

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Presentation of Thesis for Examination

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Elizabeth Ann Bradley

A thesis submitted for the degree of Doctorate of Clinical Psychology

Department of Health and Social Care

University of Essex

Date of submission (May 2017)

Word count 39,863

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Abstract

Previous research into cosmetic procedures has focused on plastic surgery. The present study sought to investigate non-surgical forms of cosmetic procedures, in addition to traditional surgical procedures. The study examined how self-esteem and dysmorphic concern relate to the desire for both non-surgical and surgical cosmetic procedures. A UK community sample of women completed self-report measures of self-esteem and dysmorphic concern online. Levels of depression, stress and aspects of obsessive compulsive disorder were controlled for in the analysis. Regression analyses were conducted to investigate how these factors relate to desire for both non-surgical and surgical cosmetic procedures. T-tests indicated those who had a cosmetic procedure showed significantly greater desire for further, cosmetic procedures. Self-esteem and dysmorphic concern were found to be strongly correlated. Higher levels of dysmorphic concern were a significant predictor of increased desire for cosmetic procedures. Self-esteem was not a significant predictive of desire for cosmetic procedures, when levels of dysmorphic concern were controlled for. The study suggests that the highly related constructs of self-esteem and dysmorphic concern may be a factor in the previously inconsistent literature around self-esteem and cosmetic procedures.

Acknowledgements and Dedication

Firstly, thank you to my friend and dedicated proof reader, Nella Campbell. It was a huge comfort to know my work was in your safe hands and a bottle of rum can never be thanks enough.

My second thanks is to my ever loving Mum, Janet Bradley. You taught me to write and so all these words have been because of you. Without your raising me to ‘never settle for little apples’ I could not possibly have travelled this far.

I would also like to thank my supervisors, Dr Frances Blumenfeld and Dr Leanne Andrews, for their support, knowledge and encouragement over the long process of completing this piece of work. A very special thanks goes to Leanne for talking me through the nerves of my viva.

My greatest thanks will always be to my magnificent better half, Joel Windels. You have figuratively, and often literally, carried me through this piece of work. There is no possible way I could have done this without you, I love you.

This thesis is dedicated to my best friend, Hester Stewart. HESSIE, it will always break my heart that only one of us got to finish our journey to becoming a Dr. On all the hardest days, I remembered I was doing this for you. Team Blonde Forever.

Contents

Abstract 3

Acknowledgements and Dedication..... 4

1. Introduction 7

 1.01 Chapter overview 8

 1.02 Cosmetic Procedure use in the UK and USA..... 8

 1.03 Feminist Theory 11

 Beauty ideals. 13

 Beauty ideals and the media..... 16

 Internalised misogyny. 18

 Beauty standards as discriminatory..... 19

 Criticism of feminist theory. 24

 Summary. 27

 1.04 Cognitive Behavioural Theory 27

 Body image and body dysmorphic disorder..... 27

 Cognitive behavioural theory - the link between BDD and cosmetic procedures. 30

 Self-esteem..... 33

 Cognitive behavioural theory – the link between self-esteem and cosmetic procedures. 35

 Critique of cognitive behavioural theory. 36

 1.05 Summary 40

 1.06 Literature Review 40

 Method. 40

 Results..... 44

 Critique of the present review. 64

 Literature review conclusion..... 65

 1.07 Rationale for the current thesis..... 66

 1.08 Statistics reported 69

 1.09 Hypotheses 69

 1.10 Chapter Summary..... 69

2. Method 70

 2.01 Chapter outline 70

 2.02 Epistemological positioning..... 70

 Positivism..... 70

 Critical Realism..... 72

 Feminist theory. 75

Desire for Cosmetic Procedures: An Investigation of Associated Factors

2.03 Design	76
2.04 Participants.....	77
Sample size.	77
2.05 Recruitment and data collection.....	79
2.06 Data coding.	80
2.07 Procedure.....	80
2.08 Measures	81
2.09 Ethical Issues.....	85
3. Results.....	86
3.01 Chapter outline	86
3.02 Sample.....	86
Demographics	87
3.03 Analysis of normality	90
3.04 Descriptive statistics.....	92
Self-esteem data.	92
Dysmorphic Concern.	93
Depression, Anxiety and Stress.....	93
OCD.	93
Desire for cosmetic procedures.....	93
Cosmetic procedures reported.....	96
3.05 Inferential statistics	100
Desire for types of cosmetic procedures.	100
Comparison of those who had a cosmetic procedure to those who had not.....	101
Self-esteem and dysmorphic concern.....	102
Predictors of desire for cosmetic procedures.	102
4. Discussion	108
4.01 Chapter Outline	108
4.02 Key Contributions of the Study.....	108
4.03 Main findings	109
Levels of desire for cosmetic procedures.....	110
Cosmetic procedures undergone and desired.....	111
Comparison of those who had a cosmetic procedure to those who had not.....	111
Reasons behind cosmetic procedure choices.	113
Desire for non-surgical and surgical cosmetic procedures.....	115
Dysmorphic concern and self-esteem.	115
Dysmorphic concern and self-esteem as predictors of desire for cosmetic procedures.....	117

Desire for Cosmetic Procedures: An Investigation of Associated Factors

4.04 Strengths and limitations of the present research.....	118
Strengths.....	118
Limitations.	121
4.05 Additional directions for future research.....	131
4.06 Chapter Summary.....	135
4.07 Conclusion.....	135
References.....	137
Appendices.....	181

1. Introduction

1.01 Chapter overview

The present chapter will provide a summary of past research in relation to cosmetic procedures. Though this thesis studied both non-surgical and surgical cosmetic procedures, this chapter includes mostly research relating to surgical cosmetic procedures. This is because so little research is available on non-surgical cosmetic procedures. The dominant theories that have discussed cosmetic procedures are feminist theory and cognitive behavioural theory. Both theories propose underlying reasons as to why a person might desire or eventually undergo a cosmetic procedure. These theories are all outlined in the present chapter. The concepts of self-esteem and dysmorphic concern, as an aspect of body dysmorphic disorder (BDD), are also outlined. The literature around self-esteem, dysmorphic concern, and how they are considered to relate to the desire for cosmetic procedures are later presented. A systematic literature review reports the literature on self-esteem and dysmorphic concern, as factors potentially associated with the use of cosmetic procedures. The chapter synthesises the present understanding of the associated factors around desire for cosmetic procedures. The chapter ends by discussing the gaps in the current literature. The hypotheses and research questions of the present thesis are then outlined.

1.02 Cosmetic Procedure use in the UK and USA

Over 45,000 people in the United Kingdom had a cosmetic operation in 2014 (The British Association of Aesthetic Plastic Surgeons, 2015). Cosmetic operations have been increasing in popularity in recent years (Gander, 2016). Cosmetic dentistry is particularly popular in Britain, with the market valued at five billion pounds (Barford, 2008). This is estimated to grow more valuable every year, with one in two adults now reporting a desire for teeth whitening, for example (Barton, 2006). The pursuit of a youthful and attractive appearance is considered to be a high priority in modern culture, particularly in the West (Bayer, 2005). The public opinion of cosmetic surgery, even amongst those who have not gone under the knife themselves, appears to be that it is a widely accepted practice (Nassab et al., 2010). Factors associated with an increased likelihood of choosing cosmetic procedures have been studied. Delinsky (2005) found that increased exposure to media, including television and

magazines, increased the likelihood of a person choosing cosmetic surgery. Another factor associated with increased interest in cosmetic surgery was knowing others, friends or relatives, who had cosmetic surgery themselves.

Cosmetic enhancements and alterations are also expanding outside of the purely surgical setting. Non-surgical, aesthetic procedures are becoming rapidly more available and prevalent. Botulinum toxin or 'Botox' is an extremely powerful chemical, injected under the skin. The American Society of Plastic Surgeons (2015) reported that almost seven million people underwent Botox in 2015, with over \$2.5 billion being spent on this wrinkle-reducing procedure.

Another common but relatively new option are 'fillers'. These chemical substances are injected into areas of skin, usually on the face, that have become sunken or less firm through the natural aging process. They are marketed as an option to smooth the skin and replace lost collagen (Smith, Jones, Thomas, Murphy, & Beddingfield III, 2010). There was a fifteen-fold increase in non-surgical cosmetic procedures being performed between 1997 and 2016 in the United States. When this is compared to a two-fold increase, over the same period, for traditional cosmetic surgery, it is clear to see that the non-surgical cosmetic industry is by far the most rapidly growing (American Society of Plastic Surgeons, 2015).

These non-surgical procedures differ from surgical cosmetic procedures in that they do not require anaesthesia and do not need to be conducted in a hospital setting. However, they differ from other services offered by the beauty industry in that they must be conducted by a trained, licensed professional. Botox, for example, is licensed to be prescribed by a doctor and only administered by a trained practitioner. Cosmetic teeth whitening is regulated by dental professionals and can only be performed by a trained professional. The present thesis uses these definitions when discussing non-surgical and surgical cosmetic procedures. This research aimed to add to the literature by studying desire for these non-surgical cosmetic procedures, as well as surgical procedures.

Cosmetic or 'plastic' surgery can be differentiated from other kinds of elective surgery. An example of an elective non-cosmetic procedure would be a corrective

surgery after the removal of a tumour. The individuals choosing to have these operations differ not only in terms of motivation for surgery and pre-operative psychological profile, but in terms of technical surgery required. Someone with cancer requiring augmentation or reconstruction often undergoes many operations before aesthetic surgery. This includes several follow-up procedures before desired results are achieved. Indeed, cancer patients having reconstructive surgeries were found to show less change in general wellbeing after surgery, in comparison to patients having surgery for purely cosmetic reasons, who had never had cancer (Klassen, Jenkinson, Fitzpatrick & Goodacre, 1996). Therefore, comparing these groups in terms of both psychological symptoms before surgery and satisfaction or outcome after, would be inappropriate. For this reason, the present thesis has focused clearly on elective procedures, undergone or considered purely for aesthetic changes.

The statistics on the number of purely aesthetic, cosmetic procedures being conducted are readily available. However, the exact reasons so many people are opting for elective, aesthetic procedures are currently somewhat unclear. This is covered further in the literature review section of the present chapter. A reason behind the continued and rising popularity of these procedures is likely to be the increasing availability and accessibility, with clinics and other services providing both surgical and non-surgical cosmetic procedures in most major cities. With more and more providers opening, to meet public demand, prices for these procedures are also becoming more competitive, with most major cosmetic procedure providers now offering many of their services on incentivised or interest-free finance packages (Tims, 2011). This has improved availability for those with less disposable income, in comparison to earlier years when only relatively wealthy people could afford to choose cosmetic procedures. Such changes in recent times are likely to be behind the rise in cosmetic procedure use, particularly non-cosmetic procedures.

Several different theories have proposed explanations of why someone might seek cosmetic procedures to aesthetically change their face or body. The present introduction will cover the most prominent: feminist theory and cognitive behavioural theory.

1.03 Feminist Theory

With regard to cosmetic procedures, feminist theory focuses much of its research on women and why women make up the vast majority of cosmetic procedure patients. Consequently, this provides a great deal of debate on the function of cosmetic procedures, for both individuals and society. This section summarises some of the key points addressed by feminist theory around the use of cosmetic procedures, particularly the underlying reasons why these procedures are desired or sought.

In her ground-breaking work 'the second sex' Simone de Beauvoir (1974) theorises why women feel compelled to improve their appearance. She speaks of how women are treated as objects from a young age. This constant objectification leads to women experiencing and valuing themselves in this way. The female experience of puberty is also considered to highlight to young women that they are desired. This is because the changes that occur to their bodies are sexualised by society, for example the growth of breasts, which are acutely objectified. The female self-objectification is seen in the way women spend more time focusing on their appearance and their own reflection, the object self in the mirror. Only because a woman believes herself to be an object, can she see her reflection as being truly real, truly herself. Men, De Beauvoir (1974) argues, perceive themselves as the subject and are treated by society as such. Therefore, a mirror image is not impressive to him as it does not capture his 'self' (De Beauvoir, 1974).

De Beauvoir spoke of how women were not only associated with the body but with hormones. For this reason, they could not be seen as rational, only acutely emotional, enabling them to be viewed as objects, again by both themselves and the rest of society (Grosz, 1994). And because women are less likely to consider themselves or be treated as rational, they are left drawn to trivial things, like their appearance. Therefore, she argues, the way to resist patriarchal societies would be to reject the desire to be beautiful and certainly reject the overt pursuit of it (De Beauvoir, 1974; Holliday & Taylor, 2006). This underpins the more traditional feminist theorists views of cosmetic procedures being a negative thing for women.

Though this argument is decades old, objectification theory has since stemmed from these ideas (Fredrickson & Roberts, 1997). Objectification theory postulates that the experience of being objectified leads to a monitoring of the self, but from the perspective of the other. The shame and anxiety this causes reduces a person's ability to attend to their own bodies or selves. An objectified person is therefore left without a clear enough awareness of themselves, eventually treating the self as an object also (Fredrickson & Roberts, 1997). The gender differences in use of grooming and beautification are often cited. These differences can be explained by this theory of female objectification. To care for one's outer appearance is often considered 'feminine', because only women are objects (Jeffreys, 2014; Abrams, Jorgensen, Southwell, Geller & Emmons, 2003). Women have been found not only to sexually objectify themselves more often but to experience greater negative emotions as a result (Roberts & Gettman, 2004). This is the crux of most theory on why women choose cosmetic procedures: women are socialised to build their self-esteem around their body and appearance. Women are left believing their self-worth is almost inextricably linked to their beliefs about whether their body is valuable, in this case attractive. Therefore, they seek to be more attractive, in order to raise their self-esteem. This drive is thought to be strengthened by the way society leaves women with very few avenues to improve their self-esteem and feel valuable, other than by being more beautiful.

These patriarchal systems have a long history in society. The word ugly comes from the ancient Norse, meaning frightening and hateful (Sinkman, 2012). Particularly for women, to be unattractive has historically meant to be uncouth and sinful. This is considered to be both a result of and continuing cornerstone of sexism and misogyny in patriarchal societies (Eco, 2007). Therefore, some feminist theory describes the motivations for cosmetic procedures, in women, as being to conform to a standard imposed on them by a male-dominated society. Most feminist theory believes that society promotes an ideology in which the value of a woman is determined predominately, if not entirely, by her physical appearance. Accordingly, the self-esteem of a woman would be heavily tied to her perceived attractiveness. This then leads to some women seeking a physical outlet, like a cosmetic procedure, in order to meet society's expectations and address her psychological distress (Holliday & Taylor, 2006).

Davis (2003) proposed the idea that the patient/surgeon relationship is in itself gendered, proposing this was evidence for the use of cosmetic procedures being part of the oppression of women. She suggested that the surgeon/male was in the position of power, while the patient/female was being acted upon, as an object and with less power. Though this was posed as a theoretical point, it is potentially supported by the notable gender disparity in cosmetic surgeons. In the US, only around 10% of registered plastic surgeons are female (Raffle, 2016). However, this has shown a very slight increase, as it was reported to be only 4% in 1998 (Kuczynski, 1998). The women's health movement in the United States accomplished a huge increase in the number of women going to medical school, with 46% of students now being female (Association of American Medical Colleges, 2016). However, very few of these female doctors go on to specialise in plastic surgery. This field remains dominated by men. This stands in stark contrast to the population of patients having plastic surgery, with 89.7% being female (The American Society for Aesthetic Plastic Surgery, 2016). This wide gender difference in the use of cosmetic surgery is often cited as support for the feminist statement that women experience far greater pressure than men to appear a certain way (Okopny, 2005).

The relationship between these sets of statistics, of predominantly male surgeons and female patients, has been compared to the Greek myth of Pygmalion (Kuczynski, 1998). The legend described a man who created a statue of a female body, to his preferred specifications. And when his idealised ivory creation came to life, he married her. Feminist thinkers have used this analogy to describe how a male-dominated view has dictated society's ideas of how female bodies should appear (Yeates, 2010). This is seen most obviously in the developed world's consumption of advertising and media.

Beauty ideals. Beauty ideals are considered to have stemmed from patriarchal expectations of women (Swami, Coles, Wilson, Salem, Wyrozumska & Furnham, 2010). Therefore, these standards are inherently oppressive (Forbes, 2007). In 1996, Smolek reported the average North American model was thinner than 98% of the female North American public, presenting an unrealistic ideal for the vast majority of women. However, with the rise of Photoshop and retouching of advertisements, the

ideals presented are no longer just unrealistic but genuinely unreal (Waller, 2015). There is evidence to suggest women are not able to identify when a photograph has been airbrushed, leaving them vulnerable to the belief that the unattainable body or face in the picture might actually be achievable (Berberick, 2010). As this use of cosmetic procedures and beautification continues, the female body is thought to become an advert itself, with other women feeling they need to measure up to a new version of female appearance. For example, the more women have botox, the less women see other women with wrinkles. The rarer the image a female face with wrinkles, the more 'abnormal' wrinkles are considered. Thus, the image of what is 'normal' for a woman becomes narrower and less achievable. Women who use cosmetic procedures therefore become a poster for the dominant cultural meaning of women: that they should be perfectly attractive and that nothing else about them is valuable (Balsamo, 1992).

Forbes, Collinsworth, Jobe, Braun and Wise (2007) theorised that beauty ideals are inherently oppressive to women, and so coined the 'beauty ideals are oppressive (BIO) hypothesis'. In studying how ideal female bodies had changed over the years, they suggested that because these ideals were never representative of the average female body, they are inherently detrimental to women. The very fact that what is considered to be the ideal body has changed so often over time and differs so greatly between cultures has been proposed as evidence for beauty as being constructed by society (Scott, 1997). Feminist theory has suggested that society is patriarchal and beauty ideals are socially constructed, therefore those beauty ideals function to maintain the lower place in society women hold (Jeffreys, 2014). Testimonies from women about how these ideals impact on areas such as their careers appear to support this theory of oppression. Some women spoke of feeling they had to achieve an exact level of attractiveness, so as to gain career opportunity without seeming unintelligent (McKay, 2014).

The BIO hypothesis (Forbes et al., 2007) notes that dysmorphic concern is therefore not just a problem for individual people, but relates to society as a whole. Therefore, a way to measure extent of patriarchal oppression, could be to measure levels of dysmorphic concern. Indeed, Forbes et al., (2007) found evidence for the link between societal oppression of women and beauty standards in the West. Hostility

towards women and several types of sexism (traditional, benevolent and hostile) were all associated with higher belief in and conformity to Western beauty ideals. This highlights how patriarchal societies leave women with body image difficulties and dysmorphic concern, causing the motivation to address this by addressing the appearance, using cosmetic procedures for example.

Some quantitative evidence for these theories has been found. Sexist attitudes have been found to be strongly associated with consideration of cosmetic surgery. Swami et al. (2013) measured the level of sexist attitudes and hostility towards women in their participants. They found those who showed more sexist beliefs were more likely to consider surgery for themselves and also show higher interest in their partner having cosmetic surgery.

While women have made great strides towards equality, achieving financial, legal and societal milestones that approach those of men, beauty standards grow ever more oppressive. Indeed, this is considered to be a patriarchal response to the growing independence and autonomy of women, in order to maintain the oppression of women overall (Wolf, 1991). Indeed, much has been published about the link between body image ideals and the oppression of women. Books by Wolf (1991) and Orbach (1978) covered this in detail and were widely read and well received. And yet, very little has changed in society since the release of such works, with standards of female beauty becoming ever higher (Jeffreys, 2014; Thompson, Heinberg, Altabe & Tantleff-Dunn, 1999).

Orbach spoke of how she felt nothing had changed forty years after her book, *Fat is a Feminist Issue*, was originally published (Orbach, 1978). She believed problems with body dysmorphia had in fact increased and worsened for women (Williams, 2016). This could suggest the oppression of women, via their self-esteem and level of body dysmorphia, is so powerful that it cannot be overcome. However, it could also pose a question to these feminist theories. Orbach's (1978) work remains in print and proposes many ways, grounded in her work as a feminist researcher, writer and psychotherapist, to challenge the oppression of beauty ideals. Despite this, difficulties around self-esteem and dysmorphic concern have been found to be more common women, and women make up the vast majority of people choosing to have a cosmetic

procedures (Kling, Hyde, Showers & Buswell, 1999; Rosen & Reiter, 1996; Veale et al., 1996; The American Society for Aesthetic Plastic Surgery, 2016). If these feminist theories were indeed correct, they might have been more powerful in creating social change.

Furthermore, Orbach's (1978) book included theory on obesity in women being linked to patriarchal oppression in the same way as a need to alter the appearance. She suggested this to be a defence against being sexualised or as an effort to be taken more seriously by men. According to her theory, obese women were acting out against the same oppressive systems that had led some women to seek cosmetic procedures. However, there is no discussion on why men might be overweight or struggle with body image. Though obesity rates vary across ethnicities and social classes, in general male obesity prevalence has been found to be similar to that in females (Wang & Beydoun, 2007). Studies of how medical professionals understand and relate to obese people also suggest underlying blame and prejudice towards those who are overweight, rather than a belief that society may play a role in a person's weight (Kaminsky & Gadaleta, 2002). Public opinion has also been shown to view both obesity and eating disorders as a purely individual difficulty (Oliver & Lee, 2005; Crisp, Gelder, Rix, Meltzer & Rowlands, 2000). Similar results have been found for the experience of people with eating disorders including anorexia. Medical professionals were found to dislike eating disorder patients and to believe they were responsible for their difficulties and medical complications of their diagnoses (Fleming & Szmukler, 1992). Therefore, it would appear that feminist theory on how society influences body image difficulties, self-esteem and outer appearance has focused disproportionately on women, perhaps creating a biased view of the oppression of women. Additionally, these theories have not altered or improved the self-esteem, body image issues or related difficulties either.

Beauty ideals and the media. The media is described as continually reinforcing beauty standards (Negrin, 2002; Lakoff & Scherr, 1984). Quantitative evidence supports the increased pressure on females, with regard to the influence of the media. Viewing advertisements with idealised bodies was found to have a negative impact on body image in girls aged twelve to sixteen. However, this was not the case for boys of the same age (Hargreaves & Tiggemann, 2004).

The presence of advertising is constant in modern society. Commercials often employ scantily clad females to grab attention. In this way, the media portrays the patriarchal definition of perfection (Frith, Shaw & Cheng, 2005). The company behind the advertisement initially hope that the desire viewers have for the women pictured, either to be with or be her, becomes associated with the commodities being sold. Research has shown that products do in fact sell more when their advertising includes attractive people (Halliwell & Dittmar, 2004). Over time, the beautiful woman is not only associated with but equated to the commodities on sale (Jacobson & Mazur, 1995; Berberick, 2010). Advertising and the media can therefore be viewed through a feminist lens, as a key maintaining force of the patriarchal notion that women are merely objects and must be beautiful objects.

Evidence for the impact of this has been found, showing young women who are exposed to the homogenous images of thin, beautiful women in advertising made them feel worse about themselves and was damaging to their body image (Yamamiya, Cash, Melnyk, Posavac & Posavac, 2005). Advertising content is thought to have these damaging effects on self-esteem and concerns about appearance by encouraging upward comparison, comparing the self to someone we believe to be superior to us. Venkat and Ogden (2002) showed their participants advertising that primed this social comparison. They found this had detrimental effects on both self-esteem and dissatisfaction with the body. Furthermore, this was seen significantly more in their female participants than males.

The effects of the media in terms of attitudes to plastic surgery have been seen in girls as young as fifteen. High school girls in England were found to view cosmetic surgery as more acceptable when it is normalised by the media and when the risk associated with the surgery itself is are not focused upon. Cosmetic surgery being viewed as an 'answer' to body dissatisfaction was also found to be discussed by female students; studied via several focus groups (Ashikali, Dittmar & Ayers, 2016). Grogan (2016) investigated the magazines aimed at women and did not find a single publication which did not promote or include paid advertising for cosmetic surgery. Therefore, these messages are being communicated to women clearly: the female

body is a commodity, it must be made as beautiful as possible, cosmetic procedures can offer this.

Internalised misogyny. One result of patriarchal societies can be an internalised sexism and misogyny in all genders, though this is thought to be deeply ingrained and therefore operates covertly (Tosone, 2009). The physical experience of one's own body is considered to be affected by the patriarchal structures around the self, though we may not always be aware of the influence of this. The power imbalances in society are thought to influence the way human bodies and individual identities are gendered (Bordo, 1993; Balsamo, 1992).

These images and expectations become pervasive. Internalised misogyny has been suggested as the explanation for the aforementioned scarcity of female plastic surgeons. As beauty becomes the currency through which women are judged and placed within a vertical hierarchy, women also judge others and themselves based almost entirely on their appearance (Morgan, 1991). As women are continually put in competition with each other, to be the most physically attractive and youthful looking, they are far less likely to want to improve the beauty of other women (Wolf, 2013).

An alternative view point might be that women make an active choice to avoid plastic surgery as a speciality, as a moral standpoint against the patriarchal judgement of female appearance. Female medical students may be attracted to other specialities for a variety of other reasons. However, as yet no research has been conducted to prove or disprove this idea. Therefore, it can only be hypothesised that patriarchal structures are behind the gender of plastic surgeons. This is often a criticism of feminist arguments, that because its nature is often theoretical and less concrete, it can be difficult to prove or disprove. Furthermore, when considering non-surgical cosmetic procedures, these are often conducted by beauticians, who are more likely to be female. Female beauticians have also been found to view their work as about making women feel better, rather than only improving their looks (Sharma & Black, 2001). While this still fits the feminist belief that many women associate appearing more attractive with feeling better, and that their self-esteem would motivate decisions to change their appearance, it speaks of positive outcomes. In this case for both female

beauticians and the female clients they work with. This is another critique of feminist writing about cosmetic procedures, the vast majority is very critical of the use of cosmetic procedures (Negrin, 2002; Lakoff & Scherr, 1984). This often fails to account for the number of female cosmetic procedure patients who report feeling satisfied, more confident and happier after having these procedures (Fagien & Carruthers, 2008; Von Soest, Kvalem, Roald & Skolleborg, 2009; Ching, Thoma, McCabe & Antony, 2003; Honigman Phillips & Caste, 2004).

Much feminist research has been devoted to discussing the oppression of the male gaze. This gaze casts men as the active character, with women as passive, objects being viewed (Mulvey, 1975). More recent research has suggested there is such a thing as a female gaze, and the media is improving in its ability to depict female motivation and sexuality as subjects. However, this female gaze is not thought to be the same as the male gaze, in that women are not in the same position of power when they look at men (Goddard, 2000).

Beauty standards as discriminatory. Okopny (2005) wrote about cosmetic procedures as a kind of assimilation, because society only holds one kind of beauty as aspirational. Therefore, standards of what is attractive are not just biased in terms of gender, they are ageist, racist and ableist. Beauty standards are centred around youthful, Westernised, or white, bodies and faces. Anti-aging cosmetic enhancements eliminate the older woman or continue to cast her as needing to be rectified and assimilated (Okopny, 2005). Indeed, studies of how women experience ageism revealed how much time women feel they must invest in looking more attractive in order to appear younger. Clarke and Griffin (2008) interviewed women between 50 and 70 years of age. These women spoke of their appearance being tied heavily to their experience of age-related discrimination. They described extensive beauty regimens, with some motivating factors being to maintain their relationships and combat ageism in the workplace. This societal admonishment of the older women leaves women with only a very narrow range in which to be valuable. Bauman (1995) spoke of early cosmetic surgery use being about the alteration of the body those people were born with, in line with their own choices. He theorised that as plastic surgery use becomes more common, these 'choices' will become obligations. As cosmetic procedures continue to expand and 'improve' in terms of what alterations

can be achieved, the expectation on the female body grows higher and the range of acceptability grows smaller (Bordo, 1993).

Bordo (1993) spoke of the homogenisation of the body via cosmetic procedures and how these 'improved' bodies become a more oppressive norm for one to judge the body and the self by. This self-judgement was considered to only increase the belief that the body is lesser. The female body has been likened to a garden, requiring continual maintenance and beautification (Orbach, 2005). The feminist position of society and the patriarchy is often very critical of the use of cosmetic procedures, viewing this as further objectification of the body. This objectification is believed to contribute to continued dysmorphic concern and further desire to improve the body as if it were a commodity or item (Smith, 1990). Many women have cited a desire to be accepted or 'normal' behind their choice to have a cosmetic procedure (Phillips, 2005). However, women who seek to improve their looks are sometimes considered vain and meet social disapproval (Grogan, 2016). This double bind is thought to perpetuate a level of unhappiness and self-surveillance, in women, that serves to continually oppress females (Chapkis, 1986).

Ethnicity and culture cannot be ignored with regard to beauty standards. It has been strongly suggested that the ideals behind self-esteem and dysmorphic issues, according to feminist theory, are all White ideals (Wolf, 2013). For this reason, not all women will experience those ideals in the same way. The way White ideals have spread across the globe has been considered as a form of imperialism or colonisation of other cultures (McClintock, 2013; Rice, 2010). Morgan (1991) suggested refusal of cosmetic procedures was important to tackle this 'colonisation', given that more women having cosmetic work added to the devaluing of women who did not, worsening the cycle of pressure on women to meet narrow beauty ideals.

Additionally, the experience of agency with regard to the body and appearance is not experienced by all women equally. If cosmetic procedure patients are consumers, marginalised and less privileged people cannot access these active choices in the same way. Poorer people are therefore denied the 'luxury of beauty' (Holliday & Taylor, 2006, pp. 184). When considering how black and ethnic minority women experience the pressure to be beautiful, they are less likely to naturally meet beauty

ideals since those are extremely white and westernised and they are less likely to be affluent enough to engage with cosmetic procedures and achieve 'agency' in that way. Furthermore, these women are more likely to have been overtly sexualised and indeed fetishized in a way that oppresses them further than White women (McClintock, 1995).

Women have been shown to experience the pressure to be beautiful in different ways, depending on their intersectional identities (McKay 2014). Research has shown some people considered White skin to be synonymous with better health, affluence and social status. This can be seen as artefact of colonisation, with White people being seen as ideal. Additionally, these beliefs maintain the oppression of all women but far more so for women who do not fit the White, Western 'ideal' image (Rice, 2010).

Feminism has been criticised for focusing more on beauty ideals and on who maintains or pursues them, than on what beauty represents. Other feminist writers have suggested that beauty, if pursued and actively created by women, was criticised for being corrupting of moral or thinking men, with female sexuality seen as overtly bad. Therefore, to embrace the pursuit of beauty and female sexuality is to revolt against the patriarchy, in a way women can choose for themselves (Holliday & Taylor, 2006). The positive outcomes after cosmetic procedures, such as increased confidence, have also been hypothesised to enable women to be a more active individual in society, one of the key goals of gender equality (Morgan, 1991).

One feminist view point is that there is a great deal of personal agency in the choice to have a cosmetic procedure. Information about the risks and potential complications of these procedures is available and there are a great many companies to choose from when selecting a cosmetic procedure. Therefore, those going forward to have a cosmetic procedure can be considered as active and informed consumers. Feminism as a social movement has aimed to provide women with agency, therefore there is some feminist support for women who show the agency to choose their own procedure and decide on how they will look (Talley, 2012; Dingman, Melilli-Otte & Foster, 2012). Indeed, personal choice and the desire to please oneself, even above the wishes of one's partner, have all been found as key themes in qualitative research

about why women chose cosmetic surgery (Morgan, 1991; Askegaard, Gertsen & Langer, 2002; Davis, 1995).

However, if that choice is to conform to an ideal, can it be seen as agency? If that choice is for others' approval can it be liberation, or only part of colonisation of the female body? Davis (1995) responded to this idea, criticising the notion that women choosing to alter their appearance are disempowered or victims. She stated that women are clearly capable of rational thought and action. Feminism as a whole, though not all feminist scholars agree with each other, has opened up important debate about the nature of agency and constraint.

If a patriarchal society has led to circumstances in which women can only gain power by being beautiful, then an individual woman does gain power by having a cosmetic procedure and becoming more beautiful. Some ways women have gained more agency in society are to have their own careers, have disposable incomes and make choices to spend money on themselves. Cosmetic procedures can be considered an example of this, evidence of improved female agency. Indeed, choosing to see the body and the self as a project, worth investing in implies cosmetic procedure patients view themselves as valuable (Holliday & Taylor, 2006). However, this may only fuel the ideology of beauty being the only route to power or value for women.

The nature of non-surgical cosmetic procedures being both elective and increasingly outside of medical environments empowers the consumers further, as they are outside of medical jurisdiction. Indeed, as these procedures become more acceptable and more common, the consumer gains more power over the market of these procedures. Talley (2012) theorised that the price of these procedures may fall as availability and therefore competition increases, showing the power cosmetic procedure patients can have not only over their own bodies and images, but the market as a whole.

Tait (2007) completed a discourse analysis of how cosmetic surgery is spoken about on television. She explained that the traditional feminist approach was to focus on the risk carried by cosmetic surgery and the oppression towards women. Conversely the post-feminist view was to celebrate and praise the empowerment of changing one's image. As feminism has so many branches and ideologies, some of them conflicting

with each other, it can be increasingly difficult to decide if something is positive for women or not.

While some feminist writers speak of women who engage in the pursuit of beauty as passive or controlled, others have described women who pursue 'glamour' and ways to express and enjoy their own sexuality as inherently progressive, active and empowered. Given that female sexuality is disparaged by patriarchal societies, women making choices about their image can be seen as a way to resist the patriarchy (Holliday & Taylor, 2006).

Davis (1995) described surgery as a tool for women to revolt against the patriarchy and male objectification, in favour of their own desired appearance. Indeed, one feminist artist employed cosmetic surgery to clash with how she felt the patriarchal society wanted her to appear. ORLAN, which is a name she created for herself, underwent many surgeries to use her body as a canvas. In an interview in 2009 she spoke with pride at being the first artist to do this. In one surgery, she had implants designed for cheek enhancement placed under her brow bones. This both mimicked the strong brow of the Mona Lisa and re-appropriated a traditional plastic surgery for her own ideas and art (Jeffries, 2009). At the same time, she has imitated various pieces of famous female beauties, which were originally portrayed by male artists. These included the chin of Venus de Milo by Botticelli and the mouth of Boucher's Europa. By choosing these features herself, and having them recreated as part of her own female face, she is returning them to women, where Knafo (2009) considered them to belong. Her surgeries were broadcast as performance art and she was conscious throughout the process, to show her active engagement in the change to her body. She described her surgeries as being a way to challenge the normative ideas of beauty, rather than to conform to them (Frank, 2013).

ORLAN described more of her work as a way to re-create an ideal version of herself, in her series 'ORLAN accouche d'elle m'aime'. The title includes a French pun ('herself' and 'she loves me' are homonyms in French). This roughly means 'ORLAN gives birth to her loved self' (Knafo, 2009). In this work, she is seen giving birth to a mannequin, a new version of her own body. This could be considered in line with the feminist theory that ORLAN was hoping to improve her self-esteem, by

transforming herself into a more youthful, beautiful and therefore more valuable and desirable version of herself. However, as ORLAN is only one artist, this cannot be taken as concrete evidence for feminist theory about why other women chose cosmetic procedures. This is another key difficulty in proving feminist ideas, they are often such broad concepts that it can be difficult to gather a succinct evidence base.

Furthermore, Negrin (2002) explained that these positive views of cosmetic procedures fail to account for the reasons women felt unempowered without changing their looks. Or the structures which had left them with no other opportunities to take control or experience agency. She also reiterated that if women continued to alter their appearance, to improve their self-esteem, this would make it harder to change society or alter the cause of women's dissatisfaction and unhappiness with their image. In this way, the systems never experience any resistance and thus never change. These systems are considered by feminist writers to oppress women by equating their self-esteem with their beauty, and weaken women body image by creating impossibly narrow standards of beauty (Negrin, 2002; Jeffreys, 2014; Thompson et al., 1999). These patriarchal societies continue to be reinforced and possibly even strengthened. This is the argument Negrin (2002) and Bordo (1993) put forward to explain why the use of cosmetic procedures can never be a feminist act. However, Negrin (2002) still firmly argues that the blame for this lies with the inequalities in society, not the individual women making the choice to have cosmetic procedures themselves. This aspect of feminist theory is also behind the hypothesis that a person who has a cosmetic procedure will not find the increase in self-esteem or decrease in dysmorphic concern they desire, either consciously or unconsciously. This is because the system which left these women feeling unhappy with their bodies and themselves will remain in place. Therefore, most feminist theory would predict that those who have a cosmetic procedure will in fact be more likely to desire yet more cosmetic work.

Criticism of feminist theory. A highly important criticism of feminist views on cosmetic procedures is that aesthetic alterations of the body have been practiced historically, in patriarchal societies but usually only on men, as they were the only ones with the money, power and independence to choose them (Taschen, 2005). The man heralded as the inventor of cosmetic surgery, Claudius Galen, worked around

AD. 130. He provided surgery to correct drooping eyelids and remove excess fat in the pectoral area, a condition now known as Gynecomastia. All these surgeries were performed only on men, often gladiators who'd been wounded or disfigured in fighting areas. Therefore, while there may be something oppressive and colonising about cosmetic procedures in modern, Western societies, this has not always been the case (Holliday & Taylor, 2006).

Feminism often fails to account for the way women do not aim to totally transform themselves into an ideal. Instead, the discourse around cosmetic procedure choices are usually about enhancing and accentuating the natural features, working with the existing appearance and therefore seeing it as valuable. Many ancient patriarchal beliefs are that women must remain natural or tolerate what they have been born with. Therefore, the cosmetically altered body is actively against this patriarchal viewpoint (Balsamo, 1996). The feminist view from most writers, that the pursuit of beauty should be abandoned in favour of the natural body, is also problematic. For example, some feminists have accepted exercise and personal hygiene but not cosmetic alterations of the body. Holliday & Taylor (2006) argue that all these are ways to 'cultivate' the body, critiquing the feminist choice to prize only the 'natural' body, but only in certain respects.

McKay (2014) studied how Westernised standards of beauty were experienced by women, from a feminist perspective. Interestingly, she found that women who described themselves as feminists found it especially hard to cope with these beauty ideals. She identified a theme discussed by her female participants was the negotiation between knowing how unrealistic or sexist beauty standards might be, and yet feeling a need to conform to them. This is supported by other research, with feminist women still experiencing strong shame and dissatisfaction with their appearance (Rubin et al., 2004). Feminist scholars would hypothesise that patriarchal societies cause self-esteem and dysmorphic concern in women that lead to a desire to modify their appearance in order to feel better about themselves. However, if this were true, knowledgeable and empowered feminist women would theoretically not show the same difficulties with self-esteem, dislike of their looks and desire to be beautiful. Therefore, feminism could be incorrect in its belief about the link between self-esteem, body dysmorphia and desire to change the appearance. Alternatively, the

pressure on women could be so powerful that even a full awareness of the patriarchal pressures behind beauty ideals is not enough to break free of a desire to conform to them.

There is also growing evidence to suggest that men experience pressure to meet aesthetic ideals, despite the literature focusing almost exclusively on how this develops in women. Toys aimed at young boys have been shown to promote unrealistic body standards. A review of popular action figures showed that the body shapes depicted were more muscular than professional body builders could achieve (Pope, Olivardia, Gruber & Borowiecki, 1999). It is possibly due to the belief that body image difficulties are more likely to be a problem for women that much of the research into BDD often focus on solely female participants. This means the literature shows an overtly gendered picture which has is not actually supported by the statistics of BDD diagnoses. Research which does include both genders reveals mixed results about gender differences in BDD (Tauai et al., 2008). While some research shows a higher prevalence in women (Rosen & Reiter, 1996; Veale et al., 1996), other papers show BDD to be more common in men (Bienvenu et al., 2000; Taqui et al., 2008). And men and women diagnosed with BDD show more similarities than differences in terms of their experience of the psychological difficulty (Phillips, Menard & Fay, 2006). These statistics stand in stark contrast to the feminist theory that would propose patriarchal oppression being harmful for women, by leading to and maintaining difficulties with dysmorphic concern and self-esteem. The theories do not appear to explain how or why these difficulties might also exist in men.

Furthermore, the most crucial point feminist writers often ignore is that not all women have cosmetic procedures. Many women do not wear makeup or engage in any activities that alter their appearance in any way. If patriarchal structures are operating to reduce the self-esteem of women and leave them feeling their image must be improved for them to achieve happiness, then perhaps all women would be consumed by this pursuit. While a desire to look beautiful is evident in most developed nations, it may be that the academic literature paints too cliched picture of women, failing to account for the enormous variation in the way women think about their appearance, across cultures and over time (Yamamiya et al., 2005; Korichi & Pelle-de-Queral, 2008).

Davis (1991) cleverly describes the bind feminism becomes trapped in when discussing female beauty, by explaining that any critique of the use of cosmetic procedures cannot help but undermine the women who 'opt' for them. In this way, she describes how problematic feminist theory in this area can become, by being unable to critique the oppression of women without sometimes implicating women themselves.

Summary. Overall, feminist theory of the use of cosmetic procedures can account for how patriarchal societies, as a system, effect the self-esteem and body image difficulties of women, by equating their appearance to their worth as a person. Feminist theory suggests women are then left believing that only improved looks will improve their self-esteem, leaving them trapped in a cycle of trying to reach an impossible beauty standard, set by a male view of the female body. These body ideals function to oppress women; especially so for older women, less able-bodied women, trans women and women of colour.

1.04 Cognitive Behavioural Theory

Cognitive behavioural theory is often relatively disorder specific (Clark & Taylor, 2009). Therefore, the proposed ideas around the seeking of cosmetic procedures are usually discussed in reference to the psychiatric diagnosis of body dysmorphic disorder (BDD). Much of this theory would also reference difficulties with self-esteem, as a related psychological difficulty to BDD. In the next section of this chapter, body image and BDD are discussed, followed by how these difficulties are understood by cognitive behavioural theory, in relation to a desire for cosmetic procedures. Self-esteem is then described, followed by cognitive behavioural theory of self-esteem difficulties. How low self-esteem can also be considered a motivating factor behind cosmetic procedures, with individuals hoping their self-esteem will be improved because of having the procedure is also outlined.

Body image and body dysmorphic disorder. In order to explain a disorder around body image, one must first understand body image, as it relates to all individuals. Every society, in every generation, has had an expectation of what is

considered beautiful, though these expectations change and evolve over time and cross-culturally. At present, standards of what is physically attractive are thought to be more difficult to achieve than they ever have been (Thompson, 1999).

Body image is a multifaceted and complex to define (Thompson, 2004). The definition includes the views held about the body, the meaning attributed to that perception and the thoughts and behaviours that stem from these views (National Eating Disorders Collaboration, 2016). The term was first used by the psychiatrist and psychoanalyst Schilder in 1935. He wrote extensively about how much a person's body image could vary and about the impact this could have on wellbeing and relationships.

Body dissatisfaction is understood as an unhappiness with one's physical appearance (Phillips, 2005). It has also been described as the imbalance between the desirable image portrayed by the media and the opinion of one's own physical body. This was supported by neuroimaging evidence, highlighting the increased anxiety-associated activation in the brain which occurred when participants were exposed to media images of bodies which differed greatly from their own (Friederich et al., 2007).

Research has been conducted into the concept of appearance related distress. Those who feel greater distress about their appearance also experience emotional pain, feel physically flawed and experience anxiety over how others may view them (Lioffi, 2003). Conversely, those who perceive themselves to be attractive also rate themselves as having greater psychological wellbeing and more capable of higher achievement (Langlois, Kalakanis, Rubenstein, Larson, Hallam & Smoot, 2000). Therefore, there are significant ramifications of one's belief about how attractive one is.

Psychological influences of body image include perceptual, developmental, and sociocultural factors (Sarwer et al., 1998a). Perceptual factors involve a person's ability to accurately evaluate the size, shape and texture of a physical characteristic (Sarwer, Wadden, Pertschuk & Whitaker, 1998a). These factors underlie how a person will rate their own appearance and how they will feel about it. Those who strongly believe that their body or face is unacceptably ugly or defective in some way

are often described psychiatrically as having BDD (Phillips, 2005). BDD is an anxiety disorder which was first included in the revised, third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R; American Psychiatric Association, 1987). However, researchers have suggested that individuals suffering with what is now known as BDD were already being discussed in the field of cosmetic surgery (Sarwer & Crerand, 2004). Some plastic surgery patients sought multiple operations and showed what appeared to be an obsession with changing their appearance. These patients were considered by scholars in the 1960s. The individuals described appear to show the clinical features of BDD that would be diagnosed by psychiatrists today (Edgerton, Jacobson & Meyer, 1960; Knorr, Edgerton & Hoopes, 1967).

BDD is diagnosed in those whose dissatisfaction with their body has become so distressing to them that their emotional wellbeing and quality of life suffers significantly (American Psychiatric Association, 2013). The level of difficulty and the exact proportion of people affected in the community is unknown. Otto, Wilhelm, Cohen and Harlow (2001) suggested roughly 0.7% of women in a US sample were affected by BDD. Much of the research in body image focuses only on women, though men have also been found to experience symptoms of BDD; thought this is thought to be more prominent in homosexual men than heterosexual men (Kaminski, Chapman, Haynes & Own, 2005).

The key factor in BDD is the level of dysmorphic concern. This is how much a person feels their body or face is malformed or unacceptable to them, and the amount of distress this causes. This includes the level of attention a person pays to a bodily feature that they perceive to be ugly. In many cases this ugliness is viewed by others as being imagined or overestimated by the person suffering. Dysmorphic concern is the factor which is assessed by most psychometric measures used in the study and treatment of BDD (Jorgensen, Castle, Roberts & Groth-Marnat, 2001).

Those suffering with BDD are often reported to desire a cosmetic procedure to 'correct' a perceived physical flaw (Crerand, Franklin & Sarwer, 2006). BDD is also more common in the specific population of those requesting a cosmetic surgery procedure than in the population that do not undertake these procedures (Crerand,

Menard & Phillips, 2010). Between ten and twenty percent of those seeking cosmetic surgery have been found to have BDD, with individual BDD symptoms found in as many as 85% of surgery seekers (Sarwer et al., 2004; Barahmand, Mozdsetan & Narimani, 2010; Dey, Ishii, Phillis, Byrne, Boahene & Ishii, 2015). Therefore, symptoms of BDD could be considered a strong predictive factor in motivation for cosmetic surgery and some research supports this (Javo & Sørli, 2009).

Panayi (2015) completed an extensive literature review of the prevalence of BDD. Results ranged from 2.9% (Castle, Molton, Hoffman, Preston & Phillips 2004) to 53.6% (Vindigni et al., 2002) of cosmetic surgery patients being considered to have BDD. The review went on to suggest that the literature is currently varied and unclear. It appears much more research should be conducted into the link between facets of BDD and cosmetic procedures.

Cosmetic surgery has been clearly contraindicated for those with BDD, who report increased distress and dissatisfaction with their appearance post-surgery (Crandall, Franklin & Sarwer, 2006; Castle, Honigman & Phillips, 2002). However, a study by Veale (1996a) found 26% of his sample of patients with diagnosed BDD had been provided with their desired plastic surgery. Consequently, many studies have called for more appropriate screening measures for surgery seekers, to identify those with BDD and ensure they receive psychological support, rather than cosmetic or surgical alterations (Dey et al., 2015; Barahmand et al., 2010; Veale, Gledhill, Christodoulou, & Hodsoll, 2016). Therefore, understanding the link between BDD and a desire to have surgery would be hugely beneficial to the clinical literature.

Cognitive behavioural theory - the link between BDD and cosmetic procedures. The cognitive behavioural argument comes from earlier theories of behaviourism and later cognitive theories. These were combined to form a more extensive and robust theory, with wider-ranging clinical utility (Milkman & Wanberg, 2007). The present section will outline both the behavioural and cognitive aspects of cognitive behavioural theory of BDD.

Firstly, behaviourism posits that operant conditioning is the process of directly rewarding and reinforcing a behaviour, to increase the amount this behaviour is

displayed (Skinner, 1971). Neziroglu, Roberts and Yaryura and Tobias (2004) used operant conditioning to describe the onset of BDD. They reported that many of their sample with BDD described having parents who regularly reinforced the importance of appearing beautiful. The majority of their sample also reported receiving praise or admiration specifically for being a certain weight or shape. Their theory proposed that this operant conditioning caused a significant over-focus on appearance, which underscores BDD.

Operant conditioning can also alter behaviour via punishment, with an individual avoiding certain behaviours due to feared or unpleasant consequences. Some individuals with BDD report bullying or even abuse due to the appearance and have therefore attempted to hide or alter their looks to reduce these negative experiences (Veale, 2004).

Later cognitive theories, included in cognitive behavioural theory, describe early experience in the development of BDD with the understanding of core beliefs. A core belief is an opinion, usually formed in early life, that is held to be completely true. This belief then informs all other automatic thoughts and behaviours. Our early conditioning experiences help to form our core beliefs. Common examples in those with BDD are “I am ugly” or “I am unlovable”. These beliefs reinforce the ideas that someone must appear attractive or disguise any possible unattractiveness (Phillips, 2005).

A cognitive behavioural model believes the root cause of the anxiety behind BDD is the faulty cognition of being ugly or flawed. These are then reinforced and rewarded by compulsive behaviours, such as covering the ‘flaw’ with makeup before ever leaving the house. Cognitive Behavioural Therapy (CBT) would therefore attempt to challenge or adapt this cognition, while also reducing the reinforcing compulsions. This often includes cognitive restructuring, where a person’s thoughts are challenged by the therapist. The patient with BDD is tasked to find evidence that they are faulty or lesser in some way. When this cognition cannot be proved true, the belief in the thought will ideally diminish. CBT can also include exposure response prevention. This treatment involves gradually increasing the time between the distressing thought and the compulsive behaviour that was previously used to deal with the thoughts.

Over time, the person becomes more able to tolerate their anxiety, without the use of the compulsions (Saxena, 2001; Epp & Dobson, 2010).

Support for this theory is found from the CBT treatment evidence base. This therapy is well supported by clinical trial research (Wilhelm, et al., 2014; Krebs, Turner, Heyman & Mataix-Cols, 2012). This suggests that the cognitive and behavioural patterns being addressed in CBT must be influential in the clinical experience of BDD, given that the treatment is very effective. The National Institute for Clinical Excellence guidelines (NICE, 2005) currently recommend CBT as the best treatment for BDD, at all levels of severity, for both adults and children. Short-term CBT was found to be effective in reducing symptoms of BDD and the impact on quality of life (Veale, Anson, Miles, Pieta, Costa & Ellison, 2014). A review of various treatment modalities found CBT to be the most effect treatment protocol for BDD (Cororve & Gleaves, 2001).

Some facets of cognitive behavioural theory view BDD as a type of obsessive compulsive disorder, or OCD (Phillips, McElroy, Hudson & Pope, 1995). Cognitive behavioural theory believes that the distressing cognitions a BDD sufferer experiences about a particular part of their body as being ugly or malformed, are understood in much the same way as the intrusive thoughts or obsessions in classic OCD. In order to receive a diagnosis of BDD, an individual must also be engaging in compulsive behaviours such as hiding, checking or attempting to mask or correct their perceived deformity (American Psychiatric Association, 2013). This is formulated by CBT in the same way that someone with OCD who compulsively washes to reduce the anxiety of intrusive thoughts about contamination would be. CBT would postulate that someone with BDD who feels extreme distress around their nose is experiencing intrusive thoughts about their own perceived ugliness. The theory would suggest this person is struggling to challenge or rationalise their thoughts correctly or holds a cognitive bias towards negative information about their nose, which further compounds their maladaptive thoughts. The CBT model of both OCD and BDD would understand the compulsive behaviours of checking or hiding a perceived flaw as initially reducing anxiety, but fuelling long term distress as these behaviours serve to reinforce the thoughts that this 'flaw' should be monitored and

hidden. The thoughts continue to reinforce the behaviours and sufferers' anxiety only increases over time (Phillips, 2005; Veale, 2004).

Another example of a compulsion that someone with BDD might engage in, to help them reduce the distress of their thoughts of being ugly or dysfunctional, could be to seek permanent, surgical changes. According to cognitive behavioural theory, their cognitions would be focused on the source of their distress being their physical feature itself, not an irrational view of a healthy body (Epp & Dobson, 2010).

Therefore, the Cognitive-Behavioural view of why a person would seek cosmetic procedures is that they hold the cognitive view that a physical change will alter their opinion of themselves and therefore their mood.

Self-esteem. Self-esteem is used to describe how much a person feels accepting of or satisfied with themselves (Baumeister, 2001). Research has often conceptualised self-esteem as being comprised of several facets. These can include the views we hold of ourselves, the way we consider those views and our tendency towards certain emotions (Pelham & Swann, 1989).

A significant relationship has been found between body satisfaction and self-esteem, with those feeling less satisfied with their physical appearance experiencing lower self-esteem. This has been shown across genders and across the lifespan (Abell & Richards, 1996; Furnham, Badmin & Sneade, 2002; Green & Pritchard, 2003). Low self-esteem is often considered as a factor in a person's decision to undergo cosmetic surgery. The literature around self-esteem and cosmetic surgery is conflicting. Some research has suggested self-esteem was found to be a motivating factor for women undergoing cosmetic surgery (Haas, 2008). Lennon and Rudd (1994) found that lower self-esteem was also associated with an increased use of beauty regimes that included pain or discomfort, such as waxing. However, other studies into associated factors have found other factors such as a history of teasing to be predictive factors of desire for cosmetic surgery and suggest self-esteem is not strongly associated (Von Soest, Kvalem, Skolleborg & Roald, 2006).

How attractive a person perceives themselves to be has been shown to be intrinsically linked to self-esteem (Holliday & Taylor, 2006). This has been found to be especially

true in Western societies and for women (Feingold, 1992; Weiner & Thompson, 1997). Body image has been described as the experience of one's own embodiment, which includes one's physical appearance (Cash, 2004; Cash & Pruzinsky, 1990). Therefore, self-rated attractiveness, could be considered to be a facet of either self-esteem or body image.

Cosmetic surgery is regularly cited as improving self-esteem and wellbeing (Cole, Shakespeare, Shakespeare & Hobby, 1994; Von Soest et al., 2009). The literature reports psychosocial improvements, increased confidence and better quality of life, as well as high levels of satisfaction with the visual outcome of surgical procedures (Ching et al., 2003; Honigman Phillips & Caste, 2004). The vast majority of patients are reported to be satisfied with the aesthetic results they achieve (Fagien & Carruthers, 2008). Most studies available report high majorities of patients being satisfied, many being extremely so (Goodman et al., 2009; Klassen et al., 1996). Sarwer et al. (2008) found improvements in body image. Retrospectively, Eriksen (2012) found less body dissatisfaction in those who previously had cosmetic surgery.

Negative side effects are seldom highlighted; though pain and infection are referenced as relatively common side effects of aesthetic surgery (Gabriel et al., 1997). Only one paper could be found which specifically focused on the adverse effects of cosmetic surgery. The patient population of this study was very specific: those with significant BDD, many of whom had performed 'DIY' cosmetic surgery (Veale, 2000). Individuals who are unhappy with the results of their cosmetic procedures have been shown to be more likely to drop-out of any research about the outcomes of cosmetic surgery. Therefore, the follow-up sample are skewed regarding satisfaction with results (Honigman et al., 2004). Most research into the long-term outcomes after cosmetic procedures is funded by the plastic surgery and cosmetics industries themselves. For this reason, a heavy publication bias regarding the outcomes of cosmetic procedures has long been considered (Margaliot & Chung, 2007).

Therefore, it could be hypothesised that the public are left with an impression that self-esteem and body dissatisfaction are improved by having cosmetic surgery, with very little cost or adverse effects. At first glance, the literature makes a clear

statement that cosmetic surgery is an attractive answer to unhappiness with one's physical appearance, low self-esteem and a lack of confidence. However, there are major flaws in the evidence base. Outcome data from these studies is routinely reported as an average result across the whole cohort studied (Ercolani, Baldaro, Rossi & Trombini, 1999; Goodman et al., 2009; Sarwer et al., 2005; Sarwer et al., 2008). While this may appear to be an easy-to-interpret way of presenting results, especially for large sample sizes, individual differences are very hard to perceive. Any patients reporting dissatisfaction with surgery results become lost in the average, provided they are in the minority.

Cognitive behavioural theory – the link between self-esteem and cosmetic procedures. There is less cognitive behavioural therapy research into self-esteem, in comparison to body dysmorphia. This is possibly because low self-esteem is not a psychiatric diagnosis in itself (Fennel, 1998). Cognitive behavioural theory sees self-esteem as stemming from both innate factors and later experience. Neglect, abuse or the experience of being belittled or rejected interact with temperament, leading to a profound negative view of the self. This negative core belief leads to low mood, anxiety and distress. Individuals then try to combat these difficulties by creating dysfunctional assumptions. These are rules the person tries to live by, to improve their experiences. For example, a negative self-view might be 'I am worthless and ugly'. A dysfunctional assumption created in response could be 'if I was beautiful, I would be worthy of care'. These assumptions then become rules to live by, in often desperate attempts to feel better about one's self. A rule for living in this case might be 'I must look as nice as I can at all times'. The person then engages in behaviours to try to avoid distress, such as avoidance of perceived challenges. However, these behaviours only serve to reinforce the rules for living. The core belief that they are worthless is never challenged or altered. Therefore, according to cognitive behavioural theory, low self-esteem persists, fuelled by the core belief (Fennell, 2006).

In the example described here, a person may seek surgery in order to follow their rules for living. They may believe that if they can alter their outer appearance and become more attractive, they might avoid the distress caused by their core belief that they are ugly and worthless. According to cognitive behavioural theory the treatment

for low self-esteem would be to challenge the rules for living, in the hope that the core beliefs about the self would eventually be challenged. Behaviours that reinforce the core belief would need to be reduced. Instead, a person would be supported to do things that foster a sense of mastery and positive opinion of the self (McManus, Waite & Shafran, 2009).

In summary of cognitive behavioural theory, a desire for cosmetic procedures would be formulated as a result of deeply held negative beliefs about the self, usually tied to the idea that one is ugly and therefore unacceptable. The cosmetic procedures themselves would be seen as a behaviour, that a person is choosing in response to their core belief. CBT might therefore facilitate a person to make an alternative choice, that would challenge the negative rules for living, rather than supporting the idea that a person needs to change their appearance in order to feel better about themselves.

Critique of cognitive behavioural theory. A main critique of this theory is that it places the difficulty squarely in the individual and therefore provides treatment for the individual. Indeed, this has long been a major critique of CBT as a whole, not just with relevance to BDD and self-esteem. Because CBT focuses on the thoughts and maintaining behaviours of each individual, it often fails to account for wider, societal influences at play (Pilgrim & Bentall, 1999).

The evidence base that supports cognitive behavioural theory can also be critiqued in many ways. Firstly, the main reason that so many studies have been conducted on CBT as a treatment method is due to its short-term nature and the speed at which therapists can be trained, in comparison to other theories, such as psychodynamic psychotherapy (Leichsenring & Leibing, 2003). There are also few long-term follow up or longitudinal studies that support the efficacy of CBT in supporting long term change. Often follow up studies reveal that many individuals still experience many symptoms after therapy and the efficacy of CBT appears to diminish over time (Wilhelm, Otto, Lohr & Deckersbach, 1999; Neziroglu, & Khemlani-Patel, 2002; Phillips, Grant, Siniscalchi, Stout, Price, 2005). One reason behind this is that much of CBT as a treatment is administered as relatively short, usually sixteen weeks or less (Veale et al., 1996; Rosen, Reiter, Orosan, 1995). Conversely, the average length

of BDD has been found to be around fifteen years (Phillips, Menard, Fay & Weisberg, 2005). Together this evidence suggests there are aspects of BDD that cannot be fully 'treated' by CBT, calling into question the cognitive behavioural theory of the cause and maintenance of dysmorphic concern, and how this relates to a desire to have cosmetic procedures.

Furthermore, the vast majority of the evidence base is on Western, White, working age adults and conducted in medicalised rather than naturalistic settings (Leichsenring & Leibing, 2003). Indeed, more modern research suggests CBT is becoming less effective over time, which has been used to suggest the placebo effect is behind the evidence base that support cognitive behavioural theory, undermining the utility of the theory (Johnsen & Friborg, 2015). There is little evidence to prove that CBT is effective as a therapy for body image difficulties or low self-esteem in older adults, those from ethnic minority backgrounds or Eastern cultures (Hofmann, Asnaani, Vonk, Sawyer & Fang, 2012). If CBT is not effective for all people, across cultures and ages, then this lends weight to the idea that it is a societal influence that is responsible for the lower self-esteem and higher dysmorphic concern that may motivate desire for cosmetic procedures, rather than a purely individual influence.

CBT would only be offered to someone who's dysmorphic concern or self-esteem difficulties were impacting on their quality of life. However, cognitive behavioural theory can be critiqued for the use of a very individualistic and somewhat blaming model, particularly in terms of desire to change the way one looks or have higher self-esteem. A very common aspect of Western culture is the desire to appear attractive; physical beauty is often associated with wellness, happiness and success (Hamermesh & Abrevaya, 2013, Dion, Berscheid & Walster, 1972; Tovée, Furnham & Swami, 2007). Therefore, it could be considered inappropriate to pathologise people in Western societies who strive to look attractive. Seeing this as an aspect of a psychological difficulty, rather than viewing this in the context of the values of a society, could be viewed as unduly simplistic. This is not just critical of Western behaviour but could be experienced as far more blaming of women, in particular. Jeffreys (2014) discussed the symptoms of BDD and suggested these were simply

ways women go about their everyday lives and engage with their own experience of femininity.

Indeed, the association between beauty and wellness is behind the ‘Look good feel better’ campaign, for women facing cancer. This service offers to teach women, who may have lost their hair to chemotherapy for example, how to use makeup in order to look good and feel better. The workshops provided aim to provide social support simultaneously, and have been shown to improve self-image and reduce anxiety in the women who attend (Taggart, Ozolins Hardie & Nyhof-Young, 2009). However, projects like Look Good Feel Better have been criticised for maintaining the belief that an overtly feminised appearance is indicative of health, putting further pressure on women who are already facing their own mortality. Furthermore, this supports an ableist view that those who are physically well *appear* physically well, and that this is to be aspired to (Kendrick, 2008).

Across Western societies, children as young as eight show difficulties as a result of poor body image (Grogan, 2016). A large majority, 82% of women and 79% of men, described themselves as unsatisfied with their physical appearance (Lioffi, 2003). Historically, body image difficulties were thought to be far more common in Caucasian females (Nasser, 1988). More recently, symptoms of body dysmorphia were found across a range of ages, ethnicities and socioeconomic levels (Ball & Kenardy, 2002; Wilfley et al., 1996). Unhappiness with appearance is so common that researchers coined the term ‘normative discontent’ to describe how liking one’s appearance had become a rarity (Rodin, Silberstein & Striegel-Moore, 1984). While their original work pertained only to females, this concept was later studied further. Tantleff-Dunn, Barnes and Larose (2011) found that both men and women showed high levels of dissatisfaction with their bodies and perceived this to be the norm. Therefore, normative discontent is not a uniquely female experience but appears to be part of modern human experience, in Western cultures. If there is evidence to suggest that there are wider, cultural influences behind dysmorphic concern, then this further suggests cognitive behavioural theory is flawed in focusing on individual differences in thought patterns and reinforcing behaviours.

Furthermore, low self-esteem and dysmorphic concern are thought to be difficulties that effect the majority of women. An international survey of over 10,000 women found 85% of women globally suffer with poor self-esteem and a dislike of their body that is so distressing that it interferes with their quality of life. A similarly high percentage of women (71%) believed the media was responsible for this. Participants felt commercial advertising overtly sexualised women and portrayed only thin, young, White women. No women were cited as having discussed their own thoughts or beliefs as being behind their unhappiness with their bodies. 69% of women spoke about feeling there was an unrealistic standard of beauty they needed to measure up to. While self-esteem and body image varied globally, even the country with the highest proportion of women reporting being happy with their appearance was only 64%, for South African women (Dove, 2016).

Diagnoses of mental health difficulties are based on norms of human behaviour and experience; experiences which deviate from these norms in a significant way are seen as symptoms and treated as being indicative of mental illness (Nevid, Rathus & Greene, 1991). However, if a dislike of one's appearance is in fact the most common experience for people, it could be considered the norm, at least for some cultures. Cognitive behaviour theory appears to struggle to reconcile this information within the formulation and treatment provided by CBT.

In summary, cognitive behavioural theory can describe why an individual would seek a cosmetic procedure, due to a cognitive focus on aspects of the body they dislike, compulsive maintenance behaviours that reinforce the belief they are ugly, which in turn make them feel very negatively about themselves. The theory can also explain the link between self-esteem and levels of dysmorphic concern. Cognitive behavioural theory would support a positivist view that levels of self-esteem and dysmorphic concern could be measured and compared to measured levels of desire for cosmetic procedures. However, this theory can be criticised as being overly focused on individuals themselves, and overly negative towards the desire to look attractive. Cognitive behavioural theory often lacks the scope to consider the impact of wider societal systems. If the individual is the centre of the theory and the therapies provided, this places the difficulty in the individual and can therefore be seen as more blaming, in comparison to feminist theory which would see the difficulty as being

outside of the individual. The other aspect of this argument is that CBT places the power in the individual, to make changes to their self-esteem and body image. In contrast, some elements of feminism can be criticised for viewing women as having less power to change their interest in looking better, as they theorise that the patriarchal structures of society must shift in order for women to experience higher self-esteem and less dysmorphic concern. Though this is not true of all feminist theory.

1.05 Summary

With these two theories in mind, self-esteem and aspects of body dysmorphia appear to be linked to the desire to undergo cosmetic procedures. Combining all the ideas and evidence discussed in the present chapter, a desire to modify the body with cosmetic procedures would likely be motivated by lower self-esteem or increased experience of dysmorphic concern. Feminist theory would hypothesise that these psychological experiences may be caused by objectification and commodification of the female body, leaving a women with a belief that meeting societies expectations of beauty will make her feel happier or more confident. Some branches of feminism see the use of cosmetic procedures as harmful for women while other see this as a positive sign of increased female agency and choice. Cognitive behavioural theory would view these difficulties as being the result of harmful, negative thinking patterns or beliefs, with the need for cosmetic procedures being a behavioural response and maintaining factor of those thoughts. The main difference between the two theories is that while feminist theory focuses on systemic, societal influences of self-esteem, dysmorphic concern and desire for cosmetic procedures, cognitive behavioural theory address individual difficulties as being behind these factors.

1.06 Literature Review

Method. A literature search was conducted, to explore the research into the link between self-esteem, and body image difficulties, such as dysmorphic concern or related constructs, and interest in cosmetic procedures and the motivational factors behind a decision to have a cosmetic procedure. For full search terms and results, see appendix A. The aim of the literature review was to understand existing studies of

self-esteem and dysmorphic concern, as the key facet of BDD, in terms of their relationship to cosmetic procedures. This included both desire for cosmetic procedures and likelihood of having had a cosmetic procedure.

The first search was included to ensure the results focused on papers on elective procedures for non-aesthetic reasons. The second search was used to cover all possible descriptions of cosmetic procedures. The limiter used for both these searches was to have the terms included in the abstract. This was done to ensure cosmetic procedures would be a key focus of the paper. The terms of the third search were included to cover as many possible ways of discussing the factors underlying an interest in cosmetic procedures. The terms in the fourth search were included to refine the search, to include relevant literature specific to body image and self-esteem, the foci of the current thesis.

In order to discover as many relevant papers as possible, the OR operator was used within the fourth search, rather than AND. There were very few papers which covered body image or dysmorphia in addition to self-esteem. The present review wished to cover as wide a range of the relevant literature as possible. Therefore, papers referring to either self-esteem or body image issues were included.

The relevant journals and databases searched were: American Doctoral Dissertations 1933-1955, CINAHL Complete, MEDLINE, PsycARTICLES, E-Journals and PsycInfo. The reference lists of reviewed studies were also hand-searched for further relevant papers, which were added as shown in appendix B.

Journal searching was completed between 1st October and 24th October 2016. The search resulted in 186 papers. Thirteen duplicate papers were removed, leaving 173 papers. These were reviewed by the researcher, to narrow down the results to the most appropriate papers. A diagram highlighting how papers were selected or excluded for the final review is detailed in appendix B.

Inclusion criteria:

- Empirical studies that investigated and reported the association between either self-esteem or body image issues, this could include BDD, and desire for

cosmetic procedures or having had a cosmetic procedure. The procedure discussed could be that which had already been completed or was being planned or considered by participants

Exclusion criteria:

- Papers that studied procedures which were undergone or sought due to a physical illness or injury such as cancer or a road accident
- Papers that only studied satisfaction with cosmetic procedures, or papers which focused on the outcomes after a cosmetic procedure rather than the desire or motivating factors behind why the procedure was undergone.
- Papers that focused solely on clinical populations such as those being treated for eating disorders. These results were considered inappropriate to generalise to non-clinical populations
- Papers that presented a single case study
- Literature reviews. The references of these were hand searched for extra papers to add to the literature review. This is detailed in appendix B.
- Papers that only studied attitude towards cosmetic surgery as a general concept, this included mainly whether participants agreed with the idea that anyone, not just themselves, might have a cosmetic procedure. Most of these used a scale which briefly covered attitudes towards cosmetic surgery. For example, the Acceptance of Cosmetic Surgery Scale (Henderson-King & Henderson-King, 2005). However, these papers did not explicitly state how their independent variables correlated with self-consideration of surgery or specific desire to have a cosmetic procedure. With the ACSS, papers reported only the total score rather than the score for the consideration subscale. Henderson-King & Henderson-King (2005) have reported that global attitudes about cosmetic surgery are clearly related to the desire to have a procedure. However, the three subscales were shown to be measuring three distinct, separate constructs. Therefore, a total ACSS score, without individual subscale scores, does not indicate desire to have a cosmetic surgery (Henderson-King & Henderson-King, 2005). Therefore, these papers were removed from the final search results as they did not meet inclusion criteria.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

In total, eighteen papers met the criteria and were included in the final literature review. Of these papers, two studied only self-esteem, nine papers studied only body dysmorphia and seven studied both concepts. The papers are described and outlined in table 1. Papers on body image and body dysmorphia are presented first, followed by the paper on self-esteem, then papers which studied both self-esteem and body dysmorphia related concepts are outlined.

Results

Table 1

Main findings of all papers included in final review

Paper	Sample	Methodology	Outcome measures	BDD/body image related findings	Self-esteem related findings	Other associated factors
Callahan, Lopez, Wong, Northcross and Anderson, 2011	544 (55 had diagnosable BDD); both genders	Quantitative, within and between groups design.	IBDQ, BICSI, BDDQ, BDDDMA, BDD-YBOCS	Body image disturbance was positively correlated with consideration of surgery. A coping strategy seen in those with BDD, ‘appearance fixing’ was also positively correlated with consideration of surgery. Those who were considering having surgery had significantly higher body image disturbance and BDD coping strategies than those who did not want cosmetic surgery.	Not studied.	Positive rational acceptance, the attempts to divert own attention away from a perceived flaw, did not significantly correlate with consideration of a surgery.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Paper	Sample	Methodology	Outcome measures	BDD/body image related findings	Self-esteem related findings	Other associated factors
Calogero, Park, Rahemtulla and Williams, 2010a	106 University students; both genders	Quantitative, correlational design.	ABRSS, BDDQ - modified, ACSS, CDESD, IAS, BD scale of EDI, RSQ	Body dissatisfaction positively correlated with surgery consideration.	Not studied.	Rejection sensitivity, weight concern, social anxiety and depression were all positively correlated with surgery consideration.
Crerand, Sarwer and Lowe, 2004	141. 90 seeking cosmetic surgery, 50 seeking non cosmetic surgery; both gender	Quantitative, within and between groups design.	BDDQ-DV, BDDE-SR, DRS, appearance subscale of the MBSRQ, BDI-II	23.5% of cosmetic surgery seekers met the diagnostic criteria for BDD. However, there was no significant difference in BDD between groups.	Not studied.	Cosmetic surgery seekers were less depressed than those seeking non-cosmetic surgery.
Paper	Sample	Methodology	Outcome	BDD/body image related	Self-esteem related	Other associated factors

Desire for Cosmetic Procedures: An Investigation of Associated Factors

			measures	findings	findings	
Didie and Sarwer, 2003	55. 25 awaiting breast surgery and 30 not interested in surgery; all female	Quantitative, between groups design.	MBSRQ, ASI, BDDE-SR, BCRS, SATAQ, DISF-SR, DAS, QOLI, PARTS	No difference in body dissatisfaction between those awaiting cosmetic breast surgery and those with no interest in surgery.	Not studied.	The cosmetic surgery group were more dissatisfied with their breasts. The surgery group also had higher sexual and marriage satisfaction. There was no difference in sociocultural influence between groups.
Kisely, Morkell, Allbrook, Briggs and Jovanovic, 2002	84 patients - 42 seeking cosmetic surgery and 42 seeking non-cosmetic surgery; both genders	Quantitative, within and between groups design.	DCQ, GHQ	Higher levels of dysmorphic concern were seen in the cosmetic group	Not studied	More females were found in the cosmetic surgery group. Higher levels of overall psychopathology were also seen in the cosmetic surgery group.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Paper	Sample	Methodology	Outcome measures	BDD/body image related findings	Self-esteem related findings	Other associated factors
Markey and Markey, 2009	101; all female university students.	Quantitative, correlational design.	CDRS, SATAQ,	Positive correlation between body dissatisfaction and consideration of surgery. Body dissatisfaction also mediated effects of all other variables.	Not studied.	BMI, internalisation of media influence and history of teasing were all positively correlated with interest in surgery.
Sante and Pasian, 2011	78. 37 seeking a cosmetic surgery. 41 not interested in surgery; all female	Quantitative, between group design.	BISS, CPS	The group seeking cosmetic surgeries had significantly lower body satisfaction than the group who did not want any surgery.	Not studied.	The group seeking surgery had significantly higher defensiveness and emotional sensitivity.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Paper	Sample	Methodology	Outcome measures	BDD/body image related findings	Self-esteem related findings	Other associated factors
Slevec and Tiggemann, 2010	108; all female	Quantitative, correlational design.	Body Appreciation Subscale of the MB-SRQ, ASI, The Physical Appearance subscale of AAAS, ACSS	Positive correlation between body dissatisfaction and consideration of surgery	Not studied.	Body dissatisfaction, appearance investment, aging anxiety, television exposure and magazine exposure were all positively correlated with interest in having surgery.
Swami, 2009	322; all female	Quantitative, correlational design.	ACSS, SATAQ, BAS	Negative correlation between body appreciation and consideration of cosmetic surgery.	Not studied.	All aspects of sociocultural and media influence positively correlated to consideration of surgery. BMI and age negatively correlated with consideration of surgery.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Paper	Sample	Methodology	Outcome measures	BDD/body image related findings	Self-esteem related findings	Other associated factors
Lee, 2011	321; female high school students	Quantitative, correlational design.	SATAQ, MBSRQ, RSE	Not studied.	Self-esteem was negatively correlated with need for surgery	Internalisation and awareness of social influences and the media and appearance orientation were all positively correlated with need for surgery. Ideal BMI was negatively correlated with need for surgery.
Park, Calogero, Harwin & DiRaddo, 2009	133; University students, both genders	Quantitative, correlational design.	Self-rated attractiveness, ABRSS (shortened), RSE, RSQ, CSW, FR (shortened), ACSS (shortened)	Not studied	Self-esteem did not significantly correlate with interest in cosmetic surgery, this was the case whether participants were writing receiving a positive or negative comment about their appearance.	Appearance based rejection sensitivity positively correlated with interested in cosmetic surgery. There was an even stronger correlation when participants had received a negative comment about their appearance.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Paper	Sample	Methodology	Outcome measures	BDD/body image related findings	Self-esteem related findings	Other associated factors
Askegaard, Gertsen and Langer, 2002	15; all female	Interviews, qualitative analysis	No outcome measures used. Self-esteem and opinions about the body were investigated qualitatively, by interview.	Some women described negative views of the body and wanting to correct this as the motivating factor behind their surgery.	The choice to have cosmetic surgery was described as a focus on self-esteem and determination of self. A strong theme of 'I did it for me' being the reason behind surgery.	Some women described a desire to be more sexually appealing to their partner or others in general.
Calogero, Pina, Park and Rahemtulla, 2010b	100; all female undergraduates	Quantitative, correlational design.	Impression management subscale of BIDR, ISOS, RSE, OBCS, ACSS	Body shame was positively correlated with consideration of surgery.	No significant relationship between self-esteem and consideration of surgery.	Sexual objection of self, and self-surveillance were both positively correlated with consideration of surgery.
Paper	Sample	Methodology	Outcome	BDD/body image related	Self-esteem related	Other associated factors

Desire for Cosmetic Procedures: An Investigation of Associated Factors

			measures	findings	findings	
Delinsky, 2012	302; all female psychology undergraduates	Quantitative, within and between groups design.	EDE-Q, BSQ, SATAQ, RSE, CSW, MEIM	Body dissatisfaction was not correlated with interest in surgery.	Self-esteem was not correlated with interest in surgery. Importance of appearance to self-worth had a positive relationship to surgery interest. The importance of virtue to self-worth had a negative relationship to surgery interest.	Media exposure and sociocultural influence had a positive relationship to surgery interest.
Henderson-King & Henderson-King, 2005 (study two)	261 University Students, both genders	Quantitative, within and between groups design.	ACSS, SSES, BES, SS-MS, MCAAMS	For women, no aspects of body esteem were correlated with consideration of cosmetic procedures. For men, all aspects of body esteem were negatively correlated.	Self-esteem based on appearance was strongly negatively correlated with consideration of cosmetic procedures, for both genders. Self-esteem based on social aspects was not significantly correlated.	More positive attitudes to makeup were correlated with higher consideration of cosmetic procedures in women but not in men.
Paper	Sample	Methodology	Outcome measures	BDD/body image related findings	Self-esteem related findings	Other associated factors

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Swami, Campana & Coles, 2012	751, all female University students	Quantitative, correlational design.	RSE, BAS ACSS	Body appreciation was negatively correlated with consideration of cosmetic surgery.	Self-esteem was negatively correlated with consideration of cosmetic surgery.	Caucasian women showed significantly higher consideration of cosmetic surgery than did South Asian and Afro-Caribbean women.
Swami, Chamorro-Premuzic, Bridges and Furnham, 2009	332 - Students at a London University; both genders	Quantitative, correlational design.	ACSS, TIPI, SAA, CS, RSE.	Consideration of surgery was negatively correlated with self-rated attractiveness.	No significant relationship to surgery consideration.	Consideration of surgery was positively correlated with age and conformity. Consideration of surgery was negatively correlated with openness.
Von Soest, Kvaalem, Skolleborg and Roald, 2006	907, all female	Quantitative, within and between groups design.	MDBS-RQ, RSE, SS-MS	Negative correlation between body image and motivation to have cosmetic surgery.	No relationship to surgery motivation.	Teasing also predicted surgery motivation, mediated by body image.

Key (alphabetically): AAAS: Anxiety About Aging Scale (Lasher & Faulkender, 1993). ABRSS: Appearance-Based Rejection Sensitivity Scale (Park, 2007). ACSS: Acceptance of Cosmetic Surgery Scale (Henderson-King & Henderson-King, 2005). ASI: The Appearance Schemas Inventory (Cash, Melnyk, & Hrabosky, 2004). BAS: Body Appreciation Scale (Avalos, Tylka, & Wood-Barcalow, 2005). BCRS: Breast and Chest Size Rating Scale (Thompson & Tantleff, 1992). BDDDMA: Body Dysmorphic Disorder Diagnostic Module for Adults (Phillips, 2005). BDDE-SR: Body Dysmorphic Disorder Examination-Self-Report (Rosen & Reiter, 1996). BDDQ:

Body Dysmorphic Disorder Questionnaire (Phillips, 2005). BDDQ-DV: BDDQ – Dermatology Version (Dufresne, Phillips, Vittorio & Wilkel, 2001). BDD-YBOCS: Yale-Brown Obsessive Compulsive Scale - Body Dysmorphic Disorder (Phillips et al., 1997). BDI-II: Beck Depression Inventory-II (Beck, Steer, & Brown, 1996). BES: The Body-Esteem Scale (Franzoi & Shields, 1984). BICSI: Body Image Coping Strategies Inventory (Cash, Santos & Williams, 2005). BIDQ: Body Image Disturbance Questionnaire (Cash, Phillips, Santos, & Hrabosky, 2004). BIDR: Balanced Inventory of Desirable Responding (Paulhus 1991). BISS: Body Image Satisfaction Scale (Ferreira & Leite, 2002). BSQ: Body Shape Questionnaire (Cooper, Taylor, Cooper, & Fairburn, 1987). CDESD: Center for Epidemiological Studies Depression Scale (Radloff, 1977). CDRS: Contour Drawing Rating Scale (Thompson & Gray, 1995). CPS: Comrey Personality Scales (Costa, 2003). CS: Conformity Scale (Mehrabian, 2005). CSW: Contingencies of Self- Worth Scale (Crocker, Luhtanen, Cooper & Bouvrette, 2003). DAS: Dyadic Adjustment Scale (Spanier, 1976). DCQ: Dysmorphic Concern Questionnaire (Oosthuizen et al., 1998). DISF-SR: Derogatis Interview for Sexual Functioning-Self-Report (Derogatis, 1998). DRS: Defect Rating Scale (Phillips, Dufresne, Wilkel & Vittorio, 2000). EDE-Q: Eating Disorder Examination-Questionnaire (Fairburn & Beglin, 1994). EDI: Eating Disorders Inventory-3 (Garner, 2004). FR: Feelings of Rejection (Park, 2007). GHQ: General Health Questionnaire (Goldberg, 1978). IAS: Interaction Anxiousness Scale (Leary & Kowalski, 1993). ISOS: The Interpersonal Sexual Objectification Scale (Kozee & Tylka, 2007). MBSRQ – Multidimensional Body-Self Relations Questionnaire (Brown, Cash & Mikulka, 1990; Loland, 1998). MCAAMS: Miller Cox Attitudes About Makeup Scale (Miller & Cox, 1982). MEIM: The Multigroup Ethnic Identity Measure (Phinney, 1992). OBCS: Objectified Body Consciousness Scale (McKinley & Hyde 1996). PARTS: The Physical Appearance-Related Teasing Scale (Thompson, Fabian, Moulton, Dunn & Altabe, 1991). QOLI: Quality of Life Inventory (Frisch, 1994). RSE: Rosenberg Self-Esteem Scale (Rosenberg, 1979). RSQ: Rejection Sensitivity Questionnaire (Downey & Feldman, 1996). SAA: Self-assessed attractiveness (Swami, Furnham, Georgiades, & Pang, 2007). SATAQ: Sociocultural Attitudes Towards Appearance Questionnaire (Heinberg, Thompson & Stormer, 1995). SSES: The State Self-Esteem Scale (Heatherton & Polivy, 1991). SS-MS: Snyder Self-Monitoring Scale (Snyder, 1986). TIPI: Ten Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003).

Self-esteem. Self-esteem was studied by fewer papers in the present review, in comparison to aspects of body dysmorphia (Askegaard et al., 2002; Calogero, Harwin & DiRaddo, 2009; Calegero, Pina, Park & Rahemtulla, 2010b; Delisnky, 2012; Henderson-King & Henderson-King, 2005; Lee, 2011; Swami, Campana & Coles, 2012; Swami, Chamorro-Premuzic, Bridges & Furnham, 2009; Von Soest et al., 2006). The results of how self-esteem relates to the likelihood of seeking cosmetic surgery were mixed. Four of the eight papers found no significant relationship between self-esteem and consideration of surgery (Calegero et al., 2010b; Park et al., 2009; Swami et al., 2009; Von Soest et al., 2006).

Swami et al. (2012) found a negative relationship between self-esteem and consideration of cosmetic surgery in females University students. This was supported by Lee (2011). For both of these studies, it may not be possible to generalise the results to males. Additionally, Lee's (2011) result may be less generalisable to adults, given that the sample was high school girls.

Askegaard et al. (2002) found participants described having chosen to have cosmetic surgery in order to increase self-esteem. This was uncovered as an explicit motivating factor within the themes of the qualitative interview results. Furthermore, the choice to have surgery was described as part of the women's construction of their self-identity. The analysis also revealed most women had been successful in their quest to improve their self-esteem as another theme found was the increase in self-esteem reported by the women, following a cosmetic procedure. This also appeared to be a lasting improvement as many of these women were referencing surgeries they had many years previously, some even decades ago.

Askegaard et al. (2002) was the only paper in the review to use qualitative analysis. They conducted in-depth interviews with fifteen women and analysed their transcribed interviews to uncover the key themes. Furthermore, their participants had already had their cosmetic surgeries. This meant the study was truly measuring the motivating factors behind procedures that had occurred rather than procedures that were merely considered. However, motivating factors could only be understood retrospectively for this reason.

Askegaard et al. (2002) reported their sample to be very diverse in terms of social, educational and occupational backgrounds of the women; all of whom were middle aged. While this sample size of fifteen appears appropriate given the qualitative method use, the authors do not report whether saturation was reached in their analysis or not. Therefore, it is difficult to know if the themes reported are fully representative and therefore generalisable.

Delinsky's (2012) results are slightly more complex to interpret, with regard to self-esteem. Her results state there was no significant relationship between self-esteem, measured with the Rosenberg self-esteem scale (RSE; Rosenberg, 1979) and interest in having a cosmetic surgery. However, the importance of appearance to self-worth showed a positive relationship to surgery interest. Conversely, the importance of virtue to self-worth showed a negative relationship to the participants' interest in surgery. Therefore, self-worth and how this is constructed was shown to have an impact on likelihood to desire surgery. The concept of self-worth is considered as a factor in a person's self-esteem (Pelham & Swann, 1989). The results of Delinsky (2012) show a mixed picture of the relationship between cosmetic surgery seeking and self-esteem, as well as the factors comprising it. It may be that self-esteem was not found to be a significant predictor of interest in cosmetic surgery, due to a shared variance between self-esteem and self-worth. However, the paper did not report on the bivariate correlation between self-esteem and self-worth, therefore, a reader cannot ascertain whether shared variance was a factor in Delinsky's (2012) findings about self-esteem.

Henderson-King and Henderson-King (2006) also studied different facets of self-esteem. They found that self-esteem related to appearance was strongly correlated to consideration of cosmetic surgery, with those with lower self-esteem being more likely to consider a cosmetic surgery. Conversely, self-esteem related to the social aspects of a person's life had no significant relationship to consideration of cosmetic procedures. Unlike many other studies, their results can be generalised to both genders, given that they not only studied men but reported their results separately for each gender, with both genders showing the same pattern.

Body image and body dissatisfaction. Body image was studied in many different guises by the vast majority of the present papers. All papers, with the exception of Askegaard, Gertsen and Langer (2002), Park et al (2009) and Lee (2011), studied the opinion or attitude towards the body in some form. The papers measured body dissatisfaction (Slevec & Tiggemann, 2010; Markey & Markey, 2009; Delinsky, 2012; Didie & Sarwer, 2003; Calegero, Park, Rahemtulla & Williams, 2010a), body appreciation (Swami, 2009; Swami et al., 2012), body satisfaction (Sante & Pasian, 2011), body image and body image disturbance (Von Soest et al., 2006; Callahan, Lopez, Wong, Northcross & Anderson, 2011), body esteem (Henderson-King & Henderson-King, 2005) and body shame (Calogero et al., 2010b).

Three of the papers found a strong correlation between interest in surgery and increased levels of body dissatisfaction (Slevec & Tiggemann, 2010; Markey & Markey, 2009; Calegero et al., 2010a). Additionally, body satisfaction showed the opposite relationship, with those desiring a cosmetic surgery found to have lower body satisfaction than those who did not want a surgery (Sante & Pasian, 2011). The use of a sample who were already seeking cosmetic surgery suggests the surgery motivation being studied had ecological validity.

Body appreciation, which could be conceptualised as the opposite of body dissatisfaction, was found to have a negative relationship to desire for cosmetic surgery (Swami, 2009; Swami et al., 2012). However, different results were found when body esteem was studied. Henderson-King and Henderson-King (2006) used the Body-Esteem scale (Franzoi & Shields, 1984). This scale investigated several aspects of body-esteem, with different factors for men and women. This revealed that body-esteem correlated with consideration of cosmetic procedures, with those who had poorer body-esteem showing significantly higher consideration of cosmetic procedures. However, this was only true for men; there was no significant relationship for women between their body esteem and cosmetic surgery consideration.

Body image was found to be negatively correlated with interest in having a cosmetic surgery; those with higher body image showed less interest in having a cosmetic surgery (Von Soest et al., 2006).

Von Soest et al.'s (2006) finding was supported by Callahan et al. (2011), who showed that those with higher body image disturbance, i.e. more problematic or negative body image, were more likely to consider a cosmetic surgery procedure. They used interviews as part of a mixed methods assessment of their participants, to decide if the individual met criteria for a diagnosis of BDD. Their interviews were conducted by researchers but were supervised and informed by qualified clinical psychologists. This qualitative addition improved upon the purely quantitative questionnaire data and meant their suggested diagnoses held more clinical validity.

Body shame was also found to have a positive correlation with interest in having a cosmetic surgery (Calegero et al., 2010b). Self-rated attractiveness was also studied; Swami et al. (2009) found that those who rated themselves as less attractive were more likely to desire a cosmetic surgery. This could suggest that cosmetic surgery was being considered in order to make a person feel more physically attractive.

Two studies found contrasting results. Delinsky (2012) reported no correlation between body dissatisfaction and interest in cosmetic surgery. She had initially hypothesised that body dissatisfaction varied across different ethnicities and so ethnicity would predict both body dissatisfaction and interest in cosmetic surgery. However, she found that the affective component of ethnic identity did not have a significant relationship to body dissatisfaction or interest in cosmetic surgery. She cited feature-specific satisfaction as a better predictor of interest in cosmetic surgery, based on previous research. The body dissatisfaction Delinsky had measured was global, referring to dissatisfaction with the entire appearance in general, including the whole face and body. She described her results as showing such a general measure did not pick up on the kind of body image unhappiness that motivates interest in cosmetic surgery.

Didie and Sarwer (2003) reported no significant difference in the body dissatisfaction of those awaiting cosmetic surgery and those with no interest. However, they did find

satisfaction specifically with one's own breasts was shown to be lower in those seeking breast augmentations than those not seeking surgery. They also reported that those seeking surgery showed higher satisfaction with their marriages and sex-life. They concluded that this meant their surgery seekers were only unhappy with one aspect of their body, which had not altered their body satisfaction or happiness overall. They stated it was only this specific concern that motivated a specific surgery. This result appears to be highly relevant to those seeking breast surgery, due to the validity of their participant sample. However, it may be that this is the only type of cosmetic surgery that their results can be generalised to.

Overall, the literature suggests that negative views or feelings towards one's own body are predictive factors in the desire to have a cosmetic surgery. Despite the wide variety of measures used to investigate this, the vast majority of the results suggest body image is a very important factor in seeking cosmetic procedures.

BDD and associated symptoms. Some papers studied the level of BDD symptomology (Kisely et al., 2002; Callahan et al., 2011; Calegero et al., 2010a; Calegero et al., 2010b) or the incidence of participants who met criteria for BDD (Crerand, Sarwer & Lowe, 2004). These studies then investigated how BDD symptoms or a suspected diagnosis of BDD related to cosmetic procedure use.

Dysmorphic concern was shown to be significantly higher in the group of participants who sought a cosmetic surgery (Kisely et al., 2002). This paper utilised a control group of participants who sought surgeries for purely medical, non-cosmetic reasons. The use of control group provided useful comparison data (Wilkinson, 1999.). The benefit of studying those awaiting surgery for a non-cosmetic purpose allowed other factors to be controlled for and therefore properly understood. One similar factor between groups might have been excitement or anxiety about the operation itself. This allowed for a very well matched control. Another strength of this research was that the control group was separated according to relatively clear factors; those seeking medical procedures such as cyst or carcinoma removal. Furthermore, the participants in this cosmetic surgery group had already been referred to a cosmetic surgery clinic. Therefore, this could be considered a very valid display of their intention to undergo surgery, giving ecological validity to the results. Overall the

results reported by Kisely et al. (2002) appear to be very reliable, valid and generalisable.

A compulsive strategy seen in BDD, appearance fixing, was found to be higher in the group seeking cosmetic surgery. This BDD symptom was also positively correlated with interest in having a cosmetic surgery (Callahan et al., 2011). Positive rational acceptance, considered to be a healthy coping strategy which those with BDD rarely have, was found to have no significant relationship with interest in cosmetic surgery. Theoretically, if BDD symptomology is related to cosmetic surgery seeking, the coping strategies in psychologically healthy adults without body dysphoria would be related to a *lower* interest in cosmetic surgery. The results of this study were therefore complex to interpret.

Other symptoms of BDD were studied by Calegero et al. (2010b). They had aimed to understand the relation of objectification theory to a desire for cosmetic surgery. They found self-surveillance, the self-monitoring or 'policing' of one's own appearance was positively correlated with interest in cosmetic surgery, in their all-female sample. They also found a positive correlation between sexual objectification of the self and interest in surgery. These results could be considered to support feminist theory around surgery-seeking and the commodification of the female body.

Another symptom of BDD studied was a focus on weight and shape. Weight concern was found to be positively correlated with interest in surgery (Calegero et al., 2010a). Body Mass Index (BMI) itself was also found to be positively correlated, suggesting a focus on lower weight as an ideal or being of higher weight were motivating factors in seeking to change one's appearance (Swami, 2009; Markey & Markey, 2009). In addition, ideal BMI was negatively correlated with desire for cosmetic surgery (Lee, 2011). Both orientation to appearance, the focus towards appearance as being important to the individual and level of investment in one's appearance were found to be positively correlated with interest in having surgery (Slevec & Tiggeman, 2010; Lee, 2011).

Additionally, Crerand et al. (2004) found almost a quarter of surgery seekers had clinically diagnosable BDD. However, this did not differ from those seeking surgery

described as non-cosmetic. A criticism of the findings of Crerand et al. (2004) is that the distinction between cosmetic and non-cosmetic surgery was not always clear. While some non-cosmetic patients were having cancerous lesions removed from their face, due to the risk of the cancer spreading, others were having moles removed due to disliking their look or placement. This would make results potentially less valid due to the less appropriate control group. However, due to a lack of information about how the groups were divided, it is hard to determine the rationale for the distinction between groups. Without such information, the study becomes very difficult to replicate or compare to similar literature. This is a major flaw in the study. Therefore, it could be argued that the difference in levels of BDD might have been significant if the cosmetic and non-cosmetic patient groups had been divided according to different, more clear parameters.

None the less, when compared to the population-average of clinically diagnosable BDD, these results show a far higher incidence of BDD amongst their sample of patients seeking a cosmetic facial surgery. A strength of Crerand et al.'s study is that their participants had already sought facial cosmetic surgery from plastic surgeons and were awaiting these procedures. This demonstrates their clear interest and intention to have cosmetic procedures. Therefore, their findings can be considered valid.

Many of these studies measures consideration of cosmetic surgery, using a subscale of the Acceptance of Cosmetic Surgery Scale (ACSS; Swami, 2009; Swami et al., 2009, Calegero et al., 2010a; Calegero et al., 2010b; Slevic & Tiggemann, 2010 Henderson-King & Henderson-King, 2005). The total scale measures acceptance of cosmetic surgery, with consideration of surgery for oneself being described as one aspect of this concept. The consideration subscale was found to be a valid measure of how much a person is considering having cosmetic surgery (Henderson-King & Henderson-King, 2005). However, did not aim to measure surgery seeking; instead focusing on the global attitudes to cosmetic procedures. For example, a person might consider cosmetic surgery as an option for them but not go on to arrange this, for various reasons. Surgery seeking, however, could be better defined as the active planning or arranging of a cosmetic procedure. A person seeking surgery may no longer be 'considering' surgery as they have made the decision to undergo the

procedure. The results of these studies should therefore be considered carefully based on what was studied; an understanding of the related factors to the consideration or potential intention to undergo cosmetic surgery, rather than the active desire or planning towards this.

Other variables

Media influence. The influence of media on interest in surgery was studied by several papers (Delinsky, 2012; Markey & Markey, 2009; Lee 2011; Swami, 2009; Slevac & Tiggemann, 2010; Didie & Sarwer, 2003). Four of these six papers measured this using the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ; Heinberg, Thompson & Stormer, 1995). The SATAQ is a measure of the level of influence that media related to physical appearance has on an individual. This includes how aware individuals are of the messages in advertising, how important they feel these messages to be and how much pressure they feel to conform to them. Items ask how much a person would like to look like the models in advertisements, for example. Four of the five studies who used this reported a positive correlation between internalisation of media messages with interest in cosmetic surgery (Delinsky, 2012; Markey & Markey, 2009; Lee 2011; Swami, 2009). Only one paper reported no difference between their group of cosmetic surgery seekers and those who did not desire a surgery (Didie & Sarwer, 2003).

Slevac and Tiggemann (2010) also studied exposure to both television and magazine advertising media. They found both had a direct relationship with interest in cosmetic surgery, as they were not related to other predictive variables. They concluded that increased exposure to media was a significant predictive factor in interest in cosmetic surgery. Therefore, these studies suggest the influence of the media and advertising, specific to physical appearance, has a significant relationship with interest in having cosmetic surgery. From the studies themselves, results suggest media exposure influences interest in surgery by altering opinions and knowledge about cosmetic surgery, making it appear more available and acceptable. However, Delinsky (2012) discussed how it may be that those who already approve of cosmetic procedures seek out more information about them from the media. Therefore, the influence of the media is a concept that is hard to measure. It is also very difficult to understand the relationship between modern media and interest in cosmetic procedures. It may be

that the media influences body image and self-esteem which later influence interest in cosmetic procedures.

Personality and Psychopathology. Various personality traits were found to be associated with interest in cosmetic surgery. Increased defensiveness and emotional sensitivity was found in those seeking a cosmetic surgery in comparison to those who did not want any surgery (Sante & Pasian, 2011). Openness was found to be negatively correlated with interest in surgery while conformity was found to be positively correlated (Swami et al., 2009).

Various psychological difficulties were also studied by some of the present papers. A group seeking cosmetic surgery were found to show significantly less depression than those seeking a medical, non-cosmetic surgery (Crerand et al., 2004). Conversely, depression and social anxiety were both found to be positively correlated with interest in surgery by another paper (Calegero et al., 2010a). Furthermore, greater overall psychopathology was seen in those seeking a cosmetic surgery in comparison to those having a non-cosmetic, medical surgery (Kisely et al., 2002). Together, this shows personality and psychological distress could play some role in surgery seeking. However, this is not explicitly clear from the present review. Additionally, given that so few papers included this and all studied different aspects of personality and psychopathology, the combined results are difficult to shape into one, concrete conclusion.

Experiences of image related teasing. Two studies investigated history of being teased about one's appearance. Both found a significant relationship to motivation to have surgery, with increased experience of appearance based ridicule predicting increased desire to have cosmetic surgery (Markey & Markey, 2009; Von Soest et al., 2006). Both studies found this relationship was mediated by body image. This could suggest body image is the more important predictive factor in surgery interest.

Rejection sensitivity, which the authors related to the experience of teasing and rejection by peers, was also studied. As was appearance based rejection sensitivity. These were both found to be positively correlated with interest in cosmetic surgery

(Calogero et al., 2010a; Park et al., 2009). Indeed, appearance based rejection sensitivity was found to be correlated with interest in cosmetic surgery even when self-esteem was controlled for. From the present review, it appears that being bullied or teased is predictive of a desire to have cosmetic surgery. The papers discussed how teasing, particularly in relation to appearance, left individuals less confident very unhappy with the area of their face or body which was ridiculed. This was hypothesised, based on the studies' findings, to lead individuals to seek 'correction' of these areas with cosmetic surgery. Again, it appears unhappiness with the body may have been a mediating factor in later interest in cosmetic surgery.

Age. Age was found to be positively correlated with interest in surgery (Swami et al., 2009). However, another paper by the same author found a negative correlation (Swami, 2009). Anxiety around aging was shown to be positively correlated with surgery interest (Slevec & Tiggemann, 2010). However, no other papers studied how distress around getting older is related to motivation to have cosmetic surgery. Therefore, the role of age in cosmetic surgery appears to be a very mixed picture from this review.

Gender. The vast majority of the papers studied only women. Only seven of the eighteen papers studied both men and women (Calogero et al., 2010a; Crerand et al., 2004; Kisely et al., 2002; Park et al., 2009; Swami et al., 2009; Henderson-King & Henderson-King, 2005). Previous literature suggested women consider cosmetic surgeries far more often than men (Brown, Furnham, Glanville, & Swami, 2007; Swami et al., 2008). This was also supported by the results of Swami et al. (2009). One study found 88% of their cosmetic surgery seeking participants were female while another found 90% were female (Callahan et al., 2011; Crerand et al., 2004). Callahan et al. (2011) also found two thirds of the participants whom met criteria for BDD were female. However, neither of these studies reported on whether gender was associated with increased likelihood of considering a cosmetic surgery or not. One study disputed this, finding no significant relationship between gender and consideration of cosmetic surgery (Calogero et al., 2010a).

The remaining papers in the present review may have chosen to study only females due to the well-reported gender difference in surgery interest. However, their results

remain generalizable only to other females due the gender bias of their research. It is important to note that cosmetic surgery appears to be growing in popularity and social acceptability amongst men (Pruitt, 2005). Therefore, studies which discount males from their results could be less relevant to more modern surgery seeking populations.

Another factor that impacts on the generalisability of the results of these papers is the sample size. There is some evidence that a larger sample means results are more likely to be reliable and generalizable (Thiemann & Kraemer, 1987). However, there is also the problem of sample sizes being too large, with statistical results overly likely to achieve significance, not because of the strength of the relationship but because of the oversized sample studied (Klein, 2005) resulting in very small effect sizes being reported as statistically significant findings. Sample size calculations should be based carefully on analysis regarding the number of variables involved. An apparently small sample may still be sufficiently powered, while a seemingly large sample size might not necessarily be overinflated. However, if published papers do not include their power calculations, it can be difficult for the reader to interpret or replicate the study effectively in the future.

The only studies to report on power calculations were Crerand et al. (2004), Kisely et al. (2002) and Swami et al. (2009). Kisely et al. (2002) reported their sample size calculations and they reported they reached this number with a sample of 84 participants with 80 being required for power. Crerand et al. (2004) also reported their power calculations but noted that they did not reach the sample size they aimed for. They recruited 141 participants, just short of the required 160. They reported that they reduced the power in their calculation to 0.6 rather than 0.8. Therefore, the study has a 40% chance of making a type two error. Given that they did not find a significant difference in levels of BDD between their surgery and non-surgery groups, it may be that they could have found this difference had their study been powered.

Critique of the present review. The results of these papers cannot be perfectly compared to one another, as they have studied varying constructs in varying ways. This leaves any conclusions based on their combined results only suggestive. An alternative to this might have been to narrow down the search terms, or to review only papers which used the same measures. However, this would have resulted in

such a small number of papers that any conclusions based on this could not have been reliable. Additionally, as this review has shown, there are multiple ways to measure self-esteem and body image concerns. This review would have lost a great deal of valuable data if only certain measures were investigated, at the expense of all others.

Literature review conclusion. Body image and attitudes towards the body have been shown to have some association with a desire for cosmetic procedures. However, this is not universally supported by every paper in the present review. Those who seek cosmetic surgery have been found to show a higher proportion of BDD symptoms or be more likely to meet criteria for a BDD diagnosis than the general population. Again, however, the present review casts some doubt into whether this is unique to those seeking cosmetic surgery purely to achieve aesthetic changes to their appearance.

The present review revealed more conflicting results with regard to the role of self-esteem in the motivation to seek cosmetic procedures. Self-esteem also appears to be studied less frequently than body image or BDD. The results of the present review was used to inform the present research hypothesis.

Furthermore, no studies researched non-surgical cosmetic procedures. Almost no research exists around non-surgical cosmetic procedures, such as Botox or teeth whitening. It is not clear from the literature if desire for non-surgical cosmetic procedures or the likelihood of undergoing these kinds of aesthetic changes have the same associated factors as do surgical cosmetic procedures. The literature would benefit from inclusion of these different ways to alter the appearance.

The present review shows a mixed picture around how self-esteem plays a role in a person's interest in cosmetic procedures. Given both the contrasting results and the very small number of studies that have measured self-esteem, more empirical research into how self-esteem relates to a desire for cosmetic procedures appears necessary.

1.07 Rationale for the current thesis

The present chapter has reviewed both feminist and cognitive behavioural theory around the desire to have cosmetic procedures. They both suggest that self-esteem and distress about the appearance are related to the interest to aesthetically change the way the body or face looks. The literature review has also shown evidence for these hypotheses, though additional research could be beneficial when considering the interaction between self-esteem and dysmorphic concern, with regard to desire for cosmetic procedures. Furthermore, the existing literature does not include non-surgical cosmetic procedures.

Scott's (1997) review of feminist literature on oppressive beauty standards revealed certain themes: Beauty is gendered, inherently seen as feminine, beauty is 'imperative' and 'paramount' for women and that beauty requires continual modification. According to feminist theory, the idealised images of female beauty standards are both a symptom of female objectification and a maintaining factor for continued objectification and reduction of women (Jeffreys, 2014; Abroms et al., 2003).

Feminism speaks of the way a patriarchal society has strict and often unachievable standards of women, in terms of their appearance, as part of a culture of reducing women to objects rather than subjects. The 'beauty ideals are oppressive' hypothesis (Forbes et al., 2007) notes that dysmorphic concern and low self-esteem stem from how society leaves individuals feeling they cannot measure up to the expectations, shown in the media for example. These internal difficulties are then thought to lead some women to seek cosmetic procedures, in order to feel more positive about themselves and their bodies. The present study seeks to examine not only self-esteem and dysmorphic concern, but the link between them, as a way of investigating the impact of objectification in society on women. If a person feels objectified, then their self-esteem should be heavily tied to their opinion of their body, because if a person defines themselves as an object, then they are likely to define their self-value with their physical self, i.e. their body (Fredrickson & Roberts, 1997; Tiggemann & Lynch, 2001). Several papers have suggested a strong link between self-esteem/self-worth and body image for women (Holliday & Taylor, 2006; Feingold, 1992; Weiner

& Thompson, 1997). The present study examined how closely female self-esteem is associated with female dysmorphic concern. It was hypothesised that this link will be strong in the present female sample.

Therefore, the present study aims to understand the link between self-esteem and dysmorphic concern with desire for cosmetic procedures in females. According to most feminist scholars, women with lower self-esteem and greater difficulties with their body image will be most likely to seek to change the way they look, as they have been left with the belief that to be valuable is to be beautiful (Eco, 2007). For this reason, measures of both self-esteem and dysmorphic concern were selected for this research.

Cognitive behavioural theories also reference self-esteem and dysmorphic concern as motivating factors for the desire to have cosmetic procedures. However, cognitive behavioural theory cites more individualised experiences as the cause for this, such as bullying about shape or weight, leaving a person with negative automatic thoughts about the self or a compulsion to change the appearance to reduce internal anxiety. Those with a diagnosis of BDD or higher levels of BDD symptoms like dysmorphic concern have been found to seek cosmetic procedures and changes to their appearance more often than the rest of the population (Crerand et al., 2004; Kisely et al., 2002). Therefore, the present thesis sought to understand the link between self-esteem and levels of dysmorphic concern, the key feature of BDD, and the desire for cosmetic procedures. This study expanded on the existing literature previously discussed by including non-surgical cosmetic procedures.

The literature around the factors associated with an interest in cosmetic procedures has yet to arrive at a concrete conclusion, with regard to surgical cosmetic procedures. As yet, there is very little information about the desire for non-surgical cosmetic procedures. Therefore, the present research aimed to investigate both types of cosmetic procedure. The study firstly aimed to understand how desire for non-surgical procedures relates to desire for surgical cosmetic procedures.

The present study compared those who reported having a cosmetic procedure of some kind with those who did not, in terms of their level of desire for further cosmetic

procedures. Women have been found to be more likely to have had a cosmetic surgery. In the UK in 2013, women made up 90.5% of plastic surgery patients (British Association of Aesthetic Plastic Surgeons, 2014). This statistic was also supported by the present literature review (Swami et al., 2009; Callahan et al., 2011; Crerand et al., 2004). Therefore, the present study focused on women. This decision is also considered in the discussion chapter. Based on the theories outlined and discussed in the introduction chapter, it was hypothesised that those who had a cosmetic procedure would show a greater desire for further cosmetic procedures, in comparison to those who had not had a cosmetic procedure. This was tested by comparing those who reported having a cosmetic procedure and those who did not.

Based on the literature, the present study hypothesised that both lower self-esteem and higher levels of dysmorphic concern would be associated with an increased desire for cosmetic procedures. Those seeking cosmetic procedures have been found to show higher incidences of depression and anxiety symptoms than the general population (Meningaud, Benadiba, Servant, Herve, Bertrand & Pelicier, 2001). Therefore, measures of these symptoms were included in the present study so that they could be controlled for, if they were found to be significantly related to the dependant variable of desire for cosmetic procedures. Research has also found those with OCD and those with BDD both score very similarly on anxiety psychometric measures specifically for OCD. The key difference found was those with BDD displayed more strongly held overvalued ideas (McKay, Neziroglu, & Yaryura-Tobias, 1997). Empirical evidence such as this supports the idea that BDD can be viewed as a particular but distinct type of OCD (Phillips et al., 1995; Mufaddel Osman, Al mugaddam & Jafferany, 2013). Therefore, the present study included a measure of OCD to control for this in analyses.

It was hypothesised that after taking into consideration the potentially related psychological constructs of depression, anxiety, stress and OCD symptoms, lower self-esteem and higher dysmorphic concern would still be associated with an increased desire for cosmetic procedures. Based on this rationale, the present research reported on and hypothesised the following:

1.08 Statistics reported

- The levels of interest in having a non-surgical and surgical cosmetic procedure amongst females in this community sample.
- The number and proportion of participants who reported having already undergone a non-surgical and/or surgical cosmetic procedure.

1.09 Hypotheses

1. Desire for non-surgical cosmetic procedures and desire for surgical cosmetic procedures will be positively correlated.
2. Those who have had a cosmetic procedure will show higher desire for further cosmetic procedures in comparison to those who have not had a cosmetic procedure.
3. Levels of dysmorphic concern will be negatively correlated to levels of self-esteem in this female community sample.
4. Lower self-esteem and higher levels of dysmorphic concern will both predict higher levels of desire for cosmetic procedures, when depression, anxiety, stress and OCD are controlled for.

1.10 Chapter Summary

The introduction chapter reviewed the current landscape of cosmetic procedures being had in the Western world, particularly the United Kingdom and United States. There has been extensive research in the area of surgical cosmetic procedures, however, far less is known about non-surgical cosmetic procedures. The literature has been summarised by this chapter and the need for investigation into non-surgical procedures has been made clear. Furthermore, it appears more clarification is needed around the associated factors in the desire for and use of cosmetic procedures, particularly self-esteem and aspects of body dysmorphia. The existing literature has been used to inform the present hypotheses of this research.

2. Method

2.01 Chapter outline

The positioning of the present paper is outlined and explained. The methodology of this research is described in detail, including the participants, their recruitment, and plan for analysis of data. The ethical issues of the present research are also discussed.

2.02 Epistemological positioning

Positivism. Positivist researchers state that knowledge is based on the logical interpretations of the experience of natural phenomena (Macionis & Gerber, 2008). Positivism takes the empiricist view that the human experience is composed of discrete, elements or events. The way these interact are considered to be observable. This observation forms the basis of available human knowledge (Collins, 2010). Quantitative methods would therefore be an ideal method to gather objective data for positivistic research.

From a positivistic stance, the constructs of self-esteem as well as symptoms of BDD, depression, anxiety, stress and OCD would be viewed as being measurable, quantifiable and essentially permanent. However, the concept of desire for a cosmetic procedure, could not necessarily be treated as a directly observable concept. Therefore, the level of this may not be measurable. For this reason, positivism would not be an appropriate stance for the present thesis.

Dysmorphic concern, for example, is a major factor of BDD. However, the diagnostic criteria for BDD has changed several times over the years (DSM-III-R; American Psychiatric Association (APA), 1987; DSM-IV-TR, APA, 2004; DSM-V, APA, 2013). The current psychiatric definition also differs depending on whether one is consulting the International Statistical Classification of Diseases and Related Health Problems (ICD; World Health Organization, 1993) to the definition of the APA (2013). Therefore, self-esteem and dysmorphic concern cannot be measured and

understood in the same way that height or blood pressure could be because they are concepts which have been socially constructed (Bentall, 1999).

Critical realism sees research as an evolving and constant process (Verschuren, 2003). Therefore, the way self-esteem or dysmorphic concern are described and conceptualised can be modified over time, to become more appropriate to newer understandings of the concepts themselves. These modified constructs might then improve the understanding of the way these things interact and influence one another. A positivist stance might view self-esteem as a definitive entity (Bryman, 1984). This would mean that it would be impossible to explain how a concept like self-esteem has been used in many ways, by multiple cultures. Despite most research into self-esteem being in the West, more cross-cultural studies have discredited the idea that self-esteem is a universal concept; it cannot be found in every culture globally (Gore & Cross, 2011; Markus & Kitayama, 1991).

Particularly in the diagnostic labels in the field of mental health, of which BDD is an example, there has been rich debate about the best position to be taken (Bentall, 1999). The field of medical naturalism states that disease, of the body and mind, exists and can be observed (Berrios & Porter, 1995). This ideology underpins both the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2015) and the International Classification of Disease (ICD-10; World Health Organization, 1993). These manuals present systematised regulations for the classification and diagnosis of mental illness. Both manuals have undergone many transformations with each new edition. Each edition therefore redefines the reality of each construct of the diseases listed, altering, adding or omitting different diagnoses with each reincarnation of the publication (Narrow & Kuhl, 2011).

Conversely, social constructionism postulates that mental illness is a concept that has been created and adapted by society and culture (Gergen, 1985). This is evidenced by the many alterations to the criteria for psychiatric diagnosis, over several decades. Therefore, social constructionists aim to study how society views and explains constructs like BDD, rather than the exact entity of BDD itself (Pilgrim and Bentall, 1999). A middle ground between positivism and social constructionism is that of

critical realism. This accounts for the real, measurable qualities of the variables in the present research while also understanding their role and adaptations within a society.

Critical Realism. Critical realism was born as a critique of, and radical alternative to, positivism (Collier, 1994; Houston, 2001). Bhaskar (2013) states that while ontology includes statements about the world and epistemology includes statements about what we know about the world, ontology cannot be reduced to epistemology. Bhaskar refers to this as the epistemic fallacy.

In context, realism sits within the realm of scientific method. It believes that the world, according to observation and scientific enquiry, is the exact, real world. Anti-realism, puts forwards the total denial of an observable or testable reality. This states that nothing can ever be proved to be true or false (Field, 1988). Critical realism falls in the centre of the spectrum of these two ideologies. Critical realism postulates that our ability to gain knowledge about the world will undoubtedly be flawed, because not all reality lies inside the reaches of human consciousness. However, critical realism does believe there is a reality to be understood but this reality is shifting, rather than static, structured and differentiated (Bhaskar, 2013; Danermark, Ekstrom, Jakobsen & Karlsson, 2002).

Critical realism believes that reality is not static. It is a continuing process, though it also has an enduring structure. This provides the basis for theories to be built upon and therefore tested (Bhaskar, 1978). This thesis focuses on cosmetic procedures, which are conducted on the physical body. Therefore, the epistemological standpoint of this thesis must account for the physical body. Critical realism can account for both the undeniable physical body and the way the body exists and is socially constructed in the world (Williams, 1999).

The human body reflects the societies and systems around it. Additionally, how cultures are altered or continued relies upon bodies existing and experiencing the world. There are many perspectives around the understanding of this. For example, Frankenberg (1990) described how the body is at once physical or lived. At the same time the body is somatic and experiential. Society creates the labels or descriptions we might have for the human body. However, the human body remains real, through

any manifestations of the way society views this (Williams, 1999). A human body has physical, observable qualities. These are not completely secondary by-products of the society around the body (Archer, 1995).

The human experience, to feel, to hold an opinion, to notice the self – these too can influence and be influenced by society. However, human experiences such as this are not entirely socially constructed. The body for example, is not purely epiphenomenal (Archer, 1995; Williams, 1999). Both the opinion of the body and the self can therefore be seen as part of the human experience, with a reciprocal relationship with society. In this way, dysmorphic concern and self-esteem can be viewed as being linked to the bodily self and measurable at an individual level. At the same time, these constructs are also experienced, understood and recreated by the societies and systems around them (Bhaskar, 1993).

According to critical realism, society may construct the idea of what an ‘ideal’ body or face is. How this constructed ‘ideal’ is experienced by each individual will be modified by the body and face they are born with. The systems around the individual will also be influential, including the social groups one is part of and the wider society around them. For example, if society has constructed and supported the notion that pale skin is ‘ideal’, those born with dark skin will experience this construct in a very different way than those born with pale skin. Therefore, we need to include the physical and biological in our understanding and research, not defend against this or see it as purely socially constructed (Benton, 1991). Williams (1997) wrote about aesthetic body modification as a way to make the physical body a more malleable factor. The physical body each person is born with is no longer a set, extrinsic factor, because procedures can be conducted to alter the physical form that one’s genetic material coded for. The world and the body both exist, regardless of the way it is perceived (Denzin, 1992). In the case of the present research the participants’ bodies and the physical changes after their cosmetic procedures are real. Critical realism can account for the real, physical body and the way society operates around and influences this (Archer, 1995; Williams, 1999). Therefore, it was an ideal choice for the epistemological stance of the present thesis.

The design of the present study is quantitative. Therefore, there is a belief that there is a tangible reality to be studied, that deductive and indicative reasoning can be used to understand the data acquired and the results can be considered empirical research. Another reason quantitative research was felt to be necessary is the hypotheses that have been built, based on previous research. These hypotheses are being tested. Qualitative research has the strength of being able to investigate brand new areas where no hypotheses can currently exist (McEvoy & Richards, 2006). However, the present study expands upon the evidence of a wide variety of previously acquired data. Despite there being much debate around the idea that all quantitative research must be inherently positivistic, many researchers argue for the use of alternative paradigms, focusing on the best method for the research goal at hand (Johnson & Onwuegbuzie, 2004). Indeed, even critical realists themselves argue for the methodology choice being based on the research hypotheses and questions at hand (McEvoy & Richards, 2006). Quantitative methods excel in comparing or contrasting definitive concepts, identifying patterns and relationships, and understanding correlated mechanisms (Mingers, 2004). The present thesis aimed to understand the relationships between self-esteem, dysmorphic concern and desire for cosmetic procedures. With this in mind, quantitative methodology was most appropriate. Further support from the idea that a critical realist position can be taken with a quantitative design comes from Bryman and Bell (2003). They discuss the idea that quantitative and qualitative designs are not totally mutually exclusive and that the results of quantitative research can be seen as a kind of description or narrative. This idea is referred to as the anti-conflationist viewpoint (McEvoy & Richards, 2006).

Additionally, Bhaskar (2013) describes how social structure exists and is responsible for all human agency. Agency, in turn, creates and recreates social structure. Human actions are seen by critical realism as being the product of human reasoning (Bhaskar, 2014). Given that the focus of the present research was the human reasoning behind the human desire or choice to have cosmetic procedures, critical realism was the ideal stand point for this research.

It is also important to note that, from the perspective of critical realism, the reality being studied can only be appreciated and understood up to a certain point. The limits placed upon our potential understanding of reality are dictated and modified by the

current human understanding of the world at present and our own personal biases or experiences. Empirical data can be gained, within the limits of what is accessible to the researcher (Fleetwood & Ackroyd, 2004). With regard to the present research, this means that the knowledge gained about the studied variables, such as self-esteem and dysmorphic concern, are limited to the present understanding of what these concepts actually are. Should human understanding or description of these concepts change drastically, the results of the present study will no longer apply to these new versions of self-esteem or dysmorphic concern. The present study has debated the limitations of this and possible ways future research can move forward in the discussion chapter. The ways in which the studied variables have been investigated are outlined later in this chapter. The measures used are all based on the present understanding of the concepts of self-esteem and dysmorphic concern. Therefore, present understanding of these concepts are the structures of reality which this thesis is using as a point of reference to test its hypotheses from, as outlined by Bhaskar's (1978) critical realism.

The study aimed to measure desire for cosmetic procedures and the potentially underlying factors. The research will hold the view that the snapshot of reality discovered by the quantitative method is representative of the reality of these participants. These results can then be seen to be generalizable to similar populations, which are influenced by similar systems and hold the same current view of what self-esteem, dysmorphic concern and cosmetic procedures are. The philosophy of critical realism is therefore the most relevant epistemological stand point to the work of the present thesis.

Feminist theory. How feminist theory relates to the present literature has been discussed in the introduction chapter. Feminist theory fits well within the critical realist position. This is because feminism recognises what is personal or 'real' to an individual as well as how this is shaped by the societies arounds that person, in ways that may not always be overt or inherently obvious to even that individual themselves. To illustrate, Davis (1995) wrote about women being able to use cosmetic surgery as part of an individual choice. Feminist theorists also recognise that any individual choice must be viewed through the lens of the options available in any given society. For women in particularly, choices around the body could be seen to be controlled or influenced by patriarchal societies around them (Cepanec & Payne,

2000). Both feminist theory and critical realism therefore recognise the individual or embodied reality for a person, while accounting for the way society constructs and relates to those realities.

Feminism speaks to what is personal in each individual. The feminist theory of engaging in research states that the work itself should be reflective (Acker, Barry & Esseveld, 1983; Harding, 1987). For this reason, it is important to note the author's own personal interests in arriving at the present body of work:

From a young age, I have been interested in how a person's inner world was tied to their outer appearance; or how my experience of self-esteem and body image related to the way my physical body appeared. I grew up in a family environment where the appearance of women was commented upon daily. Women described as beautiful were treated as worthy, virtuous and desirable. Women described as ugly or fat were only ever discussed negatively; as stupid, useless and abhorrent. As a child, I was heavier than my peers and bullied for not appearing feminine or attractive. These experiences served to reinforce the same ideals feminism tries to highlight and guard against, that women are valuable only by virtue of being pleasing to behold. As I grew older and spent all my working life in academia and psychology, I began to see things from a very different perspective. This has given me a richer understanding of the systems around my experiences. This underlies my interest in self-esteem, body image and the reasons a person would desire to appear differently. My experience, and the knowledge that mine is not a rare experience for a woman of my age, is also why I have found the feminist perspective on cosmetic procedures to be so valuable.

2.03 Design

The present study is quantitative in design. Between groups comparisons were used to investigate the difference between those who had a cosmetic procedure and those who had not. A regression analysis was also used to investigate the factors which were associated with desire for cosmetic procedures. The dependent variable for the regression model was 'desire for cosmetic procedures'. The independent variables were self-esteem and dysmorphic concern. Depression, anxiety, stress, and symptoms

of obsessive compulsive disorder (OCD) were measured so that they could be controlled for in the analysis if they were significantly correlated with the dependant variable.

2.04 Participants.

The present study aimed to gather a community sample of female participants. The study focused on studying women as they make up the vast majority of cosmetic procedure patients. In order to create results that could be generalizable across the UK, as wide a variety of participants was aimed for.

Inclusion criteria:

- Women above the age of 18, who were willing to complete all questionnaires.

Exclusion criteria:

- Those under age 18.
- Those who have had or desire a cosmetic procedure for corrective or reconstructive purposes, following a previous medical procedure or accident. This was because patients who have had reconstructive surgery have been shown to differ from patients undergoing purely aesthetic procedures in terms of motivation, expectations, pre-operative psychological presentation, and technical surgery required (Klassen et al., 1996).
- Non-UK residents. This was for ethical reasons as those outside of the UK may have been unable to access support from their GP if they felt distressed by the nature of the measures in the study.
- Those who did not have access to the internet or did not have a good enough grasp of the English language to allow them to complete the online survey.

Sample size. Power calculations were conducted for all analyses using the a-priori sample size calculator (Soper, 2017). This takes into account effect sizes based on previous research in the area. For example, if the correlation between two variables has been found to have a large effect size in previous literature, a smaller sample size will be needed, than if a medium or small effect size was expected.

Correctly powered samples are necessary not only to find significant values but also to ensure a sample is not overly large, which could lead to analysis finding a significant result purely because of the large sample, rather than the size of the correlation (i.e. the effect size) between the variables (Field, 2013). Furthermore, for ethical reasons, the author aimed to ensure that participants had provided their time for a sufficiently powered study.

t-test analysis power calculation. Independent samples t-tests were used to test the difference in desire for cosmetic procedures between those who had already had a cosmetic procedure and those who had not.

Swami et al. (2008) found that having already had a surgical cosmetic procedure was a highly significant predictor of desire for further procedures, and reported a Pearson's r of 0.17. However, this was only studied in a regression analysis. A t-test showing the difference in mean desire for cosmetic procedures between the participants who reported having had a surgical cosmetic procedure and those who did not was not presented. Therefore, the a Cohen's d value to show the effect size of this difference was not available.

Therefore, a medium effect size was used in the sample size calculations for the t-tests. A desired statistical power level of 0.8 and a probability level of 0.05 was also included. This resulted in a total required sample size of 102 with 51 participants in each group.

Regression analysis power calculation. When calculating the necessary sample size for the regression analysis, previous literature regarding the effect size of the studied variables was taken into account. Research suggests self-esteem and dysmorphic concern are both associated with desire for surgical cosmetic procedures (Haas, 2008; Javo & Sørli, 2009; von Soest et al., 2006). Swami, Campana & Coles (2012) reported a negative correlation between self-esteem and consideration of surgical cosmetic procedures, with lower self-esteem being associated with a stronger likelihood that a person would desire a surgical cosmetic procedure ($r = -0.56$, $p < 0.001$). According to Cohen (1992), this would indicate a large effect size between the two. Lee (2011) also found a negative relationship but a small effect size ($r = -$

0.20, $p < 0.001$). Based on these findings, it was considered that a medium effect size be considered, to account for both these results.

Though an exact effect size between dysmorphic concern and desire for cosmetic procedures was not found in the literature, Markey and Markey (2009) reported a link between body dissatisfaction and desire for surgical cosmetic procedures ($r = 0.54$, $p < 0.001$). According to Cohen (1992), this would indicate a large effect size.

However, another study found a medium effect size between these two variables, ($r = -0.30$, $p < 0.001$) (Calegero et al., 2010a). A study of body shame found a small effect size in the relationship to desire for surgical cosmetic procedures, ($r = -0.26$, $p < 0.001$). (Calegero et al., 2010b). Again, given the differing effect sizes within the literature a medium effect size was considered the most appropriate.

A medium effect size was used in the regression sample size calculation, based on the available data from the literature, to determine the number of participants necessary for statistical power. A desired statistical power level of 0.8 and a probability level of 0.05 was included. Calculations for hierarchical regression were used. The four independent variables that would need to be included in the first block, so that they could be controlled for, were depression, anxiety, stress and OCD. The two hypothesised predictive variables included in the second block were self-esteem and dysmorphic concern. Any demographic variables would only be included in the regression analysis if they were found to be significantly associated with the dependent variable of desire for cosmetic procedures. The sample size calculated was 71 participants (Soper, 2017).

Therefore, for both analyses, a total sample size of at least 102 participants was required. A larger sample was aimed for, to account for participants who might drop out and to improve the likelihood of having at least 51 participants in each group for the independent samples t-test.

2.05 Recruitment and data collection.

The questionnaire was available online and completed electronically. Participants were recruited through posters placed in community locations such as church halls,

cafes and shops (See appendix C). Social media, specifically Twitter and Facebook, were also used to recruit participants. The researcher's own social media pages were used to promote the study and to ask social media contacts to share the link to the research study. In this way, snowball recruitment was utilised. The study aimed to be advertised further, to a more diverse demographic.

2.06 Data coding.

Total score variables were computed for all measures and subscales, as outlined in the measures section of the present chapter.

A new variable was computed to show whether a participant had had any kind of cosmetic procedure or not. A score of '0' was inputted to signify that a participant had not had a non-surgical or surgical type of cosmetic procedure. A score of '1' was inputted to signify that a participant had had either a non-surgical cosmetic procedure, a surgical cosmetic procedure or had had both. This variable was created as the outcome variable for the logistic regression about likelihood of having had a cosmetic procedure of any type.

All categorical predictor variables were dummy coded, so that they would be suitable to be used in regression analysis. These were sexuality, marital status, highest level of education, ethnicity and employment category. For each variable, the mode category was used as the reference category to which all other variables were compared in the dummy coding.

For the questionnaire data, any missing data points, i.e. if a participant had accidentally left an item on a questionnaire unanswered, was completed using the mean score for that participant on that questionnaire.

2.07 Procedure

After ethical approval was obtained from the University of Essex (see appendix D), the online questionnaire set was created using online software. Then recruitment began.

Participants accessed the link to the online study via social media. The link was also listed in adverts in community settings (see appendix C). Participants who followed the link were presented with the information sheet (see appendix E). They were then shown the online consent form (see appendix F). The consent form explained that opting out of the study could be done by closing the browser window. Participants who consented were then asked to provide some demographic information. It was made clear that they could answer with 'I would rather not say' for each of the demographic questions (see appendix G). Participants were then shown each of the 4 questionnaires in order (see appendix H) before the questions around cosmetic procedures (see appendix I). Participants could complete these online, in their own time. It was estimated each participant would take roughly 20-30 mins to complete the study. This was explained in the information sheet (see appendix E). After completing the measures, participants were then shown a debrief screen (see appendix J).

Data from the online questionnaires were compiled into a data file using Statistical Package for the Social Sciences (SPSS) version 21. This software was used for all analysis.

2.08 Measures

- Brief demographic data was taken, to understand the participant cohort (see appendix G). This was used to describe the sample and how generalisable the final results were. The demographic data taken was age, sexuality, ethnicity, country of residence, marital status, level of education and category of employment.
- The Rosenberg self-esteem scale (RSE) (Rosenberg, 1979). This 10-item measure of global self-esteem is well validated in adult populations (Robins, Hendin & Trzesniewski, 2001) (see appendix H). The RSE has been found to

have good internal consistency, with a Guttman scale coefficient of reproducibility of .92. The construct validity is strong, as it correlates significantly with the Coopersmith Self-Esteem Inventory (Rosenberg, 1979). See appendix E-1. The scale is scored using combined ratings. For items 2, 5, 6, 8 and 9, strongly agree would score 3, agree would score 2, disagree would score 1 and strong disagree would score 0. The reverse score would be given to items 1, 3, 4, 7, 10. A total score would be the number of self-esteem indicating responses (Rosenberg, 1979). Scores range from 0 to 30, with a higher score indicating higher self-esteem. No clinical cut off is suggested.

- The Dysmorphic Concern Questionnaire (DCQ) is self-report measure of BDD symptoms with seven items (see appendix H). The DCQ has been found to have good internal reliability with a Cronbach's alpha of .88 (Oosthuizen, Lambert & Castle, 1998). It has been validated in clinical samples and is considered to assess clinical and subclinical levels of dysmorphic concern with body image (Jorgensen, Castle, Roberts & Groth-Marnat, 2001). Therefore, it was selected for the present study of a non-clinical, community sample. Scores on the DCQ were found to significantly predict scores on the Body Dysmorphic Disorder Examination (BDDE) by Rosen and Reiter (1996), accounting for 48% of the variance, with an $F(1,63)$ value of 58.2 ($p < 0.001$) (Jorgensen et al., 2001). Each item can be given a score of 0-3 with 3 signifying the most concern, ie. 'much more than other people' response. The maximum score is 21 with a minimum score of zero. A lower score indicates less dysmorphic concern. Totalling each item score gives the measure score. This questionnaire was selected as it can measure appearance concerns in clinical and non-clinical settings, rather than having been specifically developed to measure symptom changes in those with clinically diagnosed BDD (Jorgensen et al., 2001). Therefore, it was a suitable scale for this community sample. See appendix E-2.
- The Short Form Depression Anxiety and Stress Scale (DASS-21) (Henry & Crawford, 2005) has been found to be a reliable measure of distress, the Cronbach's alpha for the total 21-point scale was found to be .93. The depression, anxiety and stress subscales are also reliable, with Cronbach's alphas of .88, .82 and .90 respectively. The DASS-21 (see appendix H) has been found to be a valid measure of depression and anxiety, with these

subscales correlating significantly with the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983). The stress subscale has also been validated by correlating significantly with the Personal Disturbance Scale (Bedford & Foulds, 1978). The total scale also strongly correlated with the 42-item version of the DASS as a total measure of psychological distress and negative affectivity (Henry & Crawford, 2005). The results of the DASS-21 in this study were used to control for depression, anxiety and stress in later analysis. The total score on the DASS-21 was not included as an independent variable as it would automatically correlate with the subscale scores and cause multicollinearity. Each individual scale can provide a score of 0-21, with the whole scale score ranging from 0-63. Higher scores are indicative of higher depression, anxiety, stress or overall distress. Scores are obtained by adding the total number scored from each item. The depression scale includes items 3,5,10,13,16,17 and 21, the anxiety scale includes items 2,4,7,9,15,19 and 20 and the stress scale includes items 1,6,8,11,12,14 and 18. There are no clinical cut off scores suggested for the DASS-21.

- The Obsessive Compulsive Inventory- Revised (OCI-R; Foa et al., 2002) was used to measure symptoms of Obsessive Compulsive Disorder (OCD (see appendix H). BDD is considered to be a type of OCD (Phillips et al., 1995; Mufaddel, et al., 2013) and therefore levels of OCD symptoms should be accounted for and factored out of analysis to ensure final variance is accounted for by the symptoms that are specific to BDD. This 18-item measure was selected as it is particularly accessible and easy to understand. Some other measures of symptoms of OCD are more lengthy and include long passages of text in order to understand each set of questions. Given that each participant was asked to complete several questionnaires, the length of each was considered in order to reduce the demand on each participant. Total scoring was done by adding the scores of all items. Scores range from zero to a maximum score of 72, a score of 30 or above is considered to suggest a clinical presentation of OCD. However, no official diagnostic cut off exists for the measure and a psychiatric diagnosis could not be given based only on the measure. An adequate reliability has been found, with a Cronbach's alpha of .84 for the total scale. Additionally, the OCI-R was found to correlate significant with the Y-BOCS, showing the scale is also a valid measure of

OCD (Foa et al., 2002). The measure can be divided up into several subscales, measuring checking, hoarding, neutralizing, obsessing, ordering and washing as facets of OCD. As the present study aimed to control for OCD symptoms in general, only the total scale score was used.

Desire for cosmetic procedures. Participants were given two Likert scales and asked to what extent they feel they would like to have a/any non-surgical cosmetic procedure(s) and a/any surgical cosmetic procedure(s) (see appendix I).

Likert scales were used to measure the desire for both types of cosmetic procedures, non-surgical and surgical. This is because there are no current validated or reliable measures of desire for non-surgical cosmetic procedures, or measures which also include non-surgical cosmetic procedures. A popular measure used in some of the studies in the literature review was the ACSS (Henderson-King & Henderson-King, 2005). This could measure consideration of surgical cosmetic procedures. The present study focused on active desire for a cosmetic procedure. Many of the items in the measure are hypothetical which was not considered to fit the definition of desire for cosmetic procedures as defined by the present study as the level of drive to actually choose to undergo a cosmetic procedure. However, possible limitations of this choice are discussed in the discussion chapter of the present thesis.

In further support of the choice of the present study, other research has used Likert scales to measure motivation for surgical cosmetic procedures and produced publishable results (Markey & Markey, 2009; Von Soest et al., 2006). The present study used two 7-point Likert scales. This aimed to provide a clear and easy-to-interpret way of presenting both the question and later results.

Participants were also asked whether they have had any non-surgical or surgical cosmetic procedures. They were then asked to type what these procedures were in an open format text box (see appendix I).

Those who stated they had a cosmetic procedure or desired a cosmetic procedure in the future, were then asked to give their reasons for having or desiring this in an open text answer box. This open text box asking about motivations for the procedure

allowed for any procedures had for non-cosmetic reasons to be removed from later analysis. These answers also provided an understanding around desire for cosmetic procedures and what motivating factors may be. However, as the information provided was very brief. This was not formally, qualitatively analysed as there was not enough data to produce robust and reliable qualitative results.

2.09 Ethical Issues.

Ethical approval for the research was obtained through the University of Essex (see appendix D). Participants were recruited from the community; participants were not recruited through the National Health Service.

One major ethical issue was that those studied could potentially be distressed by the nature of the questions asked. The questionnaires covered low mood, anxiety and distress around body image and self-esteem. To reduce the potential for emotional distress around these measures, a brief introduction to the study was included before the questionnaires were presented. At the end of the study, information on local support for those who potentially felt they were in psychological distress was provided on a debrief screen (see appendix J). This included advice to visit their local general practitioner or local improving access to psychological therapies (IAPT) service. The details for the Samaritans service was also listed.

Additionally, the nature of the measures was explained in the information sheet, (see appendix E) to allow participants to exit the study before they began if they thought they might become stressed by the material. No items on any of the questionnaires included thoughts of self-harm or suicide. There were no questions querying whether a participant felt at risk or unable to keep themselves safe. Some participants may have been sensitive to the demographic questions included. Therefore, all demographic questions included an option to withhold this information if participants would rather not have revealed this.

Fully informed, written consent was obtained using several questions that participants needed to check in order to provide their consent (see appendix F). This was presented before they began the questionnaires. They were fully informed of the

nature of the research before they began. They were debriefed at the end of the measures and informed how the results were to be used and possibly disseminated.

The information screen presented made it clear that there would be questions around cosmetic procedures for purely aesthetic reasons. The screen outlined that some individuals seek or undergo cosmetic procedures following a surgery for a medical problem. It was explained that these procedures were different from cosmetic procedures had for purely aesthetic reasons and were not the focus of the present study (see appendix E). It would have been unethical to allow potential participants to spend their time on the measures, only to be excluded from analysis and this information screen aimed to prevent this.

2.10 Chapter Summary

This chapter outlined various epistemological positions, in order to highlight why critical realism was the most appropriate standpoint for this research. How the present research was designed and conducted was fully described. How the data was analysed in relation to each hypothesis is detailed in the results chapter.

3. Results

3.01 Chapter outline

The present chapter outlines the results of the study. First, demographics are presented to describe the sample, then the distribution of data is inspected for normality. Descriptive statistics are presented for each independent and dependent variable before the main results are presented in order of hypotheses of the study. The statistical analysis for each hypothesis is briefly summarised.

3.02 Sample

The data was extracted from the survey software Qualtrics. There were 147 cases. However, some participants discontinued the study without completing all the questionnaires. Their results were removed from the dataset, as stated in the introductory information presented.

The complete data set was available for 126 participants. The regression analyses for the study were powered at 71 participants therefore the sample size is large enough to detect statistically significant relationships with at least a medium effect size.

However, the t-test being was slightly underpowered as there were less than 51 participants in the group that had a cosmetic procedure. Therefore, this t-test may have been more likely to make a type-two error, failing to find a significant difference in the sample that did exist in the population.

Demographics

Age. Participants recorded their age in years. The mean (+/- SD) age of the sample was 33.49 years (+/- 10.4 years).

Sexuality

Table 3

Frequency and valid percentage of sexualities of sample

Sexuality	Frequency	Valid Percent
Heterosexual	115	91.3
Homosexual	1	0.8
Bisexual	4	3.2
Pansexual	4	3.2
I would rather not say	2	1.6
Total	126	

The majority of the sample, 91.3%, reported being heterosexual.

Marital Status

Table 4

Frequency and valid percentage of marital status of sample

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Marital status	Frequency	Valid Percent
Single	48	38.1
Cohabiting	43	34.1
Married	29	23.0
divorced or previously in a civil partnership which is now legally dissolved	3	2.4
I would rather not say	2	1.6
separated but still legally married or in a civil partnership	1	.8
Total	126	

The most commonly reported marital status of the sample was single, closely followed by those who were cohabiting.

Level of education

Table 5

Frequency and valid percentage of education level of sample

Highest level of education	Frequency	Valid Percent
Masters degree	44	34.9
University degree	41	32.5
Doctorate	19	15.1
A levels of equivalent	12	9.5
GCSEs or equivalent	6	4.8
BTEC or equivalent	2	1.6
I would rather not say	1	0.8
no formal qualifications	1	0.8
Total	126	

A large proportion of the sample held a masters degree, 34.9%. Almost as many participants, 32.5%, reporting having an undergraduate degree.

Ethnicity

Table 6

Frequency and valid percentage of ethnicities of sample

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Ethnicity	Frequency	Valid Percent
White/Caucasian	106	84.1
Irish	5	4.0
Indian	5	4.0
Any other White background	3	2.4
Mixed / Multiple ethnicity	3	2.4
Chinese	2	1.6
Any other Asian background	2	1.6
Total	126	

The majority of the sample, 84.1%, were Caucasian.

Employment category

Table 7

Frequency and valid percentage of employment categories of sample

Employment Category	Frequency	Valid Percent
Health Care and Social Assistance	53	42.1
Student	15	11.9
Education/Academia	15	11.9
Admin/Clerical	6	4.8
Finance and Insurance	5	4.0
Retired	4	3.2
Retail	4	3.2
I would rather not say	4	3.2
Arts/Creative Design	3	2.4
Information Technology	3	2.4
Publishing	3	2.4
Real Estate	3	2.4
Homemaker	2	1.6
Construction	2	1.6
Government and Public Administration	2	1.6

Hotel and Food Services	2	1.6
Total	126	

As can be seen in table 7, the most common job category within the sample was health care and social assistance, with 42.1% of participants.

3.03 Analysis of normality

All variables were analysed for normality. As can be seen in table 8, the Kolmogorov-Smirnov test revealed almost all continuous variables to be non-normally distributed. However, given that this is a relatively large sample, these results may be misleading. A larger sample is likely to find even a very small deviation from normality statistically significant (Field, 2013).

Table 8
Analysis of distribution of variable data

	Kolmogorov-Smirnov (degrees of freedom)	P
Self-esteem	D(126) = 0.071	0.198
Dysmorphic concern	D(126) = 0.106	0.002
Depression subscale score	D(126) = 0.195	0.001
Anxiety subscale score	D(126) = 0.196	0.001
Stress subscale score	D(126) = 0.135	0.001
OCD scale score	D(126) = 0.165	0.001
Level of desire for non-surgical cosmetic procedure	D(126) = 0.181	0.001
Level of desire for surgical cosmetic procedure	D(126) = 0.222	0.001
Mean level of desire for cosmetic procedures	D(126) = 0.129	0.001

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Due to the large sample size, the normality of the data was also examined in relation to skewness and kurtosis, as outlined below in table 9.

Table 9

Skewness and kurtosis values of variable data

	Skewness value	Skewness z score	Kurtosis value	Kurtosis z score
Self-esteem	-0.10241	-0.47483	0.307304	0.717731
Dysmorphic concern	0.577959	2.679718*	-0.15856	-0.37033
Depression subscale score	1.926566	8.897852*	3.771336	8.774494*
Anxiety subscale score	1.395853	6.471891*	1.939745	4.530411*
Stress subscale score	0.789548	3.632253*	0.23615	0.547312
OCD scale score	1.940224	8.995879*	4.580812	10.69881*
Level of desire for non-surgical cosmetic procedure	0.084473	0.391661	-1.3041	-3.04582*
Level of desire for surgical cosmetic procedure	0.531424	2.463957*	-1.1215	-2.61933*

* Denotes significance at the $p < 0.05$ level.

Significance of the skew and kurtosis values were assessed by calculating the z-scores. This was done by dividing each value by its standard error. Only values above 1.96 were considered to be significant (Field, 2013). Almost all variables were found to be significantly non-normally distributed. However, self-esteem showed normal levels of distribution according to the insignificant value of skew and kurtosis. The P-plot for self-esteem results reflects this (see appendix K). All other variables showed significantly non-normal distribution. The P-plot for the depression subscale results are presented as an example of this in appendix L.

Transformation of the data was tested, to investigate whether this would improve the normality of the data but unfortunately this did not appear to be the case. For example, the log transformation still resulted in highly significant values for both skew and kurtosis for almost all variables, only the kurtosis value of dysmorphic concern was improved. The square root transformation improved the skew value for desire for non-surgical procedures but did not improve the normality of the data for

other variables. There was no transformation of the data which improved the normality of the data as a whole. Therefore, bootstrapping was used in all regression analyses.

Bootstrapping creates estimations about the sample data by using estimations from the data itself. These estimates are used to create a 95% confidence interval, in which 95% of the sampled bootstrap data falls. This provided more robust statistical data from the analyses, despite difficulties with the non-normal data (Efron & Tibshirani, 1994; Field, 2003).

In order to test for normality for the regression analyses, the Durbin-Watson test was conducted during the regression analyses. The Durbin Watson statistic was 1.582. According to Durbin and Watson (1951), for a sample size of 60 and with five independent variables, the lower boundary of the d value is 1.82, values above this prove the assumption of independence of errors was not violated. For the present regression model, the d value falls below the value provided by Durbin and Watson (1951). However, given that the present sample had 126 participants and there were more than five independent variables in the equation, it was considered that the assumption of independence of errors was not been violated, because the d value is close to the lower boundary suggested for a far smaller sample, with fewer independent variables. This decision was arrived at on the advice of Field (2013).

3.04 Descriptive statistics

The sample mean and standard deviation are presented for scores on all appropriate measures. Where appropriate, the mean, standard deviation, number of participants and percentages are also presented for demographic variables. For categorical variables, the number and percentage of participants in each category are presented.

Self-esteem data. The mean score for the measure of self-esteem was 18.94 (+/- 4.85). The minimum available score was zero and the maximum was 30, with 30 representing higher self-esteem. The median score was 19 and the range was 26. A score of 15 or above is considered to represent normal levels of self-esteem

(Rosenberg, 1979). Therefore, it appears the majority of the sample had a score on the measure that indicated no psychological difficulties with self-esteem

Dysmorphic Concern. The mean score for the measure of dysmorphic concern was 7.4 (+/- 4.556). The minimum available score was zero and the maximum was 21, with 21 representing higher levels of dysmorphic concern. The median score was 7 and the range was 19. It appears the majority of the sample showed only low levels of dysmorphic concern, below the number someone with a diagnosis of BDD would likely score (Oosthuizen et al., 1998).

Depression, Anxiety and Stress. For each subscale of the DASS, the minimum available score was zero and the maximum was 21, with higher scores representing higher levels of depression, anxiety or stress. The mean score for the depression subscale of the DASS was 3.84 (+/- 4.322). The median score was 2 and the range was 20. The mean score for the anxiety subscale was 2.78 (+/- 2.856). The median score was 2 and the range was 13. For the stress subscale of the DASS, the mean score was 6.05 (+/- 4.076). The median score was 5.50 and the range was 18. It appears the majority of the sample scored within the normal range for these measures (Henry & Crawford, 2005).

OCD. The mean score for the measure of OCD was 10.03 (+/- 9.006). The minimum available score was zero and the maximum was 72, with 30 representing potentially clinical levels of OCD. The median score was 8 and the range was 49. It appears the majority of the sample showed only low levels of OCD symptoms, this would be under the cut off for a diagnosis OCD (Foa et al., 2002).

Desire for cosmetic procedures. The responses in relation to desire for cosmetic procedures were investigated, across the present sample. The mean (+/- SD) for desire for non-surgical cosmetic procedures was 3.55 (+/- 1.904). The median value was 4 and the range was 6. The mean (+/- SD) for desire for surgical cosmetic procedures was 2.98 (+/- 1.961). The median value was 2 and the range was also 6.

A variable of desire for cosmetic procedures in general was also computed by using the mean score of both Likert scales. Therefore the maximum score on this variable

Desire for Cosmetic Procedures: An Investigation of Associated Factors

was also 7. The mean (+/- SD) for desire for cosmetic procedures was 3.2619 (+/- 1.781). The median value was 3 and the range was 6.

Table 10 shows the number and proportion of participants at each level of reported desire for non-surgical cosmetic procedures.

Table 10

Answer given for “How much would you like to have a non-surgical cosmetic procedure?”	Frequency	Valid percent
1 – I definitely do not want a cosmetic procedure,	25	19.8%
2 – I am fairly sure I do not want a cosmetic procedure	24	19.0%
3 – I think I probably do not want a cosmetic procedure, I have thought about the idea	11	8.7%
4 – I do not know if I would like a cosmetic procedure or not, I have mixed feelings about the idea	18	14.3%
5 - I think I probably would like a cosmetic procedure, I have thought about the idea	25	19.8%
6 – I am mostly sure I would like a cosmetic procedure, I have thought seriously about having one	17	13.5%
7 – I definitely would like to have a cosmetic procedure, I have a strong intention to have this done	6	4.8%

Table 11

Answer given for “How much would you like to have a surgical cosmetic procedure?”	Frequency	Valid Percent
1 – I definitely do not want a cosmetic procedure	44	34.9
2 – I am fairly sure I do not want a cosmetic procedure	23	18.3
3 – I think I probably do not want a cosmetic procedure	9	7.1
4 – I do not know if I would like a cosmetic procedure or not, I have mixed feelings about the idea	16	12.7

Desire for Cosmetic Procedures: An Investigation of Associated Factors

5 - I think I probably would like a cosmetic procedure, I have thought about the idea	15	11.9
6 – I am mostly sure I would like a cosmetic procedure, I have thought seriously about having one	14	11.1
7 – I definitely would like to have a cosmetic procedure, I have a strong intention to have this done	5	4.0

Figure 1

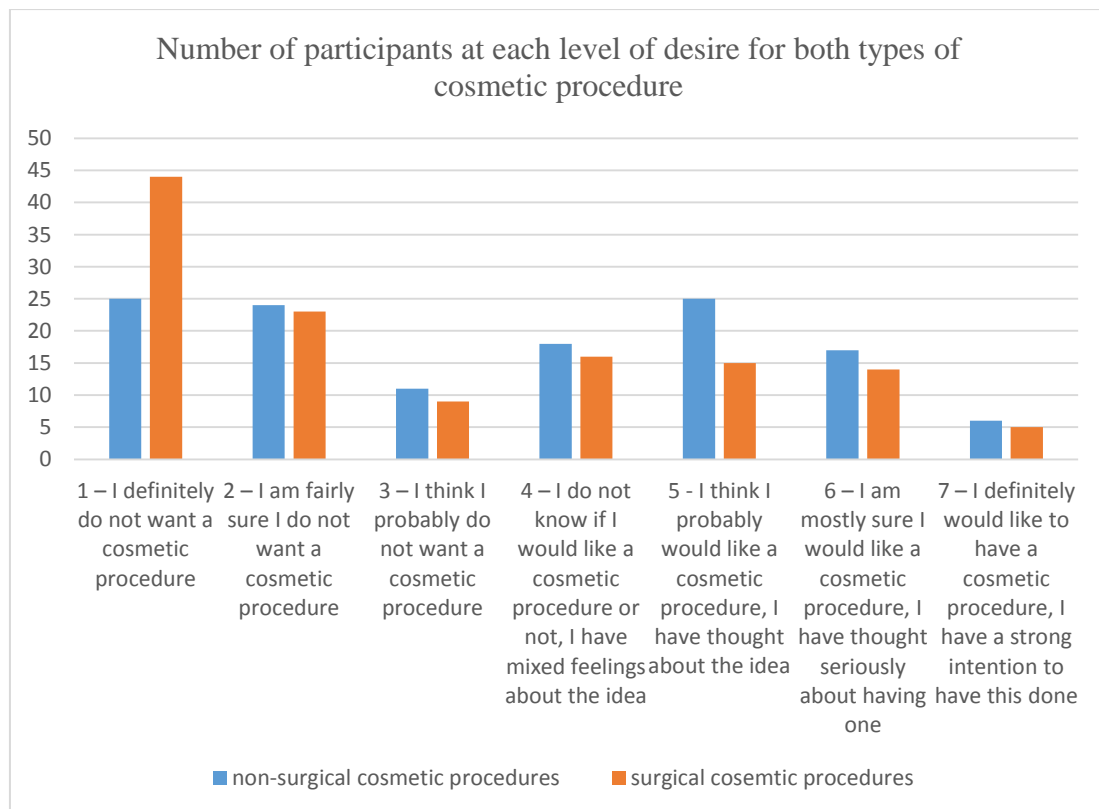


Figure 1 compares the number of participants at each level of desire for non-surgical and surgical cosmetic procedures. The desire for non-surgical cosmetic procedures appears to be low across the sample. With the most common answer given by participants being that they ‘definitely do not want a cosmetic procedure’ of either kind. However, more participants recorded this response for the question about desire for surgical cosmetic procedures than for non-surgical procedures. This could suggest that participants feel more certain about not wanting a cosmetic procedure if the procedure in question is surgical.

Cosmetic procedures reported. The number and proportion of participants who reported having any type of cosmetic procedure, is presented in table 12. Some participants reported having both non-surgical *and* surgical cosmetic procedures. Therefore, the number of participants who had a cosmetic procedure of any kind is not a direct total of the number of participants who had non-surgical procedures added to the of participants who had surgical procedures.

Table 12

Number and proportion of participants who reported having had a cosmetic procedure or procedures.

	Frequency	Valid percent
Participants who had a non-surgical cosmetic procedure	34	27.0%
Participants who had a surgical procedure	6	4.8%
Part pants who had any kind or cosmetic procedure	36	28.6%

From table 12, it can be seen that the majority of the sample did not have a cosmetic procedure. A small proportion had a non-surgical procedure and a very small proportion of the sample reported having a surgical cosmetic procedure.

Table 13

Non-surgical cosmetic procedures reported by the sample

Non-surgical cosmetic procedure had	Frequency	% of sample
Teeth whitening	14	11.11
Ceramic veneers/ cosmetic dentistry	4	3.17
Braces	4	3.17
Skin peel	4	3.17
Laser hair removal	4	3.17

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Mole or skin tag removed	3	2.38
Laser treatment for scarring/spider veins	3	2.38
Botox	2	1.59
Permeant/tattooed makeup	2	1.59
Fillers	1	0.79

Table 14

Surgical cosmetic procedures reported by the sample

Surgical cosmetic procedure had	Frequency	% of sample
Liposuction	2	1.59
Breast augmentation	1	0.79
Keloid scar removal	1	0.79
Rhinoplasty	1	0.79

Tables 13 and 14 show that the most popular non-surgical procedures were teeth whitening and cosmetic dentistry. This fits with previous literature that dental cosmetic procedures are very popular in the UK (Barford, 2008). The most commonly reported surgical cosmetic procedure in the current sample was liposuction. This is less consistent with statistical data, which suggests liposuction is the fifth most commonly had surgical cosmetic procedure in the UK, with breast augmentation being the most popular (British Association of Aesthetic Plastic Surgeons, 2015).

Table 15

Desired cosmetic procedures, ordered by most commonly wanted procedures

Cosmetic procedure desired	Frequency	% of sample
Cosmetic dentistry/teeth whitening/veneers	34	26.98%
Breast enhancement or augmentation	31	24.60%
Botox	19	15.08%
Rhinoplasty	11	8.73%
Liposuction	9	7.14%
Eye lift	8	6.35%
Tummy tuck	8	6.35%

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Laser hair removal	6	4.76%
Birth mark/mole removal	3	2.38%
Breast reduction	3	2.38%
Fillers	3	2.38%
Laser treatment for skin/scars	5	3.97%
Chin lift	3	2.38%
Facelift	2	1.59%
Ears pinned back	2	1.59%

The most commonly desired surgical procedure was a breast lift or augmentation. The non-surgical procedures most participants desired were teeth whitening and Botox. This data is very consistent with the statistical data about cosmetic procedures being requested in the UK (British Association of Aesthetic Plastic Surgeons, 2015; Gander, 2016).

Participants were asked to provide brief notes about why they chose to have the cosmetic procedures. Tables 16 and 17 show the key themes mentioned by participants in response to this question, separated by type of procedure. Some participants did not record a reason, other participants listed more than one reason for the procedures they had.

Table 16

Reasons reported by participants for their choice to have their non-surgical cosmetic procedures

Reasons recorded for why the participant had their non-surgical cosmetic procedure(s)	Number of participant responses
Felt teeth were discoloured or not straight	15
Hate or dislike for the body or body part	4
Comparison to others or fear others would notice	4
Dentist suggested or recommended	3
Desire to improve image or looks	3
Felt self-conscious or wanted to improve confidence	3

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Treat/reward to self	3
Felt ugly	2
Desire to remove hair	2
to combat signs of aging	2
Desire to cover up or hide the body or body part	1
Wanted to be happier	1
Obsession with body part	1
Aging	

Table 17

Reasons reported by participants for their choice to have their surgical cosmetic procedures

Reasons recorded for why the participant had their surgical cosmetic procedure(s)	Number of participant responses
Felt self-conscious or wanted to improve confidence	2
Hate or dislike for the body or body part	2
Felt fat/out of proportion	1
Desire to cover up or hide the body or body part	1

From both tables 16 and 17, the most commonly cited reasons for choosing non-surgical cosmetic procedures were specific to teeth colour and straightness. This clearly fits with the high numbers of participants who reported having cosmetic dental procedures. This is supported by evidence from British samples interest in cosmetic dentistry (Barton, 2006). The next most common reasons given related to a dislike of the body or appearance, and a comparison to others or fear others would notice. There is very little qualitative research into the reasons behind a person choosing cosmetic procedures. Therefore, it is difficult to compare these results to any literature to

ascertain whether these responses are supported by previous evidence. However, the work of Askegaard et al. (2002) reported a key theme from their female sample was a desire to correct a disliked body part. Therefore, the present results have some support from the very small literature base on the personal reasons given behind cosmetic procedure choice.

3.05 Inferential statistics

Desire for types of cosmetic procedures. The first hypothesis of the present study was that desire for a non-surgical cosmetic procedure would be positively correlated with desire for a surgical cosmetic procedure. A bivariate correlation between the two variables was conducted. This was used to investigate if these two variables are related or are independent of each other. Spearman's correlations were used, rather than Pearson's, due to the non-normal distribution of the majority of the variables.

The Spearman's correlation value was $r_s = 0.726$, $p < 0.001$. The high positive value shows a large effect size according to Cohen (1992). This result supports the first hypothesis, showing that as desire for non-surgical cosmetic procedures increased, so too did desire for surgical cosmetic procedures.

This particularly high correlation between desire for the two types of cosmetic procedure suggested that the two Likert scales may have in fact been measuring the same underlying construct. In order to test whether the two types of desire were so similar that they could be combined into one variable for later analysis, factor analysis was conducted.

A principal components analysis was conducted on the two items. No rotational analysis was conducted as there were not enough factors i.e. only one factor could be extracted due to only two items being included. The Kaiser-Meyer-Olkin value (KMO = .510) indicated that the sample size was adequate, being above 0.5 (Field, 2013). Bartlett's test of sphericity was also significant, ($\chi^2 (1) = 83.040$, $p < .001$). One factor explained 84.98% of the variance of the two variables, supporting the idea they could be considered one factor, both items had a factor loading of 0.9. The

Eigenvalue of the one factor was 1.7, which was over Kaiser’s recommended criterion of 1. A scree plot is included in appendix M.

Because the two variables were shown to load on to one factor, the computed variable of total ‘desire for cosmetic procedures’ was used in later analysis. This variable was created by calculating a mean value from the two scores on the two Likert scales, desire for non-surgical and surgical cosmetic procedures. therefore, the lowest score possible remained zero, with the highest being seven.

Comparison of those who had a cosmetic procedure to those who had not.

All those who reported having had a cosmetic procedure of any kind were compared to those who reported having had no cosmetic procedures. This data was collapsed into one ‘cosmetic procedure’ group for the purpose of analysis because too few participants reported having had a surgical cosmetic procedure for statistical power to be achieved.

The second hypothesis was that those who had a cosmetic procedure would show higher desire for cosmetic procedures when compared with those who have not yet had a cosmetic procedure. An independent samples t-test was conducted to compare the desire for cosmetic procedures between those who had already had a cosmetic procedure and those who had not. For this t-test, the Levene’s tests was insignificant, therefore there was homogeneity of variance.

Table 18

	Mean level of desire for	
	cosmetic procedures	Standard deviation
Participants who reported not having a procedure	3.0222	1.725
Participants who reported having had cosmetic procedure	3.8611	1.803

The mean values in table 18 show that those who had a cosmetic procedure reported higher desire for cosmetic procedures. Desire for cosmetic procedures was

significantly different between those who had a cosmetic procedure and those who did not, $t(124) = -2.434, p < 0.05$.

Self-esteem and dysmorphic concern. The third hypothesis was that dysmorphic concern would be negatively correlated with self-esteem. This was measured by a bivariate correlation between these variables. This hypothesis was supported, as there was a highly significant, negative correlation between these two variables, $r_s = -0.553, p < .001$, so as dysmorphic concern increases self-esteem decreases or vice versa.

Predictors of desire for cosmetic procedures. In order to understand the relationship between the independent and dependent variables, a bivariate correlation was conducted between all variables. All dummy coded demographic variables were included in the analysis. None of the dummy coded demographic variables correlated significantly with any other variables. The correlations between the other independent and dependent variables are present in table 21, with significant correlations being highlighted. The non-parametric test, Spearman's correlation was used as most of the data was non-normally distributed.

Table 21

Spearman's bivariate correlations between independent and dependant variables

	Self-esteem	Dysmorphic concern	Depression	Anxiety	Stress	OCD	Desire for cosmetic procedures
Self-esteem	1.000	-0.553**	-0.548**	-0.374**	-0.374**	-0.364**	-0.277**
Dysmorphic concern	-0.553**	1.000	0.404**	0.407**	0.438**	0.401**	0.353**
Depression	-0.548**	0.404**	1.000	0.468**	0.609**	0.367**	0.275**
Anxiety	-0.374**	0.407**	0.468**	1.000	0.658**	0.351**	0.104
Stress	-0.374**	0.438**	0.609**	0.658**	1.000	0.492**	0.298**
OCD	-0.364**	0.401**	0.367**	0.351**	0.492**	1.000	0.298**
Desire for cosmetic procedures	-0.277**	0.353**	0.275**	0.104	0.298**	0.298**	1.000

* denotes that the correlation is significant ($p < 0.05$)

** denotes that the correlation is highly significant ($p < 0.01$)

Desire for Cosmetic Procedures: An Investigation of Associated Factors

All correlation coefficients were below 0.8. Therefore, the assumption of multicollinearity was not violated (Field, 2013).

From the bivariate correlations, both self-esteem and dysmorphic concern were associated with all three subscales of the DASS. The DASS is a measure of overall distress, with a subscale for depression, anxiety and stress. From the direction of this relationship it appears lower self-esteem and higher levels of dysmorphic concern are both associated with all three subscales. This is consistent with the literature around the psychological difficulties experienced by those with poor self-esteem or BDD (Sowislo & Orth, 2013; Gunstad & Phillips, 2003).

As predicted, by the literature around BDD being a type of OCD, the OCD scale score was associated with dysmorphic concern, $r^s = 0.401$, $p < 0.001$ (Phillips et al., 1995; Mufaddel et al., 2013). Additionally, the OCD scores were correlated with desire for cosmetic procedures, $r^s = 0.298$, $p < 0.001$. These results support the inclusion of OCD as an independent variable in the regression analysis, so that OCD could be controlled for.

Depression, stress and OCD were all also significantly associated with desire for cosmetic procedures. These results also support the choice of the present study to include these measures in the research so that they could be controlled for in the regression analyses regarding predictors of desire of cosmetic procedures. Anxiety however was not significantly associated and was therefore not included in the regression analysis.

From table 21, it can be seen that there is a negative relationship between self-esteem and desire for cosmetic procedures, $r_s = -0.277$, $p < 0.001$. The effect size was small. Dysmorphic concern was also found to be associated with desire for cosmetic procedures. There was a highly significant positive relationship between the two variables, $r_s = 0.353$, $p < 0.001$. The effect size was medium.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

No demographic variables were associated the dependant variable of desire for cosmetic procedures. Therefore, none were included in the regression analysis.

The fourth hypothesis was that self-esteem and dysmorphic concern would predict level of desire for cosmetic procedures, when controlling for depression, anxiety, stress and OCD symptoms. To test this, a regression analysis was conducted. Desire for cosmetic procedures was the dependant variable. The independent variables were self-esteem and dysmorphic concern. Symptoms of depression, stress and OCD were all controlled for in both regression analyses.

To investigate if these factors remained significant predictors, a further, more complex regression model was conducted. A hierarchal regression model was used, so that levels of depression, stress and OCD could be controlled for. The beta coefficients are reported in table 22.

Bootstrapping was included to ensure the analyses were robust despite problems with the data being non-normal (Field, 2013). These confidence intervals are reported, in parentheses.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Table 22

Predictors of desire for cosmetic procedures

	B	SE B	B	p
Step 1				
Constant	2.525	.283		.001
	[1.962, 3.051]			
Depression	.078	.055	.180	.155
	[-0.029, 0.183]			
Stress	.066	.055	.150	.221
	[-0.050, 0.165]			
OCD	.007	.022	.036	.726
	[-0.028, 0.059]			
Step 2				
Constant	1.982	1.072		.067
	[-0.069, 4.171]			
Depression	.049	.054	.113	.369
	[-0.053, 0.158]			
Stress	.049	.054	.111	.371
	[-0.060, 0.149]			
OCD	-.009	.022	-.045	.663
	[-0.046, 0.043]			
Self-esteem	.006	.042	.015	.886
	[-0.079, 0.086]			
Dysmorphic concern	.109	.048	.280	.032
	[0.006, 0.199]			

95% bias corrected and accelerated confidence intervals reported in parentheses, confidence intervals and standard errors based on 1000 bootstrap samples.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

For model 1, the variance in desire to have a cosmetic procedure explained by the included variables was 10%, $R^2 = 0.100$, adjusted $R^2 = 0.077$, $F(3) = 4.404$, $p < 0.05$.

For model 2, the variance in desire to have a cosmetic procedure explained by the included variables was 15.1%, $R^2 = 0.151$, adjusted $R^2 = 0.115$, R^2 change = 0.051, F change (2, 117) = 3.512, $p < 0.05$.

As can be seen from model 2, only dysmorphic concern was a significant predictor of desire for cosmetic procedures. Therefore, when depression, stress and OCD symptoms are controlled for, dysmorphic concern significantly predicts level of desire for a surgical cosmetic procedure. However, this is not the case for self-esteem, which did not have a significant relationship with desire for cosmetic procedures, when other factors are controlled for.

3.06 Chapter Summary

The present chapter outlined each hypothesis and how the data was analysed in order to test those hypotheses, in turn. The results were described, with the key points of each analysis being highlighted. Most of the present hypotheses were supported by the data. Desire for the two types of cosmetic procedures were strongly correlated with each other, suggesting these concepts are highly related. Indeed factor analysis was used to show that one dependant variable, desire for cosmetic procedures, could be created. This was done using the mean of desire of the two types of cosmetic procedure studied. Those who had a cosmetic procedure showed significantly higher desire for further cosmetic procedures. Levels of dysmorphic concern were also shown to be strongly associated with levels of self-esteem for the women studied.

One hypothesis was not fully supported by the present study. The fourth hypothesis was that both self-esteem and dysmorphic concern would be predictive of level of desire for cosmetic procedures was not fully supported. Only dysmorphic concern predicted level of desire for cosmetic procedures, with self-esteem not explaining a significantly large enough proportion of unique variance in desire for cosmetic procedures.

The meaning of these results in relation to previous literature and theory will be addressed in the discussion chapter.

4. Discussion

4.01 Chapter Outline

In this chapter, the main research findings are discussed, in relation to the study hypotheses. The relevance of these findings and how they contribute to the body of literature is presented. Feminist theory and cognitive behavioural theory are employed to discuss and attempt to understand the results. The strengths of the study are highlighted. Ways in which the research could have been improved and how this might have affected the results and their ability to be generalised are also discussed. Future directions for research, based on this work, are suggested.

4.02 Key Contributions of the Study

One of the most important contributions of the present study is the inclusion of non-surgical cosmetic procedures. These procedures are growing in popularity and diversity very rapidly (American Society of Plastic Surgeons, 2015; Saner, 2017). Despite now being more common than surgical cosmetic procedures, research

around traditional plastic surgery still dwarves the research into these more modern non-surgical aesthetic procedures (Sarwer & Crerand, 2004).

The female participants in this study were found to have a strong association between self-esteem and dysmorphic concern. Given that dysmorphic concern was found by the study to be significantly predictive of desire for cosmetic procedures, these results together highlight one potential reason women may be likely to desire a cosmetic procedure.

The finding that those who had a cosmetic procedure were more likely to desire further procedures is in line with the ideas of the theories outlined in the introduction chapter. These results could also be considered as a factor in the fast-growing popularity of cosmetic procedures, that those who have a cosmetic procedure continue to want further cosmetic alterations to their appearance.

Furthermore, the results around self-esteem and dysmorphic concern contribute to an area of literature that was previously unclear. Much of the literature around the role of self-esteem in desire for cosmetic procedures was quite contradictory overall. The present results suggest that dysmorphic concern is the significant predictor in desire for cosmetic procedures, with self-esteem being so closely linked to dysmorphic concern that no unique variance in desire for cosmetic procedures can be explained by self-esteem.

4.03 Main findings

The present results are all based on a community sample of women in the UK. The main findings are presented in order of the research hypotheses outlined in the introduction chapter.

Levels of desire for cosmetic procedures. For non-surgical cosmetic procedures, the mean level of desire for non-surgical procedures was 3.2. For surgical cosmetic procedures, the mean was 2.72, out of a maximum score of seven (see tables 10 and 11 in the results chapter for a full description of each point on the Likert scale).

For non-surgical procedures, 38.1% of participants scored five or above. For surgical cosmetic procedures, 24% of the community sample scored five or above. Therefore, it appears the overall levels of desire for cosmetic procedures was relatively low, in this UK community sample. Desire for non-surgical procedures was higher than desire for surgical procedures.

For non-surgical cosmetic procedures, 19.8% of participants gave the lowest possible score, indicating a firm assurance that they did not want a non-surgical procedure. For surgical procedures, 34.9% of participants answered with a score of one. More participants appear to be certain about *not* wanting a surgical cosmetic procedure than a non-surgical procedure. Pitts-Taylor (2007) presented the idea that cosmetic procedures have an addictive quality, with one procedure appearing to make it more justifiable to choose to have more. It may be that until someone has had a surgical cosmetic procedure, the decision to undertake one is a set barrier in a person's mind, that they do not wish to overcome or challenge. Conversely, non-surgical cosmetic procedures are often less invasive, less expensive and less time consuming. These factors may be behind why people feel less set against the thought of choosing a non-surgical procedure for themselves. Pitts-Taylor (2007) went on to describe a huge reduction in stigma around procedures like Botox. Additionally, non-surgical cosmetic procedures are becoming more widely available in non-medicalised settings. Botox can now be administered by trained beauticians in hair salons (Rosenstein, 2017). This dilution into modern-day life, and the acceptance shown by society, may be behind the lower proportion of

participants who were firmly set against non-surgical procedures, in comparison to surgical ones.

Cosmetic procedures undergone and desired. Only 28.6% of the sample had had a cosmetic procedure, either non-surgical or surgical. The most popular non-surgical procedure was teeth whitening and the most popular surgical procedure was liposuction. This appears to support the data from cosmetic surgery providers about their most popular procedures (British Association of Aesthetic Plastic Surgeons, 2015; The American Society of Plastic Surgeons, 2015). This suggests the study found a representative sample in terms of the cosmetic procedures participants have had. Therefore, results appear generalisable to the UK population of people who have cosmetic procedures.

The most popular procedures that participants recorded wanting to have were cosmetic dentistry and breast implants or augmentation. Roughly 27% and 25% of the sample, respectively, reported desiring these procedures. Many participants listed several procedures they would like to have in the text box. This could suggest that a desire for cosmetic alterations is quite general, across the body as a whole. Rather than holding a dislike for only one area of the body, participants appeared to want to change or enhance many parts of themselves.

Comparison of those who had a cosmetic procedure to those who had not. Those who had a cosmetic procedure reported a significantly higher desire for cosmetic procedures, than those who had not had a cosmetic procedure. This could suggest that having one surgical procedure sparks an interest in further procedures. It could also suggest that once one area of the body has been modified, a person is left considering which other areas they may wish to alter. However, the quantitative results of this study are not conclusive and would suggest further study is needed on this area.

Feminist theory could also be used to explain why the women who had a cosmetic procedure showed higher desire for further cosmetic work. Feminist theory would hypothesise that these women were motivated to improve their self-esteem and address their concerns around their body, by making changes to their appearance. However, as this would not address the systemic influences of their experience, their desire to constantly improve their appearance would remain (Negrin, 2002; Jeffreys, 2014). Furthermore, these women would still exist in a patriarchal society, which would continue to leave them with the pressure to be attractive. The objectification these women would continue to experience would mean their dysmorphic concern would not improve and thus their desire for cosmetic procedures would remain (Fredrickson & Roberts, 1997; Roberts & Gettman, 2004). Additionally, these women may either feel more valuable for having altered their appearance, which could encourage them to continue spending their energy money and time in pursuit of further cosmetic changes. Other feminist writers who see cosmetic procedures as a form of female agency could also be used to describe the pattern in the present results (Davis, 1995). The female participants in the present study who had a cosmetic procedure may have enjoyed the experience of making an active choice in their bodies and their appearance and this may be behind their continued desire for cosmetic procedures being higher than the women who hadn't had any cosmetic procedures.

Cognitive behavioural theory formulates that cosmetic procedures are motivated by dysmorphic concern and the anxiety this raises (Phillips, 2005). Therefore, any negative responses or dissatisfaction with surgery could cause further psychological distress. For a person who was already unhappy about their appearance, to seek a cosmetic alteration of some kind, to be left feeling they do not look any better, or look worse than before, could have very negative consequences (Crerand & Sarwer, 2010). Those who are happy with surgery, according to cognitive behavioural theory, would experience a temporary

reduction in their anxieties about their appearance. This would then motivate them to continue using cosmetic procedures, to address negative emotions about their looks and the cycle of BDD would continue; similar to the compulsive actions seen in OCD.

Cognitive behavioural would explain the phenomena of cosmetic surgery having been contraindicated for those with diagnosed with BDD. These individuals are thought to be dissatisfied with their surgery results or go on to seek more (Sarwer, Wadden, Pertschuk & Whitaker, 1998b). The present results appear to be in line with these ideas, as those who had a cosmetic procedure showed greater desire for further cosmetic procedures. Therefore, the motivating factors that caused participants to seek their original procedure theoretically may have remained, possibility underlying the continued interest in cosmetic procedures.

Reasons behind cosmetic procedure choices. Participants were asked to briefly state why they chose to have their cosmetic procedures. This was asked in order to rule out any procedures that were had after an accident or illness. For example, a breast reconstruction after a mastectomy. As discussed previously, these procedures differ greatly from other cosmetic procedures and it is not appropriate to generalise research across these two types of procedure (Klassen et al., 1996). This was clearly outlined in the introductory information, for participants to read before they began the research. However, this question was still included to ensure all procedures being analysed by the research were generalisable to the rest of the data set. No participants reported having their procedures for reconstructive purposes due to an illness or injury. Therefore, no participants were excluded from analysis.

The responses participants gave, to describe why they had their cosmetic procedures, were qualitative in nature. The main points that were covered by the data are presented in the results section. However, the answers were so short that

qualitative analysis would not be appropriate. The present piece of research is quantitative. Furthermore, only one paper found in the review of the literature reported qualitative information about why their female sample had chosen to have cosmetic surgery. Therefore, it would not be appropriate to analyse this data in terms of themes or how this fits with the existing literature, not only because the present study gathered so little qualitative data, but because there is so little existing data to compare this to. The present chapter makes some tentative suggestions about the reasons participants reporting choosing their cosmetic procedures, in relation to feminist and cognitive behavioural theory.

Of the six participants who recorded a reason for their surgical cosmetic procedures, four of them mentioned they disliked or hated that body part or that they desired an improvement in their confidence. Seven participants also noted these reasons for why they chose their non-surgical cosmetic procedures. This appears to support the ideas provided by cognitive behavioural theory. A descriptive explanation of this can be found using an example of a formulation, based on the work of McManus et al. (2009) and their cognitive behavioural theory of self-esteem: A person may hold the rule for living that they need to look attractive in order to be liked or have friends. Their developed safety behaviours around this cognition could be to do all they can to improve their looks and avoid social situations. Reduced social interaction could have caused them to feel lower in confidence. Their core belief might have been that they less valuable to others, because they are less attractive. They may have chosen their cosmetic procedures to comply with their rules for living, now believing they are more worthy of social interaction because they have altered their looks, enabling them to feel more confident around others.

As previously discussed, the written information provided by participants is not sufficient for formal qualitative analysis to be suitable. However, based on this

small amount of information, tentative hypotheses can be drawn about how psychological theories might fit for these participants.

Desire for non-surgical and surgical cosmetic procedures. The study showed that desire for non-surgical cosmetic procedures was indeed strongly, positively correlated with desire for surgical cosmetic procedures ($r = 0.729$, $p < 0.001$). These results suggest that these are related constructs. When this was further assessed with factor analysis, it was clear that they could be considered together as one variable in later analysis. This could be beneficial for future research into non-surgical cosmetic procedures. Much of the existing research that has heavily focused on plastic surgery, may still relate somewhat to the desire to modify one's body in a non-surgical way. Ideally, the previous literature can be expanded upon rather than begun again. This result will hopefully make it more attractive and interesting for researchers to explore this area further, as there is already a strong, related body of literature to build upon.

Dysmorphic concern and self-esteem. As the present study hypothesised, dysmorphic concern was strongly, negatively correlated with self-esteem in this community sample. This is supported by previous research in the area. However, the literature remains unclear as to whether low self-esteem contributes to or is a symptom of dysmorphic concern (Phillips, Pinto & Jain, 2004). As the present study provides correlational, not causal, data, this cannot be ascertained from the present results.

The questionnaire used to measure self-esteem was the Rosenberg self-esteem scale (RSE; Rosenberg, 1979). Items on the RSE include 'I feel that I have a number of good qualities' and 'I wish I could have more respect for myself'. Items on the dysmorphic concern scale (DCQ; Oosthuizen et al., 1998) include 'have you ever been very concerned about some aspect of your physical appearance?' and 'have you ever considered yourself misformed or misshapen in

some way?'. The strong link between scores on these two measures are especially pertinent considering that no question in the RSE focuses on appearance in any way (see appendix H). The association between scores shows that the opinion we have of our body is very closely tied to the opinion we have of our inner selves, and vice versa. This link between self-esteem and dysmorphic concern has been strongly supported by past literature (Abell & Richards, 1996; Furnham et al., 2002; Green & Pritchard, 2003).

Phillips (1986) suggested that those who seek surgical cosmetic procedures are aiming to appear normal, rather than strikingly attractive. The dysmorphic concern measured in this research includes items on the ways a person feels their body is malfunctioning or wrong, rather than merely unattractive. This understanding of dysmorphic concern is about the distress and anxiety caused when a person considers the way they look, rather just the belief that they could potentially be more attractive. Therefore, the Dysmorphic Concern Questionnaire (DCQ; Oosthuizen, Lambert & Castle, 1998) appears to have been an appropriate measure to select, in researching symptoms of BDD and how they relate to a desire to have cosmetic procedures.

The present results also showed that self-esteem and dysmorphic concern both relate to desire for cosmetic procedures, but the variance they explain has a clear overlap, with dysmorphic concern accounting for a greater unique proportion of the variance in desire for cosmetic procedures. Erikson (1959) described the pain of low self-esteem being about a shame of being seen, causing a person to want to hide or disguise themselves. Therefore, the present measure of dysmorphic concern could be highlighting the level to which a person's self-esteem has meant they want to disguise or alter themselves physically, so that their previous, shameful self cannot be seen. Erikson's theory may explain why dysmorphic concern is the strongest predictor of desire for cosmetic procedures, when self-esteem and dysmorphic concern are both accounted for.

The literature also highlighted that self-esteem was most strongly tied to dysmorphic concern for women (Holliday & Taylor, 2006; Feingold, 1992; Weiner & Thompson, 1997). The present results supported this hypothesis, with a large effect size found for this female sample. The present results appear to support the idea that, for women, opinion of the self may rely heavily on the opinion of the outer appearance (Kling et al., 1999).

Dysmorphic concern and self-esteem as predictors of desire for cosmetic procedures. The present study found dysmorphic concern was strongly, positively correlated with desire for cosmetic procedures. This hypothesis was strongly supported by the literature in terms of traditional, surgical cosmetic procedures (Kisely et al., 2002; Callahan et al., 2011; Calegero et al., 2010a; Calegero et al., 2010b; Javo & Sørli, 2009). However, there was very little research that could be accurately generalised to non-surgical procedures like Botox. As the present research studied both surgical and non-surgical cosmetic procedures, the results can be generalised across a far wider range of cosmetic procedures.

The results around self-esteem are slightly more complex. Initially bivariate correlations showed self-esteem had a significant negative relation with desire for cosmetic procedures. However, when the other variables were included in the regression model, self-esteem no longer explained a significant proportion of unique variance in desire for cosmetic procedures.

Given that self-esteem and dysmorphic concern were found to be strongly associated with each other in the present sample overall, it is understandable that these two variables shared some variance in the regression models predicting desire for cosmetic procedures. It appears the two concepts were so closely linked that the variance they explained in the model almost completely overlapped. More

specifically, the unique variance explained by self-esteem alone was no longer large enough to be significantly related to desire for cosmetic procedures.

This may be an important factor in explaining how the previous literature around self-esteem and interest in cosmetic procedures was largely inconclusive. Lee (2011) showed a strong negative relationship between self-esteem and surgery interest. However, this study did not take any measure of body dysmorphia or body dissatisfaction. Therefore, it cannot be known whether their significant result around self-esteem would still be found if dysmorphic concern had been controlled for. In the present review of the literature, seven studies measured both attitudes to the body in some respect and self-esteem. Only two of these studies still found a significant relationship between self-esteem and desire for cosmetic procedures. Swami et al. (2012) studied body appreciation and self-esteem and found self-esteem was still negatively correlated with consideration of cosmetic surgery. Henderson-King and Henderson-King (2005) found self-esteem related to appearance was still correlated with consideration of cosmetic procedures when body esteem was also studied. The other five all found self-esteem to have no significant relationship with desire for cosmetic procedures when dissatisfaction. The literature as a whole, when taken with the results of the present study, suggests body image difficulties such as dysmorphic concern may explain more unique variance in the desire for cosmetic procedures than self-esteem.

4.04 Strengths and limitations of the present research

Strengths. A key strength of the study is the sufficiently powered sample size. The regression analyses for predictive factors of desire for cosmetic procedures were statistically powered, according to sample size calculations based on the number of independent variables. This supports the reliability of the results around desire for non-surgical and surgical cosmetic procedures. Therefore, the results could be appropriately generalised to other, similar community samples.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Despite many variables being non-normally distributed, more robust methods were used in analyses, such as bootstrapping in the regression analyses. This further supports the claim that results can still be generalised to other, similar populations (Field, 2013). Previous research in the area has often neglected to report sample size calculations (Callahan et al., 2011; Delinsky, 2012; Didie & Sarwer, 2003; Sante & Pasian, 2011). Therefore, it is difficult to ascertain whether statistical results are underpowered or have been overinflated by a sample size that greatly exceeds the powered number. Underpowered studies are also especially common in psychology research, this is thought to be a factor in the inconsistencies in the literature (Maxwell, 2004).

Another improvement upon much of the existing literature is the use of a community sample in the present research. Many previous studies have focused on undergraduate samples, with University students sometimes being awarded course credit for their participation in research (Calegero et al., 2010a; Calegero et al., 2010b; Delinsky, 2012; Markey & Markey, 2009, Park et al., 2009, Henderson-King & Henderson-King, 2005; Swami, Campana & Coles, 2012; Swami, Chamorro-Premuzic, Bridges and Furnham, 2009). Undergraduate populations are usually biased in terms of age, level of education and socio economic status (Kimmel, 2009). Therefore, the present results are likely to be more generalisable to the women of the UK.

The wide age range of the sample (20-69) was a strength of the present study, making the results more generalisable. The study found age did not correlate with desire to have a cosmetic surgery. Previous discussion in the area had speculated that it was younger people who were more likely to desire non-surgical procedures like Botox or fillers (Saner, 2017). However, from the present results it would appear cosmetic procedures are not necessarily more popular for younger people. It may be that this trend will become more apparent over time, as research in the area of non-surgical procedures develops.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Some research in surgical cosmetic procedures has shown interest to be relatively consistent across the lifespan in both men and women (Tiggemann, 2004; Frederick, Lever & Peplau, 2007). However, both positive and negative correlations between age and interest in cosmetic procedures have been reported by other studies (Swami et al., 2009; Henderson-King & Henderson-King, 2005; Swami, 2009). The literature regarding how age is related to the desire for cosmetic procedures is therefore inconsistent. Interestingly, research has shown that age itself may not be the predictive factor in desire to appear more attractive. For European American women aged over 65, feeling that one appears older than one's age was strongly associated with poorer body image, regardless of actual age (Sabik & Cole, 2017). Slevac and Tiggemann (2010) proposed that anxiety about aging and exposure to media, such as magazines and television, predicted higher consideration of cosmetic surgery. Therefore, it appears to be how a person perceives their appearance, in relation to their age, that affects their desire to have cosmetic procedures, rather than merely their age alone.

In summary, age did not explain a significant proportion of the variance in desire for either kind of cosmetic procedure. Age was also not predictive of likelihood of having a cosmetic procedure. Therefore, the present results appear to be equally generalisable to people of all ages, based on the sample studied and the results found.

Furthermore, the research itself has been more inclusive by having a wider age range within the sample. Cosmetic procedures are often advertised for their ability to make a person appear younger. Feminist writers have used this as evidence to highlight how older women are cast as less valuable or relevant in modern society. This serves to maintain the lower and continually objectified position women have in society overall (Gill, 2008). Much of the research into cosmetic procedures has studied only younger women, female students being a common sample (Calegero

et al., 2010b; Delinsky, 2012; Lee, 2001; Markey & Markey, 2009). This research could therefore be criticised for continuing to marginalise and ignore the experiences of older women. A strength of the present research is the inclusion of women across a wider proportion of the lifespan. It is hoped that by including their results and information within research, the experience of older women can be included and valued. The addition of these results to the literature could ideally include older women as an equally valuable cohort, within a wider conversation about cosmetic procedure use.

A strength of this research is the inclusion of non-surgical cosmetic procedures, making the present research relatively distinct within the literature. A review by Sarwer and Crerand (2004) highlighted that non-surgical procedures are neglected by the literature. They found no studies in which non-surgical aesthetic procedures were a focus. This is unrepresentative of the community of people having cosmetic procedures, given that non-surgical procedures are now more popular than surgical procedures (American Society of Plastic Surgeons, 2015). Surgical cosmetic procedures are suspected to be declining in popularity and non-surgical procedures have been credited as a leading cause in this downward trend. Non-surgical procedures are becoming ever-more sophisticated and capable of providing similar results to traditional plastic surgery. Additionally, they usually require far less recovery time. It appears many people, particularly young women, are choosing non-surgical cosmetic procedures in favour of surgical treatments (Saner, 2017). Therefore, the literature needs to reflect the increasing use of these procedures to be generalisable to the population of people who desire and undergo cosmetic procedures of all kinds.

Limitations. The present sample had some participants drop out. Despite 148 participants initially beginning the study, only 126 completed the full data set. The drop-out rate was just over seventeen percent. The introductory information to the study explained to participants that all their data would be deleted from

analysis if they left the study without completing it. For ethical reasons, this promise was adhered to and 22 participants' results were deleted before analysis.

Online survey research has been found to lead to an instant drop out of 10% of participants. Additionally, for each 100 survey items, a further 2% of participants drop out (Hoerger, 2010). Given these results, the dropout rate of the present study is in line with expected drop-out rates for online psychological research.

The introductory information stated the study would take roughly twenty minutes. Many participants completed the data set in around fifteen minutes. It may be that if participants were told the study would take less time, they might have been more likely to continue with the dataset. However, for ethical reasons the study wanted to make potential participants aware of the maximum amount of time they might need to dedicate to this study, in order to respect their contributions. The time required from participants was a key factor in the selection of questionnaires. Other measures of the concepts being studied were available. However, many of these were far longer or more complex to read and understand. These could have led to an even higher drop-out rate and an underpowered study. The study could have included a way for participants to return to the study at a later time. However, research suggests very few participants return to studies when this is available (Eysenbach, 2005).

A key limitation of the research was that results cannot be generalised to men, like much of the previous research in the area all participants were female (Von Soest et al., 2006; Swami, 2009; Slevic & Tiggemann, 2010; Markey & Markey, 2009; Delinsky, 2012; Lee, 2011; Didie & Sarwer, 2003; Sante & Pasian, 2011; Calogero et al., 2010b). Previous research has continually suggested that women show higher interest in cosmetic surgery and are more likely to report having had a procedure (Brown et al., 2007; Swami et al., 2008; Callahan et al., 2011; Crerand et al., 2004). Data from the American Society for Aesthetic Plastic Surgery, 2016)

show an overwhelming majority of cosmetic surgery patients are female. The same pattern is shown in the UK (The British Association of Aesthetic Plastic Surgeons, 2015). With regard to non-surgical cosmetic procedures, these are also more popular for women (American Society for Aesthetic Plastic Surgery, 2016). These statistics motivated the present research to focus on female participants. However, very little research in cosmetic procedures has included men. Therefore, it is not clear how men relate to or consider altering their appearance for aesthetic reasons. Another difficulty with only studying women, is that the conversation within the literature continues to represent cosmetic procedure patients as only being female. This is problematic as it reinforces a stereotypical notion that only women are interested in altering their appearance.

At present, due to patriarchal expectations and standards of maleness, there is more stigma and less understanding of male body image difficulties (Wienke, 1998; Strother, Lemberg, Stanford & Turberville, 2012). Boys and men have been found to experience pressure to fit a certain 'masculine' aesthetic, however, this is currently considered to differ to the body image difficulties of women. For example, men are thought to associate a muscular appearance with confidence and success (Grogan & Richards, 2002).

In addition, the way the present study has gathered data is possibly gendered, in the measures and language used. Therefore, it is unlikely to be replicable with male participants, without alteration. Some research has suggested that self-esteem could be different for males in comparison to females. Female self-esteem has been shown to be derived from the level of interconnectedness to others; male self-esteem was shown to be more strongly linked to personal achievement and independence (Josephs, Markus & Tafarodi, 1992). The measure of self-esteem used in the present study, the RSE (Rosenberg, 1979), has been well validated for both genders (Robins et al., 2001) and includes items relating to both achievement, others and the opinion of the self. Therefore, the measure of self-esteem used

appears to have been appropriate for an all-female sample and could be equally appropriate to have been used with male participants.

However, in the case of dysmorphic concern, the measure used may not have been appropriate for male participants. Research has suggested that male body image may be harder to measure, in that some scales aimed at measuring body image difficulties are less suitable for men. A popular measure used by many studies in the present literature review, the Multidimensional Body-Self Relations Questionnaire (MBSRQ; Brown et al., 1990), references thinness as a body ideal and has therefore been considered less useful for men, who value a more muscular appearance as an ideal, rather than thinness (Cafri & Thompson, 2004). The Dysmorphic Concern Questionnaire (DCQ; Oosthuizen et al., 1998) used by the present study has been validated in both genders. It is considered to be an appropriate measure in assessing the level of dysmorphic concern, the key symptom of BDD, in men as well as women (Mancuso, Knoesen & Castle, 2010). However, it is still worthy of note that anxiety about the body and appearance is often seen to be more common in women (Heinberg & Thompson, 1992). Therefore, it may be that a measure of this kind could have appeared less relevant to male participants, if the study had included them. Again, the results regarding dysmorphic concern cannot be generalised to men due to the all-female sample.

The most gendered aspect of the measures used are the questions around desire for cosmetic procedures. The word cosmetic has been thought to be especially gendered, being of far less relevance and meaning to men (Aizura, 2009). The term cosmetic is thought to have connotations of being trivial and is considered to be 'feminised' in nature (Holliday & Taylor, 2006). The examples the study provided to explain the difference between non-surgical and surgical procedures were all procedures which are more popular with women, such as Botox. Furthermore, it is likely these terms and examples are more commonly relevant to women, shown in

Desire for Cosmetic Procedures: An Investigation of Associated Factors

female-orientated magazines far more than those aimed at men for example (Grogan, 2016).

Magazines aimed at both men and women often focus on appearance and body ideals (Morry & Staska, 2001). However, men have been found to show a desire to distance themselves from perceived 'female' ideas about dieting and body image. Gough (2007) found men were more likely to be secretive about an interest in changing their body. Women, conversely, were perceived to be well-versed in dieting and concern around body image. Qualitative research may be able to investigate if there is stigma or shame for men attached to discussing their feelings about their body or desire to change it. This would very useful for the literature, given the upward trend in men seeking cosmetic procedures (Pruitt, 2005). Therefore, future research examining whether there are gender differences in desire for cosmetic procedures and the associated factors would likely benefit from studying these concepts in a way that it more accessible and relatable for male participants than the present study.

The study had hoped to find more participants who had had a cosmetic procedure of any kind. Due to the small number of participants who reported having a cosmetic procedure, the t-test – which compared the desire for cosmetic procedures between those who had had a procedure already and those who did not - was underpowered. This meant that a type two error, of failing to find a significant result, was more likely. However, as the t-test still found a significant result, this suggests the sample size did not impair the study in terms of this t-test analysis. An option for the study to gain more participants who reported having a cosmetic procedure could have been selective sampling, targeting cosmetic procedure providers like plastic surgeons waiting rooms or beautician salons which offer non-surgical cosmetic procedures. This however would not have been a truly unbiased community sample, which was the original aim of the research.

One critique of the present research is the lack of validated measure for the study of desire for cosmetic procedures. Other research which measured attitudes to cosmetic surgery or interest in surgery has found higher rates of consideration to undertake surgery. For example, Swami (2009) used a subscale of the Acceptance of Cosmetic Surgery Scale (ACSS; Henderson-King & Henderson-King, 2005) to measure consideration of surgery, with a population of female undergraduate students. Of a maximum score of seven, the sample mean was 4.2. The ACSS is a well validated measure (Henderson-King & Henderson-King, 2005) with good internal consistency for each subscale (Cronbach's alpha for interpersonal subscale: 0.8, social subscale: 0.78 and consider subscale: 0.74; Farshidfar, Dastjerdi & Shahabizadeh, 2013).

A key feature of the present research was a focus on non-surgical procedures as well as surgical ones. No validated measure exists that measures desire for non-surgical procedures or includes non-surgical procedures such as Botox. Therefore, a validated scale was not available to be used to measure this construct. The ACSS could possibly have been reworded to include non-surgical cosmetic procedures. However, this edited measure would not have been tested for reliability and validity. The present research has completed factor analysis to show that desire for non-surgical cosmetic procedures loads onto desire for surgical cosmetic procedures to form one factor. It is hoped that this finding can be used to support future research, to develop and validate a modified scale such as the ACSS to study both non-surgical and surgical cosmetic procedures. This could be very beneficial to future research given the rise of non-surgical procedures, as they already appear to have overtaken traditional cosmetic surgery in terms of popularity (Gronow, 2017). A new, validated scale that can account for both types of cosmetic procedure would be invaluable to future research.

Furthermore, the ACSS (Henderson-King & Henderson-King, 2005) includes a subscale which measures consideration of surgery, rather than desire for cosmetic

procedures. The present study defined desire as the level of interest in or drive for a cosmetic procedure. As the ACSS measures consideration, many of the items in the measure are hypothetical. E.g. 'If I could have a surgical procedure done for free I would consider trying cosmetic surgery' (Henderson-King & Henderson-King, 2005). The hypothetical aspect of this measure was considered less helpful. Given that the present study wanted to ask about participants current and direct desire to have a cosmetic procedure, it seemed unnecessary and even less ethical to ask participants to complete another measure rather than ask this one direct question.

The present sample was highly biased in terms of the level of education of participants. The sampling method that was utilised, snow ball sampling, is the likely cause of this flaw. This method can often result in a sample with an over-representation of certain characteristics due to the similarities between the initial participants and the additional participants they recruit (Magnani, Sabin, Saidel & Heckathorn, 2005). The initial participants who then shared the link to the study were likely to have recruited more people like themselves. This is also suggested by the high proportion (42.1%) of participants working in the health care and social assistance sector. In this sample, 67.4% of the sample had a degree or further degree such as a master or a PhD. Census data for the UK, taken in 2011, show only 27.2% of the population have a degree or higher degree of any kind (Office for National Statistics, 2016). Therefore, it may not be appropriate to generalise the results to another, less educated sample.

However, results may still be suitable to generalise to the wider UK population, across education levels. Furnham and Levitas (2012) studied attitudes to cosmetic surgery. They found education levels of their sample had no relationship with a reported likelihood to undergo surgery or the belief that cosmetic surgery was beneficial. The present research found no significant relationship between level of education and desire for non-surgical or surgical cosmetic procedures.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Furthermore, those who reported having a cosmetic procedure did not differ in terms of education level. This could suggest that results could be generalised to rest of the UK. However, until more research is conducted in less educated populations, to confirm the lack of effect of education levels, results should only be generalised with caution.

A flaw in the present study, as with much of the research in the area, is the lack of ethnic diversity in the sample. The majority of participants were White British; however, other ethnicities were represented in the sample (Irish, Indian, Chinese, African, Arab and mixed). None of the dummy coded variables for ethnicity proved to have a significant relationship to the dependent variables, therefore the results provided by all participants were able to be included and considered as a whole. However, it may be that a non-significant relationship between ethnicity and desire for cosmetic procedures was not found due to the very small number of participants in the other ethnic categories. Research has shown dysmorphic concern and low self-esteem are experienced globally, in all cultures (Kronenfeld, Reba-Harrelson, Von Holle, Reyes & Bulik, 2010; Xu et al., 2010; Akan & Grilo, 1995). However, the opinion on cosmetic surgery differs, with Caucasian populations showing significantly higher acceptance of surgical cosmetic procedures (Swami, Campana & Coles, 2012). Swami and Hendrikse (2013) studied British Asian and Afro-Caribbean people living in the UK. They found that stronger affiliations to traditional values and ethnic identities were associated with less acceptance and interest in cosmetic surgery. The results of the present study are therefore difficult to generalise outside of a majority White British community.

It may also be that the way the study has aimed to collect its data is biased in terms of ethnicity and may have taken a very Eurocentric and White-centric approach. The examples provided in the questions about desire for cosmetic procedures may be more common to White participants and more related to White people. Participants of other ethnicities or cultures may have potentially considered other

procedures or ideas when thinking of ways to alter the appearance for purely aesthetic reasons. These participants may have found these questions less relevant and so data gained from them may be less valid or representative. For example, skin lightening or bleaching is a cosmetic procedure that has been growing in popularity, particularly in areas of Asia and Africa (Charleston, 2016). This is not only a cosmetic procedure that is very specific to particular ethnicities in terms of popularity, but also highlights how beauty standards are built around being White as the ideal, thereby being far more oppressive to people of colour (Okopny, 2005). Furthermore, the motivations behind why women seek cosmetic procedures may differ between ethnicities. Kaw (1993) suggested that the Asian American women who were more likely to have cosmetic surgery if they had internalised the belief that their facial features were racialized and therefore held negative connotations. This is especially difficult to study given that cosmetic procedures themselves are heavily euro-centric. Balsamo (1996) studied the very manuals used to train cosmetic surgeons. She reported that cosmetic surgeons are trained in facial symmetry and beauty ideals based on White, Western faces and bodies. Understanding the relationship between ethnicity and cosmetic procedure use is therefore a very complex, requiring much more research. The present study has not been able to provide results that can add to this aspect of the cosmetic procedure literature, as results are only generalisable to White participants in Western cultures.

This research could also appear to be less inclusive in terms of disability and health. The cosmetic surgeries or procedures that are undertaken following illness, physical injury or in order to correct a birth defect or disability differ from those had for purely aesthetic reasons in many ways (Klassen et al., 1996). Patients having reconstructive surgeries after cancer treatments were shown to seek surgery for different reasons, show different post-surgical outcomes and differ in terms of the satisfaction with their surgery results. The actual cosmetic procedures themselves also differ in terms of surgery technique and recovery time (Klassen et

al., 1996). Due to this known difference, only very specific types of cosmetic procedure could be studied or the sample of results would be incomparable and potentially invalid (Hopwood 1993).

Accordingly, it was made clear to participants that the cosmetic procedures being investigated were those had for purely aesthetic reasons, without any prior injury or illness being a factor. This allowed participants to exit the study without wasting any of their valuable time. Nonetheless, it could have left potential participants who had faced a health difficulty or disability of any kind feeling less valued by the present research and the research may have been experienced as discriminatory and ableist (Dunn & Andrews, 2015). The researcher included clear contact details for any participants who had any questions or concerns about the study. No potential participants came forward to discuss this but the nature of ableism in research is still an important point to note.

The online data collection and predominately online advertising and recruitment of participants could have allowed for an international sample. Previous research in this area is often focused on one population and this makes international or multicultural comparison very difficult. However, due to the potentially personal and upsetting nature of the measures being used, an ethically appropriate support system needed to be in place for participants. In this case participants were advised to speak with their GP or call the Samaritans if they were distressed by the content of the study. Appropriate support systems could not be identified for a worldwide sample of participants. Partnerships with other Universities or organisations in other countries could potentially facilitate more international research.

Another limitation of the present research could be the order in which the questionnaires were presented. Participants were asked about their self-esteem and dysmorphic concern before they were asked about their interest in cosmetic procedures. This could have potentially highlighted or reminded participants of

their feeling about themselves or things they disliked about their bodies. When they were later asked about their desire for cosmetic procedures they might have been more likely to report higher desire. However, the overall mean desire for either type of cosmetic procedure was not especially high at 3.20 for non-surgical procedures and 2.72 for surgical procedures. Furthermore, self-esteem and dysmorphic concern are likely to be far more fixed concepts that could not swayed or increased by merely being asked about them. How the desire for cosmetic surgery is fixed or primeable is unclear. It could be that future research in this area employs an A/B strategy in the order that the questionnaires are provided. This could provide important results around how concrete or malleable the constructs of self-esteem, dysmorphic concern and desire of cosmetic procedures may be.

The present thesis did not aim to pathologise a desire for cosmetic procedures. Over 51,000 cosmetic surgeries were conducted in the UK in 2015 (The British Association of Aesthetic Plastic Surgeons, 2015). It would be inappropriate to suggest every cosmetic procedure patient has a mental health difficulty (Lemma, 2010). However, the paper studied desire for cosmetic procedures in relation to dysmorphic concern, which is a key symptom of the diagnosis of BDD. This was done in order study the hypotheses of feminist and cognitive behavioural theory, which focus on the anxiety and distress surrounding body image and how this motivates a desire for cosmetic procedures. However, this resulted in the study taking an inadvertently diagnostic and potentially pathologising tone, by viewing attitudes to the body in line with a psychiatric diagnosis. The thesis could have potentially studied attitudes to and opinions about the appearance in a more open or positive way, such as body appreciation or body satisfaction, using measures like the Body Appreciation Scale (BAS: Avalos, Tylka, & Wood-Barcalow, 2005) or the Body Image Satisfaction Scale (BISS: Ferreira & Leite, 2002).

4.05 Additional directions for future research

Desire for Cosmetic Procedures: An Investigation of Associated Factors

The present study found a large overlap between self-esteem and levels of dysmorphic concern, in terms of their ability to predict desire for cosmetic procedures. This could suggest that self-esteem and beliefs about the body cannot always be understood or measured separately. The rise of social media in recent years has been blamed for the lower self-esteem and poorer body image of young people, particularly for women (Gajanan, 2015). In many articles regarding this, self-esteem and dysmorphic concerns appear to be used relatively interchangeably; with a pressure to be validated as more attractive through social media appearing to have a huge impact on self-worth (Simmons, 2016). Research has already shown an association between aspects of self-worth and use of social media, with those who share more photos online being more likely to describe their self-worth as contingent on public opinion of themselves (Stefanone, Lackaff & Rosen, 2011). Future research could aim to understand how modern self-esteem is constructed. It may be that there are facets of self-esteem that are separate from judgements about the appearance. Alternatively, it could be found that, for women, beliefs about appearance are so powerful that self-esteem is heavily tied to them. The present results would suggest that further research into this area would be hugely beneficial, in order to understand the similarities and differences between dysmorphic concerns and self-esteem.

One area of future research yet to be noted could include house hold income or socio economic status (SES). This is often over looked in this realm of research. The literature around body image and social class or economic status is currently contradictory (Grogan, 2016). Higher SES had been found to be associated with higher self-esteem in adults (Twenge & Campbell, 2002). Other research has found no significant impact of social class on self-esteem in adults (Gecas & Seff, 1989).

Adolescent school children of higher social class were more worried about their weight and had poorer self-esteem about their bodies than their lower-class peers. This was true for both boys and girls (O'Dea & Caputi, 2001; Wardle & Marsland,

1990). Other studies of adolescents found no relationship between social class and body image (Toro, Castro, Garcia, Perez & Cuesta, 1989). It can be difficult to take an appropriate or representative measure of socio economic class as this is such a complex and multi-faceted concept (Shavers, 2007). This could be behind the mixed results in the literature. This may also be why many studies and indeed the present research, has neglected to study social class. It may be that, without valid and reliable measures of social class, it will not be useful to investigate how class relates to cosmetic procedures.

The present study explained to participants that a non-surgical procedure was ‘any procedure done purely for cosmetic reasons that did not require anaesthetic’. The examples given to help participants were Botox, teeth whitening and chemical peels. An open text box was included for participants to record which procedures they had had. This was done in order to understand which procedures were being referenced and also to remove any inappropriate response like procedures that were for medical, non-cosmetic purposes such as tumour removal or biopsy for example. Only a few examples were given to allow participants to decide for themselves what to include.

The definition of a non-surgical procedure is still unclear. There are many ways to modify the body to achieve an aesthetic outcome. It is not currently known how a community sample would define body modifications like piercings, which are seen as very common and widely culturally acceptable (Forbes, 2001; Martin, 1997). It may be that these are not considered cosmetic procedures because they are so common or readily available. At the present time, very little is known about how a non-surgical cosmetic procedure is defined across a UK sample. Future qualitative research would be very beneficial, to discover if there is a definitive set of procedures that are thought of as cosmetic procedures. This research could also be used a bench-mark, to investigate if ideas around cosmetic procedures alters over time. How society accepts cosmetic procedure may alter over time based on how

they are defined. More qualitative research conducted could begin to understand if this shift is taking place. Ideally more longitudinal research could assess whether the construct of ‘cosmetic procedures’ changes over time. Health psychology researchers caution that qualitative research into appearance requires an empathetic and sensitive approach, in order to prevent participant distress (Rumsey & Harcourt, 2005).

Longitudinal data about how having a cosmetic procedure might influence the desire to seek more aesthetic alterations of this kind would be invaluable to a more in-depth understanding of the role dysmorphic concern plays. Both feminist theory and cognitive behavioural theory would suggest that having one cosmetic procedure would not reduce the factors that motivated the procedure. They would also suggest that the act of choosing a cosmetic procedure might increase the likelihood that a person would feel they need further cosmetic changes. The present data suggests support for this pattern. However, this can only be hypothesised from the present results. The correlational nature of the results can suggest associated factors with the choice to undergo cosmetic procedures or the desire to have them in the future. Long term research would be needed, to follow up participants who report a high desire to have a cosmetic procedure, to ascertain whether this translates into having a cosmetic procedure. This would be very beneficial to the literature. Multiple follow-ups could also study how desire for cosmetic procedures fluctuates over time.

A persistent need to change the appearance of the body is often a symptom of BDD (APA, 2013). Groenman and Sauer (1983) spoke of the ‘insatiable’ cosmetic surgery patient; they suggested those who sought repeated surgeries might be presenting with a type of mental illness that was yet to be diagnosed. It appears that the use of cosmetic procedures, particularly plastic surgery, have sometimes been associated with mental health difficulties or emotional distress. This present study and many previous papers have examined the link between psychological

symptoms and cosmetic procedures (Callahan et al., 2011; Lee, 2011; Swami et al., 2012; Swami et al., 2009; Von Soest et al., 2006). However, this may be reinforcing a negative and inappropriate idea. Future research could benefit from a more open approach to understand why people desire cosmetic procedures and eventually chose to undergo them. Qualitative methods could be particularly suitable here, to uncover themes of reasons behind cosmetic procedures, in a way that would allow participants to share their own choices in their words, without the use of potentially pathologizing questionnaires.

4.06 Chapter Summary

The discussion chapter highlighted the contributions this work made to the existing literature: an investigation of non-surgical cosmetic procedures, a further understanding of the link between self-esteem and dysmorphic concern, with regard to their association with desire for cosmetic procedures. Dysmorphic concern has been found to be the most significant predictive factor of desire for cosmetic procedures. The present study has proposed that these results may be useful in understanding why the previous literature around self-esteem and cosmetic procedures was inconclusive. This chapter covered all other main findings, and discussed the strengths and potential limitations of the work. Future directions for research were suggested, a key area being a greater understanding of the association between self-esteem and dysmorphic concern.

4.07 Conclusion

In conclusion, the present thesis begins to expand the literature on cosmetic procedures beyond the traditional plastic surgery. The results highlight that dysmorphic concern is a strong predictor of desire for cosmetic procedures. The study also sheds light on the previously inconclusive field of research around self-esteem and cosmetic procedures. The study initially supported the idea that self-

esteem is indeed related to desire for cosmetic procedures. However, it appears a key reason for inconclusive findings about self-esteem may be that dysmorphic concern explains some of the same variance in desire for cosmetic procedures that self-esteem would explain. When dysmorphic concern is controlled for, self-esteem no longer significantly predicts desire for cosmetic procedures.

Results support both the literature and cosmetic procedure statistics about the most popular and most desirable cosmetic procedures. Participants who had cosmetic procedures also continued to desire further cosmetic procedures, more so than those who had not undergone any. The present thesis has used feminist theory and cognitive behavioural theory to describe why this pattern might be the case.

The field of cosmetic changes that a person can choose to make to their appearance is growing in complexity. The results of this research begin to show how more modern non-surgical cosmetic procedures can be considered in line with more widely researched surgical options. This will hopefully inspire and inform future research into a fuller understanding of cosmetic procedures.

References

- Abell, S. C., & Richards, M. H. (1996). The relationship between body shape satisfaction and self-esteem: An investigation of gender and class differences. *Journal of Youth and Adolescence*, 25(5), 691-703.
- Abroms, L., Jorgensen, C. M., Southwell, B. G., Geller, A. C., & Emmons, K. M. (2003). Gender differences in young adults' beliefs about sunscreen use. *Health Education & Behavior*, 30(1), 29-43.
- Acker, J., Barry, K., & Esseveld, J. (1983). Objectivity and truth: Problems in doing feminist research. *Women's Studies International Forum* 6(4), 423-435).
- Aizura, A. Z. (2009). Where health and beauty meet: Femininity and racialisation in Thai cosmetic surgery clinics. *Asian Studies Review*, 33(3), 303-317.
- Akan, G. E., & Grilo, C. M. (1995). Sociocultural influences on eating attitudes and behaviors, body image, and psychological functioning: A comparison of African- American, Asian- American, and Caucasian college women. *International Journal of Eating Disorders*, 18(2), 181-187.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders (3rd ed., rev.)*. Washington, DC: American Psychiatric Publishing

Desire for Cosmetic Procedures: An Investigation of Associated Factors

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders (4th ed., rev.)*. Washington, DC: American Psychiatric Publishing

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington, DC: American Psychiatric Publishing.

The American Society for Aesthetic Plastic Surgery (2016). *Cosmetic Surgery National Data Bank Statistics*. Available at:
<http://www.surgery.org/sites/default/files/ASAPS-Stats2015.pdf>

The American Society of Plastic Surgeons (2015) *Plastic Surgery Statistics Report*. Retrieved from
<https://d2wirczt3b6wjm.cloudfront.net/News/Statistics/2015/plastic-surgery-statistics-full-report-2015.pdf>

Archer, M. S. (1995). *Realist social theory: The morphogenetic approach*. Cambridge: Cambridge University Press.

Askegaard, S., Gertsen, M. C., & Langer, R. (2002). The body consumed: Reflexivity and cosmetic surgery. *Psychology & Marketing, 19*(10), 793-812.

Association of American Medical Colleges (2016). *The State of Women in Academic Medicine: The Pipeline and Pathways to Leadership, 2013-2014*. Retrieved from <https://www.aamc.org/members/gwims/statistics/>

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The Body Appreciation Scale: development and psychometric evaluation. *Body image*, 2(3), 285-297.
- Ball, K., & Kenardy, J. (2002). Body weight, body image, and eating behaviours: relationships with ethnicity and acculturation in a community sample of young Australian women. *Eating behaviors*, 3(3), 205-216.
- Balsamo, A. (1992). On the cutting edge: cosmetic surgery and the technological production of the gendered body. *Camera Obscura*, 10(1 28), 206-237.
- Balsamo, A. M. (1996). *Technologies of the gendered body: Reading cyborg women*. Durham, USA: Duke University Press.
- Barahmand, U., Mozdsetan, N., & Narimani, M. (2010). Body dysmorphic traits and personality disorder patterns in rhinoplasty seekers. *Asian journal of psychiatry*, 3(4), 194-199.
- Barford, V. (2008). American v British teeth. *BBC News*. Retrieved from <http://news.bbc.co.uk/1/hi/7633254.stm>
- Barton, L. (2006). Grin and bare it. *The Guardian*. Retrieved from <https://www.theguardian.com/lifeandstyle/2006/mar/02/healthandwellbeing.health>
- Bauman, Z. (1995). *Life in fragments*. Oxford: Blackwell.
- Baumeister, R.F. (2001). "Violent Pride." *Scientific American* 384(4): 96–101.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Bayer, K. (2005). Cosmetic surgery and cosmetics: Redefining the appearance of age. *Generations*, 29(3), 13-18.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck depression inventory-II. *San Antonio*, 78(2), 490-8.
- Bedford, A., & Foulds, G. A. (1978). The personal distress inventory and scales. *Windsor, UK: NFER*.
- Bentall, D. P. R. (1999). The medicalisation of misery: A critical realist analysis of the concept of depression. *Journal of mental health*, 8(3), 261-274.
- Benton, T. (1991). Biology and social science: why the return of the repressed should be given a (cautious) welcome. *Sociology*, 25(1), 1-29.
- Berberick, S. N. (2010). The objectification of women in mass media: Female self-image in misogynist culture. *The New York Sociologist*, 5, 1-15.
- Berrios, G. E., & Porter, R. (Eds.). (1995). *A history of clinical psychiatry: the origin and history of psychiatric disorders*. London: Athlone.
- Bhaskar, R. (1978). On the possibility of social scientific knowledge and the limits of naturalism. *Journal for the Theory of Social Behaviour*, 8(1), 1-28.
- Bhaskar, R. 1993. *Dialectic: The Pulse of Freedom*. London: Verso
- Bhaskar, R. (2013). *A realist theory of science*. London: Routledge.
- Bhaskar, R. (2014). *The possibility of naturalism: A philosophical critique of the contemporary human sciences*. London: Routledge.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Bienvenu, O. J., Samuels, J. F., Riddle, M. A., Hoehn-Saric, R., Liang, K. Y., Cullen, B. A., Grados, M. A., & Nestadt, G. (2000). The relationship of obsessive–compulsive disorder to possible spectrum disorders: results from a family study. *Biological psychiatry*, *48*(4), 287-293.
- Bordo, S. (1993). *Unbearable weight: Feminism, western culture and the body*. Berkeley, CA: University of California Press.
- British Association of Aesthetic Plastic Surgeons (2014). *Britain Sucks* [Press Release] Retrieved from <https://baaps.org.uk/about-us/press-releases/1833-britain-sucks>
- British Association of Aesthetic Plastic Surgeons (2015). *Tweak not Tuck* Retrieved from <http://baaps.org.uk/about-us/press-releases/2039-auto-generate-from-title>
- Brown, T. A., Cash, T. F., & Mikulka, P. J. (1990). Attitudinal body-image assessment: Factor analysis of the Body-Self Relations Questionnaire. *Journal of Personality Assessment*, *55*, 135–144.
- Brown, A., Furnham, A., Glanville, L., & Swami, V. (2007). Factors that affect the likelihood of undergoing cosmetic surgery. *Aesthetic Surgery Journal*, *27*(5), 501-508.
- Bryman, A. (1984). The debate about quantitative and qualitative research: a question of method or epistemology?. *British journal of Sociology*, *75*-92.
- Bryman, A., & Bell, E. (2015). *Business research methods*. Oxford University Press, USA.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Cafri, G., & Thompson, J. K. (2004). Measuring Male Body Image: A Review of the Current Methodology. *Psychology of Men & Masculinity*, 5(1), 18.

Callaghan, G. M., Lopez, A., Wong, L., Northcross, J., & Anderson, K. R. (2011). Predicting consideration of cosmetic surgery in a college population: A continuum of body image disturbance and the importance of coping strategies. *Body Image*, 8(3), 267-274.

Calogero, R. M., Pina, A., Park, L. E., & Rahemtulla, Z. (2010a). Objectification theory predicts college women's attitudes toward cosmetic surgery. *Sex Roles*, 63(1-2), 32-41.

Calogero, R. M., Pina, A., Park, L. E., & Rahemtulla, Z. (2010b). Objectification theory predicts college women's attitudes toward cosmetic surgery. *Sex Roles*, 63(1-2), 32-41.

Cash, T. F. (2004). Body image: Past, present, and future. *Body image*, 1(1), 1-5.

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

Cash, T. F., Melnyk, S. E., & Hrabosky, J. I. (2004). The assessment of body image investment: An extensive revision of the Appearance Schemas Inventory. *International Journal of Eating Disorders*, 35(3), 305-316.

Cash, T. F., Phillips, K. A., Santos, M. T., & Hrabosky, J. I. (2004). Measuring 'negative body image': Validation of the Body Image Disturbance Questionnaire in a nonclinical population. *Body Image*, 1, 363-372.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Cash, T. F., Santos, M., & Williams, E. (2005). Coping with body-image threats and challenges: Validation of the Body Image Coping Strategies Inventory. *Journal of Psychosomatic Research*, 58, 191–199.
- Castle, D. J., Molton, M., Hoffman, K., Preston, N. J., & Phillips, K. A. (2004). Correlates of dysmorphic concern in people seeking cosmetic enhancement. *Australian and New Zealand Journal of Psychiatry*, 38(6), 439-444.
- Cepanec, D., & Payne, B. (2000). Old Bags' under the knife: Facial cosmetic surgery among women. In B. Miedema, J. Stoppard, & V. Anderson (Eds.). *Women's Bodies, Women's Lives* (121-141). Toronto: Sumach Press.
- Chapkis, W. (1986). *Beauty secrets: Women and the politics of appearance*. USA: South End Press.
- Charleston, L-J. (2016). A Look At The Rise Of Skin Whitening Creams. *The Huffington Post*. Retrieved from http://www.huffingtonpost.com.au/2016/04/24/skin-whitening-beauty_n_9753900.html
- Ching, S., Thoma, A., McCabe, R. E., & Antony, M. M. (2003). Measuring outcomes in aesthetic surgery: a comprehensive review of the literature. *Plastic and reconstructive surgery*, 111(1), 469-482.
- Clark, D. A., & Taylor, S. (2009). The transdiagnostic perspective on cognitive-behavioral therapy for anxiety and depression: new wine for old wineskins?. *Journal of Cognitive Psychotherapy*, 23(1), 60-66.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Clarke, L. H., & Griffin, M. (2008). Visible and invisible ageing: Beauty work as a response to ageism. *Ageing and Society*, 28(05), 653-674.
- Cohen, J. (1992). A power primer. *Psychological bulletin*, 112(1), 155.
- Cole, R. P., Shakespeare, V., Shakespeare, P. G., & Hobby, J. A. (1994). Measuring outcome in low-priority plastic surgery patients using quality of life indices. *British journal of plastic surgery*, 47(2), 117-121.
- Collier, A. (1994). *Critical realism: an introduction to Roy Bhaskar's philosophy*. London: Verso.
- Collins, H. (2010). *Creative research: the theory and practice of research for the creative industries*. SA: Ava Publishing.
- Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairbum, C. G. (1987). The development and validation of the Body Shape Questionnaire. *International Journal of eating disorders*, 6(4), 485-494.
- Costa, F. R. (2003). *CPS: escalas de personalidade de Comrey: manual*. São Paulo: Vetor.
- Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatisation of people with mental illnesses. *The British Journal of Psychiatry*, 177(1), 4-7.
- Crerand, C. E., Franklin, M. E., & Sarwer, D. B. (2006). Body dysmorphic disorder and cosmetic surgery. *Plastic and reconstructive surgery*, 118(7), 167-180.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Crerand, C. E., Menard, W., & Phillips, K. A. (2010). Surgical and minimally invasive cosmetic procedures among persons with body dysmorphic disorder. *Annals of plastic surgery*, 65(1), 11.
- Crerand, C. E., & Sarwer, D. B. (2010). Cosmetic treatments and body dysmorphic disorder. *Psychiatric Annals*, 40(7), 344-348.
- Crerand, C. E., Sarwer & Lowe, M. R. (2004). Rate of body dysmorphic disorder among patients seeking facial plastic surgery. *Psychiatric Annals*, 34(12), 958-965.
- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, S. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85,894-908.
- Cororve, M. B., & Gleaves, D. H. (2001). Body dysmorphic disorder: a review of conceptualizations, assessment, and treatment strategies. *Clinical Psychology Review*, 21(6), 949-970.
- Danermark, B., Ekström, M., Jakobsen, L., & Karlsson, J. C. (2002). Explaining society. *Critical realism in the social sciences*. London: Routledge.
- Davis, K. (1991). Remaking the She- Devil: A Critical Look at Feminist Approaches to Beauty. *Hypatia*, 6(2), 21-43.
- Davis, K. (1995) *Reshaping the Female Body: The Dilemma of Cosmetic Surgery*. New York and London: Routledge
- Davis, K. (1997). Cosmetic Surgery as Feminist Utopia?. *European Journal of Women's Studies*, 4(1), 23-37.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

De Beauvoir, S. (1974). *The second sex* (H. M. Parshley, Trans.). New York: Vintage (Original work published 1949).

Delinsky, S. S. (2005). Cosmetic Surgery: A Common and Accepted Form of Self-Improvement? *Journal of Applied Social Psychology, 35*(10), 2012-2028.

Denzin, N. (1992). The many faces of emotionality: Reading persona. In C. Ellis & M. G. Flaherty, *Investigating Subjectivity: Research on Lived Experience* (1st ed., pp. 17-30). London: Sage Publications.

Derogatis, L. R. (1998). The derogatis sexual functioning inventory. *Handbook of sexuality-related measures, 269-271*.

Dey, J. K., Ishii, M., Phillis, M., Byrne, P. J., Boahene, K. D., & Ishii, L. E. (2015). Body dysmorphic disorder in a facial plastic and reconstructive surgery clinic: measuring prevalence, assessing comorbidities, and validating a feasible screening instrument. *JAMA facial plastic surgery, 17*(2), 137-143

Didie, E. R., & Sarwer, D. B. (2003). Factors that influence the decision to undergo cosmetic breast augmentation surgery. *Journal of Women's Health, 12*(3), 241-253.

Dingman, S., Melilli-Otte, M. E., & Foster, C. (2012). Cosmetic surgery: Feminist perspectives. *Women & Therapy, 35*(3-4), 181-192.

Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of personality and social psychology, 24*(3), 285.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Dove (2016). *The Dove Global Beauty and Confidence Report*. Retrieved from <https://www.dove.com/uk/stories/about-dove/our-research.html>
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70, 1327–1343.
- Dufresne, R. G., Phillips, K. A., Vittorio, C. C., & Wilkel, C. S. (2001). A screening questionnaire for body dysmorphic disorder in a cosmetic dermatologic surgery practice. *Dermatologic Surgery*, 27(5), 457-462.
- Durbin, J., & Watson, G. S. (1951). Testing for serial correlation in least squares regression. II. *Biometrika*, 38(1-2), 159-178.
- Dunn, D. S., & Andrews, E. E. (2015). Person-first and identity-first language: Developing psychologists' cultural competence using disability language. *American Psychologist*, 70(3), 255.
- Ercolani, M., Baldaro, B., Rossi, N., & Trombini, G. (1999). Five-year follow-up of cosmetic rhinoplasty. *Journal of psychosomatic research*, 47(3), 283-286.
- Eco, U. (2007). *On Ugliness* (A. McEwen, Trans.). New York: Rizzoli.
- Edgerton, M. T., Jacobson, W. E., & Meyer, E. (1960). Surgical-psychiatric study of patients seeking plastic (cosmetic) surgery: ninety-eight consecutive patients with minimal deformity. *British journal of plastic surgery*, 13, 136-145.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Efron, B., & Tibshirani, R. J. (1994). *An introduction to the bootstrap*. Washington DC: CRC press.
- Eichenbaum, L., & Orbach, S. (1983). *Understanding women: A feminist psychoanalytic approach*. Arizona: Basic Books.
- Epp, A. M., & Dobson, K. S. (2010). The evidence base for cognitive-behavioral therapy. In K. S. Dobson (Ed.). *Handbook of cognitive-behavioral therapies* (39-73). London: Guilford Press.
- Erikson, E. H. (1959). Identity and the life cycle: Selected papers. *Psychological Issues*, 1(1), 69.
- Eriksen, S. J. (2012). To Cut or Not to Cut: Cosmetic Surgery Usage and Women's Age-Related Experiences. *The International Journal of Aging and Human Development*, 74(1), 1-24.
- Eysenbach, G. (2005). The law of attrition. *Journal of medical Internet research*, 7(1), e11.
- Fagien, S., & Carruthers, J. D. (2008). A comprehensive review of patient-reported satisfaction with botulinum toxin type A for aesthetic procedures. *Plastic and reconstructive surgery*, 122(6), 1915-1925.
- Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: Interview or self-report questionnaire?. *International Journal of Eating Disorders*, 16(4), 363-370.
- Feingold, A. (1992). Good-looking people are not what we think. *Psychological bulletin*, 111(2), 304.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Fennell, M. J. (1998). Cognitive therapy in the treatment of low self-esteem. *Advances in Psychiatric Treatment*, 4(5), 296-304.
- Fennell, M. J. (2006). Low self-esteem. In S. Felgoise, A. M. Nezu, C. M. Nezu & M. A. Reinecke (Eds.). *Encyclopedia of Cognitive Behavior Therapy* (236-240). New York: Springer US.
- Ferreira, M. C., & Leite, N. G. D. M. (2002). Adaptação e validação de um instrumento de avaliação da satisfação com a imagem corporal. *Avaliação Psicológica*, 1(2), 141-149.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.) London: Sage.
- Field, H. (1988). Realism, mathematics and modality. *Philosophical Topics*, 16(1), 57-107.
- Fleetwood, S., & Ackroyd, S. (2004). *Critical realist applications in organisation and management studies*. London: Routledge.
- Fleming, J., & Szmukler, G. I. (1992). Attitudes of medical professionals towards patients with eating disorders. *Australian and New Zealand Journal of Psychiatry*, 26(3), 436-443.
- Frankenberg, R. (1990). Review article: Disease, literature and the body in the era of AIDS—a preliminary exploration. *Sociology of health & illness*, 12(3), 351-360.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of women quarterly*, 21(2), 173-206.
- Frederick, D. A., Lever, J., & Peplau, L. A. (2007). Interest in cosmetic surgery and body image: Views of men and women across the lifespan. *Plastic and reconstructive surgery*, 120(5), 1407-1415.
- Foa, E. B., Huppert, J. D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., & Salkovskis, P. (2002). The Obsessive Compulsive Inventory: Development and validation of a short version. *Psychological Assessment*, 14, 485-496.
- Forbes, G. B. (2001). College students with tattoos and piercings: Motives, family experiences, personality factors, and perception by others. *Psychological reports*, 89(3), 774-786.
- Forbes, G. B., Collinsworth, L. L., Jobe, R. L., Braun, K. D., & Wise, L. M. (2007). Sexism, hostility toward women, and endorsement of beauty ideals and practices: Are beauty ideals associated with oppressive beliefs?. *Sex Roles*, 56(5-6), 265-273.
- Franzoi, S. L., & Shields, S. A. (1984). The Body Esteem Scale: Multidimensional structure and sex differences in a college population. *Journal of personality assessment*, 48(2), 173-178.
- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of women quarterly*, 21(2), 173-206.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Friederich, H. C., Uher, R., Brooks, S., Giampietro, V., Brammer, M., Williams, S. C., Herzog, W., Treasure, J., & Campbell, I. C. (2007). I'm not as slim as that girl: neural bases of body shape self-comparison to media images. *Neuroimage*, 37(2), 674-681.
- Frisch, M. B. (1994). *Manual and treatment guide for the Quality of Life Inventory*. Minneapolis, MN: National Computer Systems.
- Frith, K., Shaw, P., & Cheng, H. (2005). The Construction of Beauty: A Cross-Cultural Analysis of Women's Magazine Advertising. *Journal of communication*, 55(1), 56-70.
- Frank, P. (2013). ORLAN Talks Plastic Surgery, Beauty Standards And Giving Her Fat To Madonna. *The Huffington Post*. Retrieved from http://www.huffingtonpost.com/2013/01/29/performance-artist-orlan-interview-beauty-surgery_n_2526077.html
- Furnham, A., & Levitas, J. (2012). Factors that motivate people to undergo cosmetic surgery. *The Canadian Journal of Plastic Surgery*, 20(4), 47.
- Furnham, A., Badmin, N., & Sneade, I. (2002). Body image dissatisfaction: Gender differences in eating attitudes, self-esteem, and reasons for exercise. *The Journal of psychology*, 136(6), 581-596;
- Gabriel, S. E., Woods, J. E., O'Fallon, W. M., Beard, C. M., Kurland, L. T., & Melton, L. J. (1997). Complications leading to surgery after breast implantation. *New England Journal of Medicine*, 336(10), 677-682.
- Gajanan, M. (2015). Young women on Instagram and self-esteem: 'I absolutely feel insecure' *The Guardian*. Retrieved from

Desire for Cosmetic Procedures: An Investigation of Associated Factors

<https://www.theguardian.com/media/2015/nov/04/instagram-young-women-self-esteem-essena-oneill>

- Gander, K. (2016, February 8). Cosmetic surgery operations on the rise, with breast enlargement most popular procedure. *The Independent - Health News*. Retrieved from <http://www.independent.co.uk/life-style/health-and-families/health-news/cosmetic-surgery-up-in-2015-with-breast-enlargement-most-popular-procedure-a6860641.html>
- Garner, D. M. (2004). *The Eating Disorder Inventory-3. Professional manual*. Odessa, FL: Psychological Assessment Resources, Inc
- Gecas, V., & Seff, M. A. (1989). Social class, occupational conditions, and self-esteem. *Sociological Perspectives*, 32(3), 353-364.
- Gergen, K. J. (1985). The social constructionist movement in modern psychology. *American psychologist*, 40(3), 266.
- Gill, R. (2008). Empowerment/sexism: Figuring female sexual agency in contemporary advertising. *Feminism & Psychology*, 18(1), 35-60.
- Gilman, S. L. (1999). *Making the body beautiful: A cultural history of aesthetic surgery*. New Jersey: Princeton University Press.
- Groenman, N. H., & Sauer, H. C. (1983). Personality characteristics of the cosmetic surgical insatiable patient. *Psychotherapy and psychosomatics*, 40(1-4), 241-245.
- Grogan, S. (2016). *Body image: Understanding body dissatisfaction in men, women and children*. London: Routledge.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Grogan, S., & Richards, H. (2002). Body image: Focus groups with boys and men. *Men and masculinities*, 4(3), 219-232.
- Gronow, C. (2017). Cosmetic Surgery's Decline in 2016. *Aesthetics*. Retrieved from <https://aestheticsjournal.com/feature/cosmetic-surgery-s-decline-in-2016>
- Goddard, K. (2000). "Looks maketh the man": The female gaze and the construction of masculinity. *The Journal of Men's Studies*, 9(1), 23-39.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological medicine*, 9(01), 139-145.
- Gore, J. S., & Cross, S. E. (2011). Defining and measuring self-concept change. *Psychological Studies*, 56(1), 135-141.
- Goodman, M. P., Placik, O. J., Benson III, R. H., Miklos, J. R., Moore, R. D., Jason, R. A., Matlock, D. L., Simopoulos, A. F., Stern, B. H., Stanton, R. A., Kolb, S. E., & Gonzalez, F. (2009). A large multicenter outcome study of female genital plastic surgery. *The journal of sexual medicine*, 7(4), 1565-1577.
- Goodman, W. K. (1997). A severity rating scale for body dysmorphic disorder: Development, reliability, and validity of a modified version of the Yale-Brown Obsessive-Compulsive Scale. *Psychopharmacology Bulletin*, 33, 17-22.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big- Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Gough, B. (2007). ‘Real men don’t diet’: An analysis of contemporary newspaper representations of men, food and health. *Social science & medicine*, 64(2), 326-337.
- Green, S. P., & Pritchard, M. E. (2003). Predictors of body image dissatisfaction in adult men and women. *Social Behavior and Personality: an international journal*, 31(3), 215-222.
- Grosz, E. A. (1994). *Volatile bodies: Toward a corporeal feminism*. Indiana: Indiana University Press.
- Gunstad, J., & Phillips, K. A. (2003). Axis I comorbidity in body dysmorphic disorder. *Comprehensive psychiatry*, 44(4), 270-276.).
- Haas, C. F. (2008). Motivating factors for seeking cosmetic surgery: a synthesis of the literature. *Plastic Surgical Nursing*, 28(4), 177-182.
- Halliwell, E., & Dittmar, H. (2004). Does size matter? The impact of model's body size on women's body-focused anxiety and advertising effectiveness. *Journal of Social and Clinical Psychology*, 23(1), 104-122.
- Hamermesh, D. S., & Abrevaya, J. (2013). Beauty is the promise of happiness?. *European Economic Review*, 64, 351-368.
- Harding, S. G. (1987). *Feminism and methodology: Social science issues*. Indiana University Press.

- Hargreaves, D. A., & Tiggemann, M. (2004). Idealized media images and adolescent body image: "Comparing" boys and girls. *Body image, 1*(4), 351-361.
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology, 60*(6), 895.
- Heinberg, L. J., & Thompson, J. K. (1992). Social comparison: Gender, target importance ratings, and relation to body image disturbance. *Journal of social behavior and personality, 7*(2), 335.
- Heinberg, L. J., Thompson, J. K., & Stormer, S. (1995). Development and validation of the sociocultural attitudes towards appearance questionnaire. *International Journal of Eating Disorders, 17*(1), 81-89.
- Henderson-King, D., & Henderson-King, E. (2005). Acceptance of cosmetic surgery: Scale development and validation. *Body Image, 2*(2), 137-149.
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 44*(2), 227-239.
- Hoerger, M. (2010). Participant dropout as a function of survey length in Internet-mediated university studies: Implications for study design and voluntary participation in psychological research. *Cyberpsychology, Behavior, and Social Networking, 13*(6), 697-700.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive therapy and research*, *36*(5), 427-440.
- Holliday, R., & Taylor, J. S. (2006). Aesthetic surgery as false beauty. *Feminist Theory*, *7*(2), 179-195.
- Honigman, R. J., Phillips, K. A., & Castle, D. J. (2004). A review of psychosocial outcomes for patients seeking cosmetic surgery. *Plastic and reconstructive surgery*, *113*(4), 1229.
- Hopwood, P. (1993). The assessment of body image in cancer patients. *European Journal of Cancer*, *29*(2), 276-281.
- Houston, S. (2001). Beyond social constructionism: Critical realism and social work. *British Journal of Social Work*, *31*(6), 845-861.
- Jacobson, M., & Mazur, L. A. (1995). *Marketing Madness: A Survival Guide for a Consumer Society* Boulder, CO: Westview.
- Javo, I. M., & Sørli, T. (2009). Psychosocial predictors of an interest in cosmetic surgery among young Norwegian women: a population-based study. *Plastic and reconstructive surgery*, *124*(6), 2142-2148.
- Jeffreys, S. (2014). *Beauty and misogyny: Harmful cultural practices in the West*. London: Routledge.
- Jeffries, S. (2009). Orlan's art of sex and surgery. *The Guardian*. Retrieved from <https://www.theguardian.com/artanddesign/2009/jul/01/orlan-performance-artist-carnal-art>

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Johnsen, T. J., & Friberg, O. (2015). The effects of cognitive behavioral therapy as an anti-depressive treatment is falling: A meta-analysis. *Psychological Bulletin, 141*(4), 747.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher, 33*(7), 14-26.
- Jorgensen, L., Castle, D., Roberts, C., & Groth-Marnat, G. (2001). A clinical validation of the Dysmorphic Concern Questionnaire. *Australian and New Zealand Journal of Psychiatry, 35*(1), 124-128.
- Josephs, R. A., Markus, H. R., & Tafarodi, R. W. (1992). Gender and self-esteem. *Journal of Personality and Social Psychology, 63*(3), 391-402.
- Kaminski, P. L., Chapman, B. P., Haynes, S. D., & Own, L. (2005). Body image, eating behaviors, and attitudes toward exercise among gay and straight men. *Eating Behaviors, 6*(3), 179-187.
- Kaminsky, J., & Gadaleta, D. (2002). A study of discrimination within the medical community as viewed by obese patients. *Obesity surgery, 12*(1), 14-18.
- Kaw, E. (1993). Steven Polgar Prize Essay (1991). Medicalization of racial features: Asian American women and cosmetic surgery. *Medical Anthropology Quarterly, 7*(1), 74-89.
- Kendrick, K. (2008). 'Normalizing' female cancer patients: Look good, feel better and other image programs. *Disability & Society, 23*(3), 259-269.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Kimmel, A. J. (2009). *Ethical issues in behavioral research: Basic and applied perspectives*. New Jersey: John Wiley & Sons
- Kisely, S., Morkell, D., Allbrook, B., Briggs, P., & Jovanovic, J. (2002). Factors associated with dysmorphic concern and psychiatric morbidity in plastic surgery outpatients. *Australian and New Zealand Journal of Psychiatry*, *36*(1), 121-126.
- Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: a meta-analysis. *Psychological bulletin*, *125*(4), 470.
- Klassen, A., Jenkinson, C., Fitzpatrick, R., & Goodacre, T. (1996). Patients' health related quality of life before and after aesthetic surgery. *British journal of plastic surgery*, *49*(7), 433-438.
- Klein, D. F. (2005). Beyond significance testing: Reforming data analysis methods in behavioral research. *American Journal of Psychiatry*, *162*(3), 643-644.
- Knafo, D. (2009). Castration and Medusa: Orlan's art on the cutting edge. *Studies in Gender and Sexuality*, *10*(3), 142-158.
- Knorr, N. J., Edgerton, M. T., & Hoopes, J. E. (1967). The “insatiable” cosmetic surgery patient. *Plastic and Reconstructive Surgery*, *40*(3), 285–289.
- Korichi, R., & Pelle-de-Queral, D. (2008). Why women use makeup: Implication of psychological. *Journal of cosmetic science*, *59*, 127-137.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Krebs, G., Turner, C., Heyman, I., & Mataix-Cols, D. (2012). Cognitive behaviour therapy for adolescents with body dysmorphic disorder: A case series. *Behavioural and cognitive psychotherapy*, 40(04), 452-461.
- Kronenfeld, L. W., Reba-Harrelson, L., Von Holle, A., Reyes, M. L., & Bulik, C. M. (2010). Ethnic and racial differences in body size perception and satisfaction. *Body Image*, 7(2), 131-136
- Kozee, H. B., & Tylka, T. L. (2006). A test of objectification theory with lesbian women. *Psychology of Women Quarterly*, 30, 348–357.
- Kuczynski, A. (1998). Plastic surgeons: Why so few women? *The New York Times*. Retrieved from <http://www.nytimes.com/1998/07/12/style/plastic-surgeons-why-so-few-women.html>
- Lakoff, R. T., & Scherr, R. L. (1984). *Face value, the politics of beauty*. London: Routledge.
- Langlois, J. H., Kalakanis, L., Rubenstein, A. J., Larson, A., Hallam, M., & Smoot, M. (2000). Maxims or myths of beauty? A meta-analytic and theoretical review. *Psychological bulletin*, 126(3), 390.
- Lasher, K. P., & Faulkender, P. J. (1993). Measurement of aging anxiety: Development of the anxiety about aging scale. *The International Journal of Aging and Human Development*, 37(4), 247-259.
- Leary, M. R., & Kowalski, R. M. (1993). The Interaction Anxiousness Scale: Construct and criterion-related validity. *Journal of Personality Assessment*, 61, 136–146.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Lee, H. B. (1948). Spirituality and beauty in artistic experience. *The Psychoanalytic Quarterly*, 17(4), 507-523.
- Lee, H. K. (2011). Factors Influencing Need for Cosmetic Surgery among High School Girls. *Korean Journal of Women Health Nursing*, 17(2).
- Leichsenring, F., & Leibing, E. (2003). The effectiveness of psychodynamic therapy and cognitive behavior therapy in the treatment of personality disorders: a meta-analysis. *American journal of psychiatry*, 160(7), 1223-1232.
- Lemma, A. (2010). *Under the skin: A psychoanalytic study of body modification*. London: Routledge.
- Lennon, S. J., & Rudd, N. A. (1994). Linkages between Attitudes toward Gender Roles, Body Satisfaction, Self- Esteem, and Appearance Management Behaviors in Women. *Family and Consumer Sciences Research Journal*, 23(2), 94-117.
- Lioffi, C. (2003). *Appearance related concerns across the general and clinical populations* (Unpublished Doctoral dissertation) City University, London).
- Loland, N. W. (1998). Body image and physical activity. A survey among Norwegian men and women. *International Journal of Sport Psychology*, 29(4), 339-365.
- Margalio, Z., & Chung, K. C. (2007). Systematic reviews: A primer for plastic surgery research. *Plastic and reconstructive surgery*, 120(7), 1834-1841.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Markey, C. N., & Markey, P. M. (2009). Correlates of young women's interest in obtaining cosmetic surgery. *Sex Roles, 61*(3-4), 158-166.
- Maxwell, S. E. (2004). The persistence of underpowered studies in psychological research: causes, consequences, and remedies. *Psychological methods, 9*(2), 147.
- McKay, D., Neziroglu, F., & Yaryura-Tobias, J. A. (1997). Comparison of clinical characteristics in obsessive-compulsive disorder and body dysmorphic disorder. *Journal of Anxiety Disorders, 11*(4), 447-454.
- Macionis, J. J., & Gerber, L. M. (2008). *Sociology* (6th ed.). Toronto: Prentice-Hall
- McKinley, N. M., & Hyde, J. S. (1996). The objectified body consciousness scale Development and Validation. *Psychology of women quarterly, 20*(2), 181-215.
- Magnani, R., Sabin, K., Saidel, T., & Heckathorn, D. (2005). Review of sampling hard-to-reach and hidden populations for HIV surveillance. *Aids, 19*, S67-S72.
- Mancuso, S. G., Knoesen, N. P., & Castle, D. J. (2010). The Dysmorphic Concern Questionnaire: A screening measure for body dysmorphic disorder. *Australian & New Zealand Journal of Psychiatry, 44*(6), 535-542.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological review, 98*(2), 224.
- McClintock, A. (2013). *Imperial leather: Race, gender, and sexuality in the colonial contest*. Routledge.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- McEvoy, P., & Richards, D. (2006). A critical realist rationale for using a combination of quantitative and qualitative methods. *Journal of Research in Nursing, 11*(1), 66-78.
- McManus, F., Waite, P., & Shafran, R. (2009). Cognitive-behavior therapy for low self-esteem: a case example. *Cognitive and Behavioral Practice, 16*(3), 266-275.
- Mehrabian, A. (2005). *Manual for the Conformity Scale*. Monterey, CA: University of California, Los Angeles.
- Meningaud, J. P., Benadiba, L., Servant, J. M., Herve, C., Bertrand, J. C., & Pelicier, Y. (2001). Depression, anxiety and quality of life among scheduled cosmetic surgery patients: Multicentre prospective study. *Journal of Cranio-Maxillofacial Surgery, 29*(3), 177-180.
- Milkman, H. B., & Wanberg, K. W. (2007). *Cognitive-behavioral treatment: A review and discussion for corrections professionals*. Washington, DC: US Department of Justice, National Institute of Corrections.
- Miller, L. C., & Cox, C. L. (1982). For appearances' sake: Public self-consciousness and makeup use. *Personality and Social Psychology Bulletin, 8*(4), 748-751.
- Morgan, K. P. (1991). Women and the knife: Cosmetic surgery and the colonization of women's bodies. *Hypatia, 6*(3), 25-53.
- Morry, M. M., & Staska, S. L. (2001). Magazine exposure: Internalization, self-objectification, eating attitudes, and body satisfaction in male and female

Desire for Cosmetic Procedures: An Investigation of Associated Factors

university students. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 33(4), 269.).

Moss, T. P., & Harris, D. L. (2009). Psychological change after aesthetic plastic surgery: a prospective controlled outcome study. *Psychology, health & medicine*, 14(5), 567-572.

Mufaddel, A., Osman, O. T., Almugaddam, F., & Jafferany, M. (2013). A review of body dysmorphic disorder and its presentation in different clinical settings. *The primary care companion for CNS disorders*, 15(4).

Mulvey, L. (1975). Visual pleasure and narrative cinema. *Screen*, 16, 6-18.

Narrow, W. E., & Kuhl, E. A. (2011). Dimensional approaches to psychiatric diagnosis in DSM-5. *The journal of mental health policy and economics*, 14(4), 197-200.

Nasser, N. (1988). Culture and weight consciousness. *Journal of Psychosomatic Research*, 32, 573-577.

Nassab, R., Hamnett, N., Nelson, K., Kaur, S., Greensill, B., Dhital, S., & Juma, A. (2010). Cosmetic tourism: public opinion and analysis of information and content available on the Internet. *Aesthetic Surgery Journal*, 30(3), 465-469.

National Eating Disorders Collaboration (2016). *What is Body Image*. Retrieved from <http://www.nedc.com.au/body-image>

Desire for Cosmetic Procedures: An Investigation of Associated Factors

National Institute for Clinical Excellence (2005). *Obsessive-compulsive disorder: Core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder*. London: HMSO.

Negrin, L. (2002). Cosmetic surgery and the eclipse of identity. *Body & Society*, 8(4), 21-42.

Nevid, J. S., Rathus, S. A., & Greene, B. (1991). *Abnormal psychology*. Toronto: Person.

Neziroglu, F., & Khemlani-Patel, S. (2002). A review of cognitive and behavioral treatment for body dysmorphic disorder. *CNS spectrums*, 7(6), 464-471.

Neziroglu, F., Roberts, M., & Yaryura-Tobias, J. A. (2004). A behavioral model for body dysmorphic disorder. *Psychiatric Annals*, 34(12), 915-920.

Nielsen, B. H. (2000). *An investigation into the relationship between self-esteem and patriarchal and feminist attitudes of Protestant women seminarians and lay women regarding selected Biblical passages and Christian theological constructs*. (Doctoral dissertation). Retrieved from University of Massachusetts Doctoral Dissertations 1896 - February 2014 (Accession No. 1274).

O'Dea, J. A., & Caputi, P. (2001). Association between socioeconomic status, weight, age and gender, and the body image and weight control practices of 6-to 19-year-old children and adolescents. *Health education research*, 16(5), 521-532.

Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency (2016). *2011 Census aggregate data*. UK

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Data Service (Edition: June 2016). Retrieved from:

<https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare>

Okopny, C. L. (2005). *Reconstructing women's identities: The phenomenon of cosmetic surgery in the united states* (Doctoral dissertation, University of South Florida).

Oliver, J. E., & Lee, T. (2005). Public opinion and the politics of obesity in America. *Journal of health politics, policy and law*, 30(5), 923-954.

Oosthuizen, P., Lambert, T., & Castle, D. J. (1998). Dysmorphic concern: prevalence and associations with clinical variables. *Australian and New Zealand Journal of Psychiatry*, 32(1), 129-132.

Orbach, S. (1978) *Fat is a Feminist Issue*. New York: Paddington Press

Orbach, S. (2005). *Hunger strike: The anorectic's struggle as a metaphor for our age*. Karnac Books.

Otto, M. W., Wilhelm, S., Cohen, L. S., & Harlow, B. L. (2001). Prevalence of body dysmorphic disorder in a community sample of women. *Prevalence*, 158(12).

Panayi, A. (2015). The Prevalence of Body Dysmorphic Disorder in Patients Undergoing Cosmetic Surgery: a Systematic Review. *Psychiatria Danubina*, 27(1), 438-444.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Park, L. E. (2007). Appearance-based rejection sensitivity: Implications for mental and physical health, affect, and motivation. *Personality and Social Psychology Bulletin*, 33, 490–504.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17–59). San Diego: Academic.
- Pelham, B. W., & Swann, W. B. (1989). From self-conceptions to self-worth: on the sources and structure of global self-esteem. *Journal of personality and social psychology*, 57(4), 672.
- Phillips, K. A. (2005). *The broken mirror: Understanding and treating body dysmorphic disorder*. New York: Oxford University Press.
- Phillips, K.A., Dufresne, R.G., Wilkel, C., & Vittorio, C.C. (2000). Rate of body dysmorphic disorder in dermatology patients. *Journal of the American Academy of Dermatology*, 42, 436-441.
- Phillips, K. A., Grant, J. E., Siniscalchi, J. M., Stout, R., & Price, L. H. (2005). A retrospective follow-up study of body dysmorphic disorder. *Comprehensive psychiatry*, 46(5), 315-321.
- Phillips, K. A., Hollander, E., Rasmussen, S. A., & Aronowitz, B. R. (1997). A severity rating scale for body dysmorphic disorder: development, reliability, and validity of a modified version of the Yale-Brown Obsessive Compulsive Scale. *Psychopharmacology bulletin*, 33(1), 17.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Phillips, K. A., Hollander, E., Rasmussen, S. A., Aronowitz, B. R., DeCaria, C., & Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research, 7*, 156-176.
- Phillips, K. A., McElroy, S. L., Hudson, J. I., & Pope, H. G. (1995). Body dysmorphic disorder: an obsessive-compulsive spectrum disorder, a form of affective spectrum disorder, or both?. *Journal of Clinical Psychiatry, 56*(4), 41-51.
- Phillips, K. A., Menard, W., & Fay, C. (2006). Gender similarities and differences in 200 individuals with body dysmorphic disorder. *Comprehensive psychiatry, 47*(2), 77-87.
- Phillips, K. A., Menard, W., Fay, C., & Weisberg, R. (2005). Demographic characteristics, phenomenology, comorbidity, and family history in 200 individuals with body dysmorphic disorder. *Psychosomatics, 46*(4), 317-325.).
- Phillips, K. A., Pinto, A., & Jain, S. (2004). Self-esteem in body dysmorphic disorder. *Body image, 1*(4), 385-390.
- Pitts-Taylor, V. (2007). *Surgery junkies: Wellness and pathology in cosmetic culture*. New Jersey: Rutgers University Press.
- Pope, H. G., Olivardia, R., Gruber, A., & Borowiecki, J. (1999). Evolving ideals of male body image as seen through action toys. *International journal of eating disorders, 26*(1), 65-72.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Pruitt, E. (2005). *The growing trend of men and cosmetic surgery*. Retrieved from Plastic Surgery, <http://plasticsurgery.com/the-growing-trend-of-men-and-cosmetic-surgery/>
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401.
- Raffle, B. (2016). *Why are all the plastic surgeons men?* Retrieved from PR Leap, <http://www.prleap.com/pr/207181/why-are-all-the-plastic-surgeons-men>
- Rice, C. (2009). Between body and culture: Beauty, ability, and growing up female, in V. Dhruvarajan & J. Vickers (Eds.). *Gender, race, and nation: A global perspective* (147-183). Canada: University of Toronto Press.
- Roberts, T. A., & Gettman, J. Y. (2004). Mere exposure: Gender differences in the negative effects of priming a state of self-objectification. *Sex Roles*, 51(1-2), 17-27.
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and social psychology bulletin*, 27(2), 151-161.
- Rodin, J., Silberstein, L., & Striegel-Moore, R. (1984). Women and weight: a normative discontent. In *Nebraska symposium on motivation*. University of Nebraska Press.
- Rosen, J. C., & Reiter, J. (1996). Development of the body dysmorphic disorder examination. *Behaviour research and therapy*, 34(9), 755-766.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Rosen, J. C., Reiter, J., & Orosan, P. (1995). Cognitive-behavioral body image therapy for body dysmorphic disorder. *Journal of consulting and clinical psychology, 63*(2), 263-268.

Rosenberg, M. (1965). *Society and the adolescent self-image* (Vol. 11, p. 326). Princeton, NJ: Princeton university press.

Rosenberg, M. (1979). *Conceiving the Self*. New York: Basic Books.

Rosenstein, J. (2017). I got Botox in a hair salon—and here's why. *Harper's Bazaar*. Retrieved from: <http://www.harpersbazaar.com/beauty/skin-care/a19679/blowouts-and-botox/>

Rumsey, N., & Harcourt, D. (2005). *The psychology of appearance*. McGraw-Hill Education (UK).

Sabik, N. J., & Cole, E. R. (2017). Growing Older and Staying Positive: Associations Between Diverse Aging Women's Perceptions of Age and Body Satisfaction. *Journal of Adult Development, 1*-12.

Saner, E. (2017). The rise of non-surgical beauty: 'My mum said my lip looked like a rubber dinghy'. *The Guardian*. Retrieved from <https://www.theguardian.com/lifeandstyle/2017/apr/03/non-surgical-cosmetic-procedures-botox-lip-filler-beauty>

Sarwer, D. B., & Crerand, C. E. (2004). Body image and cosmetic medical treatments. *Body image, 1*(1), 99-111.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Sarwer, D. B., Infield, A. L., Baker, J. L., Casas, L. A., Glat, P. M., Gold, A. H., Jewel, M. L. LaRossa, D., Nahai, F. & Young, V. L. (2005). A prospective, multi-site investigation of patient satisfaction and psychosocial status following cosmetic surgery. *Aesthetic Surgery Journal*, 25(3), 263-269.
- Sarwer, D. B., Infield, A. L., Baker, J. L., Casas, L. A., Glat, P. M., Gold, A. H., Jewel, M. L. LaRossa, D., Nahai, F. & Young, V. L. (2008). Two-year results of a prospective, multi-site investigation of patient satisfaction and psychosocial status following cosmetic surgery. *Aesthetic Surgery Journal*, 28(3), 245-250.
- Sarwer, D. B., Wadden, T. A., Pertschuk, M. J., & Whitaker, L. A. (1998a). The psychology of cosmetic surgery: A review and reconceptualization. *Clinical Psychology Review*, 18, 1–22.
- Sarwer, D. B., Wadden, T. A., Pertschuk, M. J., & Whitaker, L. A. (1998b). Body image dissatisfaction and body dysmorphic disorder in 100 cosmetic surgery patients. *Plastic and reconstructive surgery*, 101(6), 1644-1649.
- Sarwer, D. B., Zanville, H. A., LaRossa, D., Bartlett, S. P., Chang, B., Low, D. W., & Whitaker, L. A. (2004). Mental health histories and psychiatric medication usage among persons who sought cosmetic surgery. *Plastic and reconstructive surgery*, 114(7), 1927-1933.
- Sante, A. B., & Pasian, S. R. (2011). Body image and personality traits of women seeking aesthetic plastic surgery. *Psicologia: Reflexão e Crítica*, 24(3), 429-437.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Saxena, S. (2001). A retrospective review of clinical characteristics and treatment response in body dysmorphic disorder versus obsessive-compulsive disorder. *The Journal of clinical psychiatry*, 62(1), 67-72.
- Schilder, P. (1935) *The Image and Appearance of the Human Body: Studies in the Constructive Energies of the Psyche*. London: Trubner & Company Limited.
- Scott, B. A. (1997). Beauty myth beliefs: Theory, measurement, and the use of a new construct. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 58, 459.
- Shavers, V. L. (2007). Measurement of socioeconomic status in health disparities research. *Journal of the national medical association*, 99(9), 1013
- Simmons, R. (2016). How Social Media Is a Toxic Mirror. *Time*. Retrieved from <http://time.com/4459153/social-media-body-image/>
- Sinkman, E. (2012). *The Psychology of Beauty: Creation of a Beautiful Self*. Plymouth: Jason Aronson, Incorporated.
- Skinner, B. F. (1971). *Beyond freedom and dignity*. New York: Knopf.
- Slevec, J., & Tiggemann, M. (2010). Attitudes toward cosmetic surgery in middle-aged women: body image, aging anxiety, and the media. *Psychology of women quarterly*, 34(1), 65-74.
- Smith, D. E. (1990). *Texts, facts and femininity. Exploring the relations on ruling*. London and New York: Routledge.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Smolak, L. (1996). *National Eating Disorders Association/next door neighbors puppet guide book*. Seattle, WA: National Eating Disorders Association.

Snyder, M. (1987). *Public appearances, private realities: The psychology of self-monitoring*. New York: WH Freeman/Times Books/Henry Holt & Co.

Soper, D.S. (2017). A-priori Sample Size Calculator for Structural Equation Models [Software]. Available from <http://www.danielsoper.com/statcalc>

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1), 213-240.

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 15-28.

Stefanone, M. A., Lackaff, D., & Rosen, D. (2011). Contingencies of self-worth and social-networking-site behavior. *Cyberpsychology, Behavior, and Social Networking*, 14(1-2), 41-49.

Strother, E., Lemberg, R., Stanford, S. C., & Turberville, D. (2012). Eating disorders in men: underdiagnosed, undertreated, and misunderstood. *Eating disorders*, 20(5), 346-355.

Swami, V. (2009). Body appreciation, media influence, and weight status predict consideration of cosmetic surgery among female undergraduates. *Body Image*, 6(4), 315-317.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Swami, V., Arteche, A., Chamorro-Premuzic, T., Furnham, A., Stieger, S., Haubner, T., & Voracek, M. (2008). Looking good: Factors affecting the likelihood of having cosmetic surgery. *European Journal of Plastic Surgery*, *30*(5), 211-218.
- Swami, V., Campana, A. N., & Coles, R. (2012). Acceptance of cosmetic surgery among British female university students. *European Psychologist*. Vol. *17*(1), 55–62.
- Swami, V., Chamorro-Premuzic, T., Bridges, S., & Furnham, A. (2009). Acceptance of cosmetic surgery: Personality and individual difference predictors. *Body Image*, *6*(1), 7-13.
- Swami, V., Coles, R., Wilson, E., Salem, N., Wyrozumska, K., & Furnham, A. (2010). Oppressive beliefs at play: Associations among beauty ideals and practices and individual differences in sexism, objectification of others, and media exposure. *Psychology of Women Quarterly*, *34*(3), 365-379.
- Swami, V., Furnham, A., Georgiades, C., & Pang, L. (2007). Evaluating self and partner physical attractiveness. *Body Image*, *4*, 97–101.
- Swami, V., & Hendrikse, S. (2013). Attitudes to cosmetic surgery among ethnic minority groups in Britain: Cultural mistrust, adherence to traditional cultural values, and ethnic identity salience as protective factors. *International Journal of Psychology*, *48*(3), 300-307.
- Swami, V., Pietschnig, J., Stewart, N., Nader, I. W., Stieger, S., Shannon, S., & Voracek, M. (2013). Blame it on patriarchy: More sexist attitudes are associated with stronger consideration of cosmetic surgery for oneself and one's partner. *International Journal of Psychology*, *48*(6), 1221-1229.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Taggart, L. R., Ozolins, L., Hardie, H., & Nyhof-Young, J. (2009). Look good feel better workshops: a “big lift” for women with cancer. *Journal of Cancer Education, 24*(2), 94-99.
- Tait, S. (2007). Television and the domestication of cosmetic surgery. *Feminist Media Studies, 7*(2), 119-135.
- Talley, H. L. (2012). Getting work done: Cosmetic Surgery as Constraint, as Commodity, as Commonplace. In B. S. Turner (Ed.). *The Routledge handbook of the body* (pp. 335-347). London: Routledge.
- Taqi, A. M., Shaikh, M., Gowani, S. A., Shahid, F., Khan, A., Tayyeb, S. M., Satti, M., Vaqar, T., Shahid, S., Shamsi, A., Naqvi, H. A., & Ganatra, H. A. (2008). Body Dysmorphic Disorder: Gender differences and prevalence in a Pakistani medical student population. *BMC psychiatry, 8*(1), 20.).
- Tantleff-Dunn, S., Barnes, R. D., & Larose, J. G. (2011). It's not just a “woman thing:” The current state of normative discontent. *Eating disorders, 19*(5), 392-402.
- Taschen, A (2005). *Aesthetic Surgery*. Cologne: Taschen.
- Thiemann, S., & Kraemer, H. C. (1987). *How many subjects?: statistical power analysis in research*. California: Sage Publishing.
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington, DC: American Psychological Association.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Thompson, J. K. (2004). The (mis) measurement of body image: ten strategies to improve assessment for applied and research purposes. *Body image, 1*(1), 7-14.
- Thompson, J. K., & Tantleff, S. (1992). Female and male rating of upper torso: Actual, ideal and stereotypical conceptions. *Journal of Social Behavior and Personality, 7*, 345-354.
- Thompson, J. K., Fabian, L. J., Moulton, D. O., Dunn, M. E., & Altabe, M. N. (1991). Development and validation of the physical appearance related teasing scale. *Journal of personality assessment, 56*(3), 513-521.
- Thompson, M. A., & Gray, J. J. (1995). Development and validation of a new body-image assessment scale. *Journal of personality assessment, 64*(2), 258-269.
- Tiggemann, M. (2004). Body image across the adult life span: Stability and change. *Body image, 1*(1), 29-41.
- Tiggemann, M., & Lynch, J. E. (2001). Body image across the life span in adult women: the role of self-objectification. *Developmental psychology, 37*(2), 243.
- Tims, A. (2011). Plastic surgery companies under fire for tempting people into unneeded. *The Guardian*. Retrieved from <https://www.theguardian.com/money/2011/jan/23/plastic-surgery>
- Toro, J., Castro, J., Garcia, M., Perez, P., & Cuesta, L. (1989). Eating attitudes, sociodemographic factors and body shape evaluation in adolescence. *British Journal of Medical Psychology, 62*(1), 61-70.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Tosone, C. (2009). Sotto Voce: Internalized misogyny and the politics of gender in corporate America. *Psychoanalytic Social Work, 16*(1), 1-11.
- Tovée, M. J., Furnham, A., & Swami, V. (2007). Healthy body equals beautiful body? Changing perceptions of health and attractiveness with shifting socioeconomic status. In *The Body Beautiful* (pp. 108-128). Palgrave Macmillan UK.
- Twenge, J. M., & Campbell, W. K. (2002). Self-esteem and socioeconomic status: A meta-analytic review. *Personality and social psychology review, 6*(1), 59-71.
- Veale, D. (2000). Outcome of cosmetic surgery and 'DIY' surgery in patients with body dysmorphic disorder. *Psychiatric Bulletin, 24*(6), 218-220.
- Veale, D. (2004). Advances in a cognitive behavioural model of body dysmorphic disorder. *Body image, 1*(1), 113-125.
- Veale, D., Anson, M., Miles, S., Pieta, M., Costa, A., & Ellison, N. (2014). Efficacy of cognitive behaviour therapy versus anxiety management for body dysmorphic disorder: a randomised controlled trial. *Psychotherapy and psychosomatics, 83*(6), 341-353.
- Veale, D., Boocock, A., Gournay, K., Dryden, W., Shah, F., Willson, R., & Walburn, J. (1998). Body dysmorphic disorder. A survey of fifty cases. *Year Book of Psychiatry and Applied Mental Health, 1998*(8), 307.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Veale, D., Gledhill, L. J., Christodoulou, P., & Hodsoll, J. (2016). Body dysmorphic disorder in different settings: A systematic review and estimated weighted prevalence. *Body Image*, 18, 168-186.
- Veale, D., Gournay, K., Dryden, W., Boocock, A., Shah, F., Willson, R., & Walburn, J. (1996). Body dysmorphic disorder: a cognitive behavioural model and pilot randomised controlled trial. *Behaviour research and therapy*, 34(9), 717-729.
- Venkat, R., & Ogden, H. (2002). Advertising-induced social comparison and body-image satisfaction: The moderating role of gender, self-esteem and locus of control. *Journal of consumer satisfaction, dissatisfaction and complaining behavior*, 15, 51.
- Verschuren, P. (2003). Case study as a research strategy: some ambiguities and opportunities. *International Journal of Social Research Methodology*, 6(2), 121-139.
- Vindigni, V., Pavan, C., Semenzin, M., Granà, S., Gambaro, F., Marini, M., Bassetto, F., & Mazzoleni, F. (2002). The importance of recognizing body dysmorphic disorder in cosmetic surgery patients: do our patients need a preoperative psychiatric evaluation?. *European Journal of Plastic Surgery*, 25(6), 305-308.
- von Soest, T., Kvale, I. L., Roald, H. E., & Skolleborg, K. C. (2009). The effects of cosmetic surgery on body image, self-esteem, and psychological problems. *Journal of plastic, reconstructive & Aesthetic Surgery*, 62(10), 1238-1244.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- von Soest, T., Kvaalem, I. L., Skolleborg, K. C., & Roald, H. E. (2006). Psychosocial factors predicting the motivation to undergo cosmetic surgery. *Plastic and reconstructive surgery*, *117*(1), 51-62.
- von Soest, T., Kvaalem, I. L., & Wichstrøm, L. (2012). Predictors of cosmetic surgery and its effects on psychological factors and mental health: a population-based follow-up study among Norwegian females. *Psychological medicine*, *42*(03), 617-626.
- Waller, D. S. (2015). Photoshop and deceptive advertising: An analysis of blog comments. *Studies in Media and Communication*, *3*(1), 109-116.
- Wang, Y., & Beydoun, M. A. (2007). The obesity epidemic in the United States—gender, age, socioeconomic, racial/ethnic, and geographic characteristics: a systematic review and meta-regression analysis. *Epidemiologic reviews*, *29*(1), 6-28.
- Wardle, J., & Marsland, L. (1990). Adolescent concerns about weight and eating; a social-developmental perspective. *Journal of Psychosomatic Research*, *34*(4), 377-391.
- Weiner, K. E., & Thompson, J. K. (1997). Overt and covert sexual abuse: Relationship to body image and eating disturbance. *International Journal of Eating Disorders*, *22*(3), 273-284.
- Wienke, C. (1998). Negotiating the male body: Men, masculinity, and cultural ideals. *The Journal of Men's Studies*, *6*(3), 255-282.
- Wilfley, D. E., Schreiber, G. B., Pike, K. M., Striegel-Moore, R. H., Wright, D. J., & Rodin, J. (1996). Eating disturbance and body image: a comparison of a

Desire for Cosmetic Procedures: An Investigation of Associated Factors

community sample of adult black and white women. *International Journal of Eating Disorders*, 20(4), 377-387.

Wilhelm, S., Otto, M. W., Lohr, B., & Deckersbach, T. (1999). Cognitive behavior group therapy for body dysmorphic disorder: a case series. *Behaviour Research and Therapy*, 37(1), 71-75.

Wilhelm, S., Phillips, K. A., Didie, E., Buhlmann, U., Greenberg, J. L., Fama, J. M., Keshaviah, A., & Steketee, G. (2014). Modular cognitive-behavioral therapy for body dysmorphic disorder: a randomized controlled trial. *Behavior therapy*, 45(3), 314-327.

Wilkinson, L. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American psychologist*, 54(8), 594.

Williams, S. J. (1997). Modern medicine and the “uncertain body”: from corporeality to hyperreality?. *Social Science & Medicine*, 45(7), 1041-1049.

Williams, S. J. (1999). Is anybody there? Critical realism, chronic illness and the disability debate. *Sociology of Health & Illness*, 21(6), 797-819.

Williams, Z. (2016). Susie Orbach: ‘Not all women used to have eating issues. Now everybody does’. *The Guardian*. Retrieved from <https://www.theguardian.com/lifeandstyle/2016/feb/22/susie-orbach-fat-is-a-feminist-issue-body-dysmorphia-china>

Wolf, N. (2013). *The beauty myth: How images of beauty are used against women*. London: Vintage Books.

Desire for Cosmetic Procedures: An Investigation of Associated Factors

World Health Organization. (1993). *The ICD-10 classification of mental and behavioural disorders: diagnostic criteria for research*. Geneva: World Health Organisation

Xu, X., Mellor, D., Kiehne, M., Ricciardelli, L. A., McCabe, M. P., & Xu, Y. (2010). Body dissatisfaction, engagement in body change behaviors and sociocultural influences on body image among Chinese adolescents. *Body image*, 7(2), 156-164.

Yamamiya, Y., Cash, T. F., Melnyk, S. E., Posavac, H. D., & Posavac, S. S. (2005). Women's exposure to thin-and-beautiful media images: Body image effects of media-ideal internalization and impact-reduction interventions. *Body image*, 2(1), 74-80.

Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta psychiatr scand*, 67(6), 361-370.

Appendices

Appendix A

Search terms used in literature review

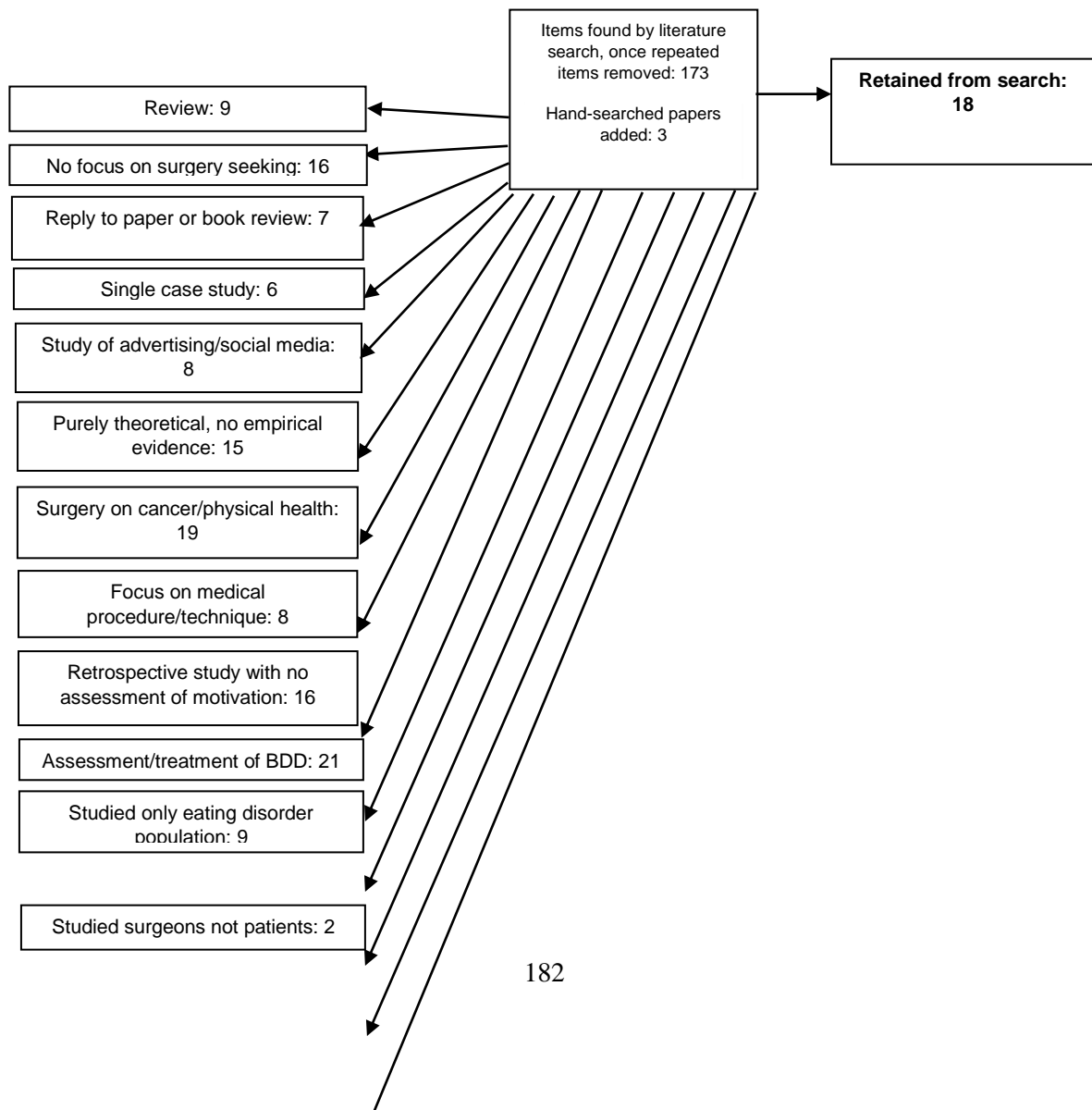
Search number	Search term	Results	Limiters
1	cosmetic OR plastic OR aesthetic	302,922	Term in abstract
2	S1 AND surgery OR procedure OR operation OR *plasty	60,736	Term in abstract
3	S2 AND motivat* OR reason* OR desire OR drive OR attitude* OR seek*	5,779	
4	S3 AND BDD OR body dysmorph* OR body image OR body satisf* OR self-esteem	683	

Desire for Cosmetic Procedures: An Investigation of Associated Factors

5	S4	186	Peer reviewed journals only
---	----	-----	-----------------------------

Appendix B

Literature search process



Desire for Cosmetic Procedures: An Investigation of Associated Factors

No focus on body image or self-esteem: 14

Studied attitude to surgery without focus on motivation/consideration: 8

Appendix C

Advert for potential participants

RESEARCH STUDY ON BODY IMAGE, SELF-ESTEEM AND COSMETIC SURGERY

A new study is being conducted to understand the **self-esteem and body image** of the community. If you would like to take part you will be asked to complete some questionnaires around your mood and feelings towards yourself and your body.

This will help researchers to understand how people in the community feel and think about themselves.

You also be asked some very brief questions around cosmetic surgery. The research will help us to understand some of the reasons people might want to have cosmetic surgery.

The whole study will be anonymous, easy to complete online and you can decline at any time.

If you are interested please take one of the slips below with the link to the study

For more information you can contact the researcher, Elizabeth Bradley on

eabrada@essex.ac.uk

Link to study

Link to study

Link to study

Link to study

Link to study

Link to study

Link to study

Link to study

Link to study

Link to study

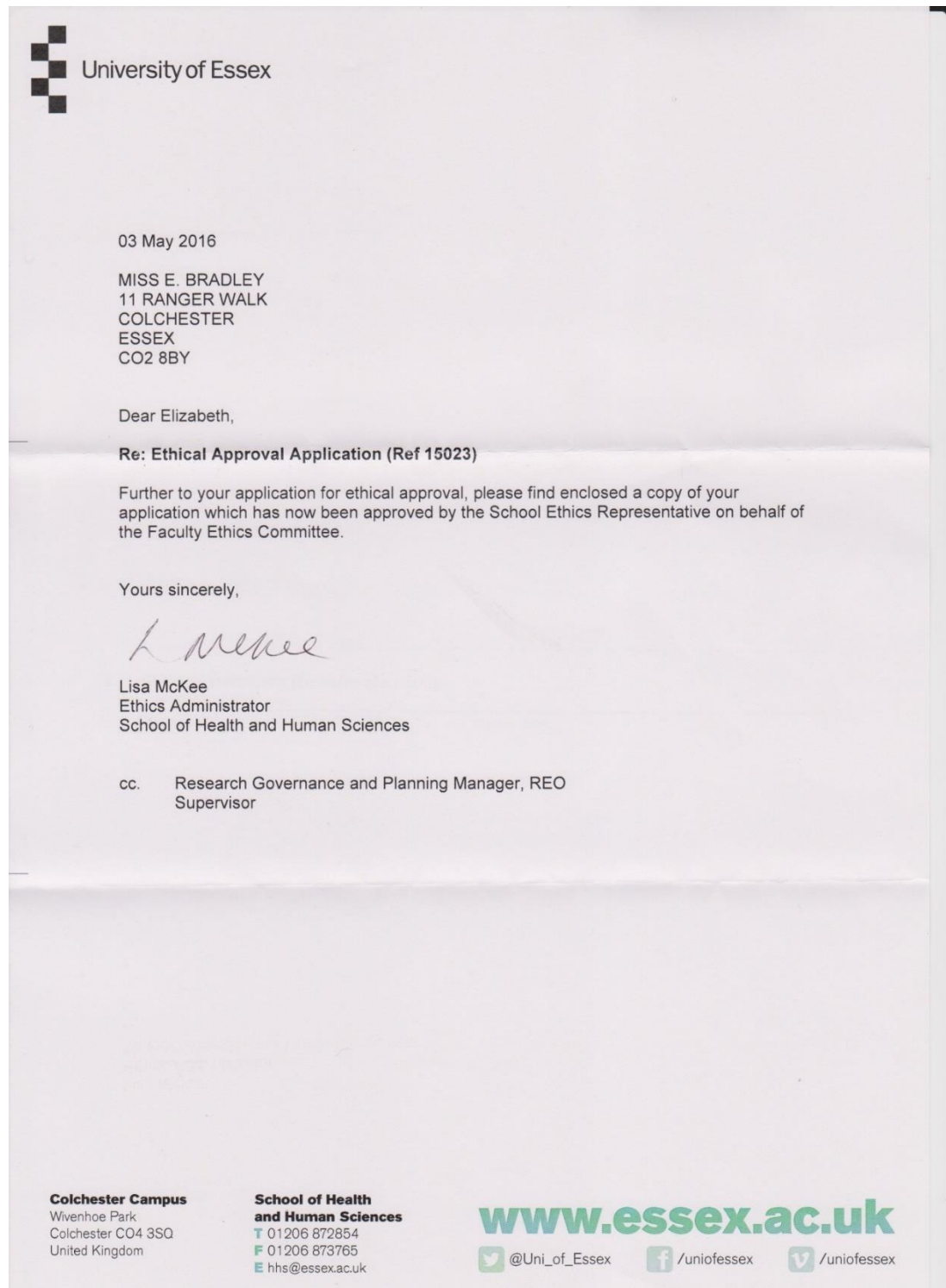
Link to study

Link to study

Link to study

Appendix D

Ethical approval confirmation from the University of Essex



Appendix E

Information Sheet for Participants

Cosmetic Surgery Seeking: An investigation of Associated Factors

What is the purpose of this study?

This project aims understand the level of body image satisfaction and levels of self-esteem in a community sample. You will be asked to complete two questionnaires around body image and self-esteem. You will be asked to complete a questionnaire around symptoms of mood, anxiety and stress.

The project also wants to investigate the desire for a cosmetic surgery procedure. You will be asked some brief questions around your feelings about cosmetic procedures.

You will also be asked to provide some brief demographic data. This will not and cannot be used to identify you in any way. This data is taken so we can understand the population of people we have studied.

Why have I been invited?

You have been asked to take part because you are an adult over the age of 18 who lives in the UK. The study wants to investigate the opinions and feelings of adults living in the community. If are not currently a UK resident, unfortunately you cannot take part.

Do I have to take part?

Absolutely not. If at any point you would like to leave the study you can close your browser window down. If you choose to close the study down, all your data will be deleted and removed from the study.

What will happen if I decide to take part?

You will be taken to a screen for you to confirm that you are happy to take part. You will then be taken to a screen with the first questionnaire, followed by the next one. There are five in total and the study should take a maximum of twenty minutes. You can complete it all online, using your computer.

What do I have to do?

Desire for Cosmetic Procedures: An Investigation of Associated Factors

You simply have to read the questions and select the answer you feel is most relevant to you. For two questions you will be given the opportunity to type an answer into a text box. You need only write a sentence or two.

What are the possible risks or disadvantages of taking part?

There are no risks to you or anyone in the study. It is possible that some of the questions may feel personal or possibly distressing for some people. If for any reason you would like to exit the study, please close down the window you are viewing the questionnaire in. If you choose to close the study down, all your data will be deleted and removed from the study. There will be no record of what you have inputted into the survey.

What are the possible benefits of taking part?

The study aims to understand how people feel out themselves and their physical appearance. The completed research project will hopefully provide insights into this and could be used to shape the way we understood self-esteem and body image. This could be very beneficial to those who have difficulties with low self-esteem or suffer with body image distress.

What if something goes wrong?

If you have any concerns about this research project, you can speak with Elizabeth Bradley, Dr. Leanne Andrews, or Dr. Frances Blumenfeld (their contact details are at the bottom of the page). They will answer any questions you may have.

What happens when the research study is finished?

All the answers from every participant will be collated together. This will be analysed by the researcher. The results will be presented in the form of a doctorate thesis for the University of Essex Doctorate in Clinical Psychology programme. The project will be completed by Elizabeth Bradley and academically supervised by Dr. Leanne Andrews and Dr. Frances Blumenfeld. The completed thesis will be available at the Albert Sloman library at Essex University. The results of the thesis will hopefully be published in relevant journals and advertised at relevant research conferences.

Will my taking part in the study be confidential?

Appendix F

Participant's consent form

I agree to complete the following questionnaires as part of the research project:

Yes/No

I agree to provide brief demographic data. I am aware that this data cannot and will not be used to identify me: Yes / No

I agree to allow the data I provide to be collated and used in analysis for the research project: Yes / No

By ticking the following box you agree to electronically sign this consent form.

Appendix G

Demographic questions

- Are you currently a UK resident, ie. living in the UK, regardless of your country of origin.

Yes

No - if you are not a UK resident, please close down this study. The present study is only open to current UK residents for ethical reasons. Thank you for your time.

You will be asked some brief demographic questions. You may choose to answer with 'I would rather not say' for any or all of these questions if you would prefer.

- Please enter your age in years:
- Please select the sexuality you would describe yourself as:

Straight

Gay

Bisexual

Asexual

Pansexual

I would rather not say

- Please select your ethnicity from the drop down menu:

White/Caucasian

Irish

Gypsy or Irish Traveller

Any other White background

Asian

Indian

Pakistani

Bangladeshi

Chinese

Any other Asian background

African

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Caribbean

Any other Black / African / Caribbean background

Arab

Mixed / Multiple ethnicity

- Please select your marital status

single

cohabitating

married

civil partnership

separated but still legally married or in a civil partnership

divorced or previously in a civil partnership which is now legally dissolved

widow/widower or surviving partner of a civil partnership

I would rather not say

- Please select your highest level of education

No formal qualifications

GCSEs or equivalent

BTEC or equivalent

A levels or equivalent

University degree

Masters degree

Doctorate

I would rather not say

- Please select your category of employment from the drop down menu

Homemaker

Retired

Student

Unemployed

Admin/Clerical

Agriculture, Forestry, Fishing, or Hunting

Arts/Creative Design

Desire for Cosmetic Procedures: An Investigation of Associated Factors

Broadcasting

Education/Academia

Construction

Finance and Insurance

Government and Public Administration

Health Care and Social Assistance

Hotel and Food Services

Information Technology

Legal Services

Manufacturing/Industry

Military

Mining

Publishing

Real Estate

Religious/Spiritual

Retail

Telecommunications

Transportation and Warehousing

Utilities

Wholesale

Appendix H

Measures presented

H-1

Rosenberg Self-esteem Scale

1 = Strongly agree 2 = Agree 3 = Disagree 4 = Strongly disagree

- _____ 1. On the whole, I am satisfied with myself.
- _____ 2. At times I think I am no good at all.
- _____ 3. I feel that I have a number of good qualities.
- _____ 4. I am able to do things as well as most other people.
- _____ 5. I feel I do not have much to be proud of.
- _____ 6. I certainly feel useless at times.
- _____ 7. I feel that I'm a person of worth.
- _____ 8. I wish I could have more respect for myself.
- _____ 9. All in all, I am inclined to think that I am a failure.
- _____ 10. I take a positive attitude toward myself.

H-2

Dysmorphic Concerns Questionnaire

These questions are designed to screen for people with certain concerns that are:

- (i) often difficult or embarrassing to talk about with their doctor/family/friends; and
- (ii) (ii) often difficult to find the right help for.

Please read the following questions carefully and answer them by selecting the answer which you think is most appropriate for your specific situation:

Have you ever:

1. Been very concerned about some aspect of your physical appearance	Not at all	Same as most people	More than most people	Much more than most people
2. Considered yourself misformed or misshapen in some way (e.g. nose/hair/skin/sexual organs/overall body build)	Not at all	Same as most people	More than most people	Much more than most people
3. Considered your body to be malfunctional in some way (e.g. excessive body odour, flatulence, sweating)	Not at all	Same as most people	More than most people	Much more than most people
4. Consulted or felt you needed to consult a plastic surgeon/dermatologist/physician about these concerns	Not at all	Same as most people	More than most people	Much more than most people
5. Been told by others/doctor that you are normal in spite of you strongly believing that something is wrong with your appearance or bodily functioning	Not at all	Same as most people	More than most people	Much more than most people
6. Spent a lot of time worrying about a defect in your appearance/bodily functioning		most people	most people	most people
7. Spent a lot of time covering up defects in your appearance/bodily functioning	Not at all	Same as most people	More than most people	Much more than most people

H-3

The Short Form Depression Anxiety and Stress Scale

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all
 - 1 Applied to me to some degree, or some of the time
 - 2 Applied to me to a considerable degree, or a good part of time
 - 3 Applied to me very much, or most of the time
-
- 1 I found it hard to wind down
 - 2 I was aware of dryness of my mouth
 - 3 I couldn't seem to experience any positive feeling at all
 - 4 I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)
 - 5 I found it difficult to work up the initiative to do things
 - 6 I tended to over-react to situations
 - 7 I experienced trembling (eg, in the hands)
 - 8 I felt that I was using a lot of nervous energy
 - 9 I was worried about situations in which I might panic and make a fool of myself
 - 10 I felt that I had nothing to look forward to
 - 11 I found myself getting agitated
 - 12 I found it difficult to relax
 - 13 I felt down-hearted and blue
 - 14 I was intolerant of anything that kept me from getting on with what I was doing
 - 15 I felt I was close to panic
 - 16 I was unable to become enthusiastic about anything
 - 17 I felt I wasn't worth much as a person
 - 18 I felt that I was rather touchy
 - 19 I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)
 - 20 I felt scared without any good reason
 - 21 I felt that life was meaningless

H-4

Obsessive Compulsive Inventory - Revised

The following statements refer to experiences that many people have in their everyday lives.

Circle the number that best describes **HOW MUCH** that experience has **DISTRESSED or BOTHERED you during the PAST MONTH**. The numbers refer to the following verbal labels:

- | | |
|----------------|---------------|
| 0 = Not at all | 3 = A lot |
| 1 = A little | 4 = Extremely |
| 2 = Moderately | |

1. I have saved up so many things that they get in the way.
2. I check things more often than necessary.
3. I get upset if objects are not arranged properly.
4. I feel compelled to count while I am doing things.
5. I find it difficult to touch an object when I know it has been touched by strangers or certain people.
6. I find it difficult to control my own thoughts.
7. I collect things I don't need.
8. I repeatedly check doors, windows, drawers, etc.
9. I get upset if others change the way I have arranged things.
10. I feel I have to repeat certain numbers.
11. I sometimes have to wash or clean myself simply because I feel contaminated.
12. I am upset by unpleasant thoughts that come into my mind against my will.
13. I avoid throwing things away because I am afraid I might need them later.
14. I repeatedly check gas and water taps and light switches after turning them off.
15. I need things to be arranged in a particular order.
16. I feel that there are good and bad numbers.
17. I wash my hands more often and longer than necessary.
18. I frequently get nasty thoughts and have difficulty in getting rid of them.

Appendix I

Questions around cosmetic procedures

- Have you ever had any kind of non-surgical cosmetic procedure? This is any procedure, done purely for aesthetic reasons, that does not require to have an operation or anaesthetic (for example Botox, teeth whitening or a skin peel). Please tick the appropriate box: Yes / No

- if yes, please type into the box which procedure or procedures you have had:

- Please type into the text box a brief description of why you decided to undergo this procedure:

- Please use the rating scale to indicate how much you would one day like to have a non-surgical cosmetic procedure. If you have already had a procedure of this kind, please indicate how much you would like to have another non-surgical cosmetic procedure of any kind.

1 – I definitely do not want a cosmetic procedure,

2 – I am fairly sure I do not want a cosmetic procedure

3 – I think I probably do not want a cosmetic procedure, I have thought about the idea

4 – I do not know if I would like a cosmetic procedure or not, I have mixed feelings about the idea

5 - I think I probably would like a cosmetic procedure, I have thought about the idea

6 – I am mostly sure I would like a cosmetic procedure, I have thought seriously about having one

7 – I definitely would like to have a cosmetic procedure, I have a strong intention to have this done

- If you would like to have any kind of non-surgical cosmetic procedure please type into the box which procedure or procedures you would like to have or have considered having:

Desire for Cosmetic Procedures: An Investigation of Associated Factors

- Have you ever had any kind of surgical cosmetic procedure? This is any procedure, done purely for aesthetic reasons, that requires you to have an operation or anaesthetic (for example liposuction, tummy tuck, breast enlargement or reduction, rhinoplasty or 'nose job'). Please tick the appropriate box: Yes / No

- if yes, please type into the box which procedure or procedures you have had:

- Please type into the text box a brief description of why you decided to undergo this procedure:

- Please use the rating scale to indicate how much you would one day like to have a surgical cosmetic procedure. (If you have already had a procedure of this kind, please indicate how much you would like to have another surgical cosmetic procedure of any kind).

1 – I definitely do not want a cosmetic procedure,

2 – I am fairly sure I do not want a cosmetic procedure

3 – I think I probably do not want a cosmetic procedure

4 – I do not know if I would like a cosmetic procedure or not, I have mixed feelings about the idea

5 - I think I probably would like a cosmetic procedure, I have thought about the idea

6 – I am mostly sure I would like a cosmetic procedure, I have thought seriously about having one

7 – I definitely would like to have a cosmetic procedure, I have a strong intention to have this done

- If you would like to have any kind of surgical cosmetic procedure, please type into the box which procedure or procedures you would like to have or have considered having:

Appendix J

Participant debrief information

Thank you for completing the questionnaires. Your results will be added to all the data we gain from all the other participants. The information around cosmetic procedures and how much our sample of people would like to have a cosmetic procedure will be compared to the levels of self-esteem and body image distress, to see if these things are related. The research is interested in understanding if low self-esteem or high levels of body image distress are correlated to a desire to have a cosmetic procedure.

We have also collected data on symptoms associated with depression, anxiety, stress and obsessive compulsive disorder so we can understand how these factors relate to a desire for cosmetic procedure.

The research also measured how many people in this community sample had already had a cosmetic procedure of some kind, and whether there were any differences between people who had a cosmetic procedure and people who had not.

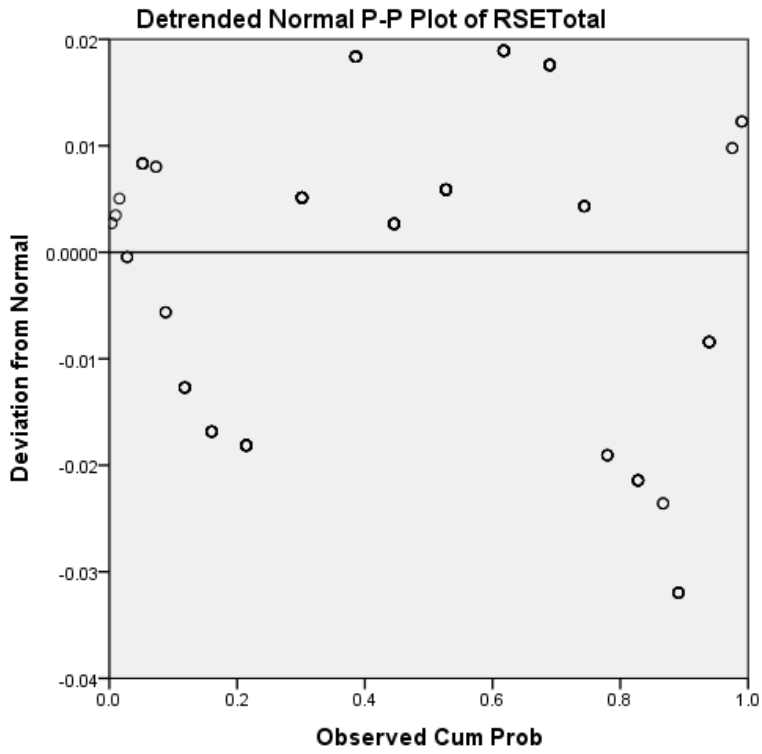
None of these questionnaires could be used to diagnose any kind of mental health concern, they only investigate certain symptoms that could be associated with distress. If you have any concern about your mental health, please visit your GP who can provide you with more information. You can also contact the Samaritans, a 24 hour and confidential listening service if you feel at all distressed by the content of these questionnaires: you can contact them with your local area code followed by 116 123.

If you have any concerns about the study and would like to speak with the researcher, please call Elizabeth Bradley on eabrada@essex.ac.uk.

Your participation is greatly appreciated and it will be used to help build an understanding of self-esteem and body image. It may also help to understand why some people may seek cosmetic procedures.

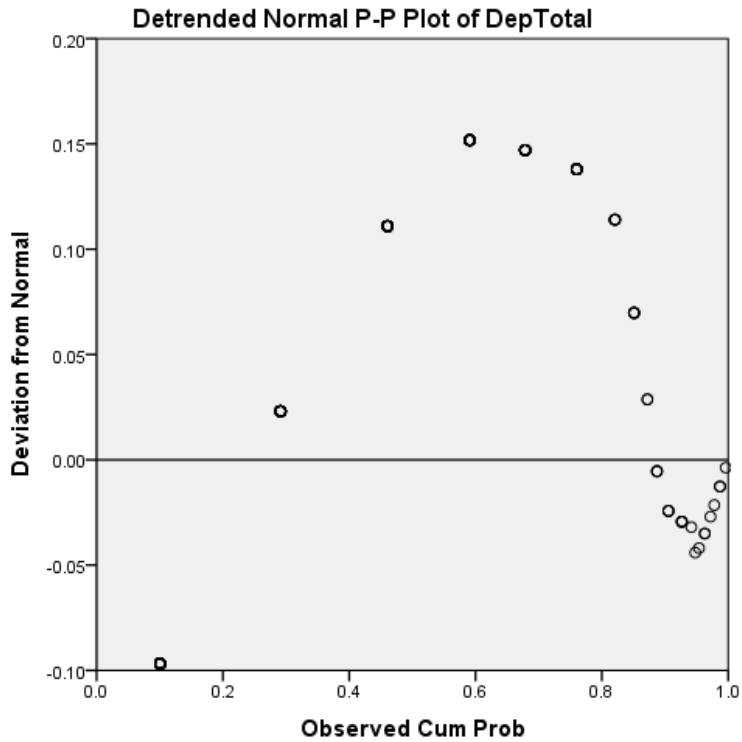
Appendix K

P-Plot for distribution of scores on RSE



Appendix L

P-Plot for distribution of scores on depression subscale



Appendix M

Scree plot from factor analysis of desire for non-surgical and surgical procedures

