability factor for various types of psychopathology, such as depression (Andrews & Hunter, 1997) and also eating disorder symptomatology (Burney & Irwin, 2000; McKinley & Hyde, 1996). Kaufman (1984; cited in Burney & Irwin, 2000, p53) observed that 'the dynamics of shame are inevitably the dynamics of self-esteem – issues of self-image, self-concept, body image, self-worth and self-doubt are extensively grounded in the domain of shame'.

The literature suggests the shame experience is implicated in body image concerns. It is therefore an aim of the present study to investigate whether shame features as a prominent emotion in the attitudes about cosmetic surgery in female undergraduates and prospective cosmetic surgery patients.
1.2 Body image – cosmetic surgery research

The review shall now focus on the literature that has specifically investigated body image in cosmetic surgery using standardised measures of body image (Sarwer, Wadden, Pertschuk & Whitaker, 1998b).

Sarwer et al. (2005) examined college students’ experiences with and attitudes about cosmetic surgery. The study found that respondents reported more positive than negative attitudes towards cosmetic surgery and that attitudes about surgery significantly positively related to investment in appearance, the mass media’s influence on body image and physical comparison to others. Sarwer et al. (2005) found two main predictors of cosmetic surgery attitudes; investment in appearance and mass media influence on body image.

Henderson-King and Henderson-King (2005) examined the relationship between acceptance of cosmetic surgery (based on the motivation for having it done) and objectified body consciousness. The study found that increased levels of body shame were associated with accepting cosmetic surgery for social and intrapersonal reasons.

Sarwer and Didie (2003) considered factors that were important in understanding the motivation to seek cosmetic breast augmentation surgery. Breast augmentation candidates reported greater dissatisfaction with their breasts compared to physically similar women who were not seeking surgery. There was no difference between the importance of their overall appearance in their lives and also on the internalisation and
awareness of sociocultural messages about physical appearance. Breast augmentation patients did not display a greater investment in appearance, greater appearance-related teasing or greater internalisation or awareness of sociocultural representations of beauty.

1.3 Summary

The psychological representation of one's physical appearance can be understood through the psychological construct of body image, which has been reviewed in the present paper. Clinical research has suggested that body dissatisfaction places individuals at risk for the development of a number of clinically significant conditions. These include eating disorders (Stice, Presnell, & Spangler, 2002) and depression (Stice & Bearman, 2001). A constructive focus for research (and ultimately for clinical care) is to integrate the body image construct to understand the complex interactions that may influence body image in cosmetic surgery patients. This construct has also been applied to help understand the potential influences on attitudes of cosmetic surgery. Previous research has found greater body dissatisfaction, higher schematicity of appearance and greater appearance-related teasing experiences in those seeking breast augmentation surgery (Sarwer, LaRossa, Bartlett, Low, Bucky, & Whitaker, 2003); however Didie and Sarwer (2003) found conflicting results. Henderson–King and Henderson-King (2005) reported greater body shame associated with acceptance of cosmetic surgery in a college sample, however no other measures were used, so it is unclear whether body shame relates to other aspects of body image. Research has also found exposure to media images of attractiveness and increased social comparison engagement produces an
immediate increase in women’s body dissatisfaction (Posavac, Posavac & Posavac, 1998). Social comparison has not previously been investigated in prospective cosmetic surgery patients. In summary, body image in adult women is an important area in need of further research. However the majority of research has either focused on women with eating disorders or female undergraduates.

1.4 Aims of the present study

The present study had three main aims. The first aim was to examine young female undergraduates' experiences with, and attitudes about, cosmetic surgery. As part of this, the relationship between several aspects of body image, identified in the literature as being important psychological influences of body image were assessed. The body image measures used in this study will assess social comparison, media influence, appearance schemas, shame and teasing history.

The second aim of the study is to explore the relationship of shame to attitudes about cosmetic surgery and several aspects of body image, namely, social comparison, media influence, appearance schemas, shame and teasing history in prospective cosmetic surgery patients seeking major body procedures. No research to date has examined shame in relation to the identified body image measures using prospective cosmetic surgery patients.
The third aim of the study is to investigate differences between undergraduates not seeking cosmetic surgery, undergraduates who had considered cosmetic surgery in the future and cosmetic surgery patients seeking major body procedures, using the reported body image measures. Standardised body image questionnaire measures have been included in the study. There are four main questions that this paper seeks to answer:

1) What aspects of body image are the strongest predictors of future surgery in female undergraduates? 2) What aspects of body image are correlated with attitudes about cosmetic surgery in female undergraduates? 3) What are the strongest predictors of cosmetic surgery attitudes in female undergraduates? 4) What are the relationships between the body images measures and shame? 5) Are there any differences on the body image measures between prospective cosmetic surgery patients, undergraduates who have not considered cosmetic surgery in the future and undergraduates who have considered cosmetic surgery in the future?
1.5 Hypotheses

It was hypothesised that:

(i) body dissatisfaction (ii) sociocultural (iii) social comparison (iv) appearance schemas (v) shame and (vi) appearance-related teasing would be significantly related to more favourable attitudes about changing one’s appearance through cosmetic surgery in the undergraduate group.

It was also hypothesised that prospective cosmetic surgery patients would report (i) greater body dissatisfaction (ii) hold more favourable attitudes about cosmetic surgery (iii) endorse greater identification with mass media images of beauty (iv) engage in greater social comparison engagement (v) demonstrate greater dysfunctional appearance schemas (vi) recount increased shame experiences and (vii) report more frequent appearance-related teasing, compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery but not currently seeking it.
2.0 Method

2.1 Design

The design was a cross sectional questionnaire study. Participants completed the measures in one questionnaire booklet.

2.2 Sample recruitment and procedure

Approval to conduct the study was obtained from the Leicestershire Research Ethics Committees (see Appendix 3). Consent was obtained from each participant (undergraduate and patient group) through completion of the questionnaires.

Undergraduates:

Female undergraduates (>18 years) studying for a Psychology degree were recruited at the University of Leicester and offered experimental practice research (EPR) credit for completion of the measures. Only 7% requested EPR. Participants were given the questionnaire booklet, an information sheet describing the study (Appendix 4) and stamp addressed envelope. It was emphasised that their participation in the study was voluntary and confidentiality was ensured. Contact details of the lead investigator were provided to all participants, offering the opportunity to obtain the results of the study (this was the same for the patient group).
Patients:
Female adults (>18 years) who had requested cosmetic surgery were identified from a U.K. University teaching hospital. The inclusion criteria were as follows: (1) patients had actively sought cosmetic surgery, (2) patients had been assessed and approved to undergo a cosmetic surgery procedure and (3) patients did not suffer from any psychotic phenomena. Patients who met the inclusion criteria were identified in collaboration with hospital staff during regular visits to the hospital by the lead investigator. There were 162 patients in total on the cosmetic surgery database who had been assessed in the nine months prior to the study. Seventy-six female patients had been approved and were on the waiting list for surgery. Each individual was posted an information sheet (Appendix 5) which outlined aim of the study, a self-report questionnaire booklet and a stamp-addressed envelope. Twenty seven patients responded (20.5%) and returned the questionnaire booklet to the lead investigator.

2.3 Sample characteristics
There were two groups in the present study 1) Undergraduates and 2) Patients.

Undergraduates:
The participants who completed the questionnaires (n = 83) were all females. The group ranged in age from 18 – 23 years old ($M = 19.61$, $SD = 1.15$). The group ranged in height from 60 – 71 inches ($M = 64.67$, $SD = 2.72$), in weight 40.4 – 98 kg ($M = 59.42$, $SD = 11.64$) and in body mass index (BMI) of 17 – 35 kg/m² ($M = 21.95$, $SD = 3.68$). The majority of the undergraduates were Caucasian (68%), 6% were Asian-Indian, 5%
were Asian (other), 5% were Black-British, 4% were Black-Caribbean, 4% were Mixed-white/black Caribbean, 1% were white-Irish, 2% were white-other, 1% were mixed-white/Asian, 1% were Black-other, 1% mixed other, 1% were Asian-Pakistani and 1% were other.

Patients:
Participants were all female (n = 27). The group ranged in age from 20 – 42 years ($M = 33.67, SD = 8.31$). BMI was not calculated due to insufficient data regarding height and weight. The majority were Caucasian (92%), 4% white-other and 4% were Asian-Indian. Each patient had been individually assessed and approved for cosmetic surgery and was on the National Health Service waiting list. Forty-one percent of the group requested breast augmentation surgery, 33% reduction mammoplasty surgery and 26% abdominoplasty surgery.

2.4 Measures:
All participants completed the following measures:

2.4.1 Patient Information Questionnaire

This questionnaire provided basic descriptive information. Participants were asked if they had undergone cosmetic surgery in the past, if they had considered cosmetic surgery in the future and if so what procedure or aspect of their appearance would they
like to change. Participants were asked to rate their appearance satisfaction on a 5-point scale.

2.4.2 BMI

Participants were asked their height and weight. From this, the Body Mass Index (BMI) was calculated as the ratio of weight (kg) to height squared (m²). It should be noted that there were a large number of missing values for this variable for the patient group therefore BMI was not included in any of the analyses that follow.

2.4.3 Cosmetic Surgery Attitudes Questionnaire (CSAQ) (Sarwer et al., 2005)

The CSAQ (Appendix 8) was developed to investigate experiences with and attitudes about cosmetic surgery. The present study employed the same measure used in Sarwer et al.'s. (2005) study, which consisted of eight items. An additional five items were included to expand the scale. The added items were based on the original items. They were designed to investigate motivation for having cosmetic surgery at the present time and in the next two years. Responses to the thirteen items were recorded on a 1 (“Definitely Disagree”) to a 5 (“Definitely Agree”) scale. Sarwer et al. (2005) reported a high internal consistency of .85 for the 8 item measure. The present study also found a high internal consistency level of .87 for the expanded 13 item measure.
2.4.4 The Physical Appearance Comparison Scale (PACS) (Thompson, Heinberg, & Tantleff, 1991)

The PACS (Appendix 9) consists of five items that deal specifically with the tendency to compare the appearance of self to the appearance of other individuals. The items are answered on a five point scale, ranging from 1 (“Never”) to 5 (“Always”). Item one originally stated “At parties or other social events, I compare my figure to the figures of other people”. This was changed to “At parties or other social events, I compare my physical appearance to the appearance of others”. Item four was a reverse item. Durkin and Paxton (2002) report a test-re-test reliability of .78. Internal consistency analysis of the five items of the PACS in the present study suggested that item one (“At parties or other social events, I compare my physical appearance to the physical appearance of others”) was rather weak, suggestive of conceptual problems. This item was removed, which produced a four item scale with high internal consistency (> .70) therefore all analyses were performed using four items.

2.4.5 The Sociocultural Attitudes Towards Appearance Scale - 3 (SATAQ-3) (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2005)

The SATAQ-3 (Appendix 10) is a recently developed scale designed to assess media influence on body image (and eating disturbances). After extensive psychometric testing, the measure indicated four factors; 1) Internalisation-General, which reflects a generic media influence related to TV, magazines and movies; 2) Internalisation-
Athletic, which reflects internalisation of athletic and sports figures; 3) Information, which reflects the media as an informational source and 4) Pressures, which reflects media pressures. The scale consists of 30 items. For the purpose of the present study, all items were added to produce a composite score. Sample items include “I compare my appearance to the appearance of TV and movie stars” (Internalisation-General category) and “I’ve felt pressure from TV or magazines to change my appearance” (Information category). Four items were reverse items (3, 6, 12 19 and 27). Sarwer et al., (2005) reported a high internal consistency of .97.

2.4.6 The Appearance Schemas Inventory (ASI) (Cash & Labarge, 1996)

The ASI (Appendix 11) assesses participants’ core beliefs or assumptions about the meaning or importance of appearance in daily life (dysfunctional schemas). The items tap several content domains: 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 internalisation of appearance-based social stereotypes. Principal-components analysis of the ASI revealed three factors (Cash & Labarge, 1996). The first factor, Body Image Vulnerability (BIV) involves the tendency to view one’s appearance as socially unacceptable. The second factor, Self-Investment (SI) concerns beliefs that one’s appearance is fundamental to self-concept and that one must pursue optimum attractiveness. The third factor, Appearance Stereotyping (AS) taps into assumptions about the social meanings of
attractiveness. Participants respond to the 14 item measure on a 5-point scale, anchored at each value from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Higher scores reflect a stronger endorsement of dysfunctional schemas or beliefs, suggesting that the individual places greater importance on appearance. The three individual factors were also included in the analyses. Cash and Labarge (1996) reported a high internal consistency of .84.

2.4.7 The Experience of Shame Scale (ESS) (Andrews, Qian & Valentine, 2002)

The ESS (Appendix 12) was based on the interview measure (Andrews & Hunter, 1997) and assesses specific areas of shame related to self and performance. The ESS taps a specific disposition to experience shame rather than assessing a temporary negative affect. The ESS is a 25-item questionnaire, which assesses four areas of characterological shame: 1) shame of personal habits, 2) manner with others 3) sort of person (you are) and 4) personal ability; three areas of behavioural shame: 1) shame about doing something wrong, 2) saying something stupid and 3) failure in competitive situations; and bodily shame: 1) feeling ashamed of (your) body or any part of it (Andrews, Qian & Valentine, 2002). For each of the eight areas covered, there are three related items addressing 1) the experiential component (e.g. "have you felt ashamed of your personal habits?"); 2) a cognitive component about concern over others' opinions (e.g. "have you worried about what other people think of your personal habits?") and 3) a behavioural component about concealment or avoidance (e.g. "have you tried to cover up or conceal any of your personal habits?"). For bodily shame, there is an added item
concerning avoidance of mirrors (in addition to concealing body parts from others). Participants respond according to how they have felt in the past year and each item is rated on a 4-point scale from 1 ("Not at all") to 4 ("Very Much"), yielding total scores in the range of 25–100. (Andrews, Qian & Valentine, 2002). Andrews, Qian and Valentine (2002) reported a high internal consistency of .92, and the test-retest reliability over eleven weeks was .83. The Cronbach alpha for the subscales were .90 (characterological), .87 (behavioural shame), and .86 (bodily shame).

2.4.8 The Physical Appearance Related Teasing Scale (PARTS) (Thompson, Fabian, Moulton, Dunn & Altabe, 1991)

The PARTS (Appendix 13) consists of 18 items that assesses an individual's history of being teased. The original version of the measure included two subscales; weight/size teasing and general appearance teasing. For the present study, all references to weight or size were changed to 'appearance'. Sample items include "When you were a child, did you ever feel like people were making fun of you because of your physical appearance?" and "Did other kids call you derogatory names that related to your physical appearance?" Participants indicated the frequency with which teasing occurred with a 5-point scale from 1 ("Never") to 5 ("Frequently"). Higher scores reflect greater awareness of and internalisation of societal standards for appearance (media's influence). Markham et al., (2004) reported a high internal consistency of .91 and a test-retest reliability of .86.
2.5 Data analyses

Descriptive analyses were carried out to identify the percentages of undergraduate participants who have had cosmetic surgery, who did or did not expect to have surgery in the future, and what procedure they would seek.

A MANOVA was conducted to investigate if two groups of undergraduates (one group that had considered cosmetic surgery in the future and one group who had not) differed on the psychosocial and developmental body image measures (dependent variables).

The relationship between attitudes about cosmetic surgery and the measures of body image was investigated using bivariate correlations. The multivariate prediction of cosmetic surgery attitudes from the measures used a multiple regression analysis, which produces a multiple correlation coefficient ($R$). The square of this value expresses the percentage of variance in cosmetic surgery attitudes that can be explained by the predictor variables (Sarwer et al., 2005). Exploratory correlational analyses were conducted for each of the body image measures with shame for the prospective cosmetic surgery patients. ANOVAs, the non-parametric equivalent Kruskal-Wallis test and post-hoc comparisons and Mann-Whitney U tests were used to investigate significant differences on the body image measures between the two undergraduate groups and prospective cosmetic surgery patients.
2.6 Prospective Power Analysis

To determine the appropriate sample size necessary to achieve a specified level of power for the analyses, a prospective power analysis was conducted. To detect a Pearsons product moment correlation coefficient of 0.5 (medium effect size) with a minimum satisfactory level of power of 80% (two-tailed) at the 0.05 level of significance, 30 participants would be needed in each group. With regard to the ANOVA analyses, power analysis revealed that at least 25 participants would be needed in each group to obtain 80% level of power at the 0.05 significance level to detect a medium effect size (two-tailed) (Cohen, 1988).
3.0 RESULTS

3.1 Data Screening

Prior to analysis the data were screened to check the distribution of the main variables for the patient and student groups separately. A number of measures were found to have significant positive skew; these being: The Cosmetic Surgery Attitudes Questionnaire (CSAQ) for students, the Appearance Stereotyping (AS) subscale of the Appearance Schema Inventory (ASI) for patients and undergraduates, the characterological shame subscale of the Experience of Shame Scale (ESS) for undergraduates and the Physical Appearance Related Teasing Scale (PARTS) for patients and undergraduates. Logarithmic transformations were used on these measures to reduce the levels of skew to non-significance. The transformed variables were then used in all subsequent analyses. For clarity, Table 1 presents the non-transformed means and SD's for undergraduates and Table 5 for patients.

In addition, the self-investment (SI) subscale of the ASI and the body shame subscale of the ESS for the patient group were found to have significant levels of skewness. Various transformations of these measures were unsuccessful in improving their distributions. Therefore, non-parametric methods were used for these measures in all subsequent analyses. Normality was assessed separately for the ANOVA analyses.
3.2 Descriptive Data

The score ranges, means, standard deviations and Cronbach alphas of the main variables for the students are reported in Table 1. The internal reliability of all the measures was found to be acceptable (i.e. ≥ 0.70) except for item one on the Physical Appearance Comparison Scale (PACS) which was subsequently deleted. All analyses were conducted with four items.

Table 1. Range, Mean scores, Standard Deviations and Cronbach Alpha’s of the main variables for the undergraduate group.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>RANGE OBSERVED</th>
<th>MEAN</th>
<th>S.D</th>
<th>CRONBACH ALPHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAQ</td>
<td>0 – 61</td>
<td>32.99</td>
<td>9.47</td>
<td>.87</td>
</tr>
<tr>
<td>PACS</td>
<td>0 – 19</td>
<td>12.52</td>
<td>3.07</td>
<td>.71</td>
</tr>
<tr>
<td>SATAQ-3</td>
<td>0 – 143</td>
<td>90.99</td>
<td>25.12</td>
<td>.95</td>
</tr>
<tr>
<td>ASI (total)</td>
<td>0 – 58</td>
<td>35.39</td>
<td>9.20</td>
<td>.84</td>
</tr>
<tr>
<td>BIV</td>
<td>0 – 26</td>
<td>15.82</td>
<td>4.60</td>
<td>.76</td>
</tr>
<tr>
<td>SI</td>
<td>0 – 21</td>
<td>13.27</td>
<td>3.33</td>
<td>.70</td>
</tr>
<tr>
<td>AS</td>
<td>0 – 14</td>
<td>6.00</td>
<td>2.41</td>
<td>.73</td>
</tr>
<tr>
<td>ESS (total)</td>
<td>0 – 99</td>
<td>57.62</td>
<td>16.90</td>
<td>.95</td>
</tr>
<tr>
<td>ESS (C)</td>
<td>0 – 47</td>
<td>25.57</td>
<td>8.12</td>
<td>.90</td>
</tr>
<tr>
<td>ESS (B)</td>
<td>0 – 36</td>
<td>23.06</td>
<td>7.15</td>
<td>.92</td>
</tr>
<tr>
<td>ESS (Bo)</td>
<td>0 – 16</td>
<td>9.70</td>
<td>3.60</td>
<td>.89</td>
</tr>
<tr>
<td>PARTS</td>
<td>0 – 64</td>
<td>31.21</td>
<td>11.25</td>
<td>.89</td>
</tr>
</tbody>
</table>

N=83. CSAQ=Cosmetic Surgery Attitudes Questionnaire; PACS=Physical Appearance Comparison Scale; SATAQ-3=Sociocultural Attitudes Towards Appearance Scale; ASI=Appearance Schema Inventory; BIV=Body Image Vulnerability; SI=Self-Investment; AS=Appearance Stereotyping; ESS=Experience of Shame Scale; ESS(C)=Experience of Shame Scale -Characterological shame; ESS(B)=Experience of Shame Scale-Behavioural shame; ESS(Bo)=Experience of Shame Scale-Body shame; PARTS=Physical Appearance-Related Teasing Scale.
3.3 Cosmetic Surgery Information: undergraduates

The undergraduate group were asked if they had thought about having cosmetic surgery: Sixty-three percent reported they did not want cosmetic surgery in the future and 37% reported they had considered cosmetic surgery. Those who wanted surgery detailed what aspect of their appearance they would want to change and what procedure they would seek. Out of the 37% who had considered cosmetic surgery, 24% requested breast augmentation, 4% rhinoplasty, 6% liposuction, 1% face lift, 2% ear pinning. Six participants reported multiples of one cosmetic procedure.

3.3.1 Cosmetic Surgery Attitudes Questionnaire (CSAQ): undergraduates

Table 2 summarises the student responses to the thirteen items on the CSAQ. Ignoring the responses of indifference, 51% approved of persons undergoing cosmetic surgery to increase their self-esteem, while 26% disapproved. Forty-one percent disagreed with the statement ‘cosmetic surgery is of no use to me’, while 39% agreed. Fifty-two percent approved of people surgically changing their appearance to feel better about themselves and 24% indicated disapproval. Forty-seven percent agreed with the statement that ‘people should do whatever they want to look good’, while 34% disagreed. Nearly half of the sample disagreed and one third agreed with the statement ‘I think cosmetic surgery is a waste of time’. Respondent’s attitudes were more equally divided or less favourable on the remaining items. Ninety-two percent disagreed and 3% agreed with being motivated to seek cosmetic surgery at the present time. Fifty-four percent disagreed with the statement that they would have cosmetic surgery in the future and 37% agreed that they would. Fifty-one percent disagreed with the statement ‘cosmetic surgery would make me
feel better about myself and 31% agreed. Over half indicated that they would be embarrassed to tell people other than family and close friends about having cosmetic surgery. Three percent indicated they would have cosmetic surgery at the request of their partner and 25% said they would have surgery if they had an unlimited amount of money.

Table 2. Undergraduate Responses on the Cosmetic Surgery Attitudes Questionnaire.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Indifferent</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am motivated to seek cosmetic surgery at this present time</td>
<td>67%</td>
<td>25%</td>
<td>5%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>I will have cosmetic surgery in the next two years</td>
<td>80%</td>
<td>14%</td>
<td>1%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>I have considered seeking cosmetic surgery in the future</td>
<td>28%</td>
<td>26%</td>
<td>9%</td>
<td>25%</td>
<td>12%</td>
</tr>
<tr>
<td>Cosmetic surgery is of no use to me</td>
<td>10%</td>
<td>31%</td>
<td>20%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Cosmetic surgery would make me feel better about myself</td>
<td>23%</td>
<td>28%</td>
<td>18%</td>
<td>21%</td>
<td>10%</td>
</tr>
<tr>
<td>I approve of persons undergoing cosmetic surgery to increase their self-esteem</td>
<td>6%</td>
<td>20%</td>
<td>23%</td>
<td>41%</td>
<td>10%</td>
</tr>
<tr>
<td>I think cosmetic surgery is a waste of money/time</td>
<td>13%</td>
<td>30%</td>
<td>28%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>If I had cosmetic surgery, I would be embarrassed to tell people other than family and close friends</td>
<td>7%</td>
<td>22%</td>
<td>13%</td>
<td>40%</td>
<td>19%</td>
</tr>
<tr>
<td>I approve of people surgically changing their appearance to feel better about themselves</td>
<td>6%</td>
<td>18%</td>
<td>24%</td>
<td>38%</td>
<td>14%</td>
</tr>
<tr>
<td>I think I might have cosmetic surgery when I reach middle age</td>
<td>22%</td>
<td>31%</td>
<td>23%</td>
<td>18%</td>
<td>6%</td>
</tr>
<tr>
<td>I think people should do whatever they want to look good</td>
<td>7%</td>
<td>27%</td>
<td>19%</td>
<td>40%</td>
<td>7%</td>
</tr>
<tr>
<td>I would have cosmetic surgery if my partner wanted me to</td>
<td>63%</td>
<td>28%</td>
<td>6%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>If I had unlimited amount of money I would have cosmetic surgery</td>
<td>31%</td>
<td>28%</td>
<td>16%</td>
<td>12%</td>
<td>13%</td>
</tr>
</tbody>
</table>
3.4 Do women who want future cosmetic surgery differ from those who do not?

A one-way between-groups multivariate analysis of variance (MANOVA) was performed to investigate the differences between those who wanted cosmetic surgery in the future and those who did not. Six dependent variables were used. These were i) social comparison ii) media influence iii) appearance schemas iv) shame v) teasing history and vi) attitudes about cosmetic surgery. The independent variable was future surgery.

Preliminary assumptions testing was conducted (Pallant, 2005). No serious violations were noted. There was a significantly significant difference between the two groups on the combined dependent variables: $F(6,76)=7.5, p=0.0001$; Wilks’ Lambda=.63; partial eta squared=.37. When the results for the dependent variables were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of 0.008, was attitudes about cosmetic surgery $F(1,81)=43.7, p=0.0001$, partial eta squared=.35. An inspection of the mean scores indicated that those who wanted cosmetic surgery in the future held more favourable attitudes towards cosmetic surgery ($M=1.6$, $SD=.10$) than those who did not ($M=1.4$, $SD=.095$). It should be noted that media influences [$F(1,81)=5.36, p<0.05$, partial eta squared=.062] and appearance schemas [$F(1,81)=3.25, p<0.05$, partial eta squared=.039] were also significant at the 0.05 alpha level. The results of the MANOVA indicated that attitudes about cosmetic surgery were statistically different for the two groups of undergraduates; however it should be acknowledged that the difference failed to reach statistical significance of the Bonferroni adjustment. Based on this finding, the study wished to investigate the relationships between attitudes about cosmetic surgery and the body image measures. These shall now be presented.
3.5 First Aim - Correlational analyses of body image measures and attitudes about cosmetic surgery for undergraduates.

The relationship between attitudes about cosmetic surgery (CSAQ) and the body image measures were assessed using Pearson Product-moment correlation coefficient. Table 3 illustrates the correlation, effect size and the coefficient of determination.

**Social Comparison and attitudes about cosmetic surgery**

There was a small, positive significant correlation between social comparison (PACS) and attitudes ($r=.28, p<0.01$).

**Media Influences and attitudes about cosmetic surgery**

There was a medium, positive significant correlation between media influences (SATAQ-3) and attitudes ($r=.32, p<0.01$).

**Appearance Schemas and attitudes about cosmetic surgery**

There was a medium, positive significant correlation between appearance schemas (ASI) (total of all subscales) and attitudes ($r=.38, p<0.01$). Two of the ASI's subscales were also found to be significantly correlated with attitudes. These were the BIV ($r=.44, p<0.01$) (medium strength) and also the SI ($r=.27, p<0.05$) (small strength). No relationship was found for attitudes about cosmetic surgery and appearance stereotyping ($r=.16$).

**Shame and attitudes about cosmetic surgery**

There was a medium, positive significant correlation between the body shame subscale of the ESS and attitudes ($r=.38, p<0.01$). No relationship was found for attitudes about cosmetic surgery and characterological shame ($r=.076$), behavioural shame ($r=.16$) and teasing history ($r=.08$).
**Body Dissatisfaction and attitudes**

There was a large, negative significant correlation between body satisfaction and attitudes ($r=-.56$, $p<0.01$).

Table 3. Correlates between the Cosmetic Surgery Attitudes Questionnaire and Body Image Measures for the undergraduates

<table>
<thead>
<tr>
<th>Measures</th>
<th>CSAQ</th>
<th>Strength of correlation</th>
<th>% variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>PACS</td>
<td>.28**</td>
<td>small</td>
<td>8</td>
</tr>
<tr>
<td>SATAQ-3</td>
<td>.32**</td>
<td>medium</td>
<td>10.4</td>
</tr>
<tr>
<td>ASI (total)</td>
<td>.38**</td>
<td>medium</td>
<td>14.7</td>
</tr>
<tr>
<td>BIV</td>
<td>.44**</td>
<td>medium</td>
<td>19.2</td>
</tr>
<tr>
<td>SI</td>
<td>.27**</td>
<td>small</td>
<td>7.2</td>
</tr>
<tr>
<td>AS</td>
<td>.16</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ESS (total)</td>
<td>.17</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ESS(C)</td>
<td>.076</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ESS(B)</td>
<td>.16</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ESS(Bo)</td>
<td>.38**</td>
<td>medium</td>
<td>14</td>
</tr>
<tr>
<td>PARTS</td>
<td>.08</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Body satisfaction*</td>
<td>-.56**</td>
<td>large</td>
<td>31</td>
</tr>
</tbody>
</table>

* $p<0.05$; ** $p<0.01$

*Non-Parametric correlations (Spearman’s rho)*

N=83. CSAQ=Cosmetic Surgery Attitudes Questionnaire; PACS=Physical Appearance Comparison Scale; SATAQ-3=Sociocultural Attitudes Towards Appearance Scale; ASI=Appearance Schema Inventory; BIV=Body Image Vulnerability; SI=Self-Investment; AS=Appearance Stereotyping; ESS=Experience of Shame Scale; ESS(C)=Experience of Shame Scale-Characterological shame; ESS(B)=Experience of Shame Scale-Behavioural shame; ESS(Bo)=Experience of Shame Scale-Body shame; PARTS=Physical Appearance-Related Teasing Scale.
3.5.1 Regression Analysis – what is the most significant predictor of attitudes about cosmetic surgery in undergraduates?

A regression analysis was performed with the dependent variable CSAQ and the variables under consideration for the undergraduates. In order to reduce the number of independent variables in the regression analyses, only variables having significant correlations with the attitude measure and which used valid measures were included. These included: i) social comparison ii) media influence iii) appearance schemas and iv) body shame.

Table 4 displays the results of the regression analyses. 20.3% of the variance in the attitude variable was explained by the regression model ($R^2 = .203$, Adjusted $R^2 = .163$, $F = 4.98$, df = 4, $p < 0.05$). Inspection of the standardised beta weights revealed that body shame (beta = .237, $p < 0.05$) made the strongest unique contribution in explaining the variance for cosmetic surgery attitudes, however this was a small effect size. Social comparison, media and beliefs did not make a statistically significant contribution.

Table 4. Standardised coefficients (βs) for Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Cosmetic Surgery Attitudes Questionnaire (CSAQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PACS</td>
<td>.01</td>
</tr>
<tr>
<td>SATAQ-3</td>
<td>.07</td>
</tr>
<tr>
<td>ASI</td>
<td>.23</td>
</tr>
<tr>
<td>ESS(Bo)</td>
<td>.24*</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.20</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.16</td>
</tr>
</tbody>
</table>

*p < 0.05

PACS= Physical Appearance Comparison Scale; SATAQ-3=Sociocultural Attitudes Towards Appearance Scale; ASI=Appearance Schema Inventory; ESS(Bo)=Experience of Shame Scale-Body shame
Table 5 displays the range, mean scores, standard deviations and Cronbach alphas of the main body image variables for the patients. The internal reliability of all the measures was found to be acceptable (i.e. ≥ 0.70) except for item one on the Physical Appearance Comparison Scale (PACS) which was subsequently deleted and all analyses were conducted with four items.

Table 5. Range, Mean scores, Standard Deviations and Cronbach Alpha’s of the main variables for the prospective cosmetic surgery patients

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>RANGE OBSERVED</th>
<th>MEAN</th>
<th>S.D</th>
<th>CRONBACH ALPHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAQ</td>
<td>0 – 63</td>
<td>53.08</td>
<td>6.88</td>
<td>.77</td>
</tr>
<tr>
<td>PACS</td>
<td>0 – 18</td>
<td>3.0</td>
<td>3.08</td>
<td>.75</td>
</tr>
<tr>
<td>SATAQ-3</td>
<td>0 – 130</td>
<td>79.69</td>
<td>31.69</td>
<td>.98</td>
</tr>
<tr>
<td>ASI (total)</td>
<td>0 – 65</td>
<td>44.23</td>
<td>10.46</td>
<td>.89</td>
</tr>
<tr>
<td>BIV</td>
<td>0 – 29</td>
<td>21.19</td>
<td>4.44</td>
<td>.82</td>
</tr>
<tr>
<td>SI</td>
<td>0 – 24</td>
<td>18.74</td>
<td>3.91</td>
<td>.82</td>
</tr>
<tr>
<td>AS</td>
<td>0 – 13</td>
<td>7.90</td>
<td>2.54</td>
<td>.74</td>
</tr>
<tr>
<td>ESS</td>
<td>0 – 91</td>
<td>62.77</td>
<td>18.09</td>
<td>.95</td>
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<tr>
<td>ESS (C)</td>
<td>0 – 40</td>
<td>27.00</td>
<td>7.70</td>
<td>.89</td>
</tr>
<tr>
<td>ESS (B)</td>
<td>0 – 37</td>
<td>23.93</td>
<td>7.63</td>
<td>.93</td>
</tr>
<tr>
<td>ESS (Bo)</td>
<td>0 – 16</td>
<td>14.63</td>
<td>1.5</td>
<td>.70</td>
</tr>
<tr>
<td>PARTS</td>
<td>0 – 74</td>
<td>40.23</td>
<td>21.75</td>
<td>.96</td>
</tr>
</tbody>
</table>

N=27. CSAQ=Cosmetic Surgery Attitudes Questionnaire; PACS= Physical Appearance Comparison Scale; SATAQ-3=Sociocultural Attitudes Towards Appearance Scale; ASI=Appearance Schema Inventory; BIV=Body Image Vulnerability; SI=Self-Investment; AS=Appearance Stereotyping; ESS=Experience of Shame Scale; ESS(C)= Experience of Shame Scale -Characterological shame; ESS(B)= Experience of Shame Scale-Behavioural shame; ESS(Bo)= Experience of Shame Scale-Body shame; PARTS=Physical Appearance-Related Teasing Scale.
3.6 Second Aim - Correlational analyses of shame with body image measures for the prospective cosmetic surgery patients.

The study investigated the exploratory relationship between the body image measures with shame for the prospective cosmetic surgery patients. Due to the small sample size (n=27) these relationships should be considered tentatively. To reduce Type I error, only correlations significant at the 0.01 alpha level are presented. Table 6 illustrates the correlation value and significance level. The range of correlations are summarised below.

**Experience of Shame**

Social comparison, appearance schemas (total), body-image vulnerability and teasing were positively correlated with the experience of shame (total) ($r = .467 - r = .62$), demonstrating a medium correlation. The individual subscales were examined:

**Characterological shame:** Social comparison, appearance schemas (total), all subscales of the ASI and teasing history were significantly correlated with characterological shame ($r = .46 - r = .64$), demonstrating a medium to large correlation.

**Behavioural shame:** Appearance schemas (total) and teasing were significantly correlated with behavioural shame ($r = .51 - r = .64$), demonstrating a large correlation.

**Body shame:** Social comparison, appearance schemas (total), body image vulnerability, self-investment and teasing were significantly correlated with body shame ($r = .48 - r = .55$), demonstrating a medium to large correlation. These results indicate significant relationships between a number of the body image measures and shame in prospective cosmetic surgery patients, in particular, social comparison, appearance schemas and teasing.
Table 6. Correlates between shame (characterological, behavioural and body shame) and sociocultural factors, appearance schemas, teasing and body dissatisfaction for patients.

<table>
<thead>
<tr>
<th></th>
<th>CSAQ</th>
<th>PACS</th>
<th>SATAQ-3</th>
<th>ASI</th>
<th>BIV</th>
<th>SI*</th>
<th>AS</th>
<th>PARTS</th>
<th>Body Dissatisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS (total)</td>
<td>.20</td>
<td>.47**</td>
<td>.27</td>
<td>.60**</td>
<td>.49**</td>
<td>.39*</td>
<td>.42*</td>
<td>.62**</td>
<td>-.05</td>
</tr>
<tr>
<td>ESS(C)</td>
<td>.31</td>
<td>.46**</td>
<td>.38*</td>
<td>.64**</td>
<td>.54**</td>
<td>.48**</td>
<td>.43*</td>
<td>.50**</td>
<td>-.04</td>
</tr>
<tr>
<td>ESS(B)</td>
<td>.04</td>
<td>.43*</td>
<td>.15</td>
<td>.51**</td>
<td>.37</td>
<td>.38*</td>
<td>.42*</td>
<td>.64**</td>
<td>.01</td>
</tr>
<tr>
<td>ESS(Bo)*</td>
<td>.29</td>
<td>.48**</td>
<td>.25</td>
<td>.51**</td>
<td>.50**</td>
<td>.33*</td>
<td>.23</td>
<td>.55**</td>
<td>-.14</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01

*Non-Parametric correlations (Spearman's rho)

N=27. CSAQ=Cosmetic Surgery Attitudes Questionnaire; PACS=Physical Appearance Comparison Scale; SATAQ-3=Sociocultural Attitudes Towards Appearance Scale; ASI=Appearance Schema Inventory; BIV=Body Image Vulnerability; SI=Self-Investment; AS=Appearance Stereotyping; ESS=Experience of Shame Scale; ESS(C)=Experience of Shame Scale-Characterological shame; ESS(B)=Experience of Shame Scale-Behavioural shame; ESS(Bo)=Experience of Shame Scale-Body shame; PARTS=Physical Appearance-Related Teasing Scale.
3.7 Third aim - Differences between the undergraduate and cosmetic surgery groups on body image constructs

The present study wished to investigate possible body image differences between the undergraduate and patient groups. ANOVAs were employed to investigate the differences on the body image measures. There was a significant difference in the undergraduate group, between women who wanted cosmetic surgery in the future and women who did not. In order to investigate the differences on the body image measures, three target groups were identified: Group 1) undergraduates who did not want cosmetic surgery in the future, Group 2) undergraduates who did want cosmetic surgery in the future and Group 3) prospective cosmetic surgery patients. ANOVAs and post-hoc tests were conducted to investigate the differences between attitudes about cosmetic surgery, appearance schemas and shame across the three groups. Non-parametric tests (Kruskall-Wallis) were used on the subscales of the ASI, the ESS and the PARTS. A Mann-Whitney U was used to investigate the differences for these measures. Tables 7 and 8 illustrate the results.

Hypothesis 1: Prospective cosmetic surgery patients will report greater body dissatisfaction compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery.

There were no statistical significant differences for body dissatisfaction ($X^2=5.37, df=2$) between the groups.
Hypothesis 2: Prospective cosmetic surgery patients will hold more favourable attitudes about cosmetic surgery compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery.

There was a statistically significant difference in attitude scores for the three groups \([F(2,107)=93.5, p<0.001]\). The effect size, calculated by eta squared, was large (0.6). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 3 \((M=1.7, SD=.15)\) was statistically different from Group 2 \((M=1.6, SD=.13)\) and Group 1 \((M=1.44, SD=0.95)\). Group 2 was also statistically significant from Group 1. These findings suggest that patients held more favourable attitudes towards cosmetic surgery than both undergraduate groups. Women who had considered surgery in the future also held more favourable attitudes than women who had not considered surgery.

Hypothesis 3: Prospective cosmetic surgery patients will engage in greater social comparison compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery.

There were no statistical significant differences for social comparison \([F(2,107)=2.18]\) between the groups.

Hypothesis 4: Prospective cosmetic surgery patients will endorse greater identification with mass media images of beauty compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery.
There were no statistical significant differences for media influence \(F(2,107)=2.36\) between the groups.

**Hypothesis 5:** Prospective cosmetic surgery patients will report greater dysfunctional appearance schemas compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery.

There was a statistically significant difference in appearance schema scores across the three Groups \(F(2,107)=21.6, p<0.001\). The effect size was large (0.2). Post-hoc comparisons indicated that the mean score for Group 3 (\(M=47.5, SD=9.7\)) was statistically different from Group 2 (\(M=37.4, SD=9.6\)) and Group 1 (\(M=33.9, SD=7.8\)). Groups 1 and 2 were not statistically different from one another. Prospective cosmetic surgery patients reported greater dysfunctional appearance schemas than both groups of women. The individual subscales were investigated:

- **Body Image Vulnerability Subscale**

The Kruskal-Wallis test was used for the subscales of the ASI. There was a statistical significant difference on the body image vulnerability (BIV) scores for the three Groups \(X^2=24.5, df=2, p<0.001\). A Mann-Whitney U test was conducted for each of the three groups. Groups 1 and 2 did not differ \((U=604, p=0.07, z=-1.82)\). There were significant differences between groups 2 and 3 \((U=226, p<0.05, z=12.87)\) and groups 1 and 3 \((U=233, p<0.001, z=-4.92)\). These results indicate that patients scored higher on BIV compared to both groups of undergraduates.
• **Self-Investment Subscale**

There was a statistical difference on the self-investment (SI) scores ($X^2=31.1, \text{df}=2$, $p<0.001$). A Mann-Whitney U test indicated no significant difference between groups 1 and 2 ($U=640, p=.141, z=-1.47$). There were significant differences between groups 2 and 3 ($U=141, p<0.001, z=-4.24$) and groups 1 and 3 ($U=198, p<0.001, z=-5.28$). These results indicate that patients scored higher on SI compared to both groups of undergraduates.

• **Appearance Stereotyping Subscale**

There was also a statistical significant difference on appearance stereotyping (AS) scores across the three groups ($X^2=10.88, \text{df}=2, p<0.001$). A Mann-Whitney U test indicated no differences between groups 1 and 2 ($U=702, p=.38, z=-.89$). There were significant differences between groups 2 and 3 ($U=270, p<0.05, z=-2.17$) and groups 1 and 3 ($U=396, p<0.01, z=-3.28$). These results indicate that patients scored higher on AS compared to both groups of undergraduates. There was no significant difference between the two undergraduate groups.

**Hypothesis 6:** Prospective cosmetic surgery patients will recount increased shame experiences compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery.

There was a statistically significant difference in shame scores across the three Groups [$F(2,107)=3.2, p<0.05$]. The effect size was moderate (0.06). Post-hoc comparisons
indicated that the mean score for Group 3 ($M=65.37, SD=15.7$) was statistically different from Group 1 ($M=56, SD=17.3$). Group 2 ($M=61.9, SD=15.6$) was not statistically different from either Group 1 or 3. These results indicate that patients reported greater shame experiences compared to both groups of undergraduates, but there was no difference between the patients and undergraduate women who had considered future cosmetic surgery.

- **Characterological Shame Subscale**

  There were no significant differences for characterological shame ($X^2=2.59, df=2$) between the groups.

- **Behavioural Shame Subscale**

  There were no significant differences for behavioural shame ($X^2=3.06, df=2$) between the groups.

- **Body Shame Subscale**

  There was a statistical significant difference for body shame scores across the three groups. ($X^2=37.7, df=2, p<0.001$). A Mann-Whitney U test indicated significant differences between groups 1 and 2 ($U=569, p<0.05, z=-2.15$), groups 2 and 3 ($U=152, p<0.001, z=-4.09$) and groups 1 and 3 ($U=135, p<0.001, z=-5.93$). These results indicate that patients reported higher scores for body shame compared to both groups. Undergraduate women who had considered surgery in the future also reported higher scores of body shame than undergraduate women who had not considered surgery.
Hypothesis 7: Prospective cosmetic surgery patients will report more frequent appearance-related teasing, compared to women who have not considered cosmetic surgery in the future and women who have considered cosmetic surgery.

There were no statistical significant differences for teasing ($X^2=3.86, df=2$) between the groups.
Table 7. Mean difference on the CSAQ, ASI, ESS, PACS and SATAQ-3 measures across the three groups.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Group 1 (n=53)</th>
<th>Group 2 (n=30)</th>
<th>Group 3 (n=27)</th>
<th>F(2,107)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAQ</td>
<td>1.44a</td>
<td>1.60b</td>
<td>1.72c</td>
<td>93.53*</td>
</tr>
<tr>
<td>ASI</td>
<td>33.85a</td>
<td>37.37a</td>
<td>47.52b</td>
<td>21.56*</td>
</tr>
<tr>
<td>ESS</td>
<td>56.00a</td>
<td>61.93ab</td>
<td>65.37b</td>
<td>3.21*</td>
</tr>
<tr>
<td>PACS</td>
<td>12.28</td>
<td>13.30</td>
<td>13.59</td>
<td>2.18</td>
</tr>
<tr>
<td>SATAQ-3</td>
<td>88.40</td>
<td>100.53</td>
<td>90.04</td>
<td>2.36</td>
</tr>
</tbody>
</table>

*p<.05; **p<0.01

Within each row, means with different subscripts differ at the 0.05 level.
CSAQ=Cosmetic Surgery Attitudes Questionnaire; ASI=Appearance Schema Inventory; ESS=Experience of Shame Scale. PACS=Physical Appearance Comparison Scale; SATAQ-3=Sociocultural Attitudes Towards Appearance Scale.

Table 8. Mean difference on the BIV, SI, AS, ESS (C), ESS (B) and ESS (Bo) across the three groups.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Group 1 (n=53)</th>
<th>Group 2 (n=30)</th>
<th>Group 3 (n=27)</th>
<th>X²</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIV</td>
<td>15.04</td>
<td>17.20</td>
<td>21.19</td>
<td>24.46**</td>
</tr>
<tr>
<td>SI</td>
<td>13.00</td>
<td>13.73</td>
<td>18.74</td>
<td>31.10**</td>
</tr>
<tr>
<td>AS</td>
<td>5.79</td>
<td>6.37</td>
<td>7.89</td>
<td>10.88**</td>
</tr>
<tr>
<td>ESS(C)</td>
<td>24.91</td>
<td>26.73</td>
<td>27</td>
<td>2.59</td>
</tr>
<tr>
<td>ESS(B)</td>
<td>22.02</td>
<td>24.90</td>
<td>23.94</td>
<td>3.06</td>
</tr>
<tr>
<td>ESS(Bo)</td>
<td>9.06</td>
<td>10.83</td>
<td>14.63</td>
<td>37.69**</td>
</tr>
<tr>
<td>PARTS</td>
<td>29.77</td>
<td>32.43</td>
<td>38.11</td>
<td>3.86</td>
</tr>
<tr>
<td>Body Satisfaction</td>
<td>2.83</td>
<td>1.87</td>
<td>1.56</td>
<td>5.37</td>
</tr>
</tbody>
</table>

*p<.05; **p<0.01

BIV=Body Image Vulnerability; SI=Self-Investment; AS=Appearance Stereotyping ESS(C)=Experience of Shame Scale-Characterological shame; ESS(B)=Experience of Shame Scale-Behavioural shame; ESS(Bo)=Experience of Shame Scale-Body shame; PARTS=Physical Appearance-Related Teasing Scale.
4.0 Discussion

The results presented will be discussed in relation to the three main aims of the study as stated in the introduction and will firstly focus on the attitudes of female undergraduates to cosmetic surgery. The hypotheses associated with this aim will be discussed together. Given the exploratory nature of the second aim, the results will not be presented for each hypothesis but will be discussed more generally, however due to the complexity of the results obtained for the third aim, each hypothesis will be considered separately.

A critique of the study will then be presented, considering the methodological limitations and strengths of the study with recommendations for improved further research throughout the sections. Clinical implications will be then be discussed and finally, future research considerations will be presented.

4.1 First aim: Attitudes of female undergraduates

An examination of female undergraduates’ experiences with, and attitudes about, cosmetic surgery was the first aim of the present study. This was investigated by assessing the relationship between several aspects of body image.

The present study identified 37% of undergraduates who had considered seeking cosmetic surgery in the future. This replicated Sarwer et al.’s. (2005) findings, who found that 40% of participants had considered surgery in the future, and contrasts with
results obtained by the American Society for Aesthetic Plastic Surgery (2003), which body found that only 16% of women aged 18 to 24 said they would consider surgery. Taken together these results suggest that attitudes about cosmetic surgery are changing. More women are contemplating surgically altering their physical appearance.

In order to investigate which body image factors significantly predicted future cosmetic surgery in the undergraduate group, this study compared female undergraduates who had considered future cosmetic surgery (37%) with those who had not (63%).

The study investigated the differences on the body image measures of social comparison, media influences, appearance schemas, shame and teasing, and also attitudes about cosmetic surgery between those who wanted cosmetic surgery in the future and those who did not. The results indicated a statistically significant difference between the two groups. When the body image variables were considered individually, only attitudes about cosmetic surgery significantly predicted future surgery. However, it should be noted that there was a strict Bonferroni adjusted alpha level (0.008) was applied to the data. The media’s influences on body image and appearance schemas were significant at the 0.05 alpha level.

Given the findings that attitudes about cosmetic surgery were a highly significant predictor of future surgery, the present study investigated the relationship between the body image measures and attitudes about cosmetic surgery in the undergraduate group.
Overall, participants held relatively favourable attitudes about surgery. It was hypothesised that: (i) body dissatisfaction (ii) sociocultural (iii) social comparison, (iv) appearance schemas (v) shame and (vi) appearance-related teasing would be significantly related to more favourable attitudes about changing one’s appearance through cosmetic surgery in the undergraduate group.

The overall finding for these hypotheses, taken together, indicated that attitudes about cosmetic surgery were significantly negatively correlated with body satisfaction, suggesting the less satisfied participants were with their physical appearance, the more favourable their attitudes were. Attitudes were positively related to the media’s influence on body image, appearance schemas, body image vulnerability and body shame. These factors produced a medium effect size. Self-investment with appearance and physical comparison to others were also significantly positively related to attitudes, however these constructs produced a small effect size. A history of teasing was the only variable found not to be related to attitudes about cosmetic surgery.

These results confirm that attitudes towards cosmetic surgery were positively related to several of the body image measures. However, the multiple regression analysis indicated that only the body shame subscale of the ESS was the strongest predictor of favourable attitudes towards cosmetic surgery. These results appear to support Henderson-King and Henderson-King’s (2005) study, who found that body shame was associated with accepting cosmetic surgery for social and intrapersonal reasons, as measured by attitudes about cosmetic surgery.
The relationships between the body image measures and attitudes about cosmetic surgery were similar to those found in Sarwer et al.'s. (2005) study. These workers found attitudes about cosmetic surgery were significantly positively related to investment in appearance, the mass media's influence on body image and physical comparison to others.

Regression analyses of data from the present study, however, produced conflicting results. Sarwer et al. (2005) had demonstrated that two indices of one's psychological investment in physical appearance were the strongest predictors of favourable attitudes. The strongest predictor in the present study was body shame. The ESS was an additional measure included in the study. This may help explain the disparity, as different independent variables would have been entered into the regression model. The body image measures employed in the present study were similar to Sarwer et al.'s. (2005) study; however body shame emerged as the most significant predictor of attitudes about cosmetic surgery.

4.2 Second aim: Exploratory evaluation of the relationship of shame to body image constructs

The second aim of the study was exploratory. Shame was included in the present study because it has been shown to have an important association with body image (Andrews, 1997). A fundamental understanding of shame is the belief that the self is evaluated negatively and critically by others which can result in feelings of humiliation and
worthlessness. Body shame was found to be a significant predictor of attitudes about cosmetic surgery for the undergraduate group, therefore the present study sought to explore the relationship between shame and the body image constructs for the prospective cosmetic surgery patients. The literature on shame has predominantly focused on eating-disordered populations, and has not been investigated within a prospective cosmetic surgery group. However Henderson-King and Henderson-King (2005), in a study to assess the relationship between shame and attitudes about cosmetic surgery in a group of female undergraduates, incorporated a shame measure.

A strong relationship between high levels of shame and the body image measures were identified in the present study. In particular, characterological shame was related to social comparison, appearance schemas, body image vulnerability, self-investment and appearance stereotyping and teasing. Behavioural shame was related to appearance schemas and teasing. And finally, body shame was associated with social comparison, appearance schemas, body image vulnerability, self-investment and teasing.

In general, these findings demonstrate the proposed role of social comparison, dysfunctional schemas about appearance, teasing and shame-based cognitions in women who have sought cosmetic surgery. These findings are also in line with the literature on eating disorders, where shame has been suggested to be one of the important factors involved in the aetiology and maintenance of eating disorders (Burney & Irwin, 2000; McKinley & Hyde, 1996).
However, it is suggested that the results of the present exploratory investigation should be interpreted with caution, given the small sample size of the patients. Nevertheless, the present study has introduced shame as a potential area for future investigation and further research using larger samples of cosmetic surgery patients is warranted.

4.3 Third aim: Differences between the undergraduate and cosmetic surgery groups on body image constructs

The third main aim of the study was to investigate differences on the body image constructs, between the undergraduate and cosmetic surgery groups. Analysis investigated the differences among three target groups – undergraduates who had considered surgery, undergraduates who had not considered surgery and the cosmetic surgery patient group.

4.3.1 Hypothesis 1.

Prospective cosmetic surgery patients will report greater body dissatisfaction compared to women who have not considered cosmetic surgery in the future and women who have considered surgery in the future.

The results indicated that prospective surgery patients did not report greater body dissatisfaction, compared to the undergraduate groups. The measure used in the present study included only one item related to overall satisfaction of appearance. This may have been insufficient to tap into the specific aspects of body dissatisfaction that
cosmetic surgery patients may have. However, these findings do lend support to previous research, in that cosmetic surgery patients do not differ in terms of global body dissatisfaction compared to controls. Previous research suggests that cosmetic surgery patients exhibit a heightened dissatisfaction with a specific body feature (Sarwer et al., 1998b; Sarwer et al., 2003). Future studies should incorporate measures that assess dissatisfaction with specific body parts compared with non-clinical groups.

4.3.2 Hypothesis 2.

Prospective cosmetic surgery patients will hold more favourable attitudes about cosmetic surgery compared to women who have not considered cosmetic surgery in the future and women who have considered surgery in the future.

The results indicated that patients held attitudes that were more favourable about cosmetic surgery compared to both groups of women. Prospective surgery patients had actively sought cosmetic surgery and were therefore likely to be more heavily invested in the cosmetic surgery process. This may help explain their more favourable attitudes.

The results also found that women who had considered cosmetic surgery held significantly more positive attitudes from those women who had not. Due to the small patient sample size, a regression analysis for attitudes about cosmetic surgery was not conducted on the data. However future research should increase the sample size of cosmetic surgery patients to investigate significant predictors of patients’ attitudes about cosmetic surgery.
4.3.3 Hypothesis 3.

Prospective cosmetic surgery patients will endorse greater identification with mass media images of beauty compared to women who have not considered cosmetic surgery in the future and women who have considered surgery in the future.

Sociocultural theory maintains that as exposure and endorsement of the mass media containing idealistic portrayals of appearances increase, body image evaluation becomes less positive. The results indicated that there was no difference between prospective surgery patients compared to women who had considered surgery and women who had not. The findings were similar to those of Didie and Sarwer (2003). It may be that cosmetic surgery patients are influenced by media images, but in a way that the SATAQ-3 was not sensitive enough to tap (Didie & Sarwer, 2003).

4.3.4 Hypothesis 4.

Prospective cosmetic surgery patients will engage in greater social comparison engagement compared to women who have not considered cosmetic surgery in the future and women who have considered surgery in the future.

To the author’s knowledge, social comparison has not been employed with prospective surgery patients. Social comparison theory contends that basing self-evaluations of physical appearance on others has a negative impact for body image. The present study found no support for this theory as prospective surgery patients did not engage in greater social comparison engagement, compared to women who had considered
surgery and women who had not. One explanation for this non-significant result is that of the social environment of undergraduates. The nature of interacting with peers of the same age is likely to foster situations where social comparisons are frequent. Future research could possibly look at age-matched women of similar demographics to clarify the potential influence of social comparison and seeking cosmetic surgery.

4.3.5 Hypothesis 5.

Prospective cosmetic surgery patients will demonstrate greater dysfunctional appearance schemas compared to women who have not considered cosmetic surgery in the future and women who have considered surgery in the future.

Cognitive schema theory contends that appearance-schematic individuals are more psychologically invested in their looks as a standard of self-evaluation and index of self-worth. Cash and Labarge’s (1996) perspective on body image maintains that pertinent events serve to activate schema-driven processing of information about one’s appearance, which provokes body-image affect and in turn, self-regulatory behaviours. It was hypothesised that women seeking cosmetic surgery would endorse the items of the ASI more strongly. Confirming previous research (Sarwer et al., 2003), results from the present study appear to support this theory. Prospective patients held a greater dysfunctional investment in appearance, compared with women who had not considered surgery and women who had considered surgery in the future. Additionally, women who had considered cosmetic surgery did not hold more dysfunctional appearance beliefs than women who had not. Upon inspection of the subscales of the
ASI, patients also scored significantly higher on body image vulnerability, self-investment and appearance stereotyping. Women who had considered cosmetic surgery did not hold greater dysfunctional appearance schemas compared to women who had not considered surgery for all of the ASI subscales.

The findings differ from previous research (Bolton, Pruzinsky, Cash, & Persing, 2003; Didie & Sarwer, 2003) who found no difference with regards to dysfunctional schemas between patients and women not seeking surgery. The present study differed from the previous studies in that they included prospective breast augmentation patients whereas the present study included women who had sought breast augmentation, reduction mammoplasty and abdominoplasty surgery. It may be that women who seek different cosmetic procedures differ in terms of their investment in appearance. Future research should seek to investigate appearance schemas in women seeking surgery for different procedures. To the author's knowledge, no study has examined appearance schemas in women seeking abdominoplasty surgery.

Another difference in methodology was that Didie and Sarwer (2003) administered questionnaire measures to prospective patients two weeks prior to their scheduled cosmetic surgery. In the present study, all prospective patients that had been assessed for surgery were placed on a waiting list for approximately nine months and invited to participate at different stages over the nine month period. The extended period during which the participants responded may have had an impact on the responses on the body
image measures. That is, patient’s who were weeks away from their scheduled surgery may have responded differently to those who had just been approved for surgery.

4.3.6 Hypothesis 6.

*Prospective cosmetic surgery patients will recount increased shame experiences compared to women who have not considered cosmetic surgery in the future and women who have considered surgery in the future.*

The literature suggests that feelings of unworthiness and inadequacy are consistent with the experience of shame. The results indicated that patients scored significantly higher on the ESS than women who had not considered surgery in the future, suggesting patients were more prone to shame. However, there was no difference between the prospective cosmetic surgery patients and women who had considered future surgery. There was also no difference between women who had not considered surgery and women who had. From the individual subscales of the ESS, only body shame emerged as being significantly different. Prospective surgery patients reported higher levels of body shame compared to both groups. Women who had considered surgery also reported higher levels of body shame compared with women who had not considered surgery. This finding was interesting, as body shame was also found to be the strongest predictor of attitudes about cosmetic surgery in the undergraduate group. No significant differences were identified for characterological and behavioural shame across the three groups. To date, no studies have examined the relationship of shame in women seeking
cosmetic surgery. Future research should focus on body shame as a potential important component of body image in women seeking cosmetic surgery.

4.3.7 Hypothesis 7.

Prospective cosmetic surgery patients will report more frequent appearance-related teasing compared to women who have not considered cosmetic surgery in the future and women who have considered surgery in the future.

Appearance-related teasing is thought to play a critical role in the development and maintenance of body image dissatisfaction (Rieves & Cash, 1996; Thompson & Smolak, 2001). However, in support of previous research (Didie & Sarwer, 2003) prospective surgery patients did not report a greater history of teasing compared to the women who had considered surgery and women who had not. This finding contradicts Sarwer et al.'s. (2003) study, in which breast augmentation patients reported a greater frequency of appearance-related teasing as compared with controls. It is possible that prospective surgery patients have experienced a history of teasing about appearance but in a way that the PARTS was not able to detect. Another issue is that the PARTS relies on retrospective recall, which is subject to bias.

4.4. Limitations and strengths

There were a number of limitations with the present study. First, the sample size was relatively small for the patient group, although an effect was detected. Even so, these
results should be replicated with larger samples. Secondly, the undergraduate sample was recruited through public messages and thus may be subject to selection bias. In addition, an opportunist sample was relied on, which potentially compromises the representativeness of the results. To improve the generalisability of the present study, alternative sampling techniques could have been used. Thirdly, although patients were reassured they would not be identified upon completion of the questionnaires, they may have been concerned about responding to items they thought may jeopardise surgery. As a consequence participants may have underreported many of the items. Postal questionnaires overcame this issue more than if ‘face-to-face’ contact was included. However, this method compromised the response rate. Fourthly, patients were recruited at different times. Some patients had recently been assessed for cosmetic surgery and some were just weeks away from undergoing surgery. The study’s design would have been strengthened if all patients were recruited during a similar time frame. Fifthly, a goal of the study was to match the undergraduates and patients in terms of physicality (BMI), due to incomplete measures from the patients, this was not achieved. It is possible that there were differences in BMI between the groups. In addition, the undergraduates were younger than the patients; therefore it is likely that age played a significant role.

Despite these limitations, the study has used a comprehensive and theoretically-based formulation of body image which may be included in the evolving arena of cosmetic surgery research, using standardised measures of body image. The venture into cosmetic surgery attitudes has helped move the literature towards a clearer
understanding of how the general population feels about surgical paths to appearance enhancement. The study has helped to establish a relationship among cosmetic surgery attitudes and body image constructs. The study has also contributed to the literature on body image and cosmetic surgery by including a number of body image constructs with women who have sought cosmetic surgery as a means of physical enhancement. The present study has attempted to draw attention to specific psychosocial, attitudinal and developmental factors and the role they serve in developing attitudes about cosmetic surgery and in women seeking cosmetic surgery.

4.5 Clinical Implications

There are no National Institute for Clinical Excellence (NICE) or Department of Health (DoH) guidelines in place for mental health professionals working with individuals who present for cosmetic surgery. Based on anecdotal reports, many regions in the U.K differ in terms of services. In many instances, prospective cosmetic surgery patients are referred to plastic surgeons from General Practitioners. Precise data is not available, but many individuals who seek surgery are turned down by plastic surgeons and thus do not present at mental health services. Little is known about such individuals declined for NHS cosmetic surgery treatment.

To the author's knowledge, clinical psychologists do not work routinely in conjunction with cosmetic surgery clinics. From the study's findings, it is hypothesised that attitudes about cosmetic surgery, appearance schemas and body shame are important
factors that characterise cosmetic surgery patients. Such findings provide some support for cognitive-behavioural (CBT) based interventions with women seeking cosmetic surgery, whether this is applied alongside surgery or as an intervention alone to help with body image adjustment. One of the problems that surgeons and psychiatrists have is determining who would benefit from a CBT intervention program for body image. Future research should aim to assess, with measures of body image, adjustment pre and post CBT intervention.

The present study highlighted a number of complex psychological interactions of body image for cosmetic surgery patients. At a service level, Bradbury (1994) recommended that a close relationship between the surgeon and the clinical psychologist, together in the same clinic, is beneficial to both surgeon and patient. The role of the psychologist, as part of the patient's general care, could be to identify and if necessary, modify the aims and expectations of cosmetic surgery. Bradbury (1994) suggested that patients often perceive psychologists negatively. If the discussion with a psychologist is not viewed as stigmatising, 'the collaboration can enhance a surgical service which is rooted in cultural, social and psychological responses' (Bradbury, 1994, p.304).

4.6 Future Research

Future work in this area could focus on a number of topics. Longitudinal studies could investigate whether attitudes about cosmetic surgery change over time and if so what influences such changes. It would have been interesting to incorporate follow-up
measures over a time period with the undergraduates in the present study, to assess who progressed to seek cosmetic surgery and whether more positive attitudes are, in fact, a significant predictor of cosmetic surgery.

A different methodological approach, such as triangulating methods would have increased the validity of the study and provided richer data. Interviews with patients, students and perhaps staff involved with cosmetic surgery patients, alongside the quantitative approach could have offered a deeper understanding of the body image constructs and attitudes about cosmetic surgery.

The Cosmetic Surgery Attitudes Questionnaire (CSAQ) (Sarwer et al., 2005) was used to investigate whether participants wanted future cosmetic surgery. This measure could be criticised on the basis that it was the only measure employed in the study to discern whether participants wanted future cosmetic surgery. Also, it did not take into consideration a variety of potential motivational factors for cosmetic surgery. There appears to be an absence of motivation measures in the literature and this absence is somewhat undermining. Future research in this field could perhaps develop reliable and valid measures to investigate motivation for surgery.

To date, there has been no accepted ‘cut-off’ point between women who display some discontent with regards to body image and women who exhibit a pathological dissatisfaction. The present study did not employ a measure to detect Body Dysmorphic Disorder (BDD). Sarwer et al. (2005) identified that 5% of female undergraduates
displayed symptoms indicative of BDD. Future research could assess BDD symptoms in both undergraduate and cosmetic surgery samples, to measure any differences in extreme body image dissatisfaction.

Given the vital role of body image in anorexia nervosa and bulimia nervosa, it is likely that these disorders may occur with greater frequency among individuals attracted to cosmetic surgery. This has not been formally studied. Eating disorders may be of a particular concern for patients interested in breast augmentation surgery, as many women that seek such procedures have a below normal body mass index, indicative of eating disorders (Didie & Sarwer, 2003). Future research should address such issues in prospective cosmetic surgery patients and investigate the prevalence rate of eating disorders.

There has been a dearth of cosmetic research conducted in the U.K. The majority of studies have been undertaken in the U.S.A. Comparing the present study’s findings with previous research is problematic, as there is one main difference between the two cultures. Cosmetic surgery is provided on the National Health Service (NHS) in the U.K whereas surgery in the U.S.A is privately funded. Additional research is needed to identify factors that influence body image in the U.K. Based on anecdotal reports, more and more women with ‘normal’ bodies are seeking cosmetic interventions. This needs to be clarified within the context of the NHS patient.
Western society places a strong emphasis on appearance, exposing constant images of the 'perfect' body or face. In the U.S.A cosmetic surgery for adolescents is rising (Simis, Verhulst & Koot, 2001). Future research could explore appearance-related concerns of school pupils and their attitudes towards cosmetic surgical interventions as a means of 'correcting' the concerns.

Only one cosmetic surgery clinic was targeted in the present study thus reducing the range and diversity of cosmetic surgery patients. Certain populations were underrepresented, for example, black and ethnic minority participants. Previous studies using cosmetic surgery samples from ethnic minorities were also limited; therefore appearance-related concerns of people from different ethnic groups, using cross-cultural comparisons of body image could be investigated. Future research should explore different ethnic cultures and their attitudes regarding cosmetic surgery.

The body image model proposed by Sarwer et al. (2005) is by no means comprehensive. For example, Heinberg (1996) suggested that individuals with body image concerns may experience perceptual inaccuracies, as illustrated by women with eating disorders. This could be an interesting avenue for future research with prospective cosmetic surgery patients.

Finally, based on this study's two key emergent findings that body shame was an important predictor of future cosmetic surgery in female undergraduates and that
elevated levels of body shame were reported by prospective patients, future research could attempt to clarify what psychosocial factors contribute to body shame.

5.0 Conclusion

Results from the present investigation suggest that a proportion of undergraduate women consider themselves possible candidates for cosmetic surgery. As a greater number of individuals seek cosmetic enhancement during their lifetime, it will become essential to establish the psychological impact of these treatments. This study highlighted a link between specific body image variables and attitudes about cosmetic surgery in undergraduate women, specifically body shame. The findings also suggest a tentative relationship between shame-proneness and the desire for prospective surgery in female cosmetic surgery patients. Subsequent studies are required to clarify this relationship, as it may have important implications for assessment and intervention treatments for body image problems. Finally, the study found dysfunctional appearance schemas and body shame to be important features in prospective cosmetic surgery patients. These factors appear to be theoretically significant (Cash & Labarge, 1996) and provide further support for research in this area.
6.0 References


Thompson, J. K., van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L.J.
(2004). The Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3):
Section 3

Critical Appraisal
1.0 Origins

This study evolved out of a personal interest in appearance and body image, which was originally stimulated while conducting my first research project as an undergraduate, investigating appearance and personality traits.

In June 2003, a discussion ensued with an academic supervisor, with the aim to think about a research issue which would warrant investigation and also combine my personal interest. A literature review was performed in the field of cosmetic surgery, examining theoretical conceptualisations of body image. From this task, I was able to assess where the current research was proceeding. After submitting an initial research proposal, which was discussed with course staff in November 2003, I began trying to structure the project.

In order to substantiate and endorse possible research in this arena, I attended a conference in December 2003, hosted by “The Centre for Appearance Research” (CAR) (Faculty of Applied Sciences, University of the West of England). The title of the conference was “Appearance Matters” and reflected the importance of appearance-related issues with regards to theory, research and practice with or without a visible difference. The conference highlighted many interesting research themes, such as appearance and adjustment in children and adolescents, cosmetic surgery and choosing to alter our appearance, school-based interventions for those who are not visibly different and appearance-related concerns following burn-injury.
The research seed for the thesis was grown at the conference. It provided a stimulating environment in which to meet many leading researchers within the field of appearance-related issues, who were generous in their discussions and time that they offered in listening to my ideas for future research.

During my first year placement in Adult Mental Health, a number of young adults were referred to the service with depressive symptoms and low self-esteem that had a wide ranging effect on their mental health and social functioning. During the assessment process, I observed that some had either planned or already undergone cosmetic surgery procedures, in particular, one eighteen year-old girl who had sought a reduction mammoplasty (breast reduction). She had an eating disordered history and engaged in self-harming behaviours. It also transpired that her non-identical twin had recently undergone the same surgical procedure. Discussions with my supervisor developed my thinking and curiosity about cosmetic surgery.

This theme continued during my Child and Adolescent placement, where I noticed children as young as seven were referred because of being bullied and exhibited alarming signs of self-hatred of their appearance. I was struck by how their self-concept, day-to-day functioning and body image seemed to be interrelated and it worried me how these factors could transcend into and beyond adulthood.

Further discussions were sought with the two Clinical Psychologists working in the field of cosmetic surgery in the country (not locally) and also with a Consultant Psychiatrist
who assessed prospective cosmetic surgery patients. The meetings and discussions with
the Consultant Psychiatrist were fruitful. I also attended several cosmetic surgery team
meetings where clinical cases were discussed. This provided me with an opportunity to
observe the role Clinical Psychologists could take in working with cosmetic surgery
patients, alongside psychiatry.

Initially, a qualitative approach for the research was favoured, to help investigate the
experiences of individuals who actively seek cosmetic surgery, but are rejected on the
grounds of not being suitable for surgery. This could be for a number of reasons, for
example psychotic phenomenon, or simply because the objective reality of their
subjective area of concern is deemed 'normal'. However, many trainees in the cohort
were also considering conducting qualitative research, which would have had a direct
impact on the resources available for supervision.

Another research idea was to devise and administer a 'self-help' body image workbook
for those rejected from surgery, to help with body-image dissatisfaction which may lead
to other psychosocial difficulties. The workbook would have been based on Cash’s
(1997) work, incorporating cognitive-behavioural therapy principles. However, given
the time estimated to devise the workbook, administer it and record the outcome, it was
considered unrealistic given the time constraints.

Several months of searching numerous databases were conducted, to help identify
current issues in the cosmetic research. From the literature, the motivation for cosmetic
surgery was still unclear, what contributed to the motivation and also assessing factors that may influence attitudes about cosmetic surgery in college populations, emerged as relevant subjects that required further investigation.

1.1 Ethics and research committee

I was offered a placement in London during my third year, which involved relocation. It was at this time I was preparing to submit for ethical approval. There was a significant preparation period before the project was submitted to the research ethics committee, namely obtaining and purchasing seven questionnaire measures and manuals from the authors, compiling the questionnaire booklet and conducting a small pilot study (n=10) to ascertain the quality and readability of the measures I wished to use. This was a particularly arduous time, as I was uncertain about what to include in the ethics form. Planning and justifying the research was daunting, mainly because I was aware that if it was not suitable, I would incur amendments which would delay the research process. I also encountered a setback during this time. My supervisor on placement in London left her post. Attempts to re-organise the placement interfered somewhat with the application process.

After the research and ethics proposal was submitted, I found the process of waiting for permission to start immobilising, as I feared that after months of preparation I would not be able to proceed with the study as I wished. However, following a committee meeting
and some minor amendments to the protocol, ethical approval was granted. The project commenced immediately after approval was authorised.

1.2 Conducting the Research

Prior to the project, considerable effort was given to arranging meetings with nursing staff involved with the assessment process for prospective patients to inform them about the research. From the outset and during the course of this project, communication and positive relationships were encouraged with all staff who were enthusiastic about the research.

Prospective cosmetic surgery patients were identified on a computer database. I had been informed that approximately 50% were rejected and 50% were accepted for surgery. The waiting list from assessment to surgery was nine months; therefore all patients that had been approved were targeted. I obtained the patient details from paper files compiled from the assessment process, which included a detailed account of the assessment. It was essential to establish contact with the administrative staff in Liaison Psychiatry, to ensure efficient communication, as there were occasions when it was not possible to personally visit the database; therefore I had to rely on administrative staff to provide patient information details. The relevant information and questionnaires were then sent to prospective cosmetic surgery patients.
Several meetings were organised with the University staff, for two main reasons; firstly, to inform them of the research and secondly, to help identify the students. Subsequently, the students were informed of the study’s aims and invited to participate. Although I was prepared to administer a large number of questionnaires over a time period of one week, there were more volunteers than I anticipated. This resulted in further journeys to the University, to distribute additional questionnaires. I also did not predict email contact from students requesting questionnaires!

1.3 Analysis

Scoring the questionnaires and devising the database in SPSS to analyse the data was time consuming. It was also at this point that I really began to see ‘patterns’ in the data. I was also touched by many of the participants’ honesty in their responses on the measures and their comments. Many students and patients said they found the questionnaire fascinating and interesting. It had also made them think about issues, for example the media influence, how much shame they were capable of feeling and how they view themselves. One person commented that she had not realised how much she compared herself to others and that this behaviour had had an impact on her self-concept. Such comments made me aware of how important physical appearance is to people and how there lives can be dominated by it. One patient commented that her appearance had ‘governed’ most of her life.
It felt important to maintain a personal element to the research, which was why I provided a comments page at the end of the questionnaire measures, as I found that there was a tendency to just view the research as ‘scores’ and outcome measures.

The analysis process was more frustrating than anticipated. I conducted a number of statistical tests that were unfamiliar to me and this took time to understand and learn. I performed many analyses before I felt confident with the output and interpretation. However I now feel more confident in designing future research projects, using quantitative methods of analysis.

1.4 Writing up

Time was scheduled to write the report; however one impediment to the smooth running of this process was some required amendments to my results section. I was alerted to the fact that I needed to collect more patient data. I felt somewhat deflated at having to administer more questionnaires, in the knowledge that I would have to re-analyse the data. However, I learnt that setbacks in research are common and it is how you deal with them that help you to ‘get back on track’. Momentum was regained to complete the task of writing the report and this was aided by peer support and encouragement to complete the thesis.

As the project was conducted while continuing my training in the final year and within a given time-period, it was expected that stress would be paramount. There were a
number of factors that helped to maintain the momentum of the research. Firstly, I found the peer support from trainees on the course extremely motivating. However, as I moved to London for my final year placement, I experienced isolation and a sense of not being connected with the course. Secondly, maintaining email contact with my two supervisors proved to be valuable. Thirdly, organisation and planning ahead was essential. I was not able to ‘spontaneously’ meet with my supervisor when problems occurred; therefore all meetings were required to be scheduled well in advance. This was a difficulty in the research process, due to the fact when ‘unscheduled’ problems were encountered; I felt ‘cut-off’ from support.

1.5 Learning Outcomes

Through the process and experience of initiating, designing, implementing and completing a research project, I could identify a number of qualities that I would be able to utilise for future research. There were many ‘learning’ points during the process, which helped to refresh and invigorate my method of study, which I shall list now.

- Whilst researching the study, I was required to identify potential patients. A consultant psychiatrist assisted and we talked through some of the cases and some of the difficulties of assessment. During an assessment phase, photographs are taken of the body/facial area the patient is requesting surgery; these were illustrated to me. It was at this stage that the research began to feel real. Up until this point, the main goal was to complete the research. Seeing photographs of real women, experiencing
very difficult and painful emotions, changed the learning process and ultimately the main goal. From this point forward, my motivation and involvement altered. I became more ardent about investigating psychosocial issues, for what can be typically seen as a ‘physical’ problem.

- During the course of the literature review process and regular reflection of the articles I collated, I believe I have a more proficient knowledge base of cosmetic surgery and body image. It was important to keep a journal of the ideas that ran through the project as I read the literature; I now appreciate that is how the treadmill of research keeps progressing. However, researching an area such as cosmetic surgery, which has had little input from clinical psychology, was difficult. I sometimes felt frustrated, as there were no clinical psychologists locally within the field that I could discuss the research with.

- Overcoming difficulties and setbacks with regards to data collection and statistical analyses taught me to persevere. I now feel more competent with statistical packages, whereas before the research I had many reservations and anxieties. However, the process has made me aware of the limitations of quantitative research. This awareness has encouraged me to be more investigative; I am less ‘accepting’ of subsequent research I have read since completing the thesis, as I now feel I have some knowledge to question!
• And finally, I have learnt about myself in a different role: the ‘researcher role’. I have a better understanding of what conditions I work well in and which conditions I struggle with. I feel more able to identify where my weaknesses and difficulties lay with regards to working under pressure to a deadline, whilst undertaking clinical work.

Upon completion of the research, I acknowledge the process of questioning and reflecting upon the work will continue. I hope that during my career as a clinical psychologist, I will continue to take a more critical stance of research and apply the understanding and knowledge I have gained from independently conducting my own research.
### Table of Research Studies for Social Comparison, Shame and Teasing

<table>
<thead>
<tr>
<th>Author</th>
<th>Sample Size</th>
<th>Research Measures</th>
<th>Major Findings</th>
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<tbody>
<tr>
<td><strong>SOCIAL COMPARISON</strong></td>
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<tr>
<td>Thompson &amp; Heinberg</td>
<td>146</td>
<td>Rosenberg Self-esteem Inventory (RSE)</td>
<td>Specific teasing about weight/size was a significant consistent predictor of body dissatisfaction and eating disturbance. Also the importance of others as comparison targets.</td>
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<tr>
<td>(1993)</td>
<td>female undergraduates</td>
<td>Eating Disorders Inventory Drive for Thinness (EDI-DT)</td>
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<td></td>
<td></td>
<td>Physical Appearance Comparison Scale (PACS)</td>
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<td>Self-Rating Depression Scale (SDS)</td>
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<td>Physical Appearance Related Teasing Scale (PARTS)</td>
<td></td>
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<tr>
<td>Stormer &amp; Thompson</td>
<td>162</td>
<td>Rosenberg Self-esteem Inventory (RSE)</td>
<td>Social comparison and societal factors were significant predictors of body dissatisfaction and eating disturbance. Negative verbal commentary also explained a small part of the variance.</td>
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<tr>
<td>(1995)</td>
<td>female undergraduates</td>
<td>Appearance Comparison Scale (ACS)</td>
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<td></td>
<td>Perception of Teasing Scale (POTS)</td>
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<td>Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ)</td>
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<tr>
<td>Morrison, Kalin &amp;</td>
<td>778</td>
<td>Appearance Self-Esteem Scale (ASES)</td>
<td>Universalistic social comparison predicted appearance self-esteem, body dissatisfaction, number of diets, pathogenic weight control practices.</td>
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<td>Morrison (2004)</td>
<td>female undergraduates</td>
<td>Body Figure Perception Questionnaire (BFPQ)</td>
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<td></td>
<td></td>
<td>Exposure to idealistic magazines</td>
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<td></td>
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<td>Universalistic Social Comparison (USC)</td>
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<tr>
<td><strong>SHAME</strong></td>
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<tr>
<td>Sanftner, Barlow Marschall &amp; Tangney (1995)</td>
<td>171</td>
<td>Eating Disorder Inventory 2 (EDI-2)</td>
<td>Shame-proneness was positively associated with eating disorder symptoms. Shame was positively correlated with drive for thinness, bulimia and body dissatisfaction.</td>
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<td></td>
<td>female undergraduates</td>
<td>Test of Self-Conscious Affect (TOSCA)</td>
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<tr>
<td>Burney &amp; Irwin (2000)</td>
<td>97</td>
<td>Test of Self-Conscious Affect (TOSCA)</td>
<td>The severity of eating disorder symptomatology is related not to global proneness to shame or guilt but rather to shame and guilt in eating contexts and to shame about the body.</td>
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<td></td>
<td>female community sample</td>
<td>Shame and Guilt Eating Scale (SGES)</td>
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<td></td>
<td>Objectified Body Consciousness Scale (OBC)</td>
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<td></td>
<td>The Eating Attitudes Test (EAT-40)</td>
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<tr>
<td>Author</td>
<td>Sample Size</td>
<td>Research Measures</td>
<td>Major Findings</td>
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<tr>
<td>Swan &amp; Andrews (2003)</td>
<td>68 females with eating disorders</td>
<td>Eating Disorder Diagnosis based on DSM-IV Symptom Checklist 90 (SCL-90) Experience of Shame Scale (ESS)</td>
<td>Clients with eating disorders scored significantly higher than controls on all shame areas when depression was controlled. Clients with eating disorders scored higher on bodily and characterological shame and shame around eating.</td>
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<td></td>
<td>72 female non-clinical controls</td>
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<td></td>
<td>female undergraduates</td>
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<tr>
<td>McLaren, Kuh, Hardy &amp; Gauvin (2004)</td>
<td>898 females</td>
<td>Body-Related Comments (devised for this study) Body Esteem Scale for Adolescents and Adults Current and Adolescent Body Mass Index</td>
<td>Negative comments while growing up, suggests an enduring adverse impact on midlife body esteem. Partner comments had a greater impact on esteem of thinner women.</td>
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<tr>
<td>body</td>
<td>female community sample</td>
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<tr>
<td>Furman &amp; Thompson (2002)</td>
<td>147 females</td>
<td>Verbal Commentary Scenarios Physical Appearance-Related Teasing Scale (PARTS) Eating-Disorder Inventory (EDI-2) Rosenberg Self-Esteem Scale (RSE) Multidimensional Body Self-Relations Questionnaire-Appearance Evaluation subscale (MBSRQ-AE)</td>
<td>Negative appearance and abilities scenes elicited moderate levels of mood disturbance when compared to positive vignettes. Eating disturbance predicted both appearance and abilities scenarios.</td>
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<td></td>
<td>female undergraduates</td>
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Appendix Two
### Table of Research Studies for Cosmetic Surgery and Body Image

<table>
<thead>
<tr>
<th>Author</th>
<th>Sample Size</th>
<th>Research Measures</th>
<th>Major Findings</th>
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<tbody>
<tr>
<td>Didie &amp; Sarwer</td>
<td>25 prospective female breast augmentation patients.</td>
<td>Multidimensional Body-Self Relations Questionnaire (MBSRQ)</td>
<td>Breast augmentation patients, compared with controls, reported greater dissatisfaction with their breasts. The two groups did not differ on overall body image dissatisfaction or greater awareness or internalisation of sociocultural influences on physical appearance. Breast augmentation patients reported more positive sexual functioning than controls. Two groups did not differ in their investment in appearance schema.</td>
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<td></td>
<td>30 female controls</td>
<td>The Appearance Schemas Inventory (ASI)</td>
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<td>Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ)</td>
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<td>Body Dysmorphic Disorder Examination-Self-Report (BDDE-SR)</td>
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<td>Breast Chest Rating Scale (BCRS)</td>
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<td></td>
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<td>Physical Appearance-Related Teasing Scale (PARTS)</td>
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<td>Quality of Life Inventory (QOLI)</td>
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<td></td>
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<td>Derogatis Interview for Sexual Functioning-Self-Report (DISF-SR)</td>
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<td></td>
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<td>Dyadic Adjustment Scale (DAS)</td>
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<tr>
<td>Sarwer, LaRossa, Bartlett, Low, Bucky &amp; Whitaker (2003)</td>
<td>30 prospective female breast augmentation patients.</td>
<td>Multidimensional Body-Self Relations Questionnaire (MBSRQ)</td>
<td>Breast augmentation patients reported greater dissatisfaction with their breasts, and rated preferred ideal breast size as significantly larger than controls. Patients reported greater investment in their appearance, greater distress about their appearance in a variety of situations and more frequent teasing about their appearance. Patients also reported frequent use of psychotherapy.</td>
</tr>
<tr>
<td></td>
<td>30 female controls</td>
<td>Situational Inventory of Body-Image Dysphoria (SIB-ID)</td>
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<tr>
<td></td>
<td></td>
<td>Body Dysmorphic Disorder Examination-Self-Report (BDDE-SR)</td>
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<td>Breast Chest Rating Scale (BCRS)</td>
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<td>Physical Appearance-Related Teasing Scale (PARTS)</td>
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<tr>
<td></td>
<td></td>
<td>Rosenberg Self-Esteem Scale (RSE)</td>
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<tr>
<td>Author</td>
<td>Sample Size</td>
<td>Research Measures</td>
<td>Major Findings</td>
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<tr>
<td>Sarwer, Cash, Magee, Williams, Thompson, Roehrig, Tantleff-Dunn, Kanter, Wilfley, Amidon, Anderson &amp; Romanofski. (2005)</td>
<td>559 female undergraduates</td>
<td>Cosmetic Surgery Attitudes Questionnaire (CSAQ)</td>
<td>Overall, women held relatively favourable attitudes about surgery. Regression analysis suggested that a greater psychological investment in physical appearance and greater internalisation of mass media images of beauty predicted more favourable attitudes toward cosmetic surgery. 2.5% screened positive for Body Dysmorphic Disorder (BDD).</td>
</tr>
<tr>
<td>Henderson-King &amp; Henderson-King (2005)</td>
<td>149 female undergraduates &amp; 112 male undergraduates</td>
<td>State Self-Esteem Scale (SSES) Body-Esteem Scale (BES) Self-Monitoring Scale (S-MS) Miller Cox Attitudes About Makeup Scale (MCAAMS) Acceptance of Cosmetic Surgery Scale (ACSS) Objectified Body Consciousness Scale (OBCS)</td>
<td>Scale development and validation of the ACSS. Found greater acceptance of cosmetic surgery for intrapersonal reasons than social reasons. Dissatisfaction with one's appearance was associated with greater acceptance of cosmetic surgery. Fear of becoming unattractive was a positive predictor of cosmetic surgery attitudes. Increased levels of body shame were associated with accepting cosmetic surgery for social and intrapersonal reasons. Cosmetic surgery was positively related to age for women but not for men.</td>
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</table>
Appendix Three
09 February 2005

Miss Justine Hardy
Trainee Clinical Psychologist
Leicestershire Partnership NHS Trust
School of Psychology - Clinical Section
c/o LPT Research Office
Daisy Peake Building, Towers Hospital, Leicester
LE5 0TD

Dear Miss Hardy

Full title of study: The relationship between cognitive, attitudinal, developmental, and socio-cultural factors associated with the motivation to seek cosmetic surgery.

REC reference number: 05/Q2501/13
Protocol number: 1, 05-Q2501-13(rp)041121.doc

Thank you for your letter of 28 January 2005, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Vice-Chair.

Confirmation of ethical opinion
On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

The favourable opinion applies to the research sites listed on the attached form. Confirmation of approval for other sites listed in the application will be issued as soon as local assessors have confirmed that they have no objection.

Conditions of approval
The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents
The final list of documents reviewed and approved by the Committee is as follows:

<table>
<thead>
<tr>
<th>Document Type:</th>
<th>Version:</th>
<th>Dated:</th>
<th>Date Received:</th>
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<td>Application</td>
<td>1, 05-Q2501-</td>
<td>17/12/2004</td>
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An advisory committee to Leicestershire, Northamptonshire and Rutland Strategic Health Authority
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**Management approval**

The study should not commence at any NHS site until the local Principal Investigator has obtained final management approval from the R&D Department for the relevant NHS care organisation.

**Membership of the Committee**

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

**Notification of other bodies**

The Committee Administrator will notify the research sponsor that the study has a favourable ethical opinion.

**Statement of compliance**

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

---

05/Q2501/13  Please quote this number on all correspondence

With the Committee’s best wishes for the success of this project,

Yours sincerely,

Dr Wilson Firth

Vice-chair

Enclosures

- Standard approval conditions
- Site approval form (SF1)

An advisory committee to Leicestershire, Northamptonshire and Rutland Strategic Health Authority
You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

- **What is the purpose of the study?**

The purpose of this study is to explore areas that may help further understand the motivation to seek cosmetic surgery. The areas being investigated in this study are the influences of development, social environment and thoughts and feelings about your appearance.

Cosmetic surgery is defined as: 'any surgery done primarily to improve or change the way one appears; cosmetic surgery does not primarily improve the way the body works or correct deformities from disease, trauma or birth defects'.

- **Why have I been chosen?**

Students at the University of Leicester are being invited to take part in this study.

- **Do I have to take part?**

It is up to you to decide whether or not to take part. If you decide to take part you are still free to withdraw at any time and without giving a reason.

- **What will I have to do?**

Enclosed in this envelope is a questionnaire pack for you to complete. The questionnaires are straightforward and should take approximately ten to twenty minutes to fill out. Once the questionnaires have been completed, there is a stamp-addressed envelope enclosed for your convenience.
• Will information obtained be confidential?

The questionnaires are completely anonymous, and cannot be identified or traced to you once they have been sent back to the researcher.

The questions in the pack will make you think about aspects of your appearance. Should any of the questions raise some concern for you, I have provided contact details of who you could get in touch with should you wish to discuss something further (listed on the questionnaire pack front sheet).

• What will happen to the results of the research study

The results of the study inform a Doctoral thesis in Clinical Psychology. You will not be identified in the report, only the responses that are collected from the questionnaires. The results of the study are to be completed by September 2005. Should you be interested in obtaining a copy of the results, please feel free to contact the researcher on either the telephone number or email address on the front sheet.

If you have any further questions or you wish further explanations please do not hesitate to ask. Thank you for taking the time to consider our request.
Appendix Five
Full title of study: Psychosocial, Attitudinal and Developmental Factors Associated with Cosmetic Surgery

Dr XXXXXXXXXX
Consultant Psychiatrist

I am writing to invite you to take part in a study that I am currently involved in with Justine Hardy, Trainee Clinical Psychologist.

Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully, discuss it with others if you wish and ask us if there is anything that is not clear. Take time to decide whether or not you wish to take part.

Thank you for reading this.

• What is the purpose of the study?

The purpose of this study is to explore areas that may help further understand the decision to seek cosmetic surgery. The areas being investigated in this study are the influences of development, social environment and thoughts and feelings about your appearance.

Cosmetic surgery is defined as: ‘any surgery done primarily to improve or change the way one appears; cosmetic surgery does not primarily improve the way the body works or correct deformities from disease, trauma or birth defects’.

• Why have I been chosen?

You have had a consultation regarding the cosmetic procedure you requested. All of the patients who are currently awaiting surgery will be invited to take part in this study.

• Do I have to take part?

It is up to you to decide whether or not to take part. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.
• What will I have to do?

Enclosed in this envelope is a questionnaire pack for you to complete. The questionnaires are straightforward and should take approximately ten to twenty minutes to fill out. Once the questionnaires have been completed, there is a stamp-addressed envelope enclosed for your convenience. The questionnaires will be sent to my colleague, Justine Hardy.

• Will information obtained be confidential?

The questionnaires are completely anonymous, and cannot be identified or traced to you once they have been sent back to the researcher. I will not view the responses that you send back. No medical records will be accessed.

The questions in the pack will make you think about aspects of your appearance. Should any of the questions raise some concern for you, I have provided contact details of who you could get in touch with should you wish to discuss something further (listed on the questionnaire pack front sheet).

• What will happen to the results of the research study

The results of the study inform a Doctoral thesis in Clinical Psychology, and will be kept in the library. You will not be identified in the report, only the responses that are collected from the questionnaires. The results of the study are to be completed by September 2005. Should you be interested in obtaining a copy of the results, please feel free to contact the researcher on either the telephone number or email address on the front sheet.

Justine Hardy can be contacted at the University of Leicester, 104, Regent Road, Leics. LE1 7LT Telephone: 0116 223 1649

Yours sincerely,

Dr XXXXXXXXXXX
Consultant Psychiatrist

If you have any further questions or you wish further explanations please do not hesitate to ask. Thank you for taking the time to consider our request.
Appendix Six
Motivation for Cosmetic Surgery

Questionnaire

• This questionnaire is designed to investigate why some people seek cosmetic surgery.

• You do not have to put your name on this questionnaire. Your responses will be completely anonymous.

• The questionnaire should take between 10 - 20 minutes to complete. Please try and answer the questions as honestly as you can.

Please contact for further information or if you would like to discuss something:

Justine Hardy (the researcher)
jlh30@le.ac.uk c/o The University of Leicester 0116 2231649

Dr Trevor Friedman (Liaison Psychiatry) 0116 2256218

Please return the questionnaire pack in the enclosed prepaid envelope.

Thank you for taking the time to complete this questionnaire

1 Cosmetic Surgery version 2
1. How old are you? ................. Years

2. How would you describe your ethnic origin? Please tick

<table>
<thead>
<tr>
<th>White</th>
<th>Black - Caribbean</th>
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<tbody>
<tr>
<td>White - Irish</td>
<td>Black - African</td>
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<td>White - other</td>
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<td>Mixed - white / black Caribbean</td>
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<td>Mixed - white / Asian</td>
<td>Asian - Bangladeshi</td>
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<td>Mixed - other</td>
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<tr>
<td>Black - British</td>
<td>Chinese</td>
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<td>Other</td>
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3a. What is your height? .......... 3b. What is your weight? ............

4. Can you please describe the cosmetic surgery procedure you have sought?  

5. Have you undergone any form of cosmetic surgery in the past? Yes / No  
If yes, can you describe what procedure(s) you have had?

7. Using the scale below, please state how much you agree with the following statement:

   I am satisfied with my physical appearance

   1  2  3  4  5

1=definitely agree  2=somewhat agree  3=indifferent  4=somewhat disagree  5=definitely disagree
Appendix Seven
Motivation for Cosmetic Surgery
Questionnaire

• This questionnaire is designed to investigate why some people seek cosmetic surgery.

• You do not have to put your name on this questionnaire. Your responses will be completely anonymous.

• The questionnaire should take between 10 - 20 minutes to complete. Please try and answer the questions as honestly as you can. There are no right or wrong answers.

Please contact for further information or if you would like to discuss something:

Justine Hardy (the researcher)
jlh30@le.ac.uk  c/o The University of Leicester 0116 2231649

NHS Direct: 0845 4647

Please return the questionnaire pack in the enclosed pre-paid envelope.

Thank you for taking the time to complete this questionnaire

1 University of Leicester
1. How old are you? .......... Years
4. How would you describe your ethnic origin? Please tick

<table>
<thead>
<tr>
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<td>Mixed – white / Asian</td>
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<td>Mixed – other</td>
<td>Asian – other</td>
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<tr>
<td>Black – British</td>
<td>Chinese</td>
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<tr>
<td>Other</td>
<td></td>
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</table>

5. Have you undergone any form of cosmetic surgery in the past? Yes / No
6. If yes, can you describe the procedure(s) you have had?

........................................................................................................

7. Have you thought about having cosmetic surgery in the future? Yes / No
8. If yes, what part of your appearance would you want to change and what type of procedure would you seek?

........................................................................................................

9. Using the scale below, please state how much you agree with the following statement:

I am satisfied with my physical appearance

1  2  3  4  5
1=definitely agree 2=somewhat agree 3=indifferent 4=somewhat disagree 5=definitely disagree
Cosmetic Surgery Attitudes Questionnaire

Please read each question and circle the response you agree with the most, using the scale below.

1 = definitely disagree  2 = somewhat disagree  3 = neither disagree nor agree
4 = somewhat agree  5 = definitely agree

1. I am motivated to seek cosmetic surgery at this present time
2. I will have cosmetic surgery in the next two years
3. I will have cosmetic surgery in the future
4. Cosmetic surgery is of no use to me
5. Cosmetic surgery would make me feel better about myself
6. I approve of persons undergoing cosmetic surgery to increase their self-esteem
7. I think cosmetic surgery is a waste of money/time
8. If I had cosmetic surgery, I would be embarrassed to tell people other than family and close friends
9. I approve of people surgically changing their appearance to feel better about themselves
10. I think I might have cosmetic surgery when I reach middle-age
11. I think people should do whatever they want to look good
12. I would have cosmetic surgery if my partner wanted me to
13. If I had unlimited amount of money I would have cosmetic surgery
Appendix Nine
Social Comparison Questionnaire

Please read each question and circle the response you agree with the most, using the scale below.

1 = never  2 = seldom  3 = sometimes  4 = often  5 = always

1. At parties or other social events, I compare my physical appearance to the physical appearance of others

2. The best way for people to know if they are overweight or underweight is to compare their figure to the figure of others

3. At parties or other social events, I compare how I am dressed to how other people are dressed

4. Comparing your 'looks' to the 'looks' of others is a bad way to determine if you are attractive or unattractive

5. In social situations, I sometimes compare my figure to the figures of other people
Appendix Ten
SATAO - 3

Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

1 = definitely disagree  2 = somewhat disagree  3 = neither disagree nor agree  4 = somewhat agree  5 = definitely agree

1. TV programs are an important source of information about fashion and "being attractive".
   1  2  3  4  5

2. I've felt pressure from TV or magazines to lose weight.
   1  2  3  4  5

3. I do not care if my body looks like the body of people who are on TV.
   1  2  3  4  5

4. I compare my body to the bodies of people who are on TV.
   1  2  3  4  5

5. TV commercials are an important source of information about fashion and "being attractive".
   1  2  3  4  5

6. I do not feel pressure from TV or magazines to look pretty.
   1  2  3  4  5

7. I would like my body to look like the models who appear in magazines.
   1  2  3  4  5

8. I compare my appearance to the appearance of TV and movie stars.
   1  2  3  4  5

9. Music videos on TV are not an important source of information about fashion and "being attractive".
   1  2  3  4  5

10. I've felt pressure from TV and magazines to be thin.
    1  2  3  4  5

11. I would like my body to look like the people who are in movies.
    1  2  3  4  5

12. I do not compare my body to the bodies of people who appear in magazines.
    1  2  3  4  5

13. Magazine articles are not an important source of information about fashion and "being attractive".
    1  2  3  4  5

14. I've felt pressure from TV or magazines to have a perfect body.
    1  2  3  4  5
15. I wish I looked like the models in music videos.  
16. I compare my appearance to the appearance of people in magazines.  
17. Magazine advertisements are an important source of information about fashion and “being attractive”.

18. I’ve felt pressure from TV or magazines to diet.  
19. I do not wish to look as athletic as the people in magazines.  
20. I compare my body to that of people in “good shape”.  
21. Pictures in magazines are an important source of information about fashion and “being attractive”.

22. I’ve felt pressure from TV or magazines to exercise.  
23. I wish I looked as athletic as sports stars.  
24. I compare my body to that of people who are athletic.  
25. Movies are an important source of information about fashion and “being attractive”.

26. I’ve felt pressure from TV or magazines to change my appearance.  
27. I do not try to look like the people on TV.  
28. Movie stars are not an important source of information about fashion and “being attractive”.

29. Famous people are an important source of information about fashion and “being attractive”.

30. I try to look like sports athletes.
Appendix Eleven
**Appearance Schema Inventory**

Please indicate your beliefs about the following items using this scale:

1 = strongly disagree  
2 = mostly disagree  
3 = neither disagree nor agree  
4 = mostly agree  
5 = strongly agree

1. What I look like is an important part of who I am  
2. What’s wrong with my appearance is one of the first things that people will notice about me  
3. One’s outward physical appearance is a sign of the character of the inner person  
4. If I could look just as I wish, my life would be much happier  
5. If people knew how I really look, they would like me less  
6. By controlling my appearance, I can control many of the social and emotional events in my life  
7. My appearance is responsible for much of what has happened to me in my life  
8. I should do whatever I can to always look my best  
9. Ageing will make me less attractive  
10. To be feminine, a woman must be as pretty as possible  
11. The media's messages in our society make it impossible for me to be satisfied with my appearance  
12. The only way I could ever like my looks would be to change what I look like  
13. Attractive people have it all  
14. Plain looking people have a hard time finding happiness
Appendix Twelve
**Experience of Shame Scale**

Please indicate how you feel about the following items using the scale below:

1 = not at all  
2 = a little  
3 = moderately  
4 = very much

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<tr>
<td>1</td>
<td>Have you felt ashamed of any of your personal habits?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Have you worried about what other people think of any of your</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>personal habits?</td>
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<td>3</td>
<td>Have you had to cover up or conceal any of your personal habits?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>4</td>
<td>Have you felt ashamed of your manner with others?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>5</td>
<td>Have you worried about what other people think of your manner with others?</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>6</td>
<td>Have you avoided people because of your manner?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>7</td>
<td>Have you felt ashamed of the sort of person you are?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
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<tr>
<td>8</td>
<td>Have you worried about what other people think of the sort of person you are?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Have you tried to conceal from others the sort of person you are?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
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<tr>
<td>10</td>
<td>Have you felt ashamed of your ability to do things?</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>11</td>
<td>Have you worried about what other people think of your ability to do things?</td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Have you avoided people because of your inability to do things?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Do you feel ashamed when you do something wrong?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Have you worried about what other people think of you when you do something wrong?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Have you tried to cover up or conceal things you felt ashamed of having done?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Have you felt ashamed when you said something stupid?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
17. Have you worried about what other people think of you when you said something stupid?
18. Have you avoided contact with anyone who knew you said something stupid?
19. Have you felt ashamed when you failed at something which was important to you?
20. Have you worried about what other people think of you when you fail?
21. Have you avoided people who have seen you fail?
22. Have you felt ashamed of your body or any part of it?
23. Have you worried about what other people might think of your appearance?
24. Have you avoided looking at yourself in the mirror?
25. Have you wanted to hide or conceal your body or any part of it?
Appendix Thirteen
The Physical-Appearance Related Teasing Scale

Each question relates to the time period of when you were growing up. Please circle the response you agree with the most using the scale below.

1=never  2=seldom  3=sometimes  4=often  5=frequently

1. When you were a child, did you feel that your peers were staring at you because of your physical appearance?

2. When you were a child, did you ever feel like people were making fun of you because of your physical appearance?

3. Were you ridiculed as a child about your physical appearance?

4. When you were a child, did people make jokes about your physical appearance?

5. When you were a child, were you laughed at for trying out for sports because of your physical appearance?

6. Did any of your relatives call you names when they were angry with you?

7. Did your father ever make jokes that referred to your physical appearance?

8. Did other kids call you derogatory names that related to your physical appearance?
9. Did you ever feel like people were pointing at you because of your physical appearance?

10. Were you the brunt of family jokes because of your physical appearance?

11. Did people point you out of a crowd because of your physical appearance?

12. Did you ever hear your classmates snigger when you walked into the classroom alone?

13. When you were growing up, did people say you dressed funny?

14. Did people say you had funny teeth?

15. Did kids call you ‘funny looking’?

16. Did other kids tease you about wearing clothes that didn’t match or were out of style?

17. Did other kids ever make jokes about your hair?

18. When you were a child were you scoffed at for looking like a weakling?