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THE IMPACT OF COSMETIC SURGERY MEDIA PORTRAYALS ON BODY IMAGE AND ATTITUDES

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THESIS STATEMENT

I hereby declare that this thesis has not been, and will not be submitted in whole, or in part, to another University for the award of any other degree.

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UNIVERSITY OF SUSSEX

DOCTOR OF PHILOSOPHY IN PSYCHOLOGY

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SUMMARY

The cosmetic surgery industry has rapidly expanded and Professional Associations for surgery in the UK and USA have expressed concern over the ways in which surgery is portrayed in the media. This thesis aimed to investigate how different portrayals of cosmetic surgery in the media impact women and adolescent girls' body image and attitudes towards surgery. Moreover, it examined a number of moderating variables which may affect responses to such media.

The first three studies examined the impact of different aspects of cosmetic surgery advertising on adult women using experimental designs. Study 1 (N=161) looked at the effect of including discount incentives or risk information on women's attitudes towards surgery and body image. Study 2 (N=151) examined the effect of different images in cosmetic surgery advertising (female models, locations, scalpels or control images) on the same outcomes. Study 3 (N=145) was a replication of Study 1, looking at whether discount incentives and risk information have a similar impact in Switzerland, a country with less exposure to cosmetic surgery. The final two studies focused on adolescent girls aged 15-18 using mixed methods. Study 4 was a qualitative focus-group investigation of girls' (N=17) attitudes towards surgery. Study 5 experimentally examined the impact of different information provided in cosmetic surgery reality television (risks associated with surgery versus no risks) on girl's (N=99) body image and attitudes towards cosmetic surgery.

Results from these studies consistently showed cosmetic surgery advertising and television shows have a negative impact on women and girls' body image. Attitudes towards cosmetic surgery varied as a result of different content of advertising. Moreover, materialistic values moderated how women and girls responded to cosmetic surgery advertising or reality shows across all studies, whereas restrained eating, body dissatisfaction and basing one's self-worth on appearance played a less consistent role in responses.

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CHAPTER 1

1. INTRODUCTION

Each year, millions of women around the world undergo elective cosmetic surgery in order to enhance or alter their appearance (British Association of Aesthetic Plastic Surgery; BAAPS, 2012; International Society for Aesthetic Plastic Surgeons; ISAPS, 2011). Research has shown that cosmetic surgery is now a more accepted means of appearance enhancement (Frederick, Lever, & Peplau, 2006; Molina, Baker, & Nduka, 2011). However, there are unique aspects of cosmetic surgery that have incited much debate (e.g. BAAPS, 2005). While cosmetic surgery is directly affiliated to the medical field, it is generally elective and carried out for purely aesthetic, rather than medical reasons. Therefore, although it falls under the umbrella of medicine as a discipline, it is not related to bettering individuals' physical health.

This unique positioning of the cosmetic surgery field has two implications. The first is that in some countries, including the UK, it is unclear with which Professional Association the responsibility for the regulation of the industry lies (Graham, 2010). This then leaves the industry to evolve through loose guidelines and without concrete laws. The second is that, given the elective element which characterises the industry, cosmetic surgery providers are likely to want to advertise their services in order to attract clients (Hennink-Kaminski, Reid, & Whitehill King, 2010; Spilson, Chung, Greenfield, & Walters, 2002; Yu, Jeong, Baek, & Joo, 2010). This desire for promotion paired with the lack of regulation has led to some marketing strategies and portrayals of surgery which have caused concern among cosmetic surgery associations (e.g. American Society of Plastic Surgeons; ASPS, 2004; BAAPS, 2005; 2008). Criticism has been expressed about the possible impact of both cosmetic surgery advertising and reality TV, with special mentions of the younger, more vulnerable adolescent audience exposed to such media. The present thesis therefore examines what the immediate impact of such media is on young women and adolescent girls, focusing both on body image and attitudes towards surgery.

1.1 Definitions of Important Constructs

For purposes of clarity, constructs which are central to the present thesis are defined. These include cosmetic surgery and the distinction between cosmetic and reconstructive surgery, body image, and attitudes towards cosmetic surgery as they are conceptualised and measured in the present research.

The term "cosmetic surgery" falls under the more general field of plastic surgery, which refers to two different types of surgery. Reconstructive surgery deals with congenital abnormalities and deformities caused by traumatic injuries. It can be performed to improve functionality, or to approximate a "normal" appearance. Cosmetic surgery on the other hand, is performed purely for aesthetic reasons to improve appearance and/or signs of aging. Procedures may be surgical, such as breast enlargement or liposuction, or non-surgical, like injection fillers, chemical peels, or laser hair removal. Surgical procedures often require general anaesthetic and are considered to be more associated with more risks than non-surgical procedures. The focal point of investigation of this thesis is cosmetic, rather than reconstructive surgery.

Body image refers to individuals' perceptions, thoughts, feelings and attitudes towards their physical appearance. It is a multi-faceted construct, which is highly subjective, and likely to change over time (Grogan, 2008; Ricciardelli & McCabe, 2001). The importance placed on female appearance in societies today means it may be become a more central element to women's identity (Dittmar, 2005; 2008). Body image may therefore play a significant role in women's self-concept, as well as form an important source of self-worth (Clabaugh, Kaprinski, & Griffin, 2008; Crocker & Wolfe, 2001). Given this, dissatisfaction with body image can lead to a range of negative psychological and unhealthy behavioural outcomes and is associated with low self-esteem, disordered eating, excessive exercise, and diminished quality of life (e.g. Cash & Fleming, 2002; Stice, 2002; Cash & Hrabosky, 2004).

The present research focuses on two elements relating to individuals' feelings towards surgery, one reflecting attitudes, the other motivation to undertake surgery. Attitudes comprise of cognitive, affective and behavioural factors that make a person favourable or not towards a particular behaviour (Hogg & Vaughan, 2008). As such, the first construct investigated in this research is the extent to which cosmetic surgery would be considered in the future, reflecting individuals' acceptance of and interest in cosmetic surgery. The second construct examined reflects individuals' acceptance of surgery based on intrapersonal motivations. Motivation differs from attitude in the sense that it is seen as a driving force behind a behaviour/action. Intrapersonal motives reflect the drive to undergo surgery for personal reasons- to manage and improve image, to relieve feelings of inadequacy and ameliorate self-esteem (Didie & Sarwer, 2003).

1.2 The Rise of Cosmetic Surgery, Media Trends and Concerns

Rise in Procedures and Factors Contributing to this Increase

The cosmetic surgery industry is developing and expanding rapidly. This is reflected both in the value of the industry, as well as in the numbers of people undergoing cosmetic procedures. In 2005, the industry was valued at £720 million, growing to £2.3 billion in 2010. It is forecasted to reach a value of £3.6 billion by 2015 (Mintel, 2010,). In terms of procedures, in 2012, the BAAPS recorded just over 43,000 surgical procedures, compared to just 10,700 in 2003 (2003; 2012). This marks a 302 percent increase in just 10 years. Importantly, the overwhelming majority of procedures were performed on women, with the BAAPS reporting percentages of over 90% of cosmetic surgery since 2006 being on women. Reports from the ISAPS (2011) indicate that interest in cosmetic surgery is worldwide, with countries from different sociocultural, religious, and ethnic backgrounds featuring in the top 25 countries by number of procedures. Moreover, available statistics are likely to be an underestimation of actual procedures carried out. Cosmetic surgery is now offered and performed by a range of physicians, from dermatologists to otorhinolaryngologists. This is partly due to the fact that no regulations are in place regarding qualifications needed for performing cosmetic procedures (Department of Health, 2013; Sarwer & Crerand, 2004). Indeed, the BAAPS reports that its (medically qualified) members only carry out approximately 30-40% of the cosmetic procedures performed in the UK (Mintel, 2010). This also means that actual numbers of procedures carried out are difficult to estimate and the figures above are likely to be an underestimate.

Several factors are likely to be at play for the increase in people undergoing surgery (c.f. Sarwer & Crerand, 2004). Technological and medical advancements have helped reduce recovery time and risks, whereas financial plans and loans have made surgery more affordable. In addition, media exposure and influence are also thought to be contributing factors to the increasing numbers of procedures. This is the focal point of the present thesis and is discussed in further detail after a description of existing Codes of Ethics on cosmetic surgery marketing and advertising.

The Marketing and Advertising of Cosmetic Surgery: Ethical Guidelines

Regulation of cosmetic surgery advertising in the UK is performed by the Advertising Standards Authority (ASA). However, there are no clauses specific to cosmetic surgery, and regulation tends to be reactive in that advertisements are generally brought under

investigation following complaints (Department of Health, 2013). Though such investigations may lead to the withdrawal of an advertisement, this is done only after the advertisement has already been made public.

In an attempt to prevent irresponsible advertising, guidelines for the marketing and advertising of cosmetic surgery have been produced by the Committee of Advertising Practice (CAP, 2013) and the Independent Healthcare Advisory Services (IHAS, 2011; 2013). The CAP Help Note focuses on appropriate language use in advertising for cosmetic surgery, whereas the IHAS Policy Statement considers in more depth the promotional elements employed as part of marketing such services. Both codes make special cautionary reference to adolescents, and state that patients should be safeguarded from unrealistic expectations and not induced to opt for multiple procedures (CAP, 2013; IHAS, 2011, 2013). Advertising for cosmetic surgery should not use production techniques, like retouching of photographs, nor play on people's insecurities, and it should adequately represent the severity of interventions (CAP, 2013). Regarding promotional elements, loyalty cards, and incentives, such as referring a friend should be treated with caution (CAP, 2013), whereas gift vouchers, competition prizes (IHAS, 2011), and "*time-sensitive financial inducements should never be*" used (IHAS, 2013, p. 11; CAP, 2013). However, both of these Codes are guidelines and adherence to them by cosmetic surgery providers is voluntary and not imposed by law.

Cosmetic Surgery Media: Trends, Concerns, and Calls for Regulation

Over the past decade, cosmetic surgery has gained a lot of media attention, and it is no longer rare to see it feature in the media. This section describes trends in cosmetic surgery advertising and reality TV and outlines concerns relating to these.

A powerful source of mass dissemination of information about cosmetic surgery is advertising. In the UK, advertising for cosmetic surgery tends to use images of women representing the societal and media ideal, and emphasizes the psychological benefits of undergoing procedures, such as to self-esteem and confidence (Ashikali, Dittmar, & Ayers unpublished). Another common element to this advertising is promotional offers, available in a range of formats. These include financial discounts, "*recommend a friend*" schemes (Surgicare), time-limited discount coupons (Groupon), loyalty cards, "*3 for 2*" areas of liposuction (Transform Medical Group), and "*Late Space*" offers created to fill-up extra surgeon time in case of unexpected cancellations. In essence, cosmetic surgery is marketed

like any other product or commodity, rather than as a serious intervention which may have significant physical and psychological repercussions.

Cosmetic surgery reality TV brought individuals' physical transformations through surgery into the homes of the masses. Though different shows have their own particular "twist", the general format remains the same: a "regular" person, most commonly a woman, whose appearance and dissatisfaction with it is presented as being at the root of a range of personal problems undergoes surgery in an attempt to improve not just appearance, but life in general (Marwick, 2010). American shows started this trend of reality TV with *Extreme Makeover* (ABC) which was first aired in 2003. Following its success, new shows were created such as *Dr. 90210* (E! Entertainment Television) and *The Swan* (Fox). Some of these shows were also successfully aired in the UK and this prompted the creation of UK shows such as *Extreme Makeover UK* (Living TV), *Make Me Beautiful, Please*, and *Make Me Perfect* (ITV1; ITV Viewing Services, personal communication, September 29, 2010). Most of these shows depict extreme surgical transformations through multiple procedures. They also tend to portray these transformations as relatively easy to achieve. Overall, this type of reality TV portrays surgery as low risk, normative and having a positive impact on individuals' life satisfaction (Lee, 2009; Nabi, 2009).

In response to advertising and TV media several calls for the regulation of the industry have been made (BAAPS, 23 January, 2012, 16 October, 2012; Department of Health, 11, March, 2013; 28 March 2013). The BAAPS publicly criticized UK media and several clinics for "*trivializing and furthering the commoditization of cosmetic surgery*" (23 September, 2005). Promotional offers have been referred to as appalling and as violating "*not only an established code of ethics where financial and date-linked incentives are prohibited, but also common sense*" (Former BAAPS President, 09 January, 2007). Some cosmetic surgery advertisements received negative reactions from the public as well, leading to their removal (ASA, 15 October, 2012). Existing marketing strategies have also prompted the BAAPS to launch its own advertising campaign designed to make potential patients fully consider the severity of cosmetic surgery, as well as their surgeon's credentials (BBC News, 18 September, 2008). A similar situation holds true for cosmetic surgery reality shows which have been criticized for portraying cosmetic surgery as low risk, raising unrealistic expectations, and "*prey[ing] on the vulnerabilities of a society increasingly obsessed with physical perfection*" (BAAPS, 10 May, 2004). Former ASPS President stated that "*The

public is being lulled into a sense that there are no real risks or complications in cosmetic plastic surgery. People need to understand that it is real surgery…" (30 March, 2004).

The concern with the media therefore, is that current marketing strategies and portrayals of cosmetic surgery may entice the public into undergoing procedures and give a false impression about the severity and risks associated with surgery. This might not allow for sufficient consideration of risks before having a procedure and could lead to unrealistic expectations. Such concerns are crucial to address and raise an important question about how different portrayals of cosmetic surgery might impact women differently. The next section discusses the empirical literature on cosmetic surgery.

1.3 Theoretical Frameworks and Psychological Research on Cosmetic Surgery

Theoretical Perspectives and Frameworks used in Cosmetic Surgery Research

Cosmetic surgery research is still in its early stages and, although studies are increasing, there is not one single dominant theoretical framework which has informed research in this field. However, there are a few studies which tested specific theoretical frameworks (e.g. Calogero, Pina, Park, & Rahemtulla, 2010). For example, the Tripartite Model of Body Image (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999) was adapted to investigate attitudes towards cosmetic surgery (Menzel, Sperry, Small, Thompson, Sarwer, & Cash, 2011). This model considers three principal sociocultural influences (peers, parents, and the media), as well as two mediators (internalisation of appearance ideals and social comparison) as potential causes of body dissatisfaction and eating disorder symptomatology. Findings among the female sample showed that perceived sociocultural pressures (from the media, parents, female and male peers, and from significant others) were associated with more positive attitudes towards surgery, and were mediated by body dissatisfaction and, more strongly so, by thin-ideal internalisation. Taking into account both body image and attitudes towards surgery, Nabi (2009) tested three theoretical principles of media effects - cultivation theory, social comparison theory, and social cognitive theory. Support was found for all principles at varying degrees so the author concluded that an integrated model of theories may be more efficient in explicating the effects of exposure to cosmetic surgery makeover shows. Moreover, it was suggested that future research might benefit from drawing on a range of theoretical frameworks to investigate the effects of exposure to cosmetic surgery media.

A theoretical framework of the decision to undergo surgery has been put forward by Sarwer and colleagues (Sarwer, Wadden, Pertschuk, & Whitaker, 1998). This model considers body image as central to cosmetic surgery, proposing that two dimensions of body image are at play: the extent to which an individual is satisfied with his/her appearance (evaluation) and the degree of importance that body image has to individuals' self-concept and esteem (orientation). It is hypothesised that the most likely conditions under which surgery would be selected are when individuals have a low body image evaluation and a high body image orientation.

The research in this thesis was guided by the above model, as well as sociocultural theory and consumer culture frameworks. I therefore examine both individual and sociocultural factors which have been shown to make some women more susceptible to negative body image media effects, and which have more recently been linked to attitudes towards surgery. Sociocultural theory considers social and cultural influences - like family, peers, and the media - to conform to the cultural appearance ideal. The literature looking at media effects on body image suggests that exposure to idealized images of beauty leads to increased body dissatisfaction (c.f. Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002). Media coverage of cosmetic surgery inherently involves the highlighting of appearance deviations from the societal ideals, with solutions for improving or "fixing" such flaws nested in the different types of procedures available. Given this, it would be reasonable to hypothesize that exposure to such media will lead to similar negative effects on body image. Body image may also act as a precursor to cosmetic surgery, as proposed by Sarwer et al. (1998), so it could be argued that the individuals who are most likely to desire surgery are those who are body dissatisfied and whose appearance plays a significant role to their self-concept. The next section discusses psychological research on cosmetic surgery, identifying a number of research gaps which are addressed in the present thesis.

Psychological Research on Cosmetic Surgery

The uniqueness of cosmetic surgery as a commercialized medical product, along with the industry's growing success and rapid expansion have attracted interest from researchers in different disciplines. It appears that much of psychological research has focused on what factors contribute to the decision to undergo surgery, or lead to more favourable attitudes towards surgery overall. This consists of qualitative and quantitative research evidence. Qualitative research is a useful method for obtaining detailed accounts of individuals' views on cosmetic surgery, whereas correlational research demonstrates relationships between

variables. Experimental studies allow for further testing of such relationships, and can provide evidence for causality. Here, I summarize this research, followed a by more detailed presentation of variables which are potentially important in how women respond to cosmetic surgery media.

Qualitative and correlational research has identified a number of factors associated with positive attitudes towards cosmetic surgery. These factors can be divided into two broad categories: individual difference and psychosocial variables. Identified individual difference factors include body dysmorphic disorder (Crerand, Franklin, & Sarwer, 2006; Sarwer & Crerand, 2008), greater social conformity (Swami, Chamorro-Premuzic, Bridges, & Furnham, 2009), celebrity worship (Maltby & Day, 2011; Swami, Taylor, & Carvalho, 2009), appearance-based rejection sensitivity (Calogero, Park, Rahemtulla, & Williams, 2010; Park, Calogero, Hardwin, & DiRaddo, 2009), as well as lower self-rated physical attractiveness and self-esteem (Furnham & Levitas, 2012; Swami, Taylor, & Carvalho, 2009). Psychosocial factors associated with favourable cosmetic surgery attitudes include paternal attitudes towards appearance (Henderson-King & Brooks, 2009), personal and vicarious experience of cosmetic surgery (Adams, 2010; Brown, Furnham, Glanville, & Swami, 2007; Delinsky, 2005; Jávo et al., 2011; Swami, et al., 2008), and appearance-related teasing (Jackson, Dowling, Honigman, Francis, & Kalus, 2012; Jávo et al., 2011; Markey & Markey, 2009).

Variables Central to the Present Thesis

Central to the present thesis are individual differences which include body image and related variables drawn from the psychological literature on body image and consumer culture. In particular, the potential moderating role of body image (evaluation and orientation), restrained eating, thin-ideal internalisation, and materialism on body image and attitudes towards surgery are examined.

Consistent with the proposed involvement of body image in cosmetic surgery (Sarwer et al., 1998), body dissatisfaction and disturbance have been linked with more positive attitudes towards cosmetic surgery (Callaghan, Lopez, Wong, Northcross, & Anderson, 2011; Henderson-King & Henderson-King, 2005; Jávo, Pettersen, Rosenvinge, & Sørlie, 2012; Markey & Markey, 2009; Sarwer, et al., 1998; Slevec & Tiggemann, 2010; von Soest, Kvalem, Skolleborg, & Roald, 2006). The extent to which appearance is important to individuals has also been associated with favourable attitudes towards surgery (Delinsky, 2005; Jávo et al., 2012; von Soest et al., 2006), with some patient studies finding this

variable as more relevant than body dissatisfaction in patients' decision to undergo surgery (Sarwer, et al., 2005; Sarwer, LaRossa, Bartlett, Low, Bucky, & Whitaker, 2003).

A less investigated variable is restrained eating, which has generally been examined as an outcome variable in body image research (e.g. Stice & Shaw, 1994; Harrison & Cantor, 1997). There are, however, grounds to consider this variable in cosmetic surgery research: dieting can be a reaction to, and an indication of, body dissatisfaction. It could therefore be argued that those who engage in this behaviour are also likely to be more prone to considering cosmetic surgery. Indeed, there is evidence that restrained eating is associated with positive cosmetic surgery attitudes in women (Schofield, Hussain, Loxton, & Miller, 2002).

The final variables examined are internalisation of the thin-ideal and materialism. Internalisation refers to individuals' personal endorsement of the media beauty ideal and has been identified as a key vulnerability variable for negative body image responses to media images (Thompson & Stice, 2001). It has also been investigated and linked to positive cosmetic surgery attitudes (e.g. Henderson-King & Brooks, 2009; Lunde, 2013; Markey & Markey, 2009; Menzel et al., 2011; Park & Cho, 2010; Sarwer, et al., 2005; Swami, 2009). Moreover, in the only experimental study to examine potential moderating variables, women who had internalized the thin-ideal reported lowered self-esteem following exposure to cosmetic surgery reality TV (Mazzeo, Trace, Mitchell, & Walker Gow, 2007).

Materialism has only recently begun emerging in body image research as potentially important to negative body image media effects. This variable is drawn from the consumer culture literature which considers two external markers as signs of success and ideal identity: the "body perfect" and the "material good life" (Dittmar, 2008). Research has shown that these two ideals are correlated (Ashikali & Dittmar, 2012; Bell, 2011a; Guðnadóttir & Garðarsdóttir, 2014), and that highly materialistic women report more body dissatisfaction in response to advertising which depicts these two consumer culture ideals (Ashikali & Dittmar, 2012). Among adolescent girls, materialism has also been associated with restrained eating and exposure to materialistic advertising led to more diet-like behaviours (Bell, 2011a). To my knowledge, only one study within the cosmetic surgery field has looked at this variable, finding that it is a predictor of positive attitudes towards surgery (Henderson-King & Brooks, 2009). I explore these two variables as potential moderators of both body image and attitudes for several reasons. Internalisation is one of the most investigated variables in body image research and considered to be one of the most potent traits which make women feel negatively about their body. It would be interesting to see if

this is the case with cosmetic surgery media as well, and whether it can go as far as affecting attitudes. Investigating materialism will add to accumulating evidence of its negative effect on body image, and extend the cosmetic surgery literature.

In terms of psychosocial variables, particularly relevant are findings which link cosmetic surgery media consumption to more positive attitudes towards surgery. Qualitative studies with patient (Adams, 2010) and non-patient samples (Markley Rountree & Davis, 2011) found that the media are perceived as a source of pressure to achieve certain beauty standards and as motivators to the consideration of surgery. Respondents made reference to media images and to the idealization of youth and perfection as pervasive and omnipresent pressures to live up to the societal standards of beauty (Adams, 2010; Rountree & Davis, 2011). Moreover, the media was seen as a source of information about cosmetic surgery, as a means of normalizing it and as giving a sense that it is accepted by society more generally (Solvi, Foss, von Soest, Roald, Skolleborg, & Holte, 2010).

Correlational evidence has also suggested a relationship between media consumption and attitudes (Delinsky, 2005; Swami, et al., 2008). Among first-time cosmetic surgery patients for example, it was found that those classified as "high-intensity" viewers of cosmetic surgery reality TV believed themselves to be more knowledgeable about surgery, and considered such shows to be more representative of real life than "low-intensity" viewers. Furthermore, four in five patients reported being influenced by television in their decision to undergo surgery (Crockett, Pruzinsky & Persing, 2007). Using a non-patient sample of 2057 undergraduate women, Sperry and colleagues found that watching cosmetic surgery reality TV was associated with more favourable attitudes towards surgery, greater perceived pressure to undergo a procedure, as well as greater perceptions of surgery as safe (Sperry, Thompson, Sarwer, & Cash, 2009). Moreover, this was one of the few studies to consider the relationship between cosmetic surgery media and body image and eating behaviour. Findings showed that watching this type of reality television was associated with greater overall body dissatisfaction and dissatisfaction with specific body parts, as well as with dietary restraint and bulimic symptomatology. The evidence therefore suggests that greater exposure to messages about cosmetic surgery is associated with more favourable attitudes towards surgery, greater body dissatisfaction and restrained eating. However, there is a need for research to examine these relationships experimentally in order to gain insight into the immediate effects of different types of cosmetic surgery media.

To my knowledge, only two experimental studies have been carried out in this field, both of which looked at cosmetic surgery reality TV shows. In a mixed-methods study, Markey and Markey (2012) qualitatively examined young adult's responses to cosmetic surgery reality TV and quantitatively measured their body satisfaction and interest in cosmetic surgery. They found that women who were body dissatisfied and who responded positively to the cosmetic surgery program reported greater interest in obtaining cosmetic procedures. The second experimental study exposed women to an episode of The Swan and examined its impact on a range of body image and eating-related measures, including body dissatisfaction, restrained eating, body shame, and appearance control beliefs among others (Mazzeo, et al., 2007). Results showed that White women who watched the program responded most negatively, reporting more perceived pressures to be thin, as well as greater perception of their ability to control their body's appearance.

Research Gaps and Research Questions

Although empirical evidence has demonstrated a relationship between media exposure and attitudes towards surgery there are a number of limitations and research gaps. Correlational research has tended to use composite measures of cosmetic surgery media (for an exception see Nabi, 2009), whether looking at a range of media (Swami, et al., 2008), or just reality shows (e.g. Sperry et al., 2009). Similarly, existing experimental studies did not consider the content of the reality TV program. This limits the research in the sense that it either confounds media type or does not take into account the potential impact of content. Body image research, for example, suggests the effect of different types of media on body image and related constructs is not invariable (e.g. Borenkowski, Robinson, & Killen, 2000). The same could apply for cosmetic surgery media, both in terms of body image and attitudes towards surgery. Moreover, media coverage on cosmetic surgery is a complex package of information not only in the sense that it explicitly refers to improving appearance, but also in that it is a serious medical undertaking. Such coverage may therefore include information about surgeon credentials and reputation, procedure efficacy and safety, psychological and physical benefits of undergoing procedures, financial assistance and so on. All this information could activate a range of thoughts in women which might affect how they respond to it.

The examination of the potentially different effect of different portrayals of surgery is therefore critical and central to the research in this thesis. Given the recent debates and criticisms surrounding cosmetic surgery media, two elements seem particularly pertinent: the

financial offers and promotions versus the provision of risk information. Cosmetic surgery research also lacks in its consideration of body image-related constructs as outcome variables. The evidence that body image is important in women's attitudes towards surgery, and that body dissatisfaction is associated with a range of negative behaviours means that examining how exposure to cosmetic surgery media impacts body image is as important as examining its impact on attitudes.

Another significant element lacking in this research field is investigations on cosmetic surgery advertising. Whereas investigations of the content of such advertising have been carried out (Hennink-Kaminski, Reid, & Whitehill King, 2010), no studies have looked at the direct impact it may have on the public (Brunton, et al., 2013). This is surprising, considering how widespread cosmetic surgery advertising is in the UK, as well as the concern expressed by cosmetic surgery associations. Several research questions (RQ) therefore arise which this thesis aims to examine:

> **RQ1:** What is the impact of advertising for cosmetic surgery on body image and attitudes towards surgery?
>
> **RQ2:** What is the impact of reality TV on these outcome variables?
>
> **RQ3:** With respect to both reality TV and advertising, what is the impact of the content of such types of cosmetic surgery media coverage? In particular with regard to images used, discount incentives and information on risk.

Media Environment and Under-Investigated Populations

The vast majority of cosmetic surgery research has been carried out with women because they account for a yearly 90% of the industry (BAAPS, 2012). However, there are other populations that are important to examine, both academically and in terms of applied implications. The first is a population of women who live in a media environment where cosmetic surgery is not a common feature, and the second is adolescent girls.

The majority of cosmetic surgery research has been carried out in the USA, UK, and Australia. Although studies in other countries, such as France (Lazar & Deneuve, 2013), Norway (Jávo et al., 2012; Jávo & Sørlie, 2009, 2010; Solvi et al, 2010), Sweden (Lunde, 2013), Hong Kong and Japan (Tam, Kin-Shing Ng, Kim, Yeung, & Cheung, 2012), and China (Luo, 2013), are now emerging, they have not necessarily been concerned with the media's effect on women. When looking at exposure effects, especially when a specific

media type is investigated, it is interesting and important to consider habitual, daily exposure to this medium. This is particularly important when examining attitudes because the general media environment and frequency of exposure may affect these. More frequent exposure to cosmetic surgery media may lead to the normalization of cosmetic surgery and a greater acceptance towards it (Tait, 2007).

A purposive content analysis of UK and Swiss media was carried out to inform the research in this thesis (Ashikali, Dittmar, & Ayers, unpublished). It showed less presence of cosmetic surgery in Swiss media, with no cosmetic reality shows being broadcast or Swiss versions created (M. Sorbera, RTS, personal communication, September 27, 2010). The most popular women's magazines also had no articles or advertisements about cosmetic surgery. Moreover, the content analysis looked at how cosmetic surgery is portrayed on websites of cosmetic surgery providers in the UK and Switzerland. UK websites contained many images of idealized beauty, emphasized the psychological benefits to self-esteem and confidence, and included a range of financial incentives and promotions. Swiss websites on the other hand, were very technical in nature, providing the facts on each procedure offered, but also on the medical team and its qualifications and expertise. Benefits of undergoing cosmetic surgery were rarely mentioned, idealized images of women hardly used, and promotional offers were not available. Instead, Swiss websites contained a different type of general theme: a strong emphasis on the clinics themselves, the services they offer, their locations, and their luxurious natures. Cosmetic surgery in these websites is portrayed as a serious medical matter, performed by qualified, experienced surgeons, with excellent after-care at a beautiful and peaceful location. Given these differences in the portrayal of cosmetic surgery, it would be interesting to see if women who live in Switzerland respond differently to cosmetic surgery media (in the case of this specific project, advertising) to those who live in the UK. The next research question is therefore:

> **RQ4:** What is the impact of cosmetic surgery advertising on body image and attitudes towards surgery among women living in Switzerland?

The second under-investigated population in cosmetic surgery research is adolescent girls (for exceptions see Lunde, 2013; McGrath & Mukerji, 2000; Simis, Verhulst, & Koot, 2001; Zuckerman & Abraham, 2008). In contrast, a lot of body image research has focussed on adolescent girls and there is now considerable evidence that media has a deleterious impact on girls' body image and eating behaviour (e.g. Harrisson, 2000; Shroff & Thompson,

2006). Moreover, it has been suggested that this population may be particularly vulnerable to these types of negative media effects (Groesz, Levine, & Murnen, 2002; Levine & Murnen, 2009). With regard to cosmetic surgery media coverage, specific concern was also expressed about "*the young impressionable audience…who are already self-conscious about their body image*" (ASPS, 2004), suggesting that the impact of such media may be stronger or more harmful on this population.

There are several reasons why it is important to investigate cosmetic surgery in adolescents. First, they are essentially the first generation to be brought up in an environment where cosmetic surgery is relatively commonplace and accepted as a means of appearance enhancement. Second, adolescents have accounted for a consistent 1.3 – 3.5 per cent of procedures carried out in the USA, despite overall increases in procedures. This implies that the actual numbers of adolescents undergoing surgery have increased throughout the years, even if the percentages have remained constant. Moreover, they are the next adult population who may be engaging with cosmetic surgery, which makes understanding how they view it and who may be more prone to considering it important. Finally, adolescence is a period during which the body is still maturing and body image and self-concept are still developing. Adolescents spend a lot of time engaging with the media, and the fact that they are trying to form their identity and have social concerns of acceptance, among others (Bell, 2011), may make them particularly vulnerable to media which promotes the idealized beauty standard. The final research questions therefore are:

RQ5: What are adolescent girls' general views on cosmetic surgery?

RQ6: What is the effect of cosmetic surgery media (in this case reality TV) on adolescent girls' body image and attitudes towards cosmetic surgery?

1.4 The Present Thesis

The primary focus of this thesis is the impact of different types of media representations of cosmetic surgery on body image and attitudes towards cosmetic surgery. Five studies reported in four papers were carried out to answer the research questions, as shown in Table 1.1. The first part of the thesis focuses on the impact of advertising on women (Studies 1-3, Papers 1 and 2), and the second part focuses on adolescent girls (Studies 4 and 5, Papers 3 and 4). Moreover, all experimental studies consider the effect of potential moderating variables outlined in a previous section.

Paper 1 (Studies 1 and 2) presents two experimental studies which look at advertising

of cosmetic surgery, manipulating the information or images used. Study 1 exposed UK women (N = 161; mean age = 20.48) to cosmetic surgery advertising containing discount incentives, risk information, or no additional information. Study 2 manipulated the images used in such advertising, exposing women (N = 151; mean age = 20.23) to advertisements featuring idealized media models, the location and/or establishments of clinics, or to scalpels.

Paper 2 (Study 3) reports a replication of Study 1 among a sample of women living in Switzerland (N = 145; mean age = 23.07), which has a different cosmetic surgery media environment to the UK.

Paper 3 (Study 4) focuses on adolescent girls with a qualitative focus group study (Study 4) on girls' (N = 17; mean age = 16.78) views on cosmetic surgery. Girls read two articles about adolescent girls who chose to have surgery for different reasons: one as a preparation for her high-school prom night, the other in response to years of bullying related to her appearance. These articles served as a means to instigate discussion, as well as a way to find out whether girls' acceptance varied according to individuals' reasons for having it. Also explored were girls' more general opinions of cosmetic surgery, perceptions of how their peers feel about it, and views about how cosmetic surgery is portrayed within the media, as well as how this influences them.

Paper 4 (Study 5) was an experimental investigation of the effect of cosmetic surgery reality TV on adolescent girls (N = 99; mean age = 16.56). Girls in the experimental conditions were exposed to two different 15-minute composite episodes of Dr. 90210: one included some discussion of risks associated with surgery as well as depictions of some post-operative difficulties and recover, whereas the other mentioned no risks and did not show problems or the recovery phase.

The ideas at the root of this empirical project originated from the PhD candidate. The candidate was responsible for all contacts and arrangements with different schools and universities and all studies were designed and conducted by her.

Table 1.1. **Research Questions and Corresponding Studies, Papers, and Chapters**

Research Question	Study	Paper	Chapter
RQ1: What is the impact of advertising for cosmetic surgery on body image and attitudes towards surgery?	Study 1 Study 2	Paper 1	Chapter 2
RQ2: What is the impact of reality TV on these outcome variables?	Study 5	Paper 4	Chapter 5
RQ3: With respect to both reality TV and advertising, what is the impact of the content of such types of cosmetic surgery media coverage? In particular with regard to images used, discount incentives and information on risk.	All Studies	All papers	All Chapters
RQ4: What is the impact of cosmetic surgery advertising on body image and attitudes towards surgery among women living in Switzerland?	Study 3	Paper 2	Chapter 3
RQ5: What are adolescent girls' general views on cosmetic surgery?	Study 4	Paper 3	Chapter 4
RQ6: What is the effect of cosmetic surgery media (in this case reality TV) on adolescent girls' body image and attitudes towards cosmetic surgery?	Study 5	Paper 4	Chapter 5

CHAPTER 2

THE IMPACT OF COSMETIC SURGERY ADVERTISING ON UK WOMEN'S BODY IMAGE AND ATTITUDES TOWARDS COSMETIC SURGERY

2.1 Abstract

Cosmetic surgery is increasingly common and concern has been expressed about the way it is being advertised (ASPS, 2004; BAAPS, 2008). Two studies examined the impact of cosmetic surgery advertising on body image and attitudes towards surgery. Study 1 examined the impact of different types of information in such advertising. Women (N = 161) were exposed to cosmetic surgery advertising containing either discount incentives, risk information, no additional information, or a control condition. Study 2 investigated the role of different imagery in cosmetic surgery advertising. Women (N = 151) were exposed to advertising containing images of models, clinics/their location, scalpels, or to the control condition. Exposure to cosmetic surgery advertising led to increased dissatisfaction with weight (Study 1) and appearance (Studies 1 and 2). Weight dissatisfaction was moderated by materialism (Studies 1 and 2) and restrained eating (Study 1), whereas body-anxiety was also moderated by materialism (Study 1). Perceived benefits of surgery were lower following exposure to cosmetic surgery advertising, whereas consideration of surgery was higher in women exposed to advertising containing risk information (Study 1). Perception of risks associated with cosmetic surgery varied according to the types of images included in the advertisements (Study 2). Overall, results suggest advertising for cosmetic surgery impacts women's body image negatively, and information provided in such advertising impacts attitudes towards surgery differently.

2.2 Introduction

Cosmetic surgery has increasingly become an accepted form of appearance enhancement (Frederick, Lever, Peplau, 2007) and reports show a worldwide interest in it (ISAPS, 2010). This is a somewhat unique industry in the sense that, although it is directly affiliated to the medical field, cosmetic surgery is usually elective, carried out for aesthetic reasons, and rarely covered by medical insurance. Therefore, cosmetic surgery providers may promote and advertise their practices as a means of attracting clients and maintaining their business (Hennink-Kaminski, Reid, & Whitehill King, 2010; Spilson, Chung, Greenfield, & Walters, 2002; Yu, Jeong, Baek, & Joo, 2010). However, controversy has surrounded some of the marketing strategies employed, and cosmetic surgery associations such as the British Association of Aesthetic Plastic Surgery (BAAPS), have expressed concern with the incentivising nature of cosmetic surgery advertising (23 September, 2005).

The present studies seek to address some of these concerns by investigating whether cosmetic surgery advertising has an impact on women's body image and attitudes towards cosmetic surgery, and whether different features in such advertising have a further, distinct impact (Study 1). Moreover the impact of different imagery used in such advertising on body image and attitudes towards cosmetic surgery is also investigated (Study 2). To our knowledge, these are the first experimental studies to examine the psychological repercussions of cosmetic surgery advertising (Brunton, et al., 2013). Such investigations are important in gaining an understanding of how cosmetic surgery advertising may influence women's attitudes toward surgery, as well as their body image. This may, in turn, help in the formulation of recommendations for advertising policy and practice.

Cosmetic Surgery Media Coverage

The number of people undergoing cosmetic surgery has increased in the past decade. The American Society of Plastic Surgeons reported a 59% increase in the total procedures carried out between 2003-2011 (ASPS, 2012), and the BAAPS (2011) reported a 303% increase in surgical procedures during the same period. A number of factors are likely to contribute to these large increases. Firstly, technological advancements in the medical field have simplified previously complicated procedures, reducing risks and recovery periods. Secondly, cosmetic surgery has become more affordable for the average person, particularly with the availability of financial plans and loans. A third factor is the potential role of the media in promoting and normalising cosmetic surgery. For example, cosmetic surgery reality

shows have increased since 2002 when the first of such shows, *Extreme Makeover*, was televised. Given the success of this program, cosmetic surgery reality television flourished, and a number of new shows were created (e.g. *The Swan*, *Dr. 90210* and *I Want A Famous Face*). These shows typically involve an individual who is unhappy in a number of domains of life due to his/her appearance undergoing extensive cosmetic surgery. A recent show, *Bridalplasty*, which aired at the end of 2011, involved brides-to-be competing with each other to win as many surgeries from their "wish list" as possible.

Specific advertising for cosmetic surgery is relatively widespread within UK media, featuring in magazines, billboards, television, or the radio. It typically contains images of beautiful women who have purportedly undergone cosmetic surgery, and emphasizes the benefits to self-esteem and confidence that follow surgery. A common element to this advertising is the use of discount incentives and/or financial plans and loans available to prospective clients, designed to make cosmetic surgery affordable for the average person. In the UK financial incentives and promotions are readily available, appearing in a range of formats, including time-limited direct financial discounts, gift vouchers, and loyalty cards which encourage multiple procedures. In their analysis of cosmetic surgery advertisements placed in US magazines over a 20-year period, Hennink-Kaminski and colleagues found that promotional sales offers increased between 1985 and 2004, whereas information on risks associated with surgery was present in less than 10% of advertisements and did not differ over time (Hennink-Kaminski, Reid, & Whitehill King, 2010). Similar patterns were found in a small-scale purposive content analysis of cosmetic surgery advertising placed in popular UK magazines, with promotional offers and financial plans being readily available, and risk information entirely excluded (Ashikali, Dittmar, & Ayers, unpublished).

It is with respect to these promotional features, as well as the way in which surgery is generally portrayed within the media that concern has been expressed. For example, the Medical Director of the NHS in the UK said "*One of the things that alarms people in this practice is that cosmetic surgery isn't treated as serious surgery by all parties. There are some organizations which offer 2 for 1 deals; bring a friend, get a discount...What they're doing is selling a product in the way that you might sell any other product. What they're interested in is sales numbers and a financial bottom line*" (Sir Bruce Keogh, NHS medical director, BBC Radio 4, 06 September, 2012). Similar concerns have been expressed about advertising strategies: **"*The BAAPS has been increasingly concerned about the standard and style of today's cosmetic surgery advertising, designed to encourage and incentivise people*

to undergo procedures. Surgery is a serious undertaking which requires realistic expectations…” (Douglas McGeorge, BAAPS, 18 September, 2008).

Such criticisms highlight the need to investigate the role of cosmetic surgery advertising in individuals' perceptions of, and attitudes towards, cosmetic surgery. They furthermore raise the question of how different portrayals of cosmetic surgery may affect the public. Study 1 therefore compares the impact of discount incentives to information on risks associated with surgery. As well as investigating the effect of these factors on women's attitudes towards surgery, it also examines how they influence body image, and individual traits which may make some women respond more negatively to such advertising. Study 2 looks at the impact of different imagery in cosmetic surgery advertising on the same variables.

Body Image, Cosmetic Surgery, and Cosmetic Surgery Media

Initially, psychological research on cosmetic surgery predominantly focused on patient demographics, mental health, and postoperative satisfaction (e.g. Sarwer, et al., 2005a; Sarwer, et al., 2008). More recently research began investigating how cosmetic surgery media exposure may impact body image, as well as the influence it may have on individuals' willingness to undergo a procedure.

In terms of body image, findings from correlational studies are mixed. Whereas some find a relationship between cosmetic surgery media consumption and body dissatisfaction (e.g. Henderson-King & Henderson-King, 2005; Markey & Markey, 2010; Sarwer et al., 2005, Sperry, Thompson, Sarwer, & Cash, 2009), others conclude that this relationship is negligible (e.g. Nabi, 2009). For attitudes towards surgery, correlational studies suggest that more exposure to cosmetic surgery media is associated with more favourable attitudes toward surgery and greater willingness to undergo a procedure (Crockett, Pruzinsky, & Persing, 2007; Delinsky, 2005; Nabi, 2009; Sperry et al., 2009). However, although these studies find a relationship between media exposure, body image, and attitudes towards cosmetic surgery, their correlational nature does not enable cause and effect inferences. It could be that women with body dissatisfaction, and/or those who already have favourable attitudes towards surgery seek out these types of media. This raises the question of whether cosmetic surgery media does actually have an immediate, direct impact on body image and attitudes. Experimental research is therefore needed in order to determine the impact of such media.

Very few experimental studies have been carried out. Those that have been done have used cosmetic surgery reality TV shows as their experimental manipulation. For example, Markey and Markey (2010) found that individuals exposed to "*Extreme Makeover*" reported a greater desire to undergo cosmetic surgery, whereas Mazzeo and colleagues found that women exposed to the "*The Swan*" reported greater perceived pressure from the media to be thin, as well as increased endorsement of their ability to control their appearance (Mazzeo, Trace, Mitchell, & Gow, 2007). It therefore appears that cosmetic surgery reality TV shows may favourably impact individuals' attitudes toward surgery and negatively impact their body image. What has not been examined is the impact of cosmetic surgery advertising on body image and attitudes towards cosmetic surgery (Brunton et al., 2013).

Theoretical Frameworks and Predictors of Cosmetic Surgery Attitudes

Research on cosmetic surgery is relatively new, and the majority of studies have not tested specific theoretical frameworks when investigating attitudes towards cosmetic surgery (for two exceptions see: Calogero, Pina, Park, & Rahemtulla, 2010; Menzel, Sperry, Small, Thompson, Sarwer, & Cash, 2011). The current studies draw on sociocultural frameworks and literature on consumer culture to inform the selection of potential moderator variables and the formulation of hypotheses. Sociocultural theories consider the media as having one of the strongest influences on body image and there is some empirical support for this (e.g. Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002; Thompson et al., 1999). Given that cosmetic surgery advertising is entirely focused on appearance, specifically highlighting flaws and providing solutions to them, it is reasonable to hypothesise that exposure to it will lead to increased body dissatisfaction, particularly when such advertising features idealised models.

Research on body image has investigated individual characteristics in depth, identifying a number of variables which may produce adverse effects in some women, but not others (e.g. Ferguson, 2013; Roberts & Good, 2010). More recently, studies on cosmetic surgery attitudes have also found a number of predictors of positive attitudes towards surgery (e.g. Calogero, Park, Rahemtulla, & Williams, 2010; Maltby & Day, 2010; Markey & Markey, 2009; Park, Calogero, Young, & Diraddo, 2010; Swami, Taylor, & Carvalho, 2009), even if these might not be not solidly based within one theoretical framework. Given that our studies examined both body image and attitudes towards cosmetic surgery as outcome variables, we selected potential moderators which have been linked to both of these outcome variables. The examined moderating variables were mostly drawn from body image research,

but have also been linked to cosmetic surgery attitudes: trait body dissatisfaction, thin-ideal internalisation, restrained eating, and appearance as a source of self-worth. The final variable selected was materialistic values, drawn from the consumer culture literature (Dittmar, 2008). We describe research on these variables in more detail below.

Body image has been considered as a key motivator to the decision to undergo surgery (e.g. Sarwer & Crerand, 2004). Sarwer and colleagues, for example, proposed the involvement of two body image dimensions in this decision: the extent to which an individual is satisfied with his/her appearance (evaluation), and the degree of importance of body image to this individual (orientation) (Sarwer, Wadden, Pertschuk, & Whitaker, 1998). Therefore, it would be expected that individuals with a low body image evaluation and a high body image orientation would be most likely to undergo cosmetic surgery. This proposal was corroborated in one study, where women who were highly motivated to have surgery reported higher body dissatisfaction and more appearance investment than those who were not (von Soest, Kvalem, Skolleborg, & Roald, 2006). However, other studies only provided partial support for this hypothesis. Correlational evidence has shown body dissatisfaction is associated with positive attitudes towards cosmetic surgery (e.g. Markey & Markey, 2009; Slevec & Tiggemann, 2010), whereas some studies have found that cosmetic surgery attitudes are unrelated to body image evaluation, but strongly predicted by orientation (Sarwer, et al., 2005). For example, a study of breast augmentation candidates found that they were significantly more invested in their appearance, but not more dissatisfied with their appearance, than women who were not interested in breast augmentation (Sarwer, LaRossa, Bartlett, Low, Bucky, & Whitaker, 2003).

Following this, Study 1 includes trait body dissatisfaction and Study 2 appearance as a source of self-worth as potential moderators of women's responses to cosmetic surgery advertising. Based on the above research, we hypothesise that women who are dissatisfied with their body and for whom appearance is important to their self-esteem will report more favourable attitudes towards cosmetic surgery. With regards to body image, both trait dissatisfaction (e.g. Posavac, Posavac, Posavac, 1999) and appearance as a source of self-worth (e.g. Brown & Dittmar, 2005) have been found to moderate responses to idealised imagery. We would therefore hypothesise that women high on these variables are likely to be the most negatively influenced in terms of their body satisfaction.

The next variable selected was restrained eating (Study 1). Dieting and disordered eating more generally have often been considered as outcome variables in body image and

media effects research (e.g. Harrison & Cantor, 1997; Stice & Shaw, 1994). Restrained eating has however been examined in relation to cosmetic surgery attitudes and found to be a significant covariate of positive attitudes towards surgery among an Australian sample of women aged 45-50 (Schofield, Hussain, Loxton, & Miller, 2002). Based on this, we would hypothesise that restrained eaters will hold more favourable attitudes towards surgery. In terms of body image, based on the idea that those attempting to lose weight also have elevated levels of body dissatisfaction, we would expect that they report more body dissatisfaction following exposure to cosmetic surgery advertising than non-restrained eaters.

Thin-ideal internalisation is thought to be a key vulnerability factor for negative body image responses to idealized media images (e.g. Thompson & Stice, 2001). It has also been considered in cosmetic surgery research, with correlational evidence suggesting that endorsement of societal and media appearance ideals is related to favourable attitudes towards surgery (Henderson-King & Brooks, 2009; Markey & Markey, 2009; Menzel et al., 2011; Sarwer, et al., 2005; Swami, 2009). Moreover, in the only experimental study investigating potential moderating factors, women high on thin-ideal internalisation reported lowered self-esteem after exposure to cosmetic surgery reality TV (Mazzeo et al., 2007). Thin-ideal internalisation is included in both Studies, and it is hypothesised that women high on this variable will report a more negative body image and more positive attitudes towards cosmetic surgery.

A variable which has relatively recently begun emerging into body image research as a potential vulnerability factor for negative responses to idealised media, is derived from consumer culture. Dittmar's (2008) analysis of consumer culture identified two prominent ideals: the "body perfect" and the "material good life". She proposed that these ideals are closely linked, both highlighting external markers as signs of an ideal identity. Moreover, they are usually depicted together within the media. Indeed research has shown that these two ideals are correlated, and a focus on materialistic values impacts women's responses to idealised media imagery (Ashikali & Dittmar, 2012). Within cosmetic surgery research, materialistic values were shown to be associated with favourable attitudes towards cosmetic surgery (Henderson-King & Brooks, 2009). Both Studies include materialistic values, and based on the above research, it is hypothesised that highly materialistic women will report a more negative body image and more positive attitudes towards surgery following exposure to cosmetic surgery advertising.

2.3 Study 1

The first experimental study examines the impact of cosmetic surgery advertising on women's body image and on their attitudes towards cosmetic surgery. Moreover, it examines whether different types of advertising have a distinct impact on these outcome measures, in this instance whether advertisements using discount incentives have a different effect compared to those containing risk information. In addition, it examines four factors which may moderate women's responses to cosmetic surgery advertising: trait body dissatisfaction, thin-ideal internalisation, restrained eating, and materialistic values. The specific hypotheses were:

(1) Women exposed to cosmetic surgery advertising will report greater body dissatisfaction.

(2) Women exposed to cosmetic surgery advertising will report more favourable attitudes toward cosmetic surgery. That is, they will perceive surgery to be more beneficial for one's image and will consider undergoing it to a larger extent than women not exposed to cosmetic surgery advertising.

(3) The investigation of the effects of discount incentives versus risk information in this study was exploratory and new to cosmetic surgery research. However, research on other health behaviours, such as vaccination uptake, suggests that risk perception is an important determinant of health behaviour (Brewer et al., 2007). Therefore, we could argue that risk information will deter women from cosmetic surgery by reminding them that it is a risky behaviour to engage in. Discount incentives on the other hand, may make surgery seem like a more plausible behaviour to engage in by making it more affordable. Thus, we hypothesise that risk information will elicit less favourable attitudes towards surgery, whereas discount incentives will lead to more favourable attitudes.

(4) These effects will be moderated by one or more of the proposed moderator variables: trait body dissatisfaction, thin-ideal internalisation, restrained eating, and materialistic values.

2.4 Method

Design

This was an online experimental study where women were randomly allocated to one of four conditions: (1) advertisements of cosmetic surgery containing no additional

information; (2) the same advertisements with discount incentives; (3) the same advertisements with risk information; (4) advertisements of flower delivery providers (control condition). The effect of these on women's body image and attitudes towards cosmetic surgery was observed. Potential moderators were measured at a follow-up one week later. These stable characteristics were measured after the exposure experiment in order to ensure that participants were not primed or given an idea of what the true purposes of the study were.

Participants

Participants were recruited from a University psychology department in the south-east of England in exchange for course credits required as part of the students' degree. One-hundred and sixty-two women participated in the experiment (condition 1 N = 37; condition 2 N = 45; condition 3 N = 42; control condition n = 38). Ninety-three percent of women (N = 151) completed both parts of the study. The mean age was 20.48 years (SD = 3.87, range = 18 - 48) and 87% were White European. Mean BMI was 21.99 (SD = 3.18, range = 15.84 – 36.71), with 8.6% of participants being classified as underweight, 75.4% normal weight, and 15.3% as overweight according to population-relevant guidelines (World Health Organization, BMI classification).

Materials

Advertisements. Eight sets of advertisements, each consisting of two advertisements, were created. Participants in each condition therefore viewed two sets of two advertisements. The cosmetic surgery advertisements were modelled on typical advertisements found in UK magazines so they were as close to real-life as possible. They therefore featured thin, typical models, scantily-dressed and looking joyful, and used slogans which emphasised the benefits of surgery (e.g. "*Perfection within your reach*" or "*Feel the joy of a new you…Trust us to shape you into your dream self*"). Advertisements were identical in terms of imagery in all three experimental conditions, with the exception of the information provided. Condition 1 contained no additional information other than the aforementioned slogans; condition 2 included discount incentives in the form of direct monetary discounts (e.g. "*£500 off your first procedure*"); and condition 3 included information on risks relating to undergoing cosmetic surgery (e.g. "*All surgical procedures involve risks. Risks associated with all procedures include adverse reactions to anaesthesia, scarring, and infections. Please be aware of the risks associated with the procedure you seek*"). The control condition was

advertisements for flower delivery shops. We wanted the control condition to be a form of advertising which did not reflect appearance-related matters. The advertisements therefore did not contain any images of female bodies and slogans were unrelated to appearance.

Scales. All measures in this research used Likert scales, most of which ranged from (1) strongly disagree to (6) strongly agree.

The Self-Discrepancy Index (SDI; Halliwell & Dittmar, 2006) was used to assess whether exposure to the various advertisements led to the activation of women's appearance-related self-discrepancies Participants completed three sentences of the format "*I... but I would like...*", allowing them to use their own words to describe aspects of themselves that they would ideally like to change. After each sentence, participants rate how different they are from their ideal (magnitude), and how concerned they are about this difference (salience) from (1) a little to (6) extremely. Self-discrepancy statements were coded into three categories: those unrelated to body and appearance, those referring to weight and a desire for a thinner body (e.g. "*I feel I am overweight, but I would like to be thin*"), and those referring to appearance more generally (e.g. "*I would like to have bigger breasts*"). Magnitude and salience ratings were multiplied for each relevant self-discrepancy, and these products added together. However, self-discrepancies were substantially positively skewed so turned into binary variables (presence or absence of discrepancies). The SDI was administered again in Part 2 of the study as an assessment of women's trait body dissatisfaction, asking women to use a 6-month time frame when responding (range: 0-72 for both; weight M = 10.03, SD = 14.47; appearance M = 10.06, SD = 14.77).

The Physical Appearance State and Trait Anxiety Scale (PASTAS; Reed, Thompson, Brannick & Sacco, 1991) was used as a measure of participants' body-related anxiety (α = .90). Participants rate to what extent they feel tense or anxious with various aspects of their life, embedded in which are body parts, such as legs, stomach, or waist. This scale can also be used as a measure of trait body-anxiety, and was used again in Part 2 of the study (α = .91) in order to assess the potential moderating role of trait body-anxiety on responses to cosmetic surgery advertising exposure.

Cosmetic surgery attitudes were measured using the Acceptance of Cosmetic Surgery Scale (ACSS; Henderson-King & Henderson-King, 2005). The ACSS consists of three five-item subscales, two of which were used in the current study. The Intrapersonal subscale measures the extent to which one believes that cosmetic surgery can have intrapersonal

benefits in the sense of increased satisfaction with one's appearance (e.g. "*Cosmetic surgery is a good thing because it can help people feel better about themselves*"). The Consider subscale measures the likelihood that one would undergo a cosmetic procedure (e.g. "*I have sometimes thought about having cosmetic surgery*"). Reliability for both subscales was high (intrapersonal: $\alpha = .89$; consider: $\alpha = .92$).

Control and moderator variables. Thin-ideal internalisation was measured using a 13-item scale compiled by Dittmar (unpublished), which includes 9 items measuring desire to look like female models/actors and meet the thin ideal (e.g. "*I want to look like media models*"; "*I would like to look like the women in films and TV shows*"; "*I would like to have a thin body*"; "*Music videos that show thing girls or women make me wish I were thin*"), and 4 items measuring identification with media models (e.g. "*I identify with media models*"; "*I feel close to media models*"). Reliability was good $\alpha = .87$.

Eating behaviour was measured using the restrained subscale from the Dutch Eating Behavior Questionnaire (Van Strien, Frijters, Bergers, & Defares, 1986), which measures the frequency with which women control or restrain their eating (e.g. "*Do you try to eat less at mealtimes than you would like to eat*"). Reliability for this scale was high ($\alpha = .95$).

Materialistic values were measured using the Aspirations Index (Kasser & Ryan, 1996). This is a measure of the importance of extrinsic goals in relation to intrinsic, taking into account not only a focus on financial success, but also image and popularity as part of its conceptualization of materialism. Six subscales were included: three extrinsic (money, image, popularity) and three intrinsic (affiliation, community, self-acceptance). The degree of importance placed on extrinsic values in relation to intrinsic values was calculated by subtracting the mean of all subscales from the mean of the three extrinsic subscales combined (Sheldon & Kasser, 2008). Cronbach's alphas for the extrinsic goals was $\alpha = .90$ and for the intrinsic goals $\alpha = .83$.

Manipulation Check. A manipulation check was included to ensure that the information provided in the different advertisements was adequately perceived by participants. At the end of the study, participants were asked to state whether the advertisements they saw contained: (1) no additional information; (2) discount incentives; (3) risk information. These checks confirmed that the majority of women in conditions 1 and 2 correctly identified which condition they were in (condition 1 = 72.2%; condition 2 = 74.4%) However, risk information was only correctly identified by 48.6% of women in that

condition. It therefore appears that the risk information was less noticeable than the discount incentives. This has pros and cons. On the one hand, it means women in the risk condition may be responding more to the cosmetic surgery advert rather than the risk information. However, on the other hand the risk information was designed to be realistic, i.e. discreet, as it possibly would be presented in real cosmetic surgery advertising. It is also possible that risk information has an impact on women's responses even if it is not consciously recognized.

Procedure and Ethical Issues

Ethical approval was obtained from the university research ethics committee. Participants were recruited through the university's respondent database in exchange for course credits, and directed to the study website, which randomly allocated them to one of the four conditions. The study was presented to participants as a project investigating consumer culture and consumer decision-making. Participants were given an introduction to the study, informed of their right to withdraw, and assured their responses would remain anonymous and confidential. Participants were then asked to provide some personal details to create a unique identifier code for each of them, in order to allow for their responses from Part 1 of the study to be matched to those from Part 2 without compromising anonymity.

The first part of the study was presented as a consumer decision-making task, whereby participants looked at and rated in terms of preference two pairs of advertisements allegedly from European companies wanting to expand their business to the UK. This decision-making guise served as a means of assuring that participants would pay close attention to the advertisements and the information given in them. Immediately after viewing the advertisements, participants' self-discrepancies were assessed, followed by their attitudes towards cosmetic surgery. Some filler items on flower delivery were also formulated in order to maintain the cover story. Finally, participants gave their demographic information and completed manipulation checks.

Part 2 was began with an introductory page, explaining that this part of the study had to be conducted at a time different to the advertisement exposure because we were interested in participants' more general and enduring attitudes, and that they should therefore use a 6-month time frame in responding to the various questions. This was followed by the consent form, unique identifier code, and the Self-Discrepancy Index. The thin-ideal internalisation scale was included in a section about opinions on the media and media models, whereas materialistic values were assessed in a section allegedly measuring the impact of individuals'

personal life goals on advertisement perception. This was followed by a section on eating habits. Participants were then fully debriefed as to the real purposes of the study, and were once again given the opportunity to withdraw their answers.

2.5 Results

Groups did not differ on any of the trait measures (trait body dissatisfaction, thin-ideal internalisation, and materialistic values), BMI or age (all $F < 1.9$, $p > .13$). However, restrained eating approached significance ($F(3, 147) = 2.51$, $p = .06$) so this variable was controlled for in subsequent analyses.

To examine which variables might moderate women's responses to cosmetic surgery advertising, hierarchical regressions were carried out on each outcome variable, with potential moderating factors as predictor variables. Our hierarchical regression model was structured as follows: restrained eating mean-centred (step 1); three exposure contrasts: control versus experimental (coded control = -.99 and experimental = .33), no additional information versus information (i.e. information on discount incentives or risks, coded no information = -.66 and information = .33), and discount incentives versus risk information (coded discount = .33 and risk = -.33; step 2). Finally, step 3 added significant moderators (mean-centred) and their interactions with the exposure contrasts. Self-discrepancies were analysed using logistic regression. Descriptive statistics for all measures are presented in Table 2.1.

Table 2.1. **Descriptive Statistics for all Measures**

Variable	Mean	S.E.	SD
Binary Weight Self-Discrepancies	.54	.04	.50
Binary Appearance Self-Discrepancies	.54	.04	.50
Body-Related Anxiety (PASTAS)	2.76	.08	.99
Intrapersonal	3.85	.08	1.04
Consider	3.47	.11	1.36
Thin-Ideal Internalisation	3.32	.06	.76
Restrained Eating	2.83	.08	.99
Materialistic Values	-.58	.03	.39
Trait Weight Self-Discrepancies	10.03	1.18	14.47
Trait Appearance Self-Discrepancies	10.07	1.20	14.77

Effects of Cosmetic Surgery Advertising on Body Image

Consistent with our first hypothesis, group differences were observed in women's weight related self-discrepancies (Table 2.2) and appearance self-discrepancies (Table 2.3). Women exposed to cosmetic surgery advertising felt worse about their weight (62.9%) and appearance (62.1%) than those exposed to the control condition (weight = 23.7%; appearance = 28.9%). Moreover, a significant main effect emerged for weight-related self-discrepancies between women exposed to cosmetic surgery advertising containing no additional information (59.5%) and those exposed to advertising containing discount incentives or risk information (64.4%). Here, it was women exposed to advertising containing additional information who reported more dissatisfaction with their weight, suggesting that the content of cosmetic surgery advertising plays a role on the impact it has on women's body image.

Table 2.2. **Binary Logistic Regression Coefficients for Weight-Related Self-Discrepancies**

Predictor	B	p	S.E.	95% C.I. for Odds Ratio		
				Lower	OR	Upper
Restrained Eating (mean-centred)	1.55	***	.30	2.65	4.72	8.43
Control vs Experimental	1.52	***	.39	2.12	4.57	9.87
No Information vs Information	1.46	**	.58	1.38	4.31	13.49
Discounts vs Risks	.95		.86	.48	2.58	14.02
Materialistic Values (MV; mean-centred)	.70		.60	.63	2.02	6.46
MV Control vs Experimental	1.97	*	.94	1.14	7.15	44.83
MV No Information vs Information	-3.48		1.82	.00	.03	1.10
MV Discounts vs Risks	.60		2.30	.02	1.82	163.51
Constant	.03		.21		1.03	

Note: $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$. Model $\chi^2(8) = 65.55$, $p < .001$. Hosmer & Lemeshow $\chi^2(8)$ = 7.50, p = .48. Cox and Snell $R^2 = .35$. Nagelkerke $R^2 = .47$.

Table 2.3. **Binary Logistic Regression Coefficients for Appearance-Related Self-Discrepancies[1]**

Predictor	B	p	S.E.	Lower	OR	Upper
					95% C.I. for Odds Ratio	
Restrained Eating (mean-centred)	-.19		.21	.55	.83	1.26
Control vs Experimental	1.15	***	.34	1.63	3.16	6.15
No Information vs Information	.32		.50	.52	1.37	3.63
Discounts vs Risks	.21		.95	.19	1.24	7.94
Weight Self-Discrepancies (WSD; mean-centred)	.05	*	.02	1.01	1.05	1.09
WSD Control vs Experimental	.04		.03	.98	1.04	1.11
WSD No Information vs Information	.07		.04	.99	1.07	1.67
WSD Discounts vs Risks	.25	**	.09	1.07	1.29	1.55
Constant	.34		.20		1.41	

Note: $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$. Model $\chi^2(8) = 28.91$, $p < .001$. Hosmer & Lemeshow $\chi^2(8) = 3.69$, $p = .88$. Cox and Snell $R^2 = .17$. Nagelkerke $R^2 = .23$.

For weight-related self-discrepancies, two significant moderation effects emerged, one with materialism and the other with restrained eating. The first is illustrated in Figure 2.1 where it can be seen that there is little difference between women low and high on materialistic values when exposed to the control condition (.15 scale points). However, when exposed to cosmetic surgery advertising, it is highly materialistic women who respond more negatively in terms of their weight satisfaction, scoring .66 scale points higher than women low on this variable.

The second ($\beta = 1.26$, $p = .05$), illustrated in Figure 2.2, shows that restrained eaters are higher on weight-related self-discrepancies than non-dieters, and this difference becomes more important when they are exposed to cosmetic surgery advertising containing information about discounts and risks than advertising which does not contain such information. Although both materialistic values and restrained eating were significant moderators of weight-related self-discrepancies individually, when entered in the same regression model, they both become non-significant. Thus, we cannot determine which variable is a stronger moderator, and further research is needed to clarify these findings.

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[1] As it can be seen in Table 2.2., appearance self-discrepancies were moderated by trait weight self-discrepancies. When exposed to risks, women respond very similarly, however when exposed to discount incentives, women who are more dissatisfied with their weight report more appearance dissatisfaction (.06 scale points) than those lower on trait weight dissatisfaction.

Figure 2.1. **Weight-related self-discrepancies at different levels of materialism for women exposed to cosmetic surgery advertising or not.**
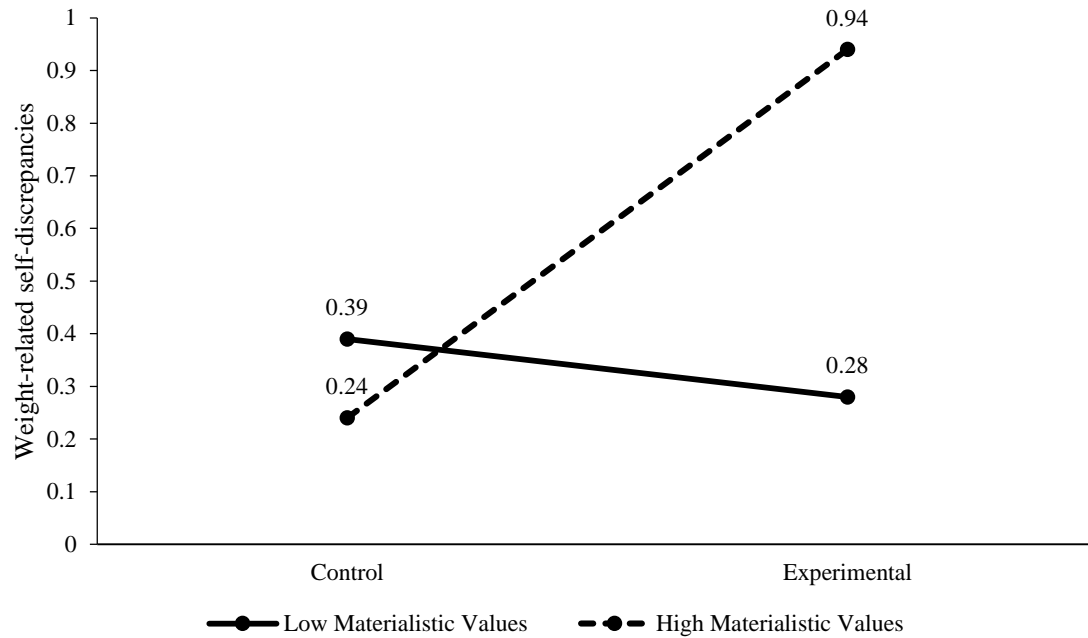
Figure 2.2. **Weight-related self-discrepancies at different levels of restrained eating for women exposed to cosmetic surgery advertising containing additional information (discounts or risks) or not.**
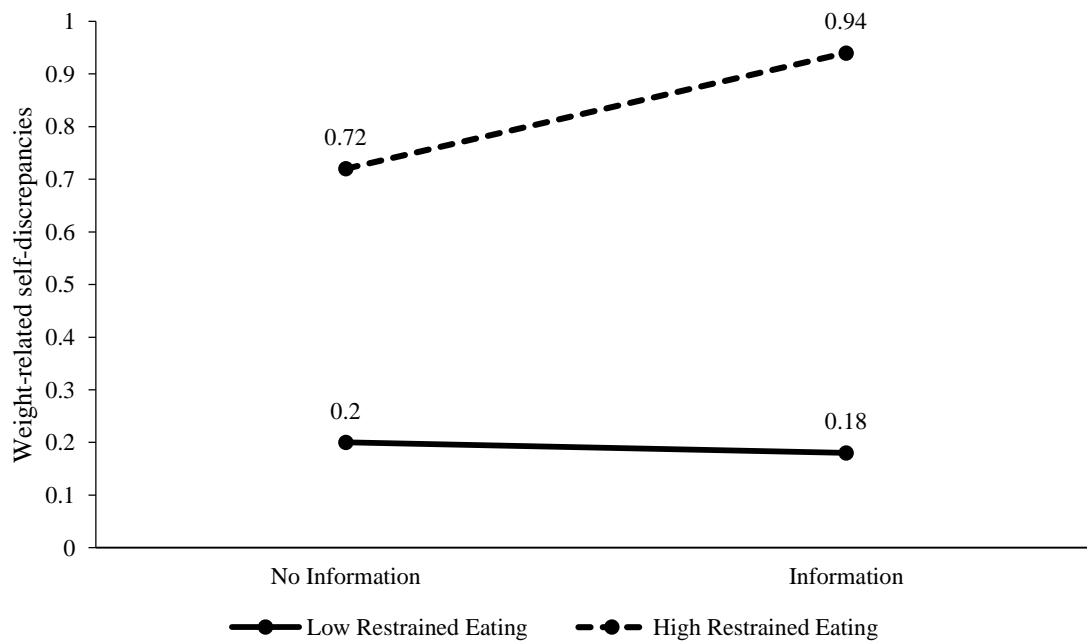
Although there were no significant main effects for body-anxiety (all $p > .15$), a significant interaction with materialism did emerge ($\beta = -1.67$, $p = .03$), such that highly materialistic women reported more body-related anxiety than non-materialists when exposed to cosmetic surgery advertising not containing information on risks or discounts (Figure 2.3).

Figure 2.3. **Body-related anxiety at different levels of materialism for women exposed to cosmetic surgery advertising containing additional information (discounts or risks) or not.**
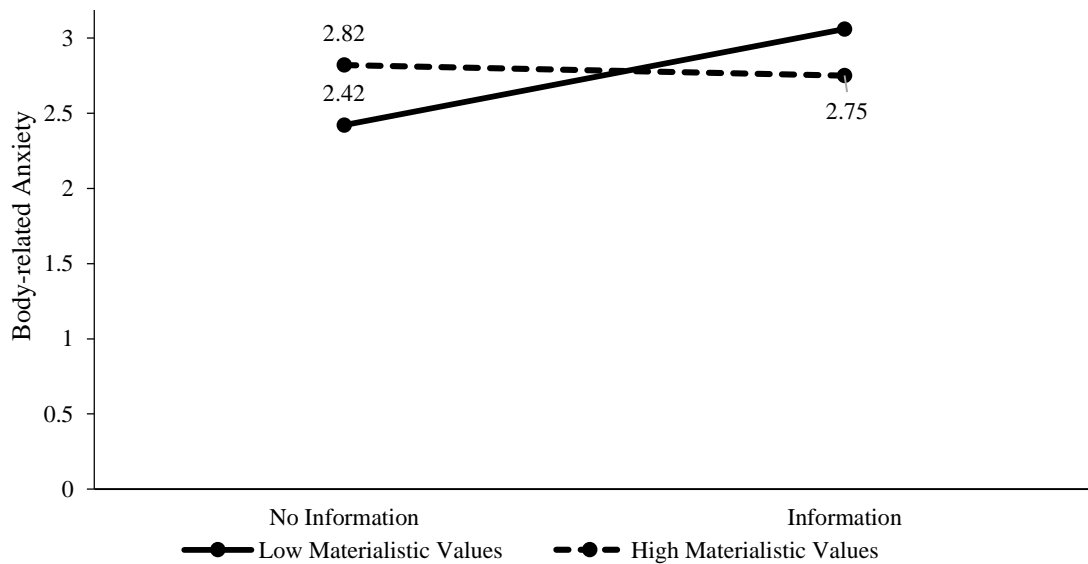
Effects of Cosmetic Surgery Advertising on Attitudes toward Cosmetic Surgery

Given that none of the interaction terms reached significance, step 3 was dropped from the analysis for both measures of attitude. Women exposed to cosmetic surgery advertisements were less likely to report that cosmetic surgery has intrapersonal benefits compared to women in the control condition (Table 2.4). Similarly, women exposed to risk information reported considering having surgery in the future more ($M = 3.76$) than those exposed to discount incentives ($M = 3.07$) (Table 2.5). Both these findings were contrary to our expectations that exposure to cosmetic surgery advertising would make attitudes toward surgery more favourable, and that risk information would act as a deterrent to the desire to undergo surgery.

Table 2.4. **Multiple Regression Coefficients for Perceived Intrapersonal Benefits of Cosmetic Surgery**

Predictor	B	β	S.E.	p
Restrained Eating (mean-centred)	.26	.25	.09	**
Control vs Experimental	-.31	-.16	.15	*
No Information vs Information	-.08	-.03	.22	
Discounts vs Risks	-.36	-.08	.34	
Constant	3.88		.08	***

Note: *p < .05, **p < .01, ***p < .001

Table 2.5. **Multiple Regression Coefficients for Consideration of Cosmetic Surgery**

Predictor	B	β	S.E.	p
Restrained Eating (mean-centred)	.43	.31	.11	***
Control vs Experimental	-.21	-.09	.19	
No Information vs Information	.29	.08	.28	
Discounts vs Risks	-1.00	-.18	.44	*
Constant	3.45		.11	***

Note: *p < .05, **p < .01, ***p < .001

2.6 Discussion

Results from Study 1 suggest that cosmetic surgery advertising leads to an increase in body dissatisfaction both in terms of weight and appearance, regardless of whether it offers discount incentives or information about risks associated with surgery. This is consistent with previous correlational research (e.g. Markey & Markey, 2009), and provides experimental evidence of the negative impact of cosmetic surgery advertising on women's body image. Moreover, weight satisfaction was affected by the content of cosmetic surgery advertising, such that additional information of discounts and risks led to an increase in dissatisfaction. This suggests that the content of such advertising plays a distinctive role on body image, and provides support for our rationale in carrying out this investigation.

Materialistic values and restrained eating were found to affect how women respond to cosmetic surgery advertising. The results suggest that women with strong materialistic values respond more negatively in terms of their weight satisfaction when exposed to cosmetic surgery advertising, and report more body-anxiety when exposed to cosmetic surgery advertising containing no additional information. These findings are consistent with previous

research which showed that highly materialistic women respond negatively to advertising containing thin-ideal models (Ashikali & Dittmar, 2012) and with the consumer culture literature (Dittmar, 2008). The final moderation effect showed that restrained eaters were more dissatisfied with their weight than women who were not attempting to lose weight, a difference which became bigger when exposed to cosmetic surgery advertising which contained discount incentives or risk information. Overall, these moderation findings highlight the importance of examining moderating factors which may make some women respond negatively to cosmetic surgery advertising.

The effect of cosmetic surgery advertising on attitudes towards surgery is less straight-forward, with unexpected findings that women exposed to such advertising were less likely to perceive intrapersonal benefits of surgery, and women exposed to risk information being more likely to consider undergoing surgery. The first finding could be explained as a negative response to cosmetic surgery advertising. However, it could be that it is frequent or prolonged exposure to cosmetic surgery advertising which leads to more favourable attitudes towards surgery. The finding that women who saw warnings about risks relating to cosmetic surgery considered it to a larger extent than those who were offered discount incentives could be explained in terms of the perceived competency of the cosmetic surgery provider. The provision of risk information may inspire more confidence in prospective clients through portraying the provider as more serious, responsible and trustworthy, thus leading women to consider undergoing surgery. Alternatively, it could be that women living in the UK are so habituated to promotional offers for cosmetic surgery that such incentives are no longer appealing, or even elicit negative attitudes towards surgery.

It therefore appears that in this context, offering a discount for cosmetic surgery did not act in the incentivising manner that the BAAPS and other associations were concerned about. However, this finding needs to be replicated before recommendations for advertising practice can be made. Future research also needs to examine whether similar or different effects are found for other forms of incentives such as cosmetic surgery prize draws (BAAPS, 07 June, 2011), online discount coupons (BAAPS, 27 May, 2011), or free surgery for magazine readers (BAAPS, 10 October, 2011).

Interestingly, trait body dissatisfaction did not play a moderating role in women's attitudes towards cosmetic surgery. This is contrary to our expectations and some previous research which found a positive relationship between these two variables (Markey & Markey, 2009; Slevec & Tiggemann, 2010). However, it is consistent with other research which found

no moderating effect of trait body dissatisfaction in responses to television and social media (Ferguson, Muñoz, Garza, & Galindo, 2013). Moreover, considering the model proposed by Sarwer and colleagues (1998), it could be that attitudes towards surgery only become more positive in women who have a low body image evaluation (i.e. high body dissatisfaction) and a high body image orientation (i.e. high importance of body image to individual's self-concept). Alternatively, and as suggested by some research (Sarwer, et al., 2003; Sarwer et al., 2005), it could be that the orientation variable is more central and important in predicting positive attitudes towards surgery than evaluation. Study 2 therefore investigates the potential moderating role of appearance as a source of self-worth.

It must be noted here that the advertisements created for this study were modelled on real cosmetic surgery advertising and therefore, all experimental material included images of thin-ideal models. The use of advertisements which resemble actual media advertising is a strength of the current study in the sense that it provides a more realistic representation of the impact of such advertising on women. However, it also entails a possible limitation in that the negative effects found on body image could be due to the presence of idealized models, rather than cosmetic surgery advertising itself. Study 2 aims to disentangle the impact of cosmetic surgery advertising information from the impact of idealised models by using different types of imagery as its experimental manipulation.

2.7 Study 2

In response to current marketing strategies and advertising for cosmetic surgery, the BAAPS launched their own ad campaign designed to encourage people considering surgery to fully contemplate the reality of surgery and the competence of their surgeon. The advertisement depicted a life-size scalpel, designed to "*heighten the sense of tension, making the instrument very real and potentially threatening*" (David Barraclough**,** producer of BAAPS advertisements, BAAPS, 18 September, 2008), combined with a simple slogan promoting safety in cosmetic surgery. We wanted to address the issues on cosmetic surgery advertising as directly as possible, so we examined the impact of images of idealised models, which are often used in cosmetic surgery advertising, in comparison to that of scalpels, as used in the campaign by the BAAPS. The third type of image selected was of the clinics and/or locations of the cosmetic surgery providers. The images depicted beautiful, clean, and somewhat luxurious clinics and locations. This experimental condition therefore is more neutral than the other two, moving away from the use of idealised media models, while also being less aggressive than the images of scalpels. Moreover, we were interested in

investigating whether these different images would have a different impact on women's perception of risks associated with cosmetic surgery. As was the intention of the BAAPS campaign, it could be expected that the threatening element of the scalpel images will lead to a higher perception of risks associated with surgery than other images.

As with Study 1 we examine the impact of this advertising on both body image and attitudes towards cosmetic surgery. We maintain materialistic values and thin-ideal internalisation as potential moderating variables and also consider appearance as a source of self-worth. Our specific hypotheses were:

(1) Women exposed to cosmetic surgery advertising will report greater body dissatisfaction than those in the control group. Following the large body of literature which has shown that exposure to images of idealised models leads to an increased body dissatisfaction (Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002), we would expect that this effect will be particularly pronounced in women exposed to images of idealised models.

(2) Women exposed to advertising containing "threatening" images of scalpels will report a greater perception of risks associated with cosmetic surgery.

(3) The above effects will be moderated by one or more of the chosen variables: materialistic values, thin-ideal internalisation, and appearance as a source of self-worth.

2.8 Method

Design

This was an online experimental study where women were randomly allocated to one of four conditions: cosmetic surgery advertising containing (1) images of models, (2) images of the clinics, (3) images of scalpels, or (4) the control condition (advertisements for flower delivery services). The effects of exposure on body image and attitudes towards cosmetic surgery were recorded. Potential moderator variables of thin-ideal internalisation, appearance as a source of self-worth, and materialistic values were measured at a follow-up one week later.

Participants

Participants were female students recruited on a voluntary basis from a University psychology department in the south-east of England in return for course credits. One-hundred

and fifty-one women participated in the first part of the study, (condition 1 N = 42; condition 2 N = 36; condition 3 N = 37; condition 4 N = 36). Eighty-nine percent of participants (N = 119) completed the experiment and the follow-up. The overall mean age was 20.23 years (SD = 3.44, range 18-43), and 79.5% were White European. The mean BMI was 22.13 (SD = 3.66, range = 13.15-39.06), with 6.6% being classified as underweight and 13.9% as overweight.

Materials

Advertisements. Four advertisements for each condition were created using Adobe Photoshop. The advertisements for the control condition were for flower delivery services, specifically chosen to not relate to appearance. The cosmetic surgery advertisements were identical to each other in the information provided, but the images varied for each condition. The first included female models representative of models present in the media. The second included images of the cosmetic surgery clinics, and the third included images of scalpels. The advertisements were presented in pairs of two, and masked as a consumer decision-making task, whereby participants stated their preferred advertisement from each set.

Scales.[2] Measures of body dissatisfaction and cosmetic surgery attitudes were identical to Study 1, assessed with the Self-Discrepancy Index and the Acceptance of cosmetic surgery Scale (intrapersonal α = .89; consider α = .93). Six items to assess perception of risks associated with cosmetic surgery were also created. Some were taken from Nabi (2009), such as "*There are psychological risks associated with having cosmetic surgery*" (α = .57).

Proposed moderator variables. The Body-Perfect Internalisation Scale (BPIS; Bell, 2011) was used to measure the extent to which women endorse the media-prescribed ideal of female beauty. Based on well-established body image measures, such as the internalisation subscale of the SATAQ-3 (Thompson et al., 2003) and the Appearance Schemas Inventory (ASI-R; Cash, Melnyk, & Hrabosky, 2004), it contains three subscales measuring identification with media models, centrality of the body perfect to the self, and investment in the body perfect. The extent to which women derive self-worth from their appearance was measured using the 5-item Appearance subscale from the Contingencies of Self-Worth Scale

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[2] A further two measures of body dissatisfaction were included: the Physical Appearance State and Trait Anxiety Scale (PASTAS; Reed et al, 1991) and the 10-item Appearance subscale from the Body Esteem Scale (BES; Mendelson, Mendelson, & White, 2001). However, the PASTAS did not yield any significant results, whereas the BES replicated a moderation effect by materialism found with weight-related self-discrepancies. We therefore do not report these scales further.

(ASW; Crocker, Luhtanen, Cooper, & Bouvrette, 2003). Example items include "*When I think I look attractive, I feel good about myself*" (α = .78). Materialistic values were measured using the Aspirations Index (extrinsic: α = .91, intrinsic α = .87).

Procedure and Ethical Issues

Ethical approval, participant recruitment, cover story and presentation of the advertisements were identical to Study 1. Procedure for Part 1 was also identical, except that the experimental conditions also exposed participants to the flower delivery advertisements with the aim to better maintain the cover story. Part 2 first assessed women's materialistic values, followed by thin-ideal internalisation and the extent to which they derive self-worth from their appearance.

2.8 Results

The analytic strategy was identical to Study 1. Groups did not differ on BMI, age, or potential moderator variables (ANOVA, all F < .44, p > .73). Final regressions were therefore structured as follows: three exposure contrasts-control versus experimental (coded -.99 and .33 respectively), model versus no model (coded -.66 and .33), and location versus scalpel (coded -.33 and .33) (step 1); and significant moderators (mean-centred) and their interactions with the exposure contrasts (step 2). Descriptive statistics for all measures are presented in Table 2.6.

Table 2.6. **Descriptive Statistics for all Measures**

Variable	Mean	S.E.	SD
Binary Weight Self-Discrepancies	.44	.04	.50
Binary Appearance Self-Discrepancies	.38	.04	.49
Body-Related Anxiety (PASTAS)	1.81	.08	.99
Body Esteem	3.63	.08	1.00
Intrapersonal	3.49	.08	1.03
Consider	3.15	.12	1.43
Risk Perception	4.69	.05	.65
Thin-Ideal Internalisation	3.38	.10	1.04
Appearance as Source of Self-Worth	4.35	.08	.85
Materialistic Values	-.49	.03	.35

Effects of Exposure to Cosmetic Surgery Advertising on Body Image

Consistent with Hypothesis 1, women exposed to cosmetic surgery advertising reported more appearance-related self-discrepancies (Table 2.7) in comparison to those in the control condition (44.3% versus 19.4%). Although no significant main effects were observed for weight-related self-discrepancies (Table 2.8), a significant interaction between the location versus scalpel exposure and materialistic values emerged. As shown in Figure 2.4, highly materialistic women respond more negatively in terms of their weight when exposed to images of locations, whereas women low on materialism respond more negatively when exposed to images of scalpels.

Table 2.7. **Binary Logistic Regression Coefficients for Appearance-Related Self-Discrepancies**

Predictor	B	p	S.E.	Lower	OR	Upper
				95% C.I. for Odds Ratio		
Control vs Experimental	.89	**	.35	1.22	2.42	4.81
Model vs No Model	-.53		.40	.27	.59	1.28
Location vs Scalpel	.80		.73	2.23	2.23	9.39
Constant	-.55	**	.18		.58	

Note: $^{**}p < .01$. Model $\chi^2(3) = 10.68$, $p < .05$. Hosmer & Lemeshow $\chi^2(2) = .00$, $p = 1.00$. Cox and Snell $R^2 = .07$. Nagelkerke $R^2 = .09$.

Table 2.8. **Binary Logistic Regression Coefficients for Weight-Related Self-Discrepancies**

Predictor	B	p	S.E.	Lower	OR	Upper
				95% C.I. for Odds Ratio		
Control vs Experimental	.66		.38	.89	1.89	4.00
Model vs No Model	-.24		.48	.31	.78	2.00
Location vs Scalpel	.26		.87	.23	1.29	7.14
Materialistic Values (MV; mean-centred)	-.33		.69	.19	.71	2.77
MV Control vs Experimental	1.88		1.14	.70	6.52	60.89
MV Model vs No Model	.97		1.54	.13	2.63	53.43
MV Location vs Scalpel	-7.05	*	3.36	.00	.00	.63
Constant	-.32		.21		7.3	

Note: $^{**}p < .01$. Model $\chi^2(7) = 15.19$, $p < .05$. Hosmer & Lemeshow $\chi^2(8) = 11.51$, $p = .18$. Cox and Snell $R^2 = .13$. Nagelkerke $R^2 = .17$.

Figure 2.4. **Weight-related self-discrepancies at different levels of materialism for women exposed to cosmetic surgery advertising containing images of clinics' locations or scalpels.**
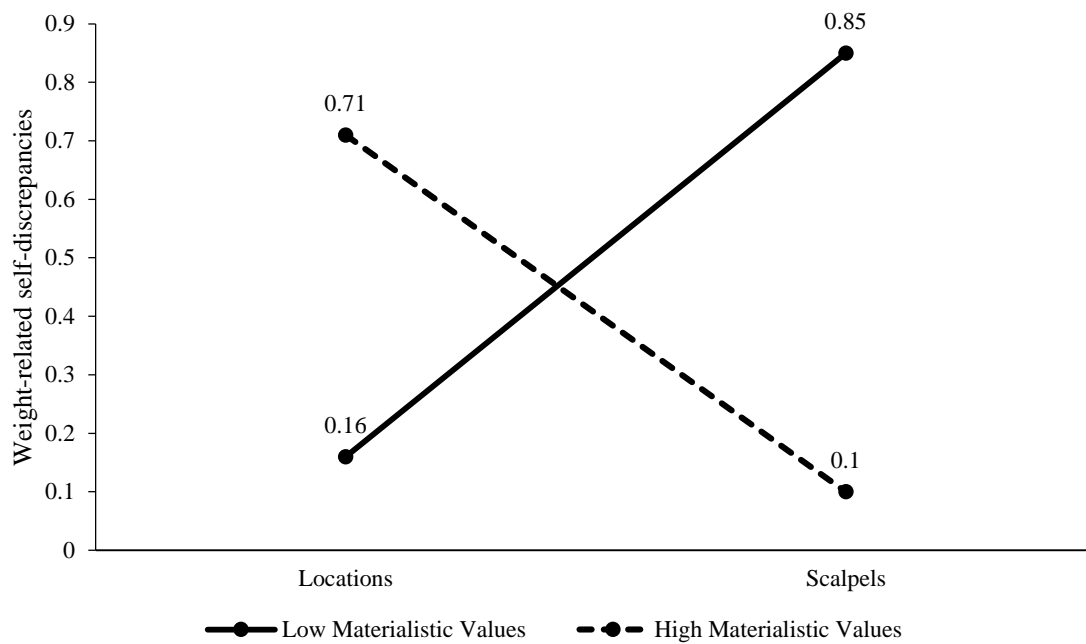
Effects of Cosmetic Surgery Advertising on Attitudes towards Surgery and Perception of Risks

Contrary to Hypothesis 2, no significant main or moderation effects were observed for attitudes towards cosmetic surgery (all $F < .94$, $p > .43$) suggesting that exposure to cosmetic surgery advertising does not impact on how beneficial to their image women perceive surgery to be (Table 2.9), nor on the extent to which they would consider it (Table 2.10). In terms of risk perception (Table 2.11), women who were exposed to cosmetic surgery advertising containing images of locations ($M = 4.88$) and scalpels ($M = 4.73$) perceived more risks associated with surgery than those exposed to images of models ($M = 4.52$).

Table 2.9. **Multiple Regression Coefficients for Perceived Intrapersonal Benefits of Cosmetic Surgery**

Predictor	B	β	S.E.	p
Control vs Experimental	-.10	-.06	.15	
Model vs No Model	-.19	-.08	.21	
Location vs Scalpel	.46	.10	.37	
Constant	3.49		.09	***

Note: ***$p < .001$

Table 2.10. **Multiple Regression Coefficients for Consideration of Cosmetic Surgery**

Predictor	B	β	S.E.	p
Control vs Experimental	-.09	-.03	.21	
Model vs No Model	-.10	-.03	.28	
Location vs Scalpel	.54	-.09	.51	
Constant	3.15		.19	***

Note: ***p < .001

Table 2.11. **Multiple Regression Coefficients for Perception of Risks Associated with Cosmetic Surgery**

Predictor	B	β	S.E.	p
Control vs Experimental	.03	.03	.10	
Model vs No Model	.28	.18	.13	
Location vs Scalpel	.21	-.08	.23	*
Constant	4.70		.05	***

Note: * p < .05 ***p < .001

2.9 Discussion

Results from Study 2 suggest that cosmetic surgery advertising leads to an increased dissatisfaction with appearance, irrespective of the types of images used. This replicates results from Study 1, and extends previous research by showing that it is not only images of idealised models that lead to increased body image concerns, but cosmetic surgery advertising more generally.

Materialism affected weight satisfaction such that materialistic women reported more dissatisfaction with their weight when exposed to cosmetic surgery advertising containing images of clinics' locations, whereas low materialists responded more negatively to images of scalpels. This finding could be explained in terms of the experimental manipulations used. The depicted clinics and locations were somewhat luxurious, which could be an element to such advertising that materialistic women are particularly sensitive or attracted to. It could be speculated that the combination of luxury and messages of attractiveness activated thoughts about materialistic women's own appearance, making them feel dissatisfied with their weight. Further research and replication of this finding are required before conclusions can be drawn.

Perceptions of risks associated with cosmetic surgery were higher in women exposed to images of clinics and scalpels than those exposed to idealised models. This provides partial support for our hypothesis that exposure to threatening images would lead to a higher risk perception, and suggests that the BAAPS ad campaign incentive was correct in its approach for encouraging people to consider the severity of cosmetic surgery. Furthermore, it is important to note that women exposed to images of models had the lowest perception of risks associated with surgery, even less so than women in the control group. This suggests that the use of models in such advertising is inappropriate in terms of eliciting sufficient consideration of the dangers involved in surgery. Given that one of the main concerns about the style of cosmetic surgery media is that it trivialises surgery, research may want to focus on risk perception and factors which affect it. It should be noted here however, that the risk perception scale used in the current study had low reliability, so future research wishing to examine this variable should strive for an improved scale.

2.10 General Discussion and Future Research

The present studies investigated the impact of cosmetic surgery advertising on women's body image and attitudes toward cosmetic surgery. They were novel in examining the impact of different information and imagery used in such advertising, as well as in investigating the potential moderating role of different variables. Such investigations are important in understanding the impact of cosmetic surgery advertising on the public, and timely given recent discussions on regulation of the industry (BBC News, 31 December, 2012), and calls for banning advertising altogether (BAAPS, 30 May, 2012).

Results from both studies show a negative influence of cosmetic surgery advertising on body image, irrespective of the type of information or images provided. Such increase in body dissatisfaction can be problematic regardless of whether it heightens the desire for cosmetic surgery, due to the known negative consequences of such dissatisfaction, such as depression and eating disorders (e.g. Stice & Shaw, 2002; Wiederman & Pryor, 2000).

The impact of advertising on attitudes towards surgery was unclear: Study 1 found attitudes are affected by the type of information provided, whereas Study 2 found no significant effects, except for the perception of risks associated with surgery. It could therefore be that information provided in such advertising has a stronger impact than the use of different images. Moreover, different types of cosmetic surgery media coverage could still have an acute impact on attitudes, as suggested by experimental studies on cosmetic surgery

reality TV (e.g. Markey & Markey, 2010). The narrative, information, and imagery provided in cosmetic surgery reality TV shows is stronger and much more detailed than in advertising. TV media may allow viewers to identify with the person undergoing surgery through gaining an understanding of the burdens caused by her appearance and the relief from these post-surgery. This may, in turn, enable them to consider the benefits of cosmetic surgery, leading to more favourable attitudes. Advertising on the other hand, is not interactive and merely promotes the services of a particular doctor or clinic and may therefore have a weaker impact on attitudes. Future research could compare these two types of cosmetic surgery media to see whether their impact on attitudes is different. Alternatively, general exposure to cosmetic surgery media could lead to the normalisation of surgery, which may consequently lead to more favourable attitudes towards it and to a greater consideration of it. It would therefore be useful for research to longitudinally examine these attitudes, taking into account cosmetic surgery media consumption and the media environment more generally.

In terms of theoretical frameworks, our studies did not provide support for the model by Sarwer and colleagues (1998), which proposed that high body dissatisfaction and appearance investment are likely precursors to the decision to undergo surgery. However, these conditions may be satisfied in actual cosmetic surgery patients, so research could examine this model among a patient sample. Our findings for body image are however consistent with media effects research, which has consistently shown that the media play an important role to women's body dissatisfaction (e.g. López-Guimerà, Levine, Sánchez-Carracedo, & Fauquet, 2010). Moreover, Study 2 extends this research to show that in the case of cosmetic surgery advertising, negative body image emerges even in the absence of idealised media models. This may be due to the fact that advertising for cosmetic surgery implicitly emphasizes image "flaws" and deviations from the societal ideals.

Despite the novel aspects of these studies, there are some limitations which should be noted and considered. The samples were relatively homogenous in terms of age, ethnicity, and educational background. Future research should replicate and extend this research on the impact of advertising among more diverse samples of women. Moreover, although the experimental nature of this study allows inferences of cause and effect, longitudinal research is needed to determine whether the effects found are long-lasting.

Another avenue for future research is to investigate expectations of surgery with relation to advertising and the media more generally. Cosmetic surgery associations also expressed concern about the impact of advertising on people's expectations of surgery, in the

sense that the sensationalist media coverage of surgery may raise unrealistic expectations in prospective clients (ASPS, 2004; BAAPS, 2004). Future research may therefore want to examine this relationship both correlationally, among cosmetic surgery clients, as well as through experimental manipulations similar to that used in the current study. In the current studies, we created the advertisements for the different exposure conditions to produce a closely controlled manipulation. It would also be interesting for studies to investigate how real-life advertising is perceived and what its impact might be on women, for example comparing the BAAPS advertisement with one containing images of models and incentives to undergo surgery. Moreover, it would be useful for research in the field to consider different populations, such as adolescents which have been largely under-investigated to date and who may be influenced by cosmetic surgery media differently (ASPS, 2004; BBC News, 18 September, 2008)

Taken together, our studies show that cosmetic surgery advertising has a negative effect on women's body image, regardless of the type of information or imagery used. Materialistic values and restrained eating moderated women's body image responses to this advertising, emphasizing the need for research to take individual traits into consideration when examining cosmetic surgery media effects. Attitudes towards surgery were affected by the type of information provided in such advertising, but not the types of image. Further research is needed to replicate and extend the current studies.

CHAPTER 3

THE IMPACT OF COSMETIC SURGERY ADVERTISING ON SWISS WOMEN'S BODY IMAGE AND ATTITUDES TOWARDS SURGERY

3.1 Abstract

Concerns have been expressed internationally about cosmetic surgery advertising (BAAPS 2005; 2008) and a recent study showed that exposure to such advertising led to more negative body image and attitudes towards surgery in women living in the UK (Ashikali, Dittmar, & Ayers, revisions requested). This study investigates the impact of cosmetic surgery advertising on women living in Switzerland, a country with relatively little cosmetic surgery advertising. One-hundred and forty-five women (mean age = 23.07) were exposed to cosmetic surgery advertising containing either discount incentives, risk information, no additional information, or to the control condition. Exposure to cosmetic surgery advertising led to increased dissatisfaction with both weight and appearance, and weight dissatisfaction was also higher in women exposed to risk information than those exposed to discount incentives. Restrained eaters reported more body-anxiety when exposed to the control condition, whereas materialistic women perceived surgery as less beneficial to image when exposed to cosmetic surgery advertising, as well as when exposed to risk information rather than discount incentives. Moreover, appearance-dissatisfied women considered surgery to a lesser extent when exposed to risk information than discount incentives. Our findings highlight the need for research examining the impact of cosmetic surgery media to consider the content of advertising for cosmetic surgery, as well as cultural variability.

3.2 Introduction

The number of people undergoing cosmetic surgery has substantially increased in recent years (American Society of Plastic Surgeons; ASPS 2012; BAAPS, 2011) and a report of the top 25 countries in number of procedures carried out in 2010 showed worldwide interest in cosmetic surgery (International Society of Aesthetic Plastic Surgeons; ISAPS, 2011). The report included countries of a variety of socioeconomic statuses and cultural backgrounds, such as the UK, Brazil, China, India, Germany, and Saudi Arabia. This suggests that interest in cosmetic surgery is not limited to the Western world, but is more widespread and multinational. A number of reasons could be behind this trend. Firstly, medical and technological advances have allowed for less complicated and less risky procedures, while also cutting down recovery time. Secondly, undergoing a cosmetic procedure has become more affordable for the average person, especially given that many clinics around the world now offer financial plans, loans, and promotions. The third factor, and the focus of this research, relates to the potential role played by the media in normalising and promoting cosmetic surgery.

The present study examines the impact of cosmetic surgery advertising, and of different types of information provided in such advertising, on women's body image and attitudes towards cosmetic surgery in Switzerland. It is a replication of research carried out in the UK, where cosmetic surgery advertising is more common and rates of cosmetic surgery uptake higher (ISAPS, 2011).

Cosmetic Surgery in the Media

In some countries, the media have embraced the cosmetic surgery industry, making it a feature in reality TV shows and documentaries, magazine and internet articles, and as part of radio shows. Another major and widespread promotion of cosmetic surgery is advertising, which is also present in all types of media, as well as on billboards in highly crowded public spaces. Advertising for cosmetic surgery typically features images of beautiful women who have allegedly undergone procedures and emphasizes the benefits of surgery. A common feature in such advertising, and the cause for debate among cosmetic surgery associations, is discount incentives appearing in a range of formats. In the UK for example, such incentives include time-limited direct monetary discounts, promotions like "*two areas for one*" liposuction, or loyalty cards which encourage multiple procedures. Moreover, the use of such discount incentives is increasing. An analysis of cosmetic surgery advertisements placed in

popular US magazines between 1985 and 2004 found an increase in promotional sales and offers, whereas information on risks associated with surgery was present in less than 10% of advertisements and did not differ over time (Hennink-Kaminski, Reid, & Whitehill King, 2010).

Both British and American associations for cosmetic surgery have expressed concern about the standard and style of cosmetic surgery advertising, saying that it trivialises surgery and does not adequately represent either the severity of procedures, or the risks associated with it (American Society of Plastic Surgeons; ASPS, 2004; British Association of Aesthetic Plastic Surgeons; BAAPS, 2005; 2008).

Advertising guidelines in the UK are similar to those in Switzerland, such that clinics and surgeons are able to advertise their practices as long as they present a truthful image of their expertise and of cosmetic surgery itself, without attempting to encourage clients to undergo surgery (Swiss Medical Association, 2006). However, there appears to be a different media environment involving cosmetic surgery in these two countries. Cosmetic surgery reality television for example, was quite successful in the UK, with American shows having been aired, whilst UK versions or new shows were also created. In Switzerland, to our knowledge, such shows did not air, nor were Swiss versions of existing shows created (M. Sorbera, RTS, personal communication, September 27, 2010). In terms of advertising, a small-scale purposive content analysis of the July/August 2009 editions of the most popular UK and Swiss magazines found 18 cosmetic surgery advertisements in UK magazine, but none in Swiss (Ashikali, Dittmar, & Ayers unpublished). Overall, it appears that cosmetic surgery is present to a much lesser extent in Swiss media than in the UK and USA. Examining responses of Swiss women may therefore provide interesting insights into the impact of such media on women's body image and on attitudes toward cosmetic surgery when they have not been overly exposed to such media.

Two questions relating to the media arise therefore: First, what is the actual impact of cosmetic surgery advertising on women and can different portrayals of surgery have a distinct impact? Second, are there differences in how women who live in different media environments respond to cosmetic surgery media? This study examines these research questions in relation to Swiss women's attitudes towards cosmetic surgery and also in terms of their body image.

Psychological Research on Cosmetic Surgery Media

Correlational research has found a positive relationship between cosmetic surgery media consumption and body dissatisfaction (Henderson-King & Henderson-King, 2005; Markey & Markey, 2009; Sarwer et al., 2005, Sperry, Thompson, Sarwer, & Cash, 2009), as well as more favourable attitudes towards surgery and an increased willingness to undergo cosmetic procedures (Crockett, Pruzinsky, & Persing, 2007; Delinsky, 2005; Nabi, 2009; Sperry et al., 2009). Little experimental research on cosmetic surgery has been carried out. However, two studies which used reality TV as their experimental material showed that exposure to the cosmetic surgery show led to an increased desire for cosmetic surgery (Markey & Markey, 2010), greater perceived pressure from the media to be thin, as well as increased endorsement of their ability to control their appearance (Mazzeo, Trace, Mitchell, & Gow, 2007).

A recent UK study on cosmetic surgery advertising compared the impact of discount incentives and risk information in such advertising, while also taking into consideration potential moderation variables to these effects (Ashikali, Dittmar, & Ayers, revisions requested). It showed a negative effect on weight and appearance satisfaction following exposure to advertising for surgery, irrespective of the type of information provided. Moreover, weight satisfaction was moderated by women's materialistic values and dieting habits. In terms of attitudes towards surgery, exposure to cosmetic surgery advertising led to less perceived benefits of surgery, whereas exposure to risk information in comparison to discount incentives increased consideration of surgery. These findings suggest that cosmetic surgery advertising has a negative impact on young women's body image, and that the impact of such advertising on attitudes towards surgery can vary depending on the type of information provided. Therefore, the content of cosmetic surgery media and the way in which they portray surgery may play a role to how surgery is perceived by the public and the extent to which individuals would consider undergoing a procedure.

The UK is representative of the majority of research on cosmetic surgery, which has generally been carried out in the US, the UK, and Australia. However, to our knowledge, no research has been carried out in a country which is relatively low on cosmetic procedures and where cosmetic surgery is not a commonplace feature in the media. Examining these effects among a sample of women who are likely to have had less daily exposure to cosmetic surgery media is important in gaining an understanding of how such women respond to this type of media. Moreover, the investigation of potential moderating roles will give an insight as to

which women are most affected by cosmetic surgery media. Finally, discussing findings from the UK and Swiss samples in conjunction can shed an initial light into the impact of different media environments on women's attitudes towards surgery.   .

The Present Research

This study aims to investigate the effects of cosmetic surgery advertising in Switzerland. Specifically, we investigate whether advertising with discount incentives has a different effect on body image and attitudes towards surgery compared to advertising with risk information. We also examine a number of potential moderators, most relating to body image, but also materialistic values, which may make some women more vulnerable than others in terms of negative responses to cosmetic surgery advertising (Ashikali, Dittmar, & Ayers, revisions requested). Our specific hypotheses were:

(1) Exposure to cosmetic surgery advertising will lead to greater body dissatisfaction.

(2) Discount incentives are predicted to elicit more positive attitudes towards surgery than risk information, on the premise that such discounts make surgery more affordable for the general public. Risk information on the other hand, highlights the dangers of undergoing surgery, which may discourage women to consider it. We did not formulate specific hypotheses about the effect of discount incentives and risk information on body image, as this element of the study was exploratory.

(3) These effects will be moderated by one or more of the proposed variables: thin-ideal internalisation, restrained eating, trait body dissatisfaction, or materialistic values.

3.3 Method

Design

This experimental online study contained four conditions where women were exposed to advertisements of cosmetic surgery containing: (1) no additional information; (2) discount incentives; (3) risk information; or (4) to the control condition, advertisements for flower delivery providers. The effect of exposure to these on women's body image and attitudes towards cosmetic surgery was examined. Potential moderators of thin-ideal internalisation, restrained eating, trait body dissatisfaction, and materialistic values were measured at a follow-up one week later.

Participants

Participants were recruited from the Université de Neuchâtel, Switzerland. One-hundred and forty-five women took part in the study, with 36 exposed to cosmetic surgery advertisements containing no additional information, 39 to advertisements containing discount incentives, 37 to advertisements containing risk information, and 33 to the control condition. Sixty-seven per cent of respondents (N = 97) also participated in the second part of the experiment. Participation was on a voluntary basis and participants were entered into a prize draw for two gift vouchers of €25. The overall mean age was 23.07 years (SD = 4.66, range = 18-44) and 79.3% were White. The overall mean BMI was 21.00 (SD = 2.59, range = 14.7 – 33.31), with 9% of participants being classified as underweight, 85.5% normal weight, and 5.5% as overweight according to population-relevant guidelines (World Health Organization, BMI classification).

Materials

Advertisements. Each of the four conditions in this study contained two sets of two advertisements presented side-by-side. The cosmetic surgery advertisements were identical in all conditions, containing images of idealised media models. The text in each condition differed however, such that condition 1 had no additional information; condition 2 included discounts in the form of direct monetary reductions (e.g. *700 CHF off your first procedure*); and condition 3 contained information on risks associated with cosmetic surgery (e.g. *Cosmetic surgery involves risks such as procedural and anaesthetic complications, bleeding, scarring, and infection. Our surgeons will give you further information during your first consultation*). The control condition was advertising for flower delivery services. All advertisements were in French.

Questionnaire Measures. Given that the study took place in French-speaking Switzerland, all scales were translated and presented in French.

Body-image. The Self-Discrepancy Index (SDI; Halliwell & Dittmar, 2006) was used to assess the activation of women's self-discrepancies. Participants complete three sentences of the format "*I…but I would like…*" allowing them to freely describe in their own words aspects of their life that they would like to change. After each sentence, they rate how different they are from their ideal (magnitude) and how concerned they are about this difference (salience) from (1) a little to (6) extremely. Statements are then coded into three categories: appearance-related (e.g. "*I have a big nose, but I would like a smaller one*");

weight-related (e.g. "*I am overweight, but I would like to be thinner*"); and unrelated to appearance or weight. Normally, magnitude and salience scores in the appearance and weight categories are multiplied and then added together (Dittmar, 2009; Halliwell & Dittmar, 2006) to produce a unique index for each category. However, given that we wanted to conduct parametric analyses and these indices do not have a normal distribution, we turned weight and appearance-related self-discrepancies into binary variables (presence or absence of discrepancies) and analysed them using binary logistic regression. Weight-related self-discrepancies were reported by 38.6% of women, whereas 57.9% reported appearance-related self-discrepancies. The SDI was also administered in Part 2 of the study to measure women's trait body dissatisfaction. Given that normal distribution issues in regression only apply to outcome variables, we used the normal procedure for this scale, multiplying and then adding together magnitude and salience scores. Weight-related self-discrepancies ranged from 0-36 (M = 4.31, SD =6.85), and appearance-related self-discrepancies from 0-72 (M = 7.11, SD = 10.78).

The Physical Appearance State and Trait Anxiety Scale (PASTAS; Reed et al., 1991) was used to measure women's body-related anxiety. Women are asked to state how anxious or tense they feel about different aspects of their life (o = not at all – 4 = exceptionally so), embedded in which were body parts such as legs, weight, or abdomen (α = .81).

Cosmetic surgery attitudes. Women's attitudes towards cosmetic surgery were assessed using the Acceptance of Cosmetic Surgery Scale (ACSS; Henderson-King & Henderson-King, 2005). Two of three 5-item subscales were included in this study: intrapersonal, measuring the extent to which one believes that cosmetic surgery can be beneficial to one's image (e.g. "*Cosmetic surgery is a good thing because it can help people feel better about themselves*"); and consider, measuring the extent to which one would consider undergoing surgery (e.g. "*I have sometimes thought about having cosmetic surgery*"). Reliabilities were good for all subscales: intrapersonal α = .88; consider α = .91. The ACSS was also administered in Part 2 of the study as a control variable to ensure that any significant findings from the exposure experiment were in fact due to the exposure itself rather than pre-existing group differences (intrapersonal α = .92; α = .92).

Control and moderator variables. Thin-ideal internalisation was measured using a scale developed by Dittmar (unpublished) comprised of 9 items measuring the desire to look like female models/actresses and meet the thin ideal (e.g. "*I want to look like media models*";

"*I would like to have a thin body*"), and 4 items measuring identification with media models (e.g. "*I identify with media models*"). Reliability was good α = .87.

Restrained eating behaviour was measured using the relevant subscale from the Dutch Eating Behavior Questionnaire (Van Strien, Frijters, Bergers, & Defares, 1986), with items like "*Do you deliberately eat less in order not become heavier?*" from (1) never to (5) very often. Reliability for this scale was high α = .91.

Materialistic values were measured using the using the Aspirations Index (Kasser & Ryan, 1996). This is a measure of the importance of extrinsic goals in relation to intrinsic, taking into account not only a focus on financial success, but also image and popularity as part of its conceptualization of materialism. Six subscales were included: three extrinsic (money, image, popularity) and three intrinsic (affiliation, community, self-acceptance). The degree of importance placed on extrinsic values in relation to intrinsic values was calculated by subtracting the mean of all subscales from the mean of the three extrinsic subscales combined (Sheldon & Kasser, 2008). Cronbach's alphas for the extrinsic goals was α = .89.

Manipulation Check. At the end of the study participants in the experimental conditions were asked whether the advertisements they saw contained (1) no additional information, (2) discount incentives, (3) risk information. A high percentage of participants in conditions 1 (75.7%) and 2 (88.9%) noted seeing no additional information and discount incentives respectively. The risk information in condition 3 however, was consciously noted by a significantly lower percentage of women (45.2%). This was, to a certain extent, expected as the risk information was included in a more discreet and subtle manner than the discount incentives. Any findings relating to this condition may therefore imply that risk information can have an impact on women's responses even if it is not consciously recognized.

Procedure and Ethical Issues

The study was approved by the research ethics committee at the University of Sussex, UK. Participants were emailed by their professor with an invitation to complete the study online. The study website randomly allocated participants to one of the four conditions. The first page introduced the study, and participants were informed of their right to withdraw, and assured confidentiality and anonymity. They were then asked to provide some personal information to create a unique identifier code for each of them so that their answers to Part 1 could be matched up to Part 2 of the study without compromising anonymity.

The first part of the study was presented as a consumer decision-making task, where participants were presented with and asked to rate in terms of preference two sets of advertisements allegedly from UK companies wanting to expand their business it Switzerland. After viewing the advertisements, participants' self-discrepancies and body-anxiety were assessed. Participants then completed the Acceptance of Cosmetic Surgery Scale, in which filler items about flower delivery were embedded in order to maintain the cover story. The study ended with a section on demographic information and a manipulation check.

Part 2 of the study was emailed to participants a week after completion of the first part, in order to ensure that responses would not be influenced by the experimental manipulation. In the introductory page, participants were asked to use a 6-month time-frame in their responses, as this section was focused on their more general and enduring attitudes. Following the consent form and unique identifier code, participants completed the Self-Discrepancy Index. They then completed the Aspirations Index and thin-ideal internalisation, followed by the Dutch Eating Behavior Questionnaire, and the Acceptance of Cosmetic Surgery Scale. Participants then completed the manipulation check, were fully debriefed about the true purposes of the study and were given the opportunity to withdraw or submit their responses.

3.4 Results

Analyses to check whether groups exposed to different conditions differed on trait measures found no differences in BMI, thin-ideal internalisation, restrained eating, trait body dissatisfaction, materialistic values, perceived intrapersonal benefits of surgery to image. However, groups did differ on whether they would consider surgery ($F(3, 93) = 2.74$, $p = .05$) and small differences in age were observed, although this was not significant ($F(3, 141) = 2.43$, $p = .07$). These variables were therefore controlled for in subsequent regression analyses. Age was controlled for in all analyses and whether women would consider surgery was controlled for when looking at consideration of surgery as an outcome measure. Thus, regressions were structured as follows: age (step 1); three exposure contrasts: control versus experimental (coded control: -.99; experimental: .33), no information versus information, and discounts versus risks (coded discounts: .33; risks: -.33) (step 2); and significant moderators (step 3). Descriptive statistics for all measures are presented in Table 3.1.

Table 3.1. **Descriptive Statistics for All Measures**

Variable	Mean	S.E.	SD
Binary Weight Self-Discrepancies	.39	.04	.49
Binary Appearance Self-Discrepancies	.58	.04	.50
Body-Related Anxiety (PASTAS)	1.05	.07	.78
Intrapersonal	3.72	.09	1.12
Consider	2.88	.12	1.42
Thin-Ideal Internalisation	2.99	.08	.85
Restrained Eating	2.43	.09	.89
Materialistic Values	-.70	.04	.38
Trait Weight Self-Discrepancies	4.31	.70	6.85
Trait Appearance Self-Discrepancies	7.11	1.09	10.77

Effects of Exposure to Cosmetic Surgery Advertising on Body Image

Concerning body image, two significant main effects emerged between the control and experimental groups, such that women exposed to cosmetic surgery advertising reported more weight (43.8%) and appearance-related self-discrepancies (67.9%) than those in the control condition (weight = 21.2% ; appearance = 24.2%).

Table 3.2. **Binary Logistic Regression Coefficients for Weight-Related Self-Discrepancies**

				95% C.I. for Odds Ratio		
				Lower	OR	Upper
Predictor	B	p	S.E.			
Age	-.07		.04	.86	.93	1.01
Control vs Experimental	.84	*	.36	1.15	2.31	4.65
No Information vs Information	.10		.42	.48	1.10	2.52
Discounts vs Risks	-1.15		.73	.08	.32	1.33
Constant	1.12		.97		3.05	

Note: $^*p < .05$. Model $\chi^2(4) = 10.86$, $p = .03$. Hosmer & Lemeshow $\chi^2(7) = 5.18$, $p = .64$. Cox and Snell $R^2 = .07$. Nagelkerke $R^2 = .10$.

Table 3.3. **Binary Logistic Regression Coefficients for Appearance-Related Self-Discrepancies**

Predictor	B	p	S.E.	95% C.I. for Odds Ratio Lower	OR	Upper
Age	-.03		.04	.90	.97	1.05
Control vs Experimental	1.45	***	.35	2.16	4.25	8.37
No Information vs Information	-.04		.45	.40	.96	2.31
Discounts vs Risks	.22		.75	.29	1.24	5.40
Constant	1.01		.91		2.74	

Note: ***$p < .001$. Model $\chi^2(4) = 21.03$, $p < .001$. Hosmer & Lemeshow $\chi^2(7) = 6.76$, $p = .45$. Cox and Snell $R^2 = .14$. Nagelkerke $R^2 = .18$.

Although no main effects of exposure to cosmetic surgery advertising emerged for body-related anxiety ($F(4, 92) = .86$, $p = .49$), a significant interaction with restrained eating was found ($\beta = -.35$, $p = .04$). As shown Figure 3.1, women report the same amount of body-related anxiety when exposed to cosmetic surgery advertising, but when exposed to the control condition, it is restrained eaters who report higher levels of body-related anxiety, scoring .72 scale points higher than non-dieters.

Table 3.4. **Multiple Regression Coefficients for Body-Related Anxiety**

Predictor	B	β	S.E.	p
Age	-.02	-.10	.02	
Control vs Experimental	-.14	-.11	.13	
No Information vs Information	.00	.00	.19	
Discounts vs Risks	.34	.11	.31	
Restrained Eating (RE; mean centred)	.20	.25	.09	**
RE Control vs Experimental	-.35	-.22	.16	*
RE No Information vs Information	-.01	-.00	.22	
RE Discounts vs Risks	.46	.14	.33	
Constant	1.41		.40	***

Note: *$p < .05$, *$p < .01$, ***$p < .001$.

Figure 3.1. **Body-related anxiety at different levels of restrained eating for women exposed to cosmetic surgery advertising or not.**
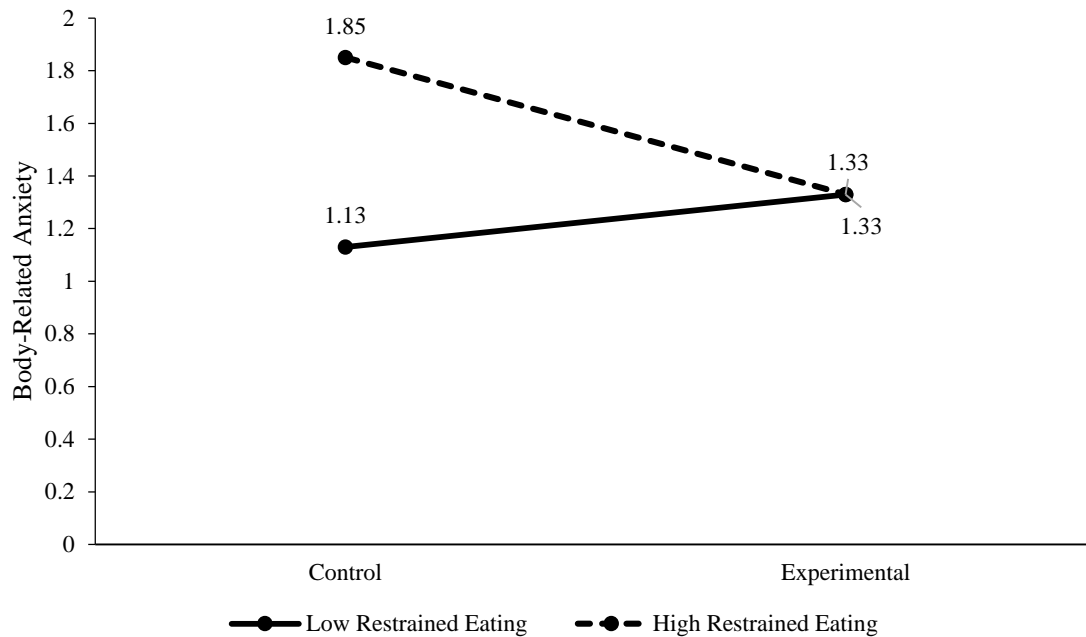
Effects of Exposure to Cosmetic Surgery Advertising on Attitudes toward Surgery

Exposure to cosmetic surgery advertising did not impact women's perceived benefits of surgery or the extent to which they would consider undergoing it (all $p > .43$). However, several moderating variables emerged as significant for both measures of attitude. Perceived intrapersonal benefits of surgery was moderated by both trait weight and appearance self-discrepancies, as well as by materialistic values. Consideration of surgery was also moderated by weight and appearance self-discrepancies, and by restrained eating. In order to gain an understanding as to which of these variables played a stronger moderating role, they were all entered together in at step 3 in two separate multiple regressions- one for each measure of attitude. This showed that materialistic values were the strongest moderator of intrapersonal benefits (Table 2.12), whereas appearance-related self-discrepancies were strongest for consideration of surgery (Table 2.13). We therefore report these findings in more detail.

Table 3.5. **Multiple Regression Coefficients for Perceived Intrapersonal Benefits of Cosmetic Surgery**

Predictor	B	β	S.E.	p
Age	.05	.21	.03	*
Control vs Experimental	-.21	-.10	.19	
No Information vs Information	.00	.00	.28	
Discounts vs Risks	.37	.08	.46	
Materialistic Values (MV; mean centred)	.65	.22	.32	*
MV Control vs Experimental	-1.90	-.29	.69	**
MV No Information vs Information	.74	.11	.68	
MV Discounts vs Risks	3.48	.30	1.11	**
Constant	2.48		.59	***

Note: $^{*} p < .05,$ $^{*} p < .01,$ $^{***} p < .001.$

Table 3.6. **Multiple Regression Coefficients for Consideration of Cosmetic Surgery**

Predictor	B	β	S.E.	p
Age	.01	.03	.02	
Trait Consideration of Surgery	.91	.90	.05	***
Control vs Experimental	-.08	-.03	.14	
No Information vs Information	-.19	-.05	.17	
Discounts vs Risks	.18	.03	.30	
Appearance Self-Discrepancies (ASD; mean centred)	-.01	-.09	.01	*
ASD Control vs Experimental	-.03	-.09	.02	
ASD No Information vs Information	.02	.06	.02	
ASD Discounts vs Risks	.09	.11	.02	**
Constant	.03		.04	

Note: $^{*} p < .05,$ $^{*} p < .01,$ $^{***} p < .001.$ In terms of intrapersonal benefits, two interactions with materialistic values emerged as significant: the control versus experimental and the discount versus risks exposure contrasts. Simple slopes analyses were carried out for both interactions. Figure 3.2 shows the interaction between materialistic values and the control versus experimental exposure contrast. When women are exposed to cosmetic surgery advertising, there is very little difference between women low and high on materialistic values (.34 scale points). When exposed to neutral adverts however, highly materialistic women perceive surgery to be more beneficial to their image by 1.32 scale points than women not focused on materialistic values. In terms of the discounts versus risks interaction, there is virtually no difference between women low and high on materialistic values when

exposed to risk information (Figure 3.3). Differences in the perception of how beneficial surgery is to image occur in the discounts condition, whereby materialistic perceive surgery to be more beneficial by 1.21 scale points than those low on materialistic values.

Figure 3.2. **Perceived intrapersonal benefits of surgery at different levels of materialism for women exposed to cosmetic surgery advertising or not.**
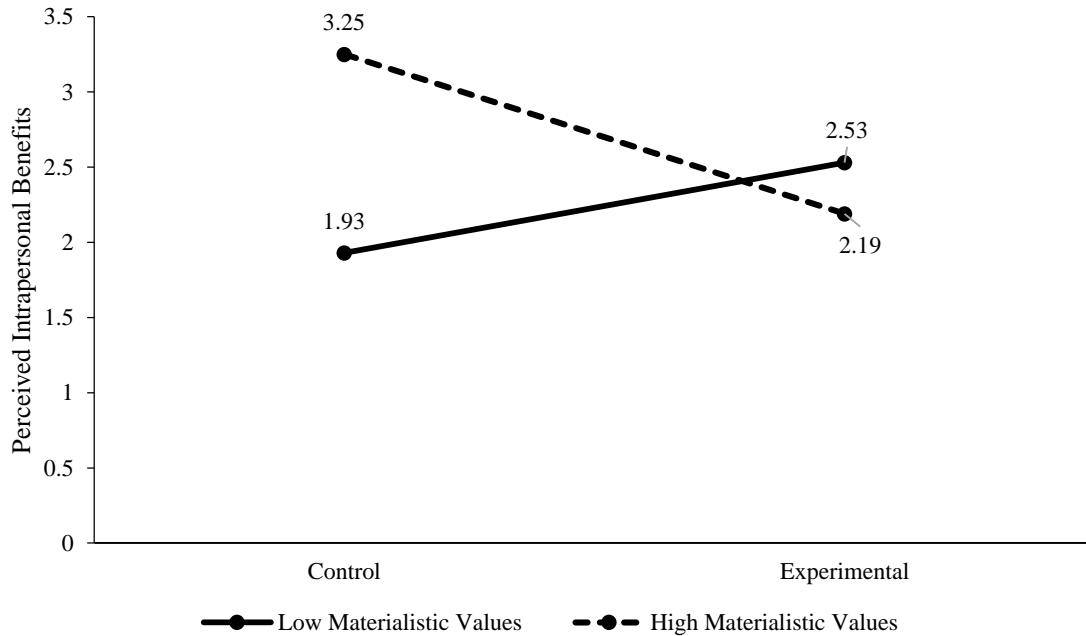
Figure 3.3. **Perceived intrapersonal benefits of surgery at different levels of materialism for women exposed to cosmetic surgery advertising containing discount incentives or risk information.**
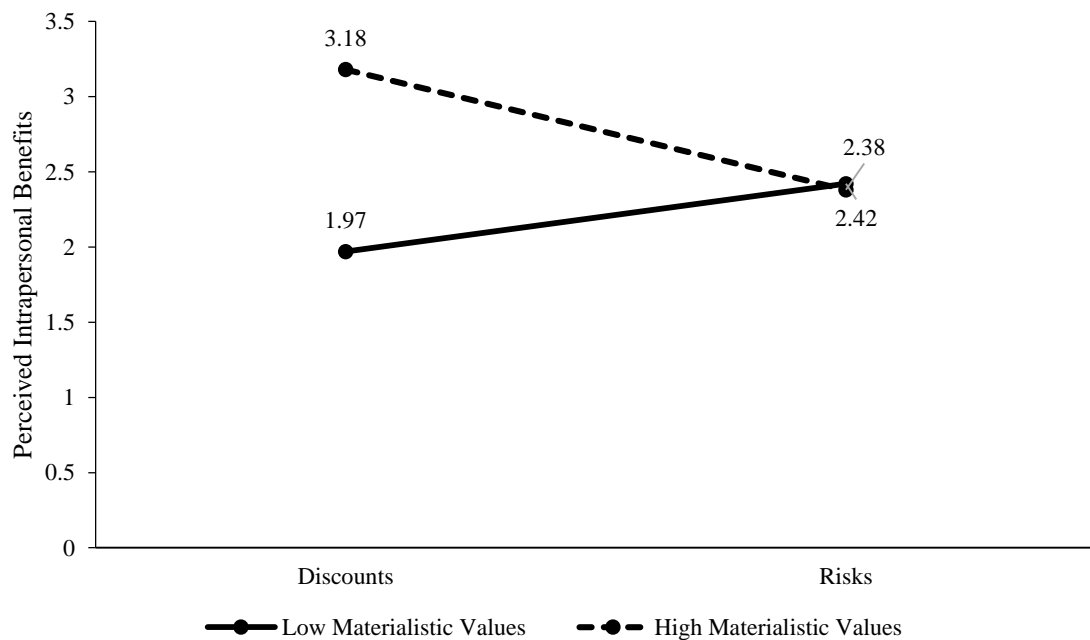
For consideration of surgery, the significant interaction term with trait appearance-related self-discrepancies was in the discounts versus risks exposure contrast. As shown in Figure 3.4, there is little difference between women exposed to discount incentives (.26 scale points), and a larger difference in women exposed to risk information. Here it was women who are low on appearance-related self-discrepancies who reported considering surgery to a larger extent, scoring .61 scale points higher than women who are high on appearance-related self-discrepancies.

Figure 3.4. **Consideration of surgery at different levels of appearance-related self-discrepancies for women exposed to cosmetic surgery advertising containing discount incentives or risk information.**
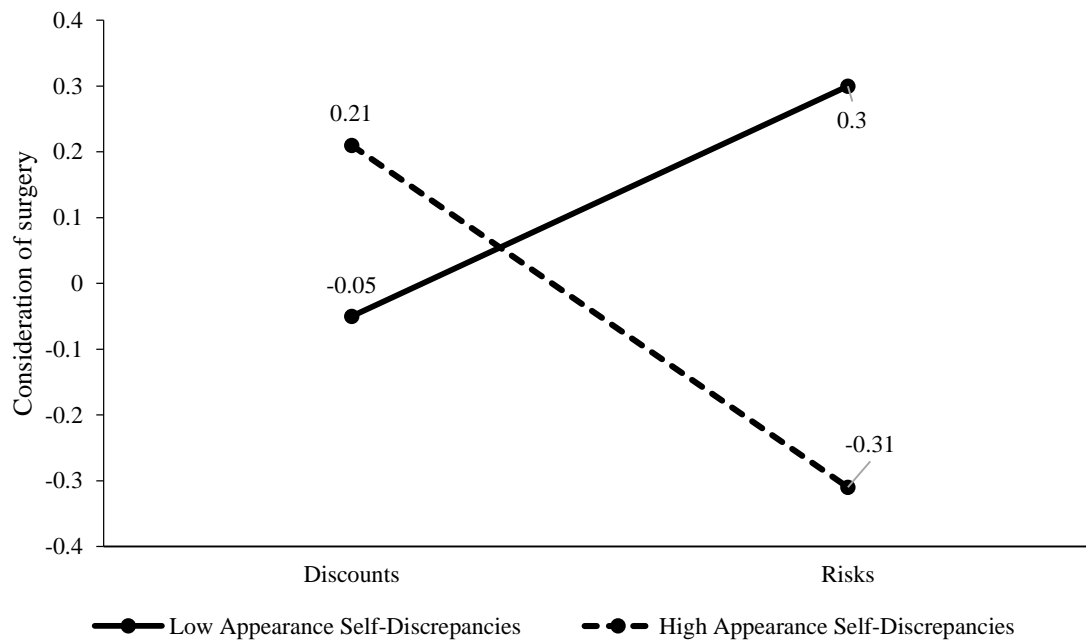
In sum, and contrary to our expectations, exposure to cosmetic surgery advertising did not have an impact on the extent to which Swiss women report considering undergoing surgery nor to the extent to which they believe surgery to be beneficial to image. However, some interesting interactions with materialistic values suggest that materialistic women perceive surgery as more beneficial to image when they are not exposed to cosmetic surgery advertising and, in line with our predictions, when they are exposed to discount incentives rather than risk information. Furthermore, consideration of surgery varied according to women's pre-existing dissatisfaction with their appearance, suggesting that women low on this trait consider surgery more when they are informed of the risks associated with surgery.

3.5 Discussion

The current study addressed concerns expressed about the nature and style of cosmetic surgery advertising through investigating its impact on Swiss women, a population with relatively little exposure to such advertising compared to other Western countries, such as the UK or US. The main findings for body image were an increased dissatisfaction with both weight and appearance more generally following exposure to cosmetic surgery advertising.

These findings are consistent with previous correlational research which showed a link between cosmetic surgery media and body dissatisfaction (e.g. Markey & Markey, 2009), and provide experimental evidence of this relationship. They furthermore replicate findings with a UK sample (Ashikali, Dittmar, & Ayers, under review), which showed a deleterious effect of cosmetic surgery advertising on weight and appearance satisfaction. The consistency of these findings across two samples of women who are part of different cosmetic surgery media environments, provides more robust evidence of the negative effect of cosmetic surgery advertising on women's body image.

Restrained eating was found to moderate women's responses in terms of their body-related anxiety. Women who were high on restrained eating were the most adversely affected, reporting more body-related anxiety when exposed to the control condition, rather than to advertising for cosmetic surgery. This was therefore in the opposite direction than we had hypothesised, and this finding should be replicated before any conclusions can be drawn.

The main findings for attitudes towards cosmetic surgery were that perceived intrapersonal benefits of surgery was moderated by materialism, and that considering undergoing a procedure was moderated by trait self-discrepancies in appearance. This suggests than in this sample of women, only women who possess these trait variables are affected in their responses to cosmetic surgery advertising. This is contrary to the UK sample, where main effects were observed, such that exposure to cosmetic surgery advertising led to decreased perception of intrapersonal benefits, and exposure to risk information to an increased consideration of surgery. However some of the findings are comparable. Swiss materialistic women and British women who were exposed to cosmetic surgery advertising reported surgery as less beneficial to image, than those exposed to the control advertisements. This suggests a negative response to cosmetic surgery advertising and a rejection of the benefits of surgery in both samples of women. A further interaction emerged in the Swiss

sample, with materialistic women exposed to discount incentives perceiving surgery as more beneficial to image than those exposed to risk information. This could relate to materialistic women's sensitivity to financial information, and the offer of a discount making surgery more appealing.

Consideration of surgery was impacted by women's pre-existing appearance self-discrepancies, which is consistent with the proposal that individuals with a low appearance evaluation are likely to consider surgery to a larger extent than those who are relatively satisfied with their looks (Sarwer, Wadden, Pertschuk, & Whitaker, 1998). Interestingly, when exposed to risks, women high on appearance self-discrepancies reported considering surgery to a lesser extent than those low on such discrepancies. When exposed to discount incentives however, the opposite pattern emerged. It therefore appears that for women already dissatisfied with their appearance, the provision of risk information had a deterring effect from cosmetic surgery, perhaps by posing a "threat" to these women's appearance through reminding them that surgery will leave them scarred and can involve other complications. These findings suggest that the content of cosmetic surgery advertising does have an impact on some women's attitudes towards it, and future research should take the content of cosmetic surgery media into account.

One possible reason for different attitudes towards cosmetic surgery in the UK and Swiss samples is the media environment in each country. For example, UK women are exposed much more frequently to cosmetic surgery advertising so may be more responsive to the way in which it is advertised. Alternatively, these differences may be due to methodological issues such as reporting biases in self-reports of attitudes to cosmetic surgery. It may be that lower exposure to cosmetic surgery in Switzerland results in more stigma attached to it, and Swiss women therefore being less likely to report positive attitudes. These issues need to be examined by future research and the variability between different cultures illustrates the value of a comparative research in cosmetic surgery.

This study provides further evidence that cosmetic surgery advertising has a negative impact on women's body image. However, the content of such advertising has different and complex effects in different cultures. In Switzerland cosmetic surgery attitudes were only impacted in women who were highly materialistic and appearance-dissatisfied. Therefore, women's attitudes toward surgery may be influenced by the media environment and the frequency with which they are exposed to cosmetic surgery advertising. Further research should consider the content of cosmetic surgery media to gain an understanding about which

types of portrayals have a negative impact on women. Moreover, focus should be placed on women's individual trait differences, which may affect how they respond to this type of media.

CHAPTER 4

ADOLESCENT GIRLS' VIEWS ON COSMETIC SURGERY: A FOCUS GROUP STUDY

4.1 Abstract

This study examined adolescent girls' views of cosmetic surgery. Seven focus groups were run with girls aged 15–18 years (N = 27). Participants read case studies of girls having cosmetic surgery, followed by discussion and exploration of their views. Thematic analysis identified four themes: (1) dissatisfaction with appearance, (2) acceptability of cosmetic surgery, (3) feelings about undergoing cosmetic surgery and (4) cosmetic surgery in the media. Results suggest the acceptability of cosmetic surgery varies according to the reasons for having it and that the media play an important role by normalising surgery and under-representing the risks associated with it.

4.2 Introduction

Cosmetic surgery has become relatively affordable, commonplace and more acceptable form of appearance enhancement (Frederick, Lever, & Peplau, 2007). Cosmetic surgery differs from reconstructive in that it is purely elective and does not involve congenital or other deformities; rather, it is aimed at improving features for purely aesthetic reasons. American associations for cosmetic surgery report that rates of cosmetic surgery are increasing and that adolescents are also undergoing such surgery (American Society for Aesthetic Plastic Surgery; ASAPS, 2000; American Society of Plastic Surgeons; ASPS, 2010). The number of cosmetic surgery procedures carried out in the United States (US) increased from 12.1 million in 2008 to 13.1 million in 2010, and adolescents typically account for 1.3 to 3.5% (125,397 – 298,704 adolescent patients) of procedures carried out each year (ASPS, 2010).

The increased popularity of cosmetic surgery is due to a number of factors. Technological advances make procedures less invasive, financial plans and loans make it more affordable. Increased media attention to cosmetic surgery is also likely to play a role in promoting and normalising it (Tait, 2007). Cosmetic surgery is widely covered in the media, including advertising, celebrity news stories, magazine articles, and reality TV shows. Cosmetic surgery associations have expressed concerns that the nature of this coverage may trivialise and misrepresent the severity of cosmetic surgery. Specific concern has been expressed with regards to adolescents, a "*young impressionable audience...already self-conscious about their body image*" (ASPS, 2004), who "*are being targeted heavily*" (BBC News, 19 September, 2008).

Risks of undergoing cosmetic surgery are substantial. The two most popular cosmetic procedures for adolescent girls are breast augmentation and liposuction (Zuckerman & Abraham, 2008). A review of these procedures shows risks associated with these procedures include normal risks of surgery, higher complication rates, financial, and health risks. All this may be amplified by the use of surgery at a time when girls' bodies are still developing. Physical complications from surgery include pain, scarring, infection and postoperative bleeding. Long-term physical complications that can arise include loss of physical sensations, implant rupture (in the case of breast augmentation), and the need for additional surgery. With implants the risk increases over time, meaning adolescents may require repeated surgery in future years and suffer other complications. For example, breast implants

interfere with the accuracy of mammographies so cancer is less likely to be detected in these women (Zuckerman & Abraham, 2008).

Psychological research on cosmetic surgery originally focused on the characteristics of adults undergoing it, as well as the psychosocial outcomes of cosmetic procedures (e.g. Crerand, Cash, & Whitaker, 2006). More recently, researchers have investigated factors associated with attitudes towards cosmetic surgery, such as self-objectification (Calogero, Pina, Park, & Rahemtulla, 2010), celebrity worship (Maltby & Day, 2011), dieting frequency (Schofield, Hussain, Loxton, & Miller, 2002), and materialistic values (Henderson-King & Brooks, 2009). A qualitative study investigating the reasons for women seeking breast reduction found that pain, body image, and self-esteem were all factors contributing to women's desire for such a procedure (Reardon & Grogan, 2011). Researchers have also begun to examine the impact of media portrayals of cosmetic surgery. However, such investigations typically involve adult populations. In young women aged 19 years, Markey and Markey (2010) showed that more favourable attitudes towards cosmetic surgery reality television were associated with greater interest in pursuing surgery. Similarly, Mazzeo and colleagues found that exposure to a cosmetic surgery makeover program led women to report increased perceptions of media pressures to be thin and stronger endorsement of their capacity to control their body's appearance (Mazzeo, Trace, Mitchell, & Gow, 2007). It therefore appears that among young women, cosmetic surgery media may lead to a short-term negative body image, as well as to more favourable attitudes towards surgery.

Research on adolescents in this field is sparse. Studies of adolescents have predominantly focused on guidelines for appropriate patient selection (McGrath & Mukerji, 2000; Zuckerman & Abraham, 2008), and postoperative satisfaction (Kamburoğlu & Özgür, 2007; Simis, Verhulst, & Koot, 2001). For example, Simis and colleagues investigated body image changes between three groups of adolescents: those undergoing reconstructive surgery for congenital or disease-related deformities; those undergoing surgery for aesthetic purposes; and those with self-reported 'deformities' who were not planning to have surgery (Simis, Verhulst, & Koot, 2001). A significant decrease in body image burdens was noted across all groups. However, this decrease was most pronounced in adolescents undergoing corrective surgery, which suggests that such improvements in body image are more prominent following surgery than the expected natural developmental changes that occur during adolescence. The authors concluded that adolescents are appropriate candidates for cosmetic surgery in the sense that they gain bodily satisfaction and body-related burdens decrease. To

date, only one study has looked at adolescent boys' and girls' attitudes towards cosmetic surgery (Pearl & Weston, 2003). This survey found that 30% of adolescents were interested in having surgery and the main reasons they would not choose it were health risks, cost and fear of a bad result.

In sum, researchers have started to investigate cosmetic surgery media and the impact on individuals' attitudes toward surgery, but very little research has looked at the impact on adolescents. This is a particularly important population to investigate for several reasons. First, in many societies adolescents are the first generation to be raised in an environment where cosmetic surgery is a commonplace and acceptable form of appearance enhancement (Frederick, Lever, & Peplau, 2007). Second, they are at an age where their body image and self-concept is still developing, which may make them particularly sensitive to options for appearance change or enhancement. Adolescents may therefore be more prone to considering cosmetic surgery, which could be problematic due to its inherent riskiness.

We therefore aimed to obtain a detailed account of adolescent girls' views about cosmetic surgery. Given the lack of previous research examining this, qualitative focus groups were most appropriate. Focus groups enable the canvassing of a larger number of adolescents (compared to individual interviews), and facilitate the exploration and discussion of social norms and influences on the topic. By using focus groups we aimed to gain a better understanding of girl's individual views, as well as using group discussion to produce more elaborated co-constructed accounts (Wilkinson, 1998). More specifically, we investigated adolescent girls' (1) attitudes toward cosmetic surgery; (2) perceptions of how their peers feel about cosmetic surgery; (3) attitudes towards undergoing cosmetic surgery for different motives; and (4) opinions about how cosmetic surgery is portrayed within the media and how this influences them.

4.3 Method

Participants

Participants were 27 girls attending a higher education college in England who took part in an annual 'Psychology Day' organised by the college in February 2010 and March 2011. Four focus groups were run in 2010, each consisting of 3-4 participants. In 2011, a further three focus groups were run, each consisting of 3-5 participants. Participants were all students at the same college, and often signed up with friends to take part in the study. Participants were all White European with an age range of 15-18 years (mean 16.78). This is

broadly reflective of the local population, which is predominantly White European (90.7%; Office of National Statistics, 2011)

Materials and Interview Schedule

To instigate discussion, we used two excerpts from published articles. The first excerpt was taken from an article published in *'Sugar'* (July, 2009) on *'Operation Prom'*. This article focused on a 15-year-old girl who underwent liposuction and breast augmentation for her prom night. The second article, *'Teenage Bullying - Is Plastic Surgery the Solution?'* was published in a number of online newspapers and reported the case of a girl who received rhinoplasty after changing schools because of bullying related to her nose. Both articles were short, approximately 500 words each, and required no more than three minutes to be read. The content of these articles also allowed us to explore whether different motivations for undergoing surgery play a role in girls' acceptance of it.

A semi-structured interview was used, in which we focused on the articles first, then asked about cosmetic surgery more generally. Initial discussion of the articles explored adolescents' attitudes towards people who undergo surgery for different motives. The general discussion of cosmetic surgery focused on the media's portrayal of cosmetic surgery; adolescents' personal attitudes toward and expectations of cosmetic surgery; and their perceptions of how their peers feel about surgery. We used follow-up questions and probes to facilitate discussion and ensure the participants' views were explored in depth. Participants were encouraged to freely express their views in as much detail as possible and the facilitator did not ask the next question until she felt that all participants had voiced their opinions. Example questions include: *"How do you think risks are portrayed in cosmetic surgery media"* and *"Do you think cosmetic surgery media may influence girls your age? How?"*

Procedure

Interviews were carried out at a higher education college. After the study was approved by the University research ethics board and the college, students voluntarily signed up to the study in the time slots available. We gave participants an information sheet which explained the procedure of the study, and assured participants anonymity and confidentiality, while also noting that should they decide to withdraw from the study, it would be difficult to remove their individual contribution due to the nature of the methodology. Participants then signed the consent form and read one of the two articles, followed by discussion around it. All participants were given time to finish reading the article before discussion was initiated.

The same was repeated for the second article. The order in which the articles were presented was counter-balanced across groups to ensure subsequent opinions were not influenced by the order in which they were read. Following this, there was a more general discussion on cosmetic surgery and participants' personal opinions. The first author facilitated all the focus groups, which took an average of 35 minutes.

4.4 Analysis

Interviews were analysed using systematic thematic analysis. This involves interpreting and categorising linguistic data into theme-based groupings. The categorisation process was inductive and continual in the sense that pieces of text categorised as falling within a specific theme may be adjusted and placed in relation to other pieces. Interviews were analysed in two phases. To begin with, the first author read through the first wave (2010) of transcribed focus group interviews, identifying themes and commonalities within and between interviews, and then placing them in higher-order categories or themes. Four main themes emerged from this analysis of the first wave interviews. The same process was carried with the second wave of interviews (2011). The original four main themes remained, although some further information emerged. Reliability of coding (Boyatzis, 1998) was checked through an independent rater coding approximately 25% of participants' comments and indicating which of four themes the comments fell within. There was a 90% agreement between the author's coding and the independent rater. Any minor disagreements were resolved through discussion.

4.5 Results

Four themes were identified of girls' (1) dissatisfaction with their appearance, (2) acceptability of cosmetic surgery, (3) personal feelings about undergoing cosmetic surgery, as well as perceptions of peers' feelings and opinions towards surgery, and (4) cosmetic surgery in the media.

Theme 1. Dissatisfaction with our Appearance: *"Everyone is self-conscious"*

This theme summarises how adolescent girls felt about their appearance and perceived pressures to look good. Participants believed the majority of girls are dissatisfied with their appearance and that this is due to pressure from peers, media and society to look good. Participants argued that girls their age are almost invariably dissatisfied and unhappy with their appearance with comments such as *"I don't really know a single girl that's completely*

happy with her body" and *"If you're a girl everyone, however good looking, however thin, whatever, everyone's self- conscious."*

Girls perceived various pressures to look good, the most prominent source being the media. This was mentioned by the majority of girls as influencing how they felt about their body image.

> *"I think the majority of everyone being unhappy with themselves is down to the media. If you didn't see these perfect people and you saw them normally, you wouldn't be half as bad. I think everyone would be much happier if we weren't so focused on the way you look, and... images in magazines and stuff."*

Interestingly, girls were aware of airbrushing and image manipulations that occur within the media, but still felt negatively influenced by them. Many stated that the image of how they could potentially look is now so engraved in their mind that it is hard to remind themselves that what they are looking at and comparing themselves to is not real.

> *"I think the problem is that you see so many people in magazines and on TV so airbrushed and trimmed in..., so therefore you almost compare it to yourself, and no matter how hard you try, you still have an image in your head of what you could look like."*

Other sources of pressure to look good came from peers and comparison with peers. One participant even argued that peer pressure was more important than media pressure:

> *"I don't really know if we get it off the media, I think we probably get it more from friends 'cos I compare myself to them, I don't really compare to really stick thin people because it's not realistic is it?"*

Finally, girls went on to say that they thought there was more pressure to look good when you are younger, and that concern with appearance decreases with age and women become more accepting of themselves, focusing on things other than appearance: *"When you're younger there's a lot more pressure around you to look better, but as you get older you sort of realise there's no point really, you are who you are."*

Theme 2. Acceptability of Cosmetic Surgery: ***"I don't know how people can get through life thinking the only way of fixing things is to have surgery."***

Girls' perceptions of how acceptable and justified cosmetic surgery is varied depending on the conditions under which cosmetic surgery is chosen. In discussing the

stimulus articles, girls were more accepting of the girl who was being bullied having surgery (although not without reservations), than the girl who had surgery for her prom. Participants said appearance-based bullying happens a lot in UK schools, that they understood the pain of it and therefore perhaps the decision to have surgery. On the contrary, the idea of surgery for a prom was characterised as *"extreme"* and *"silly"*. Concerns about surgery in response to bullying included the ideas that bullying also relates to a person's self-confidence. Therefore, one concern was that although a specific feature may be 'fixed' through surgery, the person's confidence may not change, which could lead to bullying about a different feature: *"I think [surgery] would stop them bullying her about her nose...but they would find something else to bully her about."*

A further concern about cosmetic surgery in response to bullying was that surgery cannot deal with the psychological and emotional challenges that are caused by bullying.

> *"...if people think that's the only way to deal with it; at such a young age they're being taught the only way you can deal with it is go and get plastic surgery, you can't work it out yourself, you can't talk to people, you just go on and get this procedure. I don't know how people can get through life thinking the only way of fixing things is to have surgery."*

> *"I think it's a really bad message to give people 'if you're suffering from bullying, then you can just go get it fixed and you'll be fine'. It's, you know, it's not that easy to fix, it's not just a physical problem, it's gonna take its toll mentally as well."*

Related to this idea, was that surgery may simply mask and leave unresolved other underlying insecurities. In this sense, cosmetic surgery was viewed as a *"quick fix"*, with the potential of underlying problems eventually resurfacing.

> *"There are other ways of dealing with [low self-esteem]. You can have counselling...which can boost your self-esteem. I don't think covering [insecurities] up by having cosmetic surgery is a good idea 'cos they're still underneath, you'll still think about them, you still won't be happy with them."*

Acceptance of cosmetic surgery also varied as a function of the age of people undergoing it. Participants expressed a strong concern about young girls undergoing surgery in the sense that they may not have fully developed yet.

"I think it's a bit worrying at 18...I mean, you're still not fully developed, you're still growing...so I really think it's damaging in a way...I think there should really be a minimum age for surgery."

Type of surgery also affected the extent to which it was perceived as acceptable. Surgery for features which cannot be altered through other means was seen as more acceptable than procedures on features which can change and be improved without surgery.

"It depends on what kind of surgery it is, whether it is a nose job, which is something you can't fix, or whether it's something like liposuction 'cos they're a bit overweight - then you'd say 'why don't you try dieting first?'"

Irrespective of the conditions under which cosmetic surgery is selected, participants felt strongly that surgery should be a last resort. They stated that there are other, less drastic ways in which people can make themselves feel better about their appearance, such as going to the hairdresser or buying clothes which are flattering for one's body type, saying *"I think if you can fix it without surgery, you should do that"* and *"I don't think surgery should be the initial answer to everything. I think that should be the last resort."*

Theme 3. Feelings about Undergoing Cosmetic Surgery. *"I think everyone would consider it at some point"*

This theme summarises girls' feelings and opinions about the prospect of undergoing cosmetic surgery. Girls expressed concern about cosmetic surgery in terms of potential poor awareness and consideration of risks associated with procedures. Without being against the idea of cosmetic surgery, girls made the point that careful consideration of the risks associated with procedures is essential, saying *"it's a whole life-changing thing. I think maybe young people should be more aware of the risks... There's so many things that could go wrong"* and *"You're kind of risking your life when you go for surgery, the anaesthetics and stuff, it's really dangerous, so you gotta weigh out the benefits."*

Discussion of the article about the girl having surgery for her prom raised further concerns over the desire for more surgery. Girls thought that if this girl chose surgery for a special event, she is likely to do it again. The risk of becoming addicted to surgery was also discussed in terms of appearance dissatisfaction, such that when one feature is improved, the desire and temptation to improve another may lead to further surgeries. In this sense, having a first cosmetic procedure was viewed as crossing a threshold: *"With cosmetic surgery, you can have one thing done and then you think there's another thing [to be] done, and another, and*

it just goes in one big circle" and *"I think it could become a bit of an obsession...and it can really get out of hand."*

Girls had mixed views over whether they would ever consider surgery themselves. Some said they would seriously consider it, with specific procedures already in mind; some categorically rejected the possibility of it both now and in the future; while others stated that they would consider it, but probably never go through with it: *"I'd go for rhinoplasty, and then laser eye surgery, veneers, Botox, and that"* or alternatively, *"I wouldn't do it, but I have nothing against it, if one of my friends got it done, it wouldn't even shock me anymore...I know quite a lot of people that have had things done and it's quite normal now".* As this last quote indicates, although girls differed in whether they would personally consider surgery, they believed a large proportion of their peers, ranging from 40 to 75 per cent, would consider having surgery. Importantly, girls thought the main barrier to their peers having surgery was cost rather than the risks involved in cosmetic surgery: *"I think everyone would consider it at some point, even if they wouldn't take it further than just a quick thought...everyone has their things they don't like about themselves"*, *"If it wasn't a money issue, I think a lot of people, a scary amount of girls would do it."*

In response to a hypothetical scenario of undergoing a procedure there was a contrast between girls believing they would feel negatively about themselves following surgery because *"it's lazy"* and *"an easy option",* yet perceiving positive benefits of surgery: *"I think I'd feel worse if I had plastic surgery 'cos I'd feel fake and that it wasn't actually me, and that people would look at me and think 'oh she's done plastic surgery'...and in a bad way."* Positive expectations of what cosmetic surgery would do for them included psychological benefits, such as improvements in self-confidence and self-esteem: *"Confidence and feeling more secure within yourself when you go out, like when you go clubbing, feeling a lot better about yourself."* Some girls had even stronger expectations, viewing surgery as a marker of a *"new start"* in a person's life, as well as the creation of a *"new life".* Finally, girls mentioned benefits in terms of social life and being seen as more attractive by others.

> *"You see people and they're all slim with big boobs, I know it's really pathetic, but they get all the lads, they have lots of friends, they're confident - it's that perception of the whole thing. Yeah, I'm quite a confident person, but that would just give me the extra boost."*

Theme 4. Cosmetic Surgery in the Media. *"It's shoved in our faces"*

This theme summarises girls' views of how cosmetic surgery is portrayed within the media and its influence. Girls thought cosmetic surgery is widely covered in the media, saying *"it's everywhere"* and *"shoved in our faces"*. In their views, cosmetic surgery coverage has become standard in certain media.

"I think it's like the norm now...you wouldn't pick up a magazine and go 'oh my' because there's surgery in there...you see it every day. There's always another celebrity saying they've had surgery and it's helped them or...stories about regular people as well that have had it."

There was a strong consensus that the risks and dangers associated with cosmetic surgery are not adequately covered in the media. In cases where such risks are covered they tend to be in the form of extreme stories, rather than portraying the more common side-effects and complications: *"They don't state the dangers of it, they just show how you could look, and the best things that come out of it, but they don't say that you could die...it's only the good bits"*. Other girls commented *"They only show the extremes of it...[when] surgery goes really wrong, or when people have gone over the top with it"* and *"they don't show the small things. They don't show the fact that you could have pain, or headaches, or sickness...they won't show that 'cos it's not extreme enough. So they'll either show it perfect or really bad."*

Surgery was viewed as being glamorised by the media. This glamorisation and focus on the positives of cosmetic surgery in the media was perceived to lead to greater acceptance and desire for surgery: *"You see more pros than cons, and when you see pictures of it…they airbrush the whole body to make it look perfect...and then you're like 'I want that, I want to look like that!'"* Another girl commented *"They're trying to make surgery look glamorous, they try to make it look like a good thing, like everyone should be having it 'cos it's the 'in' thing, but...it's still surgery! If they actually told the whole story, I think people's opinions would change completely - so they wouldn't think it's such a good thing."*

Media coverage was also perceived as normalising cosmetic surgery, as well as setting standards for acceptable appearance: *"It's just the norm now…because it got so big, it's not a big deal anymore, people just have it"* and *"It sets a benchmark, if you don't look like this, it's not acceptable."* Interestingly, girls denied the media influenced or put pressure on them to have cosmetic surgery, yet believed that other girls their age are quite strongly influenced by such media: *"They definitely do [influence girls our age]. A lot of people see it*

and straight away, as soon as they know it's there and they can have it, they will try and get it."

Celebrity stories were thought to be a powerful influence. Girls stated that celebrities are important for girls their age and act as role models. Highly publicised stories of celebrities undergoing surgery were viewed as increasing young girls' desire for surgery, as well as increasing awareness of cosmetic surgery as an option for appearance enhancement: 'I think it makes them more aware of having that option and they're more likely to choose it if celebrities have it done' and *"They [celebrities] are role models. We look up to them so when they have [cosmetic surgery] done you think "if they get it done, I should get it done"".* Linked to this was the idea that by emulating celebrities' looks, young girls think they will then have a chance of being successful in life. In this sense cosmetic surgery was not viewed as a tool just for improving one's appearance but also one which can enhance a person's life overall.

> *"They'll see their celebrity idols getting plastic surgery and think 'Oh I need to do that then to be as good as them or to be successful'….If they see everyone doing it, they'll think it's a good thing to do, and they'll wanna do it themselves."*

4.6 Discussion

This study qualitatively examined adolescent girls' attitudes and beliefs about cosmetic surgery. Our findings suggest appearance dissatisfaction was present in many girls in this study and that they held complex attitudes towards cosmetic surgery. Important findings include girls' beliefs about the normalisation of cosmetic surgery, its glamorisation in the media, and the underrepresentation of the risks associated it. These results are consistent with previous research showing that body dissatisfaction is normative in adolescents (Ricciardelli & McCabe, 2004), as well as sociocultural theory which emphasises the role of the media as contributing to this dissatisfaction (c.f. Grabe, Ward, & Hyde, 2008). In this sample, adolescent girls' acceptance of cosmetic surgery varied according to the conditions under which surgery was selected, in that bullying or extreme personal unhappiness made the decision to have surgery more justifiable. Still, concerns were expressed with regards to these conditions, with participants making the point that surgery may not be the correct way of dealing with issues such as bullying. Moreover, while not categorically against surgery, participants placed strong emphasis on using it as a last resort, particularly for body features that can be altered through other means, such as exercise. In

this sense, surgery was perceived as an easy and quick fix, which does not solve potential underlying issues with low self-esteem and confidence. Such concerns point to a critical appraisal of the meanings and motivations involved in the decision to undergo surgery, suggesting that these adolescent girls did not take surgery lightly.

Responses to whether participants would consider undergoing surgery were mixed, though there was consensus that many of their peers would consider doing so. Interestingly, the biggest perceived barrier between desiring cosmetic surgery and undergoing it was money, which was viewed as more important than potential risks or complications. This is consistent with a previous study which found that cost is one of the main reasons adolescents do not choose to have cosmetic surgery (Pearl & Weston, 2003). It must be noted, however, that cost issues may simply relate to the fact that adolescent girls do not have the means to afford cosmetic surgery. Therefore, the barriers between wanting and having surgery may change with age and better financial circumstances, in that finances may not be a major concern to adults. Whichever is the case, this point warrants further investigation, and could be a cause for concern, particularly given the widespread availability of financial plans, loans and discount offers for cosmetic surgery.

Cosmetic surgery was perceived as being widely available in all types of media, leading to its normalisation, as well as setting a 'benchmark' for an acceptable appearance. In terms of actual media coverage, girls thought cosmetic surgery was mostly presented in a glamorised way, with a strong emphasis on the psychological benefits of undergoing it, whereas the risks associated with it were almost entirely disregarded. This is consistent with studies of media content which find that risk information is rarely present in advertising (Hennink-Kaminski, Reid, & Whitehill King, 2010). It is also consistent with concerns expressed by cosmetic surgery associations that the mass media does not adequately represent the severity of cosmetic surgery (BAAPS, 2008). Cosmetic surgery therefore appears to be marketed as a consumer product rather than a serious medical intervention, which may impact on how consumers view it. Future research should try to identify the actual impact of different types of cosmetic surgery media coverage through experimental studies.

Interestingly, although participants gave mixed responses as to whether they would consider surgery they believed many of their peers would consider it. Similarly, participants felt little or no influence by cosmetic surgery media in terms of pressure to undergo a procedure, but believed that the influence on their peers was significant and strong. Celebrities and highly publicised stories of cosmetic surgery were seen as strong

encouragement to have surgery, particularly for adolescent girls who see celebrities as role models. This idea is consistent with research which showed that celebrity worship is predictive of the desire of cosmetic surgery (Maltby & Day, 2011). Future research should try to identify further factors which may predict adolescent girls' interest in cosmetic surgery, as well as trait characteristics which may make girls more susceptible to negative cosmetic surgery media effects.

These findings provide an interesting initial picture of adolescent girls' attitudes towards cosmetic surgery. For preliminary research such as this, focus groups are ideal for sampling views from a large number of girls, exploring social norms and the co-construction of views (Wilkinson, 1998). However, focus groups can involve self-presentation biases, and the influence of peers opinions can lead to conformity of views. Future studies should therefore replicate and extend this research through using individual interviews or quantitative self-report methods. Nonetheless, this study provides a good preliminary basis for us to further understand adolescent girls' attitudes to cosmetic surgery. Future research extending this work in other sociodemographic groups, such as ethnic minority groups or girls of a younger age, would be useful to see whether results can be generalised.

In sum, our findings suggest adolescent girls have sophisticated attitudes and perceptions of cosmetic surgery. Without being against cosmetic surgery, girls expressed concerns about the risks associated with having surgery, the way it is portrayed within the media and how this may affect people, particularly their peers. Nonetheless, their attitudes towards having cosmetic surgery were complex, and girls thought the majority of their peers would consider undergoing it. The greatest perceived barrier was cost rather than risks associated with surgery. This suggests consideration of cosmetic surgery maybe normal in adolescent girls and the media may play a significant role in normalising and glamorising such surgery. Further research is needed to examine the impact of cosmetic surgery media on girls and which factors determine whether girls choose to have cosmetic surgery or not.

CHAPTER 5

THE EFFECT OF COSMETIC SURGERY REALITY TV SHOWS ON ADOLESCENT GIRLS' BODY IMAGE

5.1 Abstract

Cosmetic surgery media coverage has become common in recent years, with surgery featuring in advertising and reality TV. Concerns have been expressed by the American and British Associations for Plastic Surgery about the nature of this coverage, particularly with respect to the impact on adolescents (ASPS, 2004; BAAPS, 2004). This study was the first to investigate adolescent girls' responses to a cosmetic surgery TV show using an experimental design. Girls (N = 99) aged 15 to 18 (M = 16.6) were randomly allocated to one of three conditions: a cosmetic surgery TV show which either (1) mentioned risks associated with surgery or (2) did not mention risks or (3) to the control condition, a home makeover show. Results showed that exposure to cosmetic surgery shows resulted in girls reporting more dissatisfaction with their weight and appearance, but no changes were observed in attitudes towards cosmetic surgery. Girls' responses to cosmetic surgery shows varied according to their materialistic values and the extent that they derived self-worth from their appearance. Results suggest that cosmetic surgery reality TV can be damaging to adolescent girls' body image and that there is a need for research to consider factors which may affect how girls respond to such shows.

5.2 Introduction

The media are an important source of information about culturally idealized beauty and attractiveness (Groesz, Levine, & Murnen, 2002). Sociocultural models (c.f. Dittmar, 2008; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999) propose that the media are central in the development of body dissatisfaction among girls and young women, and a significant body of literature investigating different types of media has provided empirical support for this proposal (Grabe, Ward, & Hyde, 2008; Levine & Murnen, 2009). The current study extends past research by examining a type of program which specifically relates to improving appearance: cosmetic surgery TV shows. Moreover, it examines whether the content of such shows has a distinct impact on body image and attitudes toward surgery in adolescent girls.

Media Influence on Adolescent Girls' Body Image

Adolescent girls are continuously exposed to images of idealized female models through the media and advertising (Fouts & Burggraf, 2000; Spyeck, Gray, & Ahrens, 2004). Within Western societies the media present a very uniform idealized body type which is extremely thin, yet curvaceous and toned with flawless skin (Grabe & Hyde, 2009; Want, 2009). This body type is a beauty ideal that is so unrealistic it is difficult for women to achieve naturally. While it still remains unclear exactly how this media ideal becomes internalized in some women, there is empirical support for a number of theoretical explanations of this process. Social comparison theory, for example, proposes that the idealized images within the media provide an abundance of references for upward social comparison. This makes it difficult for women to refrain from evaluating themselves against this sociocultural ideal (e.g. Engeln-Maddox, 2005; Milkie, 1999). Cultivation theory argues that the repeated exposure to idealized images makes this unrealistic media ideal appear as the norm rather than the exception, leading people to endorse this ideal as part of their personal belief system. Striving to achieve this nearly impossible beauty ideal unsurprisingly leads to the experience of body dissatisfaction, which is now so widespread that is had been referred to as "normative" (Striegel-Moore & Franko, 2002, p. 183.)

A wealth of evidence demonstrates the deleterious impact of idealised media images on women's body image. In adolescent samples, correlational studies have shown that higher media consumption is related to higher levels of body dissatisfaction (e.g. Harrison & Cantor, 1997), and eating disorder symptomatology (e.g. Stice & Shaw, 2002). Experimental studies

have also consistently shown that acute exposure to thin-ideal images leads to a more negative body image, at least in the short term. Hargreaves and Tiggemann (2004), for example, found that adolescent girls exposed to idealized beauty images in advertisements reported increased levels of body dissatisfaction, negative mood and more appearance comparisons than girls who saw advertisements not containing idealized models. Moreover, this deleterious effect has been observed across a range of media forms, such as music videos and magazines (Tiggemann, 2003; Tiggemann & Slater, 2004) and confirmed by two meta-analyses of correlational and experimental research (Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002). The concern about these adverse media effects is not just that women feel bad about their appearance, but also the consequences of the accompanying negative affect. Body dissatisfaction has been linked with negative mental health outcomes (e.g. van den Berg, Mond, Eisenberg, Ackard, & Neumark-Sztainers, 2010), as well as unhealthy behaviours, such as dieting and disordered eating (Stice & Shaw, 2002; Tiggemann, 2005). Another such behaviour is cosmetic surgery, and research has begun investigating the impact of cosmetic surgery media, which highlight image "flaws" that are "improved" through surgery.

Cosmetic Surgery: Media and Adolescents

The presence of cosmetic surgery within the media has increased over the past decade, with cosmetic surgery featuring in magazines, widespread advertising, documentaries, and reality TV shows. Cosmetic surgery reality shows began in 2002 when Extreme Makeover, the first of such shows, was televised in the US. Following the success of this show other shows were created e.g. *The Swan*, *Dr. 90210*, *I Want A Famous Face*, and *Bridalplasty*. Each of these shows has its own twist, but they are all based around the same theme: an individual unhappy with a number of areas of life due to her/his appearance undergoing multiple procedures and being transformed into a different looking person. These shows tend to present surgery as low in risk by seldom acknowledging the risks and complications associated with it (Lee, 2009; Nabi, 2009). Moreover, they generally omit the post-operative recovery phases, depicting the patient fully recovered and happy instead.

It is with regard to this portrayal of surgery that cosmetic surgery associations have expressed concern. Both the American Society for Plastic Surgeons (ASPS, 30 March, 2004) and the British Association for Aesthetic Plastic Surgeons (BAAPS, 10, May, 2004) have stated that these types of shows send the wrong message to viewers saying that that they may raise unrealistic expectations and that "*the public is being lulled into a sense that there are no*

real risks or complications in cosmetic plastic surgery" (Rod Rohrich, ASPS president, 2004). Moreover, specific concern has been expressed about "*the young impressionable audience watching these shows who are already self-conscious about their body image*" (ASPS, 30 March, 2004). Such concerns raise the questions of what the actual impact of these types of shows is on both adults and adolescents, not only in terms of attitudes toward cosmetic surgery, but also body image. In the current study, we focus on adolescent girls for a number of reasons. Firstly, they are being brought up in an environment where cosmetic surgery is relatively commonplace and accepted as a form of appearance enhancement. Secondly, they are the future population which may engage in cosmetic surgery. Thirdly, adolescence is a sensitive period during which body image and self-concept are still developing. The pressure to conform to the media-prescribed ideal may make adolescent girls particularly susceptible to appearance enhancing methods, and consequently more likely to consider cosmetic surgery.

Cosmetic Surgery Research and the Importance of Assessing Potential Moderators

Correlational research has shown cosmetic surgery media exposure is associated with the desire for cosmetic procedures (Crockett, Pruzinsky, & Persing, 2007; Delinsky, 2005; Markey & Markey, 2009, 2010; Nabi, 2009; Sperry, Thompson, Sarwer, & Cash, 2009). With regards to body image, correlational findings suggest a positive relationship between cosmetic surgery media consumption and body dissatisfaction (Henderson-King & Henderson-King, 2005; Sarwer et al., 2005; von Soest, Kvalem, Skolleborg, & Roald, 2006). A qualitative exploration of adolescent girls' attitudes towards cosmetic surgery suggested that girls perceive a strong influence from the media on their peers through the promotion of cosmetic surgery and underrepresentation of the risks associated with it (Ashikali, Dittmar, & Ayers, 2014). In an interesting study of emerging adults' responses to a cosmetic surgery reality show, Markey and Markey (2012) found that there was greater interest in obtaining cosmetic surgery among young women who responded positively to the show than those who were relatively negative towards it.

A few experimental studies have been carried out in this field, all of which used young adults as their sample. Exposure to the reality show Extreme Makeover led to a greater desire for cosmetic surgery as a means of altering appearance (Markey & Markey, 2010), whereas exposure to The Swan led to greater perceived media pressures to be thin, as well as an increased endorsement of the ability to control appearance (Mazzeo, Trace, Mitchell, & Gow, 2007). It therefore appears that exposure to cosmetic surgery reality shows has a direct

impact on body image and attitudes towards surgery, but more research is needed to better understand the impact of such shows on the public.

Another important element for research to investigate is individual factors which may make people respond differently to cosmetic surgery media. Body image research has identified a number of traits which make some women more susceptible to responding negatively to idealized imagery than others. Although cosmetic surgery reality shows do not generally feature or focus on idealized media models, their essence is about "fixing" or improving body parts that deviate from the societal ideal. Based on this, we might expect a particularly negative body image following exposure to such a show among women who possess these vulnerability factors. Cosmetic surgery research has recently begun investigating such factors, finding links between favourable attitudes toward surgery and appearance-based teasing (Markey & Markey, 2009), self-objectification (Calogero, Pina, Park, & Rahemtulla, 2010), and celebrity worship (Maltby & Day, 2010; Swami, Taylor, & Carvalho, 2009).

In the current study, we investigate three potential moderating variables, all of which have been linked to both body image and cosmetic surgery attitudes. The first is internalisation of the thin-ideal, that is, the endorsement of the media-prescribed ideal as part of one's own personal belief system. This is considered to be the key vulnerability factor for adverse body image responses to idealized imagery (e.g. Thompson & Stice, 2001) and correlational evidence has linked it to favourable attitudes towards cosmetic surgery (Henderson-King & Brooks, 2009; Markey & Markey, 2009; Sarwer, et al., 2005; Swami, 2009). Moreover, the only experimental study to examine moderating factors found a lower self-esteem following exposure to a cosmetic surgery show among women high on internalisation (Mazzeo et al., 2007).

The second factor we examine is also drawn from the body image literature and refers to the importance of appearance in an individual and her sense of self-worth. Women who derive self-worth from their appearance have been shown to be more concerned about their weight and appearance (Grossbard, Lee, Neighbors, & Larimer, 2009; Overstreet & Quinn, 2012), and engage in more upward social comparisons (Bailey & Ricciardelli, 2010; Patrick, Neighbors, & Knee, 2004). Appearance as a source of self-worth has also been linked to cosmetic surgery. For instance, this variable was significantly higher in women who sought breast augmentation than those who did not (Sarwer, LaRossa, Bartlett, Low, Bucky, & Whitaker, 2003).

The third variable we explore is one which has recently been shown to be a vulnerability factor for negative body image responses to idealized imagery: materialistic values (Ashikali & Dittmar, 2012). Materialistic values were also found to be predictors of positive attitudes towards cosmetic surgery (Henderson-King & Brooks, 2009).

The Present Research

The present study aimed to examine the impact of a cosmetic surgery reality TV show on adolescent girls' body image and attitudes towards surgery. It extends previous research in four ways. Firstly, it is the first experimental study on this topic to focus on an adolescent population. Secondly, whereas previous research tended to focus on either attitudes towards surgery or body image, this study investigates the impact of the cosmetic surgery show on both of these variables. Thirdly, it examines whether different portrayals of surgery have a distinct impact on these outcomes. Specifically, it compares whether the inclusion of risk information has a different impact on body image and attitudes towards cosmetic surgery than a show which does not contain any risk information. Finally, it examines a number of potential moderator variables of girls' responses to the show. Our specific hypotheses were:

(1) Based on previous correlational (e.g. Sperry et al., 2009) and experimental (e.g. Mazzeo et al., 2007) evidence, we expected that girls exposed to a cosmetic surgery reality show would report more body dissatisfaction than those exposed to the control condition.

(2) Based on previous research showing that exposure to cosmetic surgery reality TV leads to a greater desire for surgery, we expected that girls exposed to such a show would report more favourable attitudes toward cosmetic surgery.

(3) The investigation of the impact of different types of information provided is based on literature on other health behaviours, such as vaccination uptake, which suggests risk perception is an important determinant of health behaviour (Brewer, Chapman, Gibbons, Gerrard, McCaul, & Weinstein, 2007). We could argue that the provision of risk information may deter girls from cosmetic surgery through reminding them that it is a risky behaviour to engage in. Thus, we could expect that girls exposed to the show with risk information would report less favourable attitudes towards cosmetic surgery.

(4) All of the above effects may be moderated by one or more potential moderator variables.

5.3 Method

Design

Female adolescents were exposed to one of three conditions: A cosmetic surgery reality TV show which mentioned risks associated with surgery and depicted some post-anaesthesia problems as well as recovery pain (Risk condition); a cosmetic surgery reality TV show which did not include any risk information or postoperative recovery (No risk condition); and the control condition, a home makeover reality show. The impact of these shows on adolescent girls' body image and attitudes towards cosmetic surgery was recorded. Potential moderator variables, such as materialistic values and appearance as a source of self-worth were also measured.

Participants

Participants were all female students recruited through a girls' school for students aged 15-18. In the first wave of recruitment, girls were recruited through a Psychology Conference organized for six schools located in the South East of England (School 1 n = 67; School 2 n = 4; School 3 n = 16; School 4 n = 3; School 5 n = 7; School 6 n = 2). Prior to the conference, the schools gave out information about the study and obtained parental consent. Girls took part in the experiment on the day of the conference. In the second wave of recruitment 3 months later, all students aged 15-18 attending the girls' school were sent information by the school and parental consent obtained. Girls took part in the experiment during a school day. Girls from the six schools did not differ in age ($F(5, 92) = 1.02, p = .41$), but did differ in BMI ($F(5, 92) = 2.44, p = .04$).

In total, 99 girls took part in the study, with 35 exposed to the risk condition, 31 to the no risk condition, and 33 to the control condition. The mean age was 16.56 years (SD = .67, range 15 - 18), and 66.7% were White, 22.3% were Asian, 4.9% "other" and 4.9% preferred not to answer. The mean BMI was 21.13 (SD = 4.15, range = 13.96 – 49.63), with 13.1% classified as underweight and 5.1% as overweight. Participants' personal monthly spending money ranged from £0-£450, with an average of £92.79 (SD = 106.32).

Materials

Reality TV show. The cosmetic surgery reality TV show was *Dr. 90210*. The risk condition was a composite of clips from several episodes of this show in which the surgeon discussed, albeit briefly, the risks associated with surgery, and which depicted minor

complications with anaesthesia and pain. The no risk condition was a composite of clips from the same show which did not mention any risks or show any complications or post-surgical pain. The resulting clips in both conditions were focused on the patients, all of whom were women, and were approximately 15 minutes long. It must also be noted that patients in these episodes only underwent one procedure each, rather than multiple: the risk condition featured a rhinoplasty, and the no risks condition featured a breast augmentation and tummy tuck. Therefore, their postoperative appearance was not radically different to their preoperative appearance. Any information or depictions of the surgeons' lives, as well as transitional scenes of luxurious shops and young, beautiful women were cut out in order to maintain closely controlled experimental conditions. The control condition was a clip of Extreme Makeover Home Edition. All stimuli were matched for length.

     Scales. Body Image[3]. The Self-Discrepancy Index (SDI; Dittmar, 2009; Halliwell & Dittmar, 2006) is a participant-generated scale, allowing participants to describe in their own words aspects of themselves that they would ideally like to change. Participants completed up to three sentences of the format "*I…, but I would like…*", and then rated on a 6-point Likert scale how different they are from their ideal (magnitude), and how concerned they are about this difference (salience). Self-discrepancy statements were coded into three categories: weight loss and a desire for a thinner body (e.g. "*I am overweight, but I would like to be skinny and lose weight*"); appearance more generally (e.g. "*I have acne, but I would like clear skin*"); and statements unrelated to weight or appearance. Two indices were created, one for weight and another for appearance, by multiplying magnitude and salience ratings for each relevant statement, and these products added together. Self-discrepancies were, however, substantially positively skewed so were transformed into binary variables and analysed using binary logistic regressions. Just over half of the participants (50.5%) generated weight-related self-discrepancies, and 65.7% appearance-related self-discrepancies.

     Cosmetic surgery attitudes. The 5-item Intrapersonal and Consider subscales of the Acceptance of Cosmetic Surgery Scale (Henderson-King & Henderson-King, 2005) were used to respectively measure the perceived benefits of cosmetic surgery to image and the extent to which participants would consider surgery. Participants state their agreement on a 6-point Likert scale from (1) strongly disagree to (6) strongly agree to items such as

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[3] The 10-item Appearance subscale from the Body Esteem Scale (Mendelson, Mendelson, & White, 2001) was also used (α = .93). However, this scale did not yield significant results (all *p* > .07), so we do not discuss it further.

"*Cosmetic surgery can be a big benefit to people's self-image*" and "*In the future I could end up having some kind of cosmetic surgery*". Reliabilities were good for both subscales: intrapersonal α = .91 (M = 3.87; SD = 1.40) and consider α = .93 (M = 3.38; SD = 1.08).

Proposed moderators. Girls' materialistic values were measured using the abridged 9-item Materialistic Values Scale (Richins, 2004), which conceptualizes materialism as a value system comprised of three constructs relating to material acquisition: centrality, happiness, and success. Example items include "*I like a lot of luxury in my life*" (α = .83; M = 3.76; SD = .83).

The Body-Perfect Internalisation Scale (Bell, 2011) was used to measure the extent to which girls endorse and value the female beauty ideal as portrayed in the media, as well as the perceived benefits of attaining this ideal. It contains three subscales measuring identification with media models, centrality of the body perfect to the self, and investment in the body perfect. Example items include "*Having the perfect body is important to me*" and "*I would be more popular if I had the perfect body*" (α = .95; M = 9.94; SD = 10.74).

The Appearance subscale from the Contingencies of Self-Worth Scale (Crocker, Luhtanen, Cooper, & Bouvrette, 2003) is a 5-item scale measuring the extent to which a sense of self-worth is derived from appearance. Items include "*When I think I look attractive, I feel good about myself*" (α = .77; M = 4.32; SD = .95).

Procedure and Ethical Issues

Ethical approval was obtained from the University research ethics committee, as well as from the School where the study was carried out. Due to the sensitive topic of the study, parental consent was also obtained; parents were sent out a letter from the school explaining the nature of the study, and gave signed consent for their daughters to take part. Participants were given an information sheet introducing the study as an investigation of TV makeover shows and explaining that some of the videos may contain graphic scenes. The consent form informed of their right to withdraw from the study and that their responses would remain anonymous and confidential.

Participants watched the 15-minute video then completed the questionnaire in two sections. The first section included the Self-Discrepancy Index, the Body Esteem Scale, and then the Acceptance of Cosmetic Surgery Scale. To maintain the cover story, participants were told that people's personal ideals, feelings about different aspects of their life, and their opinions on the industries of the makeover shows can have an effect on how they respond to

them. Also, filler items were embedded within the latter two scales. The second part of the questionnaire was introduced as a section on more general attitudes and life values, and asked participants to respond using a 6-month frame. Moderator measures were recorded in this section, beginning with the Materialistic Values Scale, the Appearance as a Source of Self-Worth and the Body Perfect Internalisation Scale. Again, filler items were embedded within all of the above scales. The questionnaire ended with a demographic section, asking age, ethnic background, height and weight. Participants were then debriefed and asked whether they wanted to submit or withdraw their responses.

5.4 Results

A series of one-way analyses of variance (ANOVA) was carried out to check whether there were any group differences in age, BMI, or in the proposed moderators. There were no group differences on any of the variables (all $F < 1.95$, $p > .15$), so these did not need to be controlled for in subsequent analyses. In order to determine which of the proposed variables played a moderating role, multiple regressions were carried out for each outcome variable with these variables as predictors. Body-perfect internalisation did not significantly moderate any of the outcome variables, so it is not reported further. Binary logistic regressions were used to analyse self-discrepancies, whereas stepwise hierarchical multiple regressions were used for all other variables. Regression models were structured as follows: two exposure contrasts: control versus experimental (coded control = .66 and experimental = .33) and no risk versus risk (coded no risk = -.33 and risk = .33) (step 1), and appearance as a source of self-worth or materialistic values (mean-centred) (step 2) for outcome variables for which they were shown to be significant moderators.

Effects of Exposure to Cosmetic Surgery Reality TV on Body Image

Consistent with our first hypothesis, group differences were observed in girls' weight and appearance-related self-discrepancies, such that girls who were exposed to cosmetic surgery videos felt more dissatisfied about their weight (59.1%) and appearance (75.8%) than those in the control condition (weight = 33.3%; appearance = 45.5%; see Tables 5.1 and 5.2 for regression coefficients). Moreover, a significant main effect emerged for weight-related self-discrepancies between the two cosmetic surgery conditions, with girls exposed to the video containing risk information reporting more dissatisfaction with their weight (76.7%; β = -3.24, $p < .01$) than those exposed to the video not containing any risks (44.4%).

Weight-related self-discrepancies were moderated by appearance as a source of self-worth. The significant interaction term here was with the control versus experimental exposure contrast and a simple slopes analysis was carried out to explore the nature of this interaction. As shown in Figure 5.1, there is very little difference between girls low on appearance as a source of self-worth who are exposed to cosmetic surgery and those who are not. For girls who derive self-worth from their appearance however, exposure to cosmetic surgery shows has a stronger impact on their weight-related self-discrepancies, scoring .51 scale points higher than those for whom appearance is not so central to their self-concept.

Appearance-related self-discrepancies were moderated by materialistic values. The interaction term with the risks versus no risks exposure contrast emerged as significant and was explored with a simple slopes analysis. As shown in Figure 4.2, girls low and high on materialistic values differ very little in their appearance-related self-discrepancies when exposed to cosmetic surgery shows which mention/depict risks associated with surgery. When exposed to a show which did not mention risks linked to cosmetic surgery, it is girls who are highly materialistic who respond most negatively, scoring .44 scale points higher than non-materialistic girls.

Table 5.1. **Binary Logistic Regression Coefficients for Weight-Related Self-Discrepancies.**

	B	S.E.	Odds Ratio with 95% C.I.		
			Lower	OR	Upper
Control vs Experimental	-3.92[**]	.39	1.25	2.67	5.68
No Risk vs Risk	-3.24[**]	1.06	.00	.04	.32
Appearance Self-Worth (mean-centered)	.82[**]	.30	1.26	2.28	4.13
Appearance Self-Worth Control vs Experimental	.91[*]	.41	1.12	2.49	5.42
Appearance Self-Worth No Risk vs Risk	-.13	1.16	.88	.88	8.58
Constant	.28	.28		1.32	

[*]$p < .05$, [**] $p < .01$. Cox and Snell $R^2 = .22$. Nagelkerke $R^2 = .29$

Table 5.2. **Binary Logistic Regression Coefficients for Appearance-Related Self-Discrepancies.**

	B	S.E.	Odds Ratio with 95% C.I.		
			Lower	OR	Upper
Control vs Experimental	1.20[**]	.38	1.58	3.31	6.93
No Risk vs Risk	-.37	1.07	.09	.69	5.63
Materialistic Values (mean-centered)	.53	.37	.83	1.70	3.49
Materialistic Values Control vs Experimental	.82	.48	.89	2.56	5.73
Materialistic Values No Risk vs Risk	-2.77[*]	1.42	.00	.06	1.01
Constant	.99[***]	.28		2.70	

[*]$p < .05$, [**]$p < .01$, [***]$p < .001$. Cox and Snell $R^2 = .16$. Nagelkerke $R^2 = .22$.

Figure 5.1. **Weight-related self-discrepancies at different levels of appearance as a source of self-worth for girls exposed to the cosmetic surgery shows or not.**
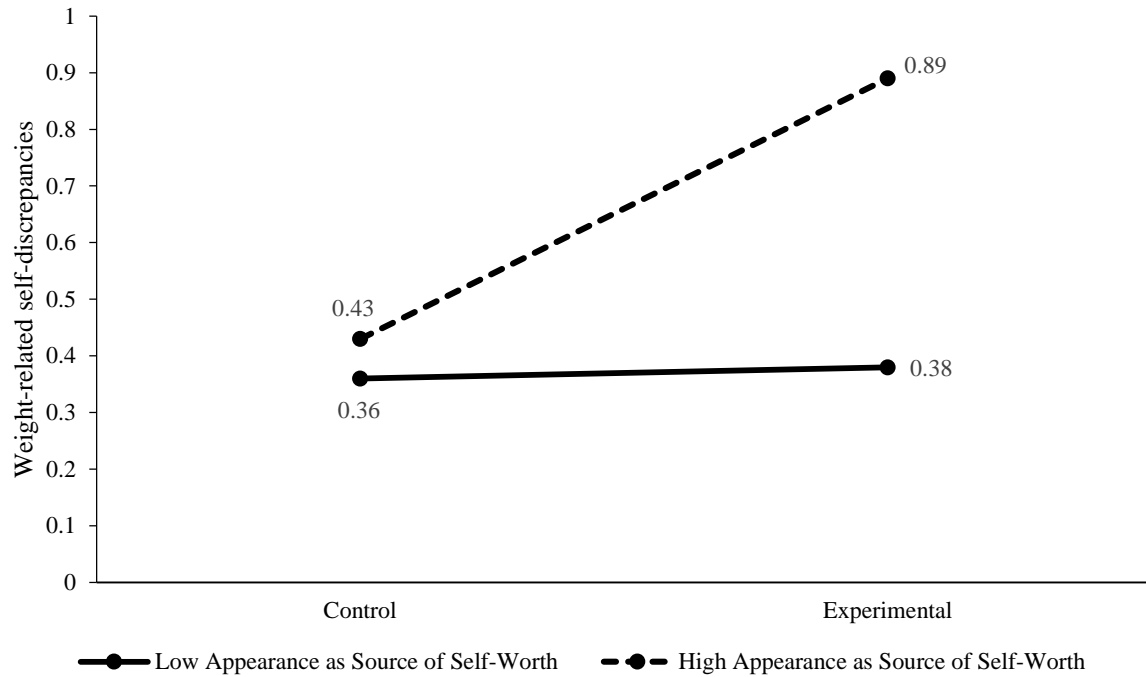
Figure 5.2. **Appearance-related self-discrepancies at different levels of materialism for girls exposed to cosmetic surgery shows containing risk information or not.**
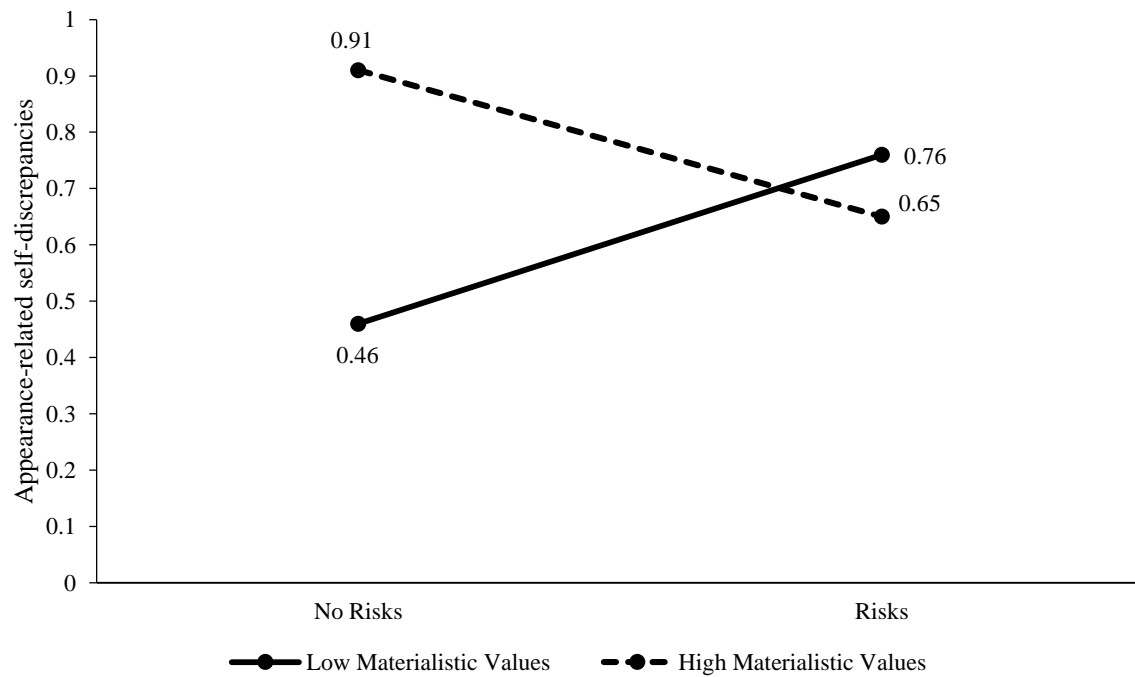
Effects of Exposure to Cosmetic Surgery Reality TV on Attitudes towards Surgery

Contrary to expectations, no main effects were observed for any of the cosmetic surgery attitudes variables (intrapersonal and consider all $F < 1.525$, $p > .223$), suggesting that attitudes toward cosmetic surgery were not influenced by a single exposure to cosmetic surgery reality TV. It must be noted however, that a post-hoc power analysis indicated that there was not enough statistical power in our sample for the consider subscale. This might suggest that potential differences on this scale are mild and that a larger sample is needed to detect these. Future experimental research should therefore use larger samples to clarify such possible effects.

A significant interaction term for the intrapersonal subscale did emerge however. This was between appearance as a source of self-worth and the experimental videos contrast ($\beta = -.22$, $p < .01$), suggesting that the extent to which girls derive self-worth from their appearance plays a role in how they respond to different portrayals of cosmetic surgery in reality shows. As illustrated in Figure 5.3, there is very little difference between girls low and high on appearance as a source of self-worth when exposed to the risk cosmetic surgery video. When exposed to the no risk video however, it is girls high on this variable who perceive surgery as more beneficial to image than those for whom appearance is not important to their self-worth.

Figure 5.3. **Intrapersonal benefits of surgery at different levels of appearance as a source of self-worth for girls exposed to cosmetic surgery reality TV shows containing risk information or not.**
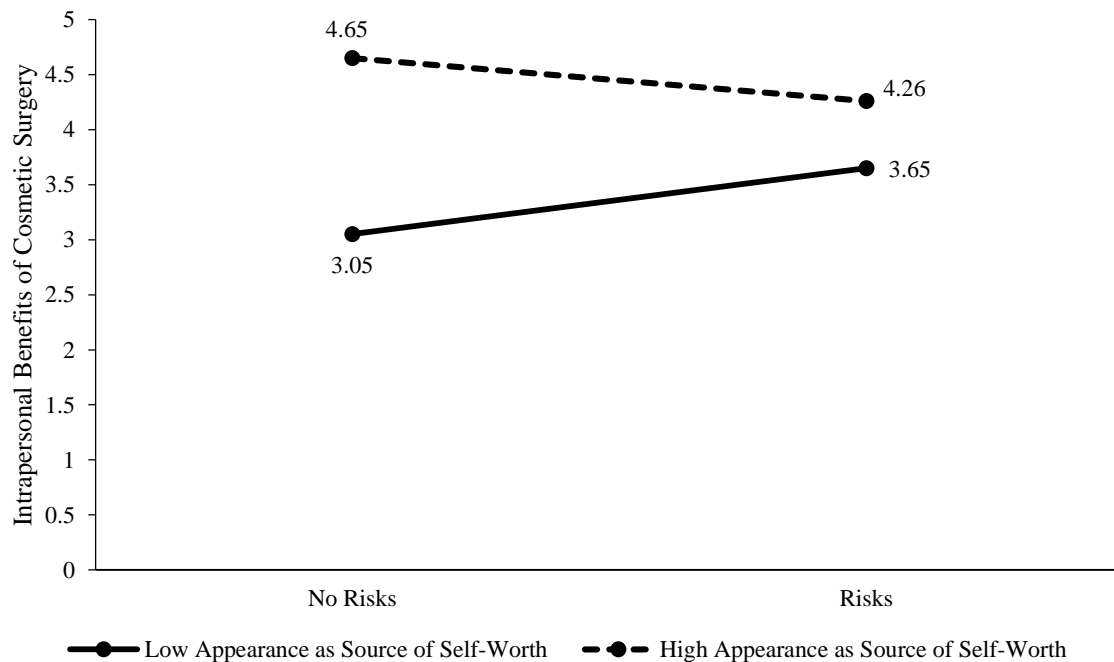
5.5 Discussion

The current study was the first to investigate the effect of a cosmetic surgery TV show on adolescent girls' body image and attitudes towards cosmetic surgery. Furthermore, it was novel in examining whether different portrayals of surgery from the same show had a distinct impact on these outcome measures. The main findings were that exposure to cosmetic surgery shows led to increased body dissatisfaction, whereas attitudes towards cosmetic surgery were not impacted by such exposure, except in girls for whom appearance is important to their self-worth.

Exposure to Dr. 90210, irrespective of its content, had an adverse effect on adolescent girls' body image, both in terms of weight satisfaction as well as appearance satisfaction more generally. Moreover, weight dissatisfaction was more pronounced in girls exposed to risk information than those who were not. This suggests that the provision of risk information may highlight the risks or barriers to achieving an idealized weight and thus make girls more dissatisfied with their current weight. This negative body image following exposure to cosmetic surgery shows is consistent with previous correlational (e.g. Markey & Markey, 2009) and experimental research (Mazzeo, Trace, Mitchell, & Gow, 2007) that found a link between cosmetic surgery media and body image among adult women. Furthermore, since people undergoing surgery in the videos used in this study were average women rather than models, our findings extend the body image literature by showing that in the case of cosmetic surgery media, body dissatisfaction can arise irrespective of the presence of the prescribed media ideal. This could be due to the fact that these types of shows first present deviations from media ideals as flaws and then offer solutions to them. This might, in turn, act as a reminder of girls' own deviations from idealized media beauty, making them feel worse about their appearance. It is interesting to note here that unlike other shows, the reality show chosen for the current study does not generally feature extreme transformations through a multitude of procedures. It may be that shows which depict more extreme appearance changes may lead to more pronounced body dissatisfaction in viewers. On the other hand, such extreme changes may make it harder for the viewer to identify and empathize with the person featured in the show, which could lead to more subtle responses. Future research could therefore examine the impact of different types of shows which feature more or less extreme cosmetic alterations.

Attitudes towards cosmetic surgery were not affected by exposure to cosmetic surgery shows, except for girls high on appearance as a source of self-worth. This is contrary to

previous research which found that exposure to cosmetic surgery reality TV led to an increased desire for surgery (Markey & Markey, 2010) and suggests that attitudes towards surgery are stable in this population and not malleable by a single exposure to a cosmetic surgery show. This interpretation of our finding is consistent with a cultivation theory framework, which proposes that repeated media exposure leads the viewers to consider and accept what they are watching as being representative of reality (Gerbner, Gross, Morgan, Signorelli, & Shanahan, 2002). It therefore could be that the role of the media in terms of attitudes towards cosmetic surgery is one of normalizing surgery, making it appear as a common and accepted form of appearance change. More research is therefore needed to gain a better understanding of the impact of cosmetic surgery media on attitudes towards surgery so that better-informed proposals for policy change can be made.

The extent to which girls derive self-worth from their appearance was found to impact how they responded to the cosmetic surgery show, both in terms of their weight satisfaction and their attitudes towards surgery. Moreover, materialistic values impacted girls' appearance satisfaction. Exposure to cosmetic surgery shows led to an increased weight dissatisfaction in girls high on appearance as a source of self-worth than those who are low. This is consistent with our hypothesis, and previous research showing that a focus on appearance as a means of gaining self-worth is correlated with weight and appearance dissatisfaction and a vulnerability factor for negative responses to idealized media (e.g. Grossbard, Lee, Neighbors, & Larimer, 2009; Overstreet & Quinn, 2012). In terms of appearance satisfaction, it was highly materialistic girls exposed to the cosmetic surgery show which did not mention risks who responded most negatively. It could be that this "light" portrayal of cosmetic surgery makes the option for surgery appear more feasible to the viewer. Having not engaged in this behaviour therefore, made materialistic girls feel worse about their appearance than those who are low on materialistic values. Whatever the possible explanations for these moderation effects, it is clear that future research needs to consider such moderating factors. Moreover, it appears that the examination of different contents of such cosmetic surgery shows was a warranted one in the current study, and highlights the importance of future research to do so as well.

Perceived benefits to image from cosmetic surgery were also affected by the importance of appearance to self-worth, such that girls who were high on this variable perceived surgery as more beneficial when exposed to the no risks cosmetic surgery video than girls for whom appearance is not important to their self-worth. A reason for this could be

that the portrayal of surgery as without risk makes surgery more acceptable to girls for whom appearance is an important factor to their self-concept by presenting surgery as an easy behaviour to engage in. These findings show that not all girls respond in the same way and highlight the importance of measuring factors, such as the importance of appearance to self-worth, which may make some girls respond more negatively to this type of media.

The findings of this study need to be considered in the context of potential methodological limitations. One limitation of the current study is that state and trait measures were recorded at the same time as exposure to the videos. Future research may wish to record trait measures of potential moderator factors at a different time to ensure that responses were not impacted by the experimental manipulation. Moreover, it would be useful to replicate and extend this work among other sociodemographic groups, such as ethnic minorities, to see whether different views or issues arise. The second limitation relates to the study's ecological validity. The experimental materials were shortened and specifically selected for the purposes of this study. While this allows for a close manipulation and control of the research, in reality these TV shows are longer and include other types of information and imagery (e.g. the surgeons and their personal lives). The flow and focus of the show is therefore likely to be different to our material, with potentially different outcomes. Future studies may therefore choose to use full-length episodes of reality shows to see whether similar effects are found.

An important variable which future research should strive to explore is people's perception of risks following exposure to different types of cosmetic surgery media. Gaining an understanding of what type of information leads to more accurate and realistic perceptions of risks associated with surgery is critical to informing regulation proposals of cosmetic surgery media. Moreover, it is important for research to start taking into consideration the impact of such media on expectations from cosmetic surgery. This could be measured in actual patients, or as a hypothetical scenario among non-clinical samples. For both risk perception and expectations, it would be interesting to employ similar experimental paradigms to the current study, such that the impact of different portrayals of surgery are examined in order to gain better understanding of what type of information and/or images has the most adverse effects.

Taken together, our findings suggest that cosmetic surgery reality shows have a negative impact on adolescent girls' body image. Moreover, the importance of appearance to self-worth as well as materialistic values may make some girls more susceptible to negative responses to such media. Further research should take into account the content of cosmetic

surgery media, and examine individual differences in responses to such media in order to better identify who might be more vulnerable to them.

CHAPTER 6

6. DISCUSSION AND CONCLUSION

Rates of cosmetic surgery are increasing with more people expressing interest in and undergoing it every year (BAAPS, 2012; Frederick, Lever, & Peplau, 2006). At the same time, cosmetic surgery has become a common feature in the media, with advertising and reality TV shows being widely available. However, this type of media coverage tends to present cosmetic surgery as low-risk and markets it like any other consumer product. British and American associations for cosmetic surgery have expressed their concerns about both advertising and reality TV (ASPS, 2004; BAAPS, 2008), making special mention of adolescent audiences which may be particularly influenced by such media (ASPS, 2004). Although studies on cosmetic surgery media are emerging, there is a lack of research which: (1) uses experimental designs, (2) considers body image as an outcome variable (3) looks at the impact of advertising, and (4) focuses on younger populations. The present thesis therefore examined the impact of cosmetic surgery advertising on young adult women, explored adolescent girls' views on surgery, and investigated the impact of reality TV on girls' body image and attitudes towards surgery. Importantly, a key element that ran throughout this series of research was the impact of different portrayals of surgery.

6.1 Summary of Main Findings

The first part of the thesis was concerned with cosmetic surgery advertising and examined its impact among women living in the UK (Studies 1 and 2, Paper 1) and in Switzerland (Study 3, Paper 2). Studies 1 and 3 manipulated cosmetic surgery media portrayals through providing different types of information, namely discount incentives or risks associated with surgery. Study 2 manipulated the imagery used, specifically, images of models, clinic locations and premises, or scalpels. The second part of the thesis was focused on adolescent girls, with a qualitative study exploring their views on surgery (Study 4, Paper 3), and an experimental study exposing them to cosmetic surgery reality TV which either mentioned risks and depicted postoperative difficulties/recovery, or not (Study 5, Paper 4). The main findings from the qualitative and experimental studies are summarised first, followed by discussion on factors that moderated responses to cosmetic surgery media.

Key Findings from the Qualitative Study

The qualitative study suggested that adolescent girls hold relatively sophisticated attitudes towards surgery. They perceived the media as normalising and glamorising cosmetic surgery, and as setting the standard of beauty. They reported being influenced by idealised media images, despite being aware of the digital manipulations employed to enhance them. They also considered celebrity role models as affecting girls' in their awareness of and desire for surgery. The conditions under which surgery was selected impacted girls' acceptance of it, though never without reservations about other underlying psychological issues and the extent to which surgery can actually better those. While responses about personally undergoing surgery were mixed, there appeared to be a consensus that the majority of peers would do so, with the main barrier being cost rather than risks. Overall, adolescent girls did not take surgery lightly and were mature in their approach to it: they did not see it as an easy, straight-forward behaviour to engage in and were aware of risks and complications. Still, at the same time they seemed to be quite influenced by cosmetic surgery media and the idea of having appearance concerns taken away through surgery did seem to be tempting to them. It would be useful for experimental studies to extend this research further among this population. Further qualitative research using one-on-one interviews rather than focus groups, would reduce potential problems of peer influence and provide more individual accounts of how adolescent girls view the industry as a whole.

Key Findings on the Impact of Exposure to Cosmetic Surgery Media on Body Image

All experimental studies showed that cosmetic surgery advertising and reality TV had a negative influence on body image, with women reporting greater dissatisfaction with their weight (Studies 1, 3, and 5) and appearance (all studies) following exposure to cosmetic surgery media. Importantly, negative body image effects were observed also in the absence of idealised media models (Studies 2 and 5). This is contradictory to previous body image research which examined the effect of the presence or absence of (a) an idealised model, and (b) an appearance-related product (Birkeland et al., 2005), finding that only the presence of a model led to increased body dissatisfaction. This might suggest that the inherent purpose of cosmetic surgery to enhance appearance and essentially approach the cultural beauty ideal, may be enough to remind women of their appearance shortcomings.

Three points are worth noting in relation to these results. First, weight satisfaction in adolescent girls was also affected by media portrayals in that those exposed to risk

information felt more dissatisfied. It therefore appears that media portrayals of surgery affect body image to a certain extent and future research should take these into consideration. Second, although moderation effects were found with a number of measurements of body dissatisfaction, significant main effects of exposure to cosmetic surgery media only emerged with the Self-Discrepancy Index (Halliwell & Dittmar, 2006). One explanation for this could be that its open-ended nature, whereby participants openly express their thoughts, may be a more sensitive way of capturing women's feelings toward their body than fixed-item scales. However, there may be other factors involved in these effects, such as demand characteristics. Whichever the case, the inclusion of several measures of body dissatisfaction was a warranted one and body image research should carry on examining different aspects of this multi-faceted construct. Third, that fact that exposure to cosmetic surgery advertising led to increased levels of body dissatisfaction among samples of women living in different countries, as well as in different age groups, suggests these findings are relatively robust and may be generalizable to other European countries.

Key Findings on the Impact of Exposure to Cosmetic Surgery Media on Attitudes towards Surgery

Attitudes towards cosmetic surgery were mainly affected by different media portrayals, with the exception of intrapersonal benefits being perceived as lower following exposure to cosmetic surgery advertising (Study 1). Consideration of surgery was higher in women exposed to risk information than discount incentives (Study 1), whereas perception of risks was higher in women exposed to images of scalpels and clinics' locations than those exposed to images of models (Study 2). These findings suggest that media portrayals of cosmetic surgery do play a role in how surgery is perceived, and provide support for the decision to consider such portrayal in the present research. It is important for research to carry on examining how different portrayals of surgery impact the public so that proposals for regulation of the industry are well-informed. For example, one concern about current cosmetic surgery media portrayals is that they do not adequately cover the risks associated with procedures, which may not allow for proper consideration of them by prospective patients. The provision of risk information in such advertising would therefore be expected to act as a "buffer" between interest in surgery and decision to have it. As mentioned above however, risk information unexpectedly led to greater consideration of surgery (Study 1), suggesting that the way in which different portrayals of surgery affect women's attitudes

towards it is not straight forward and does not necessarily reflect what logic would lead us to expect.

Overall, results on attitudes towards cosmetic surgery were less consistent and more complex than those on body image. The fact that relatively few significant main effects of exposure to cosmetic surgery media were found, suggests that attitudes towards surgery may be quite stable and less malleable by a single exposure. However, the effect of cosmetic surgery media content on attitudes shows that the information provided in such media and the way in which surgery is portrayed does play a role in how women evaluate surgery.

Key Findings on Moderator Variables

A number of variables drawn from literature on body image and consumer culture were examined as potential moderators of responses to cosmetic surgery media. Materialism was the most consistently significant variable across all studies. It moderated body-anxiety (Study 1) and weight satisfaction in adult women (Studies 1 and 2), appearance satisfaction in adolescent girls (Study 5), and perceived intrapersonal benefits of surgery in women living in Switzerland (Study 3). These findings add to the existing evidence linking materialism and body image (e.g. Ashikali & Dittmar, 2012; Bell, 2011a; Dittmar, 2008; Guðnadóttir & Garðarsdóttir, 2014) and the emerging research linking it to attitudes towards cosmetic surgery (Henderson-King & Brooks, 2009). Furthermore, they highlight the need for future research in body image and cosmetic surgery to more consistently consider the potential moderating role of materialism.

Some body image-related variables were also found to play significant moderating roles. Among adult women, restrained eating moderated weight satisfaction (Studies 1 & 3) and body-related anxiety (Study 3), whereas among adolescent girls, appearance as a source of self-worth moderated weight satisfaction (Study 5). Although the examination of body-image variables as moderators to cosmetic surgery attitudes was the more novel investigation in this research, it was unexpected to find so few significant moderation effects by these variables on body dissatisfaction. This may be due to the fact that the experimental stimuli used in this research project are different to the usual stimuli used in body image research in that idealised media models were not necessarily present, whereas they generally are in body image research. This might suggest that the known factors which make some women respond more negatively to media exposure in terms of their body image are particularly relevant in the presence of idealised imagery. Perhaps most surprising, given previous research (e.g.

Thompson & Stice, 2001), was that thin-ideal internalisation did not emerge as significant in any of the studies. However, this could be due to measurement issues, as discussed in the section on limitations pertaining to this research.

In terms of moderation of cosmetic surgery attitudes, two further effects were found: trait appearance dissatisfaction moderated consideration of surgery among women living in Switzerland (Study 3), and appearance as a source of self-worth moderated perceived intrapersonal benefits of surgery in adolescent girls (Study 5). These findings provide some support to the idea that appearance importance and dissatisfaction play a role in women's attitudes towards surgery (Sarwer et al, 1998). However, more consistent exploration of these variables is needed. In the present research importance of appearance (Studies 2 and 5) and trait body dissatisfaction (Studies 1 and 3) were considered in separate studies. In order to more thoroughly test the model put forward by Sarwer and colleagues (1998), these two variables should be considered within single studies. Furthermore, even though results from the present studies did not consistently find a role of body image to attitudes towards surgery, future research should persist in investigating these relationships in order to gain a better understanding of how exactly body image might motivate the decision to undergo surgery or lead to more favourable attitudes towards surgery more generally.

Finally, it is interesting to note that over half of the moderation effects found in the present series of research were between experimental conditions, which suggests that media content has an impact on how certain women respond to cosmetic surgery media. This provides further support for investigating cosmetic surgery media portrayals, and that future research should take it into account.

6.2 Applied and Theoretical Implications

Applied Implications

The present research suggests that media on cosmetic surgery negatively affects women and girls' body image. While increased body dissatisfaction may not directly translate to the desire for cosmetic surgery, there are still causes for concern. Body dissatisfaction has been linked to a number of unhealthy behaviours (e.g. Cash & Hrabosky, 2004; Cash & Fleming, 2002; Stice, 2002) as means to reducing it. Therefore, although surgery may not be selected in response to such body dissatisfaction, individuals may engage in other behaviours which are risky and a threat to psychological and physical well-being. Given that the media is replete with images and messages about the "body perfect", removal of cosmetic surgery

media would not help reduce people's dissatisfaction with their image. It would, however, be useful for intervention programs aimed at minimising negative media effects to also consider cosmetic surgery media and advertising. Media literacy interventions often focus on making young girls more aware of how unrealistic idealised media models are and attempt to tackle unhealthy media messages about the "body perfect" (e.g. Posavac, Posavac, & Weigel, 2001; Richardson, Paxton, & Thomson, 2009). These could be expanded to include discussion on cosmetic surgery media and on the concept of surgery more generally.

In terms of attitudes towards surgery, it is difficult to draw any solid conclusions from the present research. Cosmetic surgery media portrayal played a role in how women reported feeling about surgery. This is in line with concerns expressed by associations for cosmetic surgery (e.g. BAAPS, 2005, 2008) that the way in which surgery is marketed and presented is likely to have an effect on the public. However, given that my findings suggest that a more realistic portrayal of surgery as carrying risks led to more favourable attitudes towards it, it is difficult to conclude that this would be a better way of portraying cosmetic surgery. Moreover, despite the fact that discount incentives in the present research did not have the incentivising effect that I had anticipated, it does not preclude that other types of marketing tools do act as incentives for undergoing surgery. Therefore, more research is needed in this area to clarify how information affects attitudes, and how cosmetic surgery may best be marketed within the media.

The findings with moderating variables suggest that materialism plays a key role in how women and girls respond to cosmetic surgery media. Intervention programs have been successful at reducing girls' thin-ideal internalisation (e.g. Richardson, Paxton, & Thomson, 2009) and could expand their efforts to also focus on reducing individuals' materialistic orientation. This could be done following a self-determination perspective (see section below) by educating girls about the benefits of pursuing intrinsic over extrinsic life goals and by empowering them to lead a more autonomous, self-determined life.

Theoretical Implications

Sociocultural and consumer culture frameworks were used in the present series of research to guide both hypotheses and the selection of potential moderating variables to investigate. Sociocultural theory has been the dominant framework in body image research through which negative media effects can be understood (Groesz, Levine, & Murnen, 2002). This theory considers social and cultural factors, such as family, peers, and more importantly,

the mass media, as pressures to conform to the cultural beauty ideal. The consumer culture literature on the other hand, suggests that two prominent ideals are promoted within Western cultures- the "body perfect" and the "material ideal" (Dittmar, 2008). These two ideals are often depicted together within the media with messages suggesting that their attainment can bring rewards of happiness, status, and social standing. The present thesis found support for both of these frameworks, with exposure to cosmetic surgery media leading to increased body dissatisfaction, and with materialism moderating a number of relationships- both in terms of body image and attitudes towards surgery.

However, there are limitations pertaining to these frameworks which should be noted. The sociocultural framework, though dominant in body image research, is very broad and does not efficiently help guide the investigation of the smaller details of the media-body image relationship. For example, it does not provide any explanations or indications as to why and who may be more adversely affected by the media. Moreover, it does not offer suggestions for how media-related body image problems might be tackled. The consumer culture framework on the other hand, is more precise in its propositions, focusing on specific extrinsic individual difference factors which may lead to adverse effects. This then also allows for a more efficient use of findings in the sense that there is a clearer focus on traits which should be included in intervention-type research. Although, the consumer culture framework is advantageous in linking body image to other extrinsic aspirations, it is derived from a more established theory, which is more detailed and nuanced in its propositions.

Overall, therefore both the findings from the present thesis and the limitations pertaining to the theoretical frameworks used suggest that a synthesis of these frameworks may be necessary to better understand the relationship between the media, body image, and cosmetic surgery attitudes. A framework which may be particularly relevant to these relationships may be one which considers the internalisation and impact of media messages, as well as taking into consideration individual differences, particularly in terms of extrinsic aspirations.

A framework based Self-Determination Theory (SDT; Kasser & Ryan, 1996; Ryan & Deci, 2000) considers both the internalisation and impact of consumer culture ideals and may therefore offer an interesting perspective on this relationship. This theory proposes that individuals have three basic psychological needs- autonomy, competence, and relatedness, which lead to psychological and personal well-being when satisfied (Ryan & Deci, 2000). Autonomy refers to the feeling that one's behaviour is volitional and meaningful; competence

reflects efficient behaviour, and relatedness refers to feeling connected to others and having a sense of belonging. A wealth of evidence has demonstrated that satisfaction of these psychological needs leads to positive well-being in a number of domains and contexts, such as sports (Reinboth & Duda, 2006), health behaviour (Niemiec, Ryan, Patrick, Deci, & Williams, 2010), and education (Vlachopoulos, Katartzi, & Kontou, 2011).

Despite individuals' inherent motivation to satisfy these needs however, social experiences and environmental elements may interfere with their fulfilment (need thwarting). One such interference may relate to individuals' personal goals and aspirations. Working form a self-determination perspective, Kasser and Ryan (1996) made a distinction between life goals as intrinsic (e.g. self-acceptance, affiliation) and extrinsic (e.g. physical attractiveness, financial success, popularity). Intrinsic goals help satisfy the three basic psychological needs, whereas extrinsic goals are pursued for their external rewards (Ryan & Deci, 2000). These extrinsic goals are heavily promoted within consumer culture and the mass media, where the "body perfect", material possessions, and fame are considered as markers of a successful individual (Dittmar, 2008). A focus on extrinsic relative to intrinsic goals undermines people's happiness and well-being, and takes away time and energy from satisfying the three basic psychological needs (Dittmar, 2008; Kasser & Ryan, 1993, 1996).

Research has demonstrated that need satisfaction and need thwarting are two distinct factors (e.g. Vanteenkiste & Ryan, 2013; Unanue, Dittmar, Vignoles, & Vansteenkiste, 2014). As such, a lack of need satisfaction does not imply thwarting, but thwarting implies a blockage in the fulfilment of basic needs. Repeated thwarting of the basic psychological needs leads to a psychological deficit, which people might attempt to minimise through the adoption of need substitutes and compensatory behaviours (Deci & Ryan, 2000; Vestuyf, Patrick, Vansteekiste, & Teixeira, 2012). According to SDT, repeated need thwarting may increase individuals' susceptibility to cultural and media messages about attaining extrinsic goals, leading them to internalise them as part of their personal belief system (Vestuyf et al., 2012). Indeed, research has suggested that need thwarting experiences, such as peer rejection in children, leads to greater perceived peer pressure about having material possessions and an attractive appearance, and consequently, to a greater internalisation of materialistic values (Banerjee & Dittmar, 2007). SDT could be applied to cosmetic surgery research from a need satisfaction versus need thwarting perspective. According to this therefore, need thwarting would lead to the internalisation of consumer culture ideals as need substitutes, and compensatory behaviours might include cosmetic surgery. Future research could measure

need satisfaction and need thwarting as separate constructs to more systematically test the tenets of SDT.

Another stance for future research to take could be the investigation of motives for pursuing extrinsic goals. SDT proposes that behaving in a self-determined and autonomous manner is the key to satisfying the basic psychological needs. It could be that materialism and appearance are pursued for intrinsic reasons, like being able to help the others and being healthy (Easterbrook, Wright, Dittmar, & Banerjee, 2014). As such, the pursuit of extrinsic goals is viewed as the means to fulfilling intrinsic goals. Among children, the pursuit of extrinsic goals for extrinsic motives led to a greater internalisation of the consumer culture ideals and was negatively linked to well-being. The pursuit of materialism for intrinsic goals on the other hand, was unrelated to the internalisation of consumer culture ideals and to well-being (Easterbrook et al., 2014). Applying this to the decision to undergo surgery, it could be suggested that striving for consumer culture ideals for extrinsic motives could lead to their internalisation and to individuals having surgery for external reasons, such as social motives to please a partner. Pursuing the same ideals for intrinsic reasons could decrease the desire for surgery, as the internalisation of consumer culture ideals is less likely to occur (Vestuyf et al., 2012). However, in the cases where cosmetic surgery is still desired, it may be done in a more self-determined and autonomous way, without any prior regard for external agents' reactions or opinions. For example, having breast reduction to deal with back pain may be considered as more intrinsically-motivated than doing so purely in order to improve appearance. Alternatively, rhinoplasty undertaken for reasons related to health, such as improved breathing and sports performance, may also be viewed as fulfilling intrinsic motivations. This could also have implications to the perceived success of a procedure: extrinsically-motivated surgery may be less satisfying than surgery for intrinsic reasons.

6.3 Limitations of the Present Research and Directions for Future Research

Limitations of the Present Research

Despite the novel areas of investigation undertaken in this project, there are a number of limitations which must be considered. The first point is related to the sampling and the samples used. All studies used convenience samples, and adult women who took part in the advertising experimental studies were university students. This means they were therefore relatively homogenous in terms of their economic and educational backgrounds. Participant homogeneity has the advantage of effectively controlling for sociodemographic variability,

but it also limits the generalizability of findings as these may vary in other sociodemographic groups. Generalising findings from the present research to populations with other backgrounds should therefore be done with caution.

The second point relates to methodological issues. The present research used both quantitative and qualitative methods to explore the various research questions. The use of mixed methods is an advantage to this research, and may be particularly useful to employ in fields such as this, which are relatively new and under-investigated. Combining quantitative and qualitative investigations allows for a deeper exploration of a given issue through the attainment of detailed information on a specific topic (qualitative), which may then be explored more specifically (quantitative), or vice versa. The two types of methods are therefore most efficiently utilised when one study is used to inform the other. This may be done using an inductive approach, whereby the qualitative study is carried out first, followed by quantitative research to test the hypotheses generated from the qualitative. A deductive approach may also be used, whereby qualitative research is carried out to add deeper understanding of quantitatively-observed relationships. Although the present research used both methods (Papers 4 and 5), the qualitative and quantitative studies   were carried out during the same period. This therefore did not allow for the information obtained in one study to be used to inform the other. Future research in the field of cosmetic surgery may consider continuing to use mixed methods, but strive to do so in a more efficient way.

Experimental methods were used in some studies to enable causal inferences. The controlled setting characterising experimental studies has the advantage of allowing to see what particular element in the experimental manipulations has an effect on participants. However, it affects studies' ecological validity in the sense that participants may focus more on the experimental manipulations (i.e. advertisements, reality TV show) than they would in normal life. There are two methodological possibilities which might help minimise such issues. The first would be to expose participants to advertising in a subliminal way, which has already been shown to affect women in terms of their body image (Brown & Dittmar, 2005). The second would be to present exposure materials in a more natural setting, for example within a magazine, and have participants browse through it as they would in real-life.

A related point is that the experimental studies in this thesis only looked at the immediate impact of acute media exposure. This raises two potential issues: first, the effects of long-term exposure to and interaction with cosmetic surgery media may be different, particularly with respect to people's attitudes towards surgery. Longitudinal studies would

therefore be useful in providing information about the effects of long-term cosmetic surgery media exposure. Such studies would be particularly interesting to carry out among younger audiences- for example pre-teens through to young adults- due to the fact that youths are likely to be more impressionable than adults, and also because they are likely to be developing and forming their attitudes towards surgery during that time. The second issue with looking at immediate responses to exposure is that it is possible that any effects found are transient. Therefore research is needed that follows up participants over a longer time frame.

A third limitation relates to measurement issues. Thin-ideal internalisation was considered as a moderator to women's responses to cosmetic surgery media in all experimental studies. However, for a number of reasons, including the conceptualisation of this construct, different scales were used in different studies in this thesis. The most widely-used scale for thin-ideal internalisation is from the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3, Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). However, at the time when this research was undertaken, the SATAQ-3 was being revised and a new version was being developed. This new version aimed to more clearly and explicitly measure perceived sociocultural pressures from different domains (family, peers, media), as well as to include assessment of a muscularity versus thinness internalisation (Schaefer et al., 2012). Meanwhile, the SATAQ-3 received criticisms relating to wording of items measuring identification with and aspirations to look like media models. Items such as "*I compare my body to the bodies of TV and movie stars*" can be seen as measuring tendencies for social comparison (Bell, 2011), and were indeed shown to load better on a social comparison factor along with items from a popular social comparison scale (the Physical Appearance Comparison Scale. Thompson, Heinberg, & Tantleff, 1991) than the rest of the SATAQ-3 items (Durkin, Paxton, & Sorbello, 2007). Such concerns led to the development of a new questionnaire, the Body Perfect Internalisation Scale (BPIS; Bell, 2011), which was used in some of the studies in this thesis. This scale considers (1) the extent of identification to media models, similar to the SATAQ-3, but excluding any phrasing relating to social comparison; (2) the extent to which the body perfect is central to one's self and life; and (3) the investment one places on attaining the body perfect and beliefs that this attainment will lead to popularity and success (Bell, 2011). This scale was validated among adolescent girls (N = 373), had excellent internal reliability (α = .94) and convergent validity with constructs shown to be related to the sociocultural beauty ideal (Bell, 2011). Therefore,

while there were valid reasons in my selection of scales, more consistency in their employment would have been preferable because it would have enabled more comparability between studies.

Finally, the studies in this thesis were conducted at an early stage in research and understanding of the relationship between media, body image, and cosmetic surgery attitudes. They were therefore informed by a number of broad theories in body image and consumer culture. However, as more investigations into the impact of cosmetic surgery media emerge, theory development in this area will be enabled, which can then be applied and tested. Application and testing of specific theories would help make the field of cosmetic surgery research more coherent and allow for clearer insight and development of understanding.

Directions for Future Research

The field of cosmetic surgery research is still relatively new and open for exploration. It is, in my opinion, crucial for research to carry on considering the content of cosmetic surgery media. As evidenced in the present series of research, the content of such media and the information provided plays a role in how respondents' feel about cosmetic surgery. Even though there have been consistent calls for the regulation of the industry we do not yet know- at least in terms of the media- what the best direction to take would be. A more accurate representation of the risks associated with surgery has been one of the main recommendations from cosmetic surgery associations. However, as shown in Study 1, the provision of risk information led to a greater consideration of surgery. It would be useful for research to take this investigation a step further and measure people's perceptions of cosmetic surgery risks. Therefore, does the provision of risk information lead to greater consideration of surgery through a better-informed and more realistic perception of the possible risks or dangers associated with procedures? In fact, risk perception is an important element to consider in all kinds of cosmetic surgery research as it could be considered as a measure of people's understanding and knowledge of cosmetic surgery. Related to this, another major concern about cosmetic surgery media is the inclusion of sensationalism, which is thought to raise unrealistic expectations. It would therefore be interesting for research to investigate respondents' expectations of surgery - whether in a hypothetical scenario, or in real terms among prospective patients.

A population which has been largely under-investigated is men. Research has placed a focus on women so far, and for good reason, given that they account for the vast majority of

procedures carried out each year. However, cosmetic surgery among men has accounted for a stable 10 per cent over the past few years (BAAPS, 2011), with specific procedures, such as brow and face lifts, being on the increase (BAAPS, 2012). Moreover, it would be interesting to explore how men feel about their significant others undergoing surgery. It is likely that male cosmetic surgery is still more stigmatised than female surgery- a similar situation to a few years ago with male use of cosmetic products, such as moisturising creams and other facial care cosmetics. Gaining insight into men's attitudes about women undergoing surgery could provide an indication of their own personal feelings about it, as well as possible external social influences/pressures on women to have surgery.

Finally and importantly, there is a need for some consensus over the concept and measurement of cosmetic surgery "attitudes". Whilst a number of questionnaires are available, they differ in scope and very few have been validated. The Acceptance of Cosmetic Surgery Scale (Henderson-King & Henderson-King, 2005), which is the measure I used in this research, is, to my knowledge, the only scale which has been validated. Other research has used a range of measures developed for specific studies. For example, the Cosmetic Surgery Attitudes Questionnaire (e.g. Sarwer et al, 2005) takes into account previous vicarious experience with surgery, as well as familiarity with and consideration of procedures in the near future and later in life. The Interest in Cosmetic Surgery Questionnaire (e.g. Markey & Markey, 2009; 2010; 2012) measures respondents' interest in the most popular procedures as indicated by the ASPS. Similarly, the Likelihood of having Cosmetic Surgery Scale (e.g. Brown, Furnham, Glanville, & Swami, 2007; Furnham & Levitas, 2012; Swami, Chamorro-Premuzic, Bridges, & Furnham, 2009) presents respondents with the hypothetical scenario that they have won unlimited funds for surgery from highly reputable experts, and then asks the likelihood of undergoing popular procedures, as indicated by reputable cosmetic surgery clinics. Other studies still (e.g. Callaghan, Lopez, Wong, Northcross, & Anderson, 2011) use single item questions relating to previous experience with and future interest in having cosmetic surgery. It would be beneficial for future research to examine the psychometric properties of these measures, including reliability and validity.

6.4 Final Conclusion

Despite limitations pertaining to this research project, there were several novel and important investigations which add to the cosmetic surgery literature. Most noteworthy was the consideration of cosmetic surgery media portrayals and their impact on both body image and attitudes towards surgery. Overall, findings from this series of research suggest that

cosmetic surgery advertising and reality TV have a negative impact on body image, both in adult women and adolescent girls. Media portrayals play a role in women's attitudes towards surgery and, to a certain extent, in their weight satisfaction. Moreover, individual factors moderated some of these relationships. These findings highlight the need for cosmetic surgery media research to consider the content of such media, as well as individual factors which make people respond differently to them. Accumulating evidence on these two points would allow for more informed suggestions for regulation of the industry.

REFERENCES

Adams, J. (2010). Motivational narratives and assessments of the body after cosmetic surgery. *Qualitative Health Research, 20,* 755-767. doi: 10.1177/1049732310362984

Advertising Standards Association (15 October, 2012). ASA response to department of health call for evidence: Review of the regulation of cosmetic interventions. Retrieved from: http://www.asa.org.uk/News- resources/~/media/Files/ASA/Public%20affairs /ASA%20response%20DH%20Call%20for%20Evidence%20- %20Cosmetic%20Interventions.ashx

American Society for Aesthetic Plastic Surgery (2000). ASAPS 2000 statistics on cosmetic surgery. Available at: www.surgery.org/sites/default/files/2000stats.pdf

American Society of Plastic Surgeons (30 March, 2004) Press release: New reality TV programs create unhealthy, unrealistic expectations of plastic surgery.

American Society of Plastic Surgeons (2010). Cosmetic Surgery National Data Bank Statistics. Available at: http://www.surgery.org/sites/default/files/Stats2010_1.pdf

American Society of Plastic Surgeons (2012). The national clearinghouse of plastic surgery statistics 2012 report of the 2011 statistics. Retrieved from: http://www.plasticsurgery.org/news-and-resources/2011-statistics-.html

Ashikali, E.-M., & Dittmar, H. (2012). The effect of priming materialism on women's responses to thin-ideal media. *British Journal of Social Psychology, 51,* 514-533. doi: 10.1111/j.2044-8309.2011.02020.x

Ashikali, E-M., Dittmar, H., & Ayers, S. (unpublished). A nip here and a tuck there: Purposive content analysis of UK and Swiss Media.

Bailey, S. D., & Ricciardelli, L. A. (2010). Social comparisons, appearance related comments, contingent self-esteem and their relationships with body dissatisfaction and eating disturbance among women. *Eating Behaviors, 11,* 107–112. doi: 10.1016/j.eatbeh.2009.12.001

Banerjee, R. & Dittmar, H. (2008). Individual differences in children's materialism: The role of peer relations. *Personality and Social Psychology Bulletin, 34*, 17-31. doi: 10.1177/0146167207309196.

BBC News (18 September, 2008). Cosmetic surgery ad 'clampdown'. Retrieved from: http://news.bbc.co.uk/1/hi/health/7623507.stm

BBC News (03 February 2010). The dangers of "lax" cosmetic surgery rules. Retrieved from: http://news.bbc.co.uk/go/pr/fr/-/1/hi/health/8484665.stm

BBC News. (31 December, 2012). Tighter restrictions on cosmetic surgery urged. Retrieved from: http://www.bbc.co.uk/news/uk-20850284

BBC Radio 4. (06 September, 2012). Woman's Hour: Plastic Surgery Enquiry. Retrieved from: http://www.bbc.co.uk/programmes/p00xf0v0

Bell, B. (2011). Body Perfect Internalization Scale (BPIS): A new measure of sociocultural body and beauty ideal internalization for adolescent girls. In Understanding adolescent girls' vulnerability to the impact of the mass media on body image and restrained eating behaviour: The role of media type, body perfect internalisation, and materialism. (Doctoral dissertation). Retrieved from: University of Sussex Research Online: http://sro.sussex.ac.uk/39670/1/Bell,_Beth_Teresa.pdf

Bell, B. (2011a). The role of materialism and the material ideal within the media, body image, and restrained eating behaviour relationship. In Understanding adolescent girls' vulnerability to the impact of the mass media on body image and restrained eating behaviour: The role of media type, body perfect internalisation, and materialism. (Doctoral dissertation). Retrieved from: University of Sussex Research Online: http://sro.sussex.ac.uk/39670/1/Bell,_Beth_Teresa.pdf

Birkeland, R., Thompson, J. K., Herbozo, S., Roehrig, M., Cafri, G., van den Berg, P. (2005). Media exposure, mood, and body image dissatisfaction: An experimental test of person versus product priming. *Body Image, 2,* 53-61. doi: 10.1016/j.bodyim.2004.11.002

Borenkowski, D. K. G., Robinson, T. N., & Killen, J. D. (2000). Does the camera add 10 pounds? Media use, perceived importance of appearance, and weight concerns among teenage girls. *Journal of Adolescent Health, 26,* 36-41.

Boyatzis, R. E. (1998). *Transforming Qualitative Information: Thematic Analysis and Code Development.* London: SAGE.

Brewer, N. T., Chapman, G. B., Gibbons, F. X., Gerrard, M., McCaul, K. D., & Weinstein, N. D. (2007). Meta-analysis of the relationship between risk perception and health behavior: The example of vaccination. *Health Psychology, 26,* 136–145. doi:10.1037/0278-6133.26.2.136

British Association of Aesthetic Plastic Surgeons (2003). Over 10,700 plastic surgery procedures in the UK in 2003. Retrieved from: http://www.consultingroom.com/media/media-stats-display.asp?id=5

British Association of Aesthetic Plastic Surgeons (10 May, 2004). Cosmetic surgery reality TV sends the wrong message. Retrieved from: http://www.baaps.org.uk/about-us/press-releases/134-cosmetic-surgery-reality-tv-sends-the-wrong-message

British Association of Aesthetic Plastic Surgeons (23 September, 2005). BAAPS to criticise `commoditisation` of cosmetic surgery at annual conference. Retrieved from: http://www.baaps.org.uk/about-us/press-releases?start=75

British Association of Aesthetic Plastic Surgeons (09 January, 2007). Plastis surgery lottery: "It shouldn't be you!". Retrieved from: http://baaps.org.uk/about-us/press-releases/148-plastic-surgery-lottery-qit-shouldnt-be-youq

British Association of Aesthetic Plastic Surgeons (18 September, 2008). Surgeons "Name and Shame" inappropriate cosmetic surgery ads. Retrieved from: http://www.baaps.org.uk/about-us/press-releases/405-surgeons-name-and-shame-inappropriate-cosmetic-surgery-ads

British Association of Aesthetic Plastic Surgeons (2011). 43,069 surgical procedures in the UK in 2010, rise of 5.8%. Retrieved from: www.consultingroom.com

British Association of Aesthetic Plastic Surgeons (27 May 2011). Surgery online coupons slammed. [Press release]. Retrieved from: http://www.baaps.org.uk/about-us/press-releases/885-surgery-online-coupons-slammed

British Association of Aesthetic Plastic Surgeons (07 June 2011). Cosmetic surgery nightclub draw "insane   and depraved". Retrieved from: http://www.baaps.org.uk/about-us/press-releases/887-cosmetic-surgery-nightclub-draw-qinsane-and-depravedq

British Association of Aesthetic Plastic Surgeons (10 October 2011). Outrage over magazine's "crass" offer of free surgery. Retrieved from: http://www.baaps.org.uk/about-us/press-releases/982-outrage-over-magazines-qcrassq-offer-of-free-surgery

British Association of Aesthetic Plastic Surgeons (23 January, 2012). Surgeons put forward regulation proposal. Retrieved from: http://baaps.org.uk/about-us/press-releases/1029-surgeons-put-forward-regulation-proposal

British Association of Aesthetic Plastic Surgeons (30 May, 2012). Get 'em off: ban cosmetic surgery ads in public places. Retrieved from: http://www.baaps.org.uk/about-us/press-releases/1321-get-em-off-ban-cosmetic-surgery-ads-in-public-places

British Association of Aesthetic Plastic Surgeons (26 October, 2012). Exhibit DD: Plastic surgeons submit evidence to government review. Retrieved from: http://baaps.org.uk/about-us/press-releases/1482-exhibit-dd-plastic-surgeons-submit-evidence-to-government-review

British Association of Aesthetic Plastic Surgeons (2012). 43,172 surgical procedures in the UK, 0.2% rise. Retrieved from: http://www.consultingroom.com/media/media-stats-display.asp?id=57

Brown, A., & Dittmar, H. (2005). Think "thin" and feel bad: The role of appearance schema activation, attention level, and thin–ideal internalization for young women's responses to ultra–thin media ideals. *Journal of Social and Clinical Psychology*, *24*, 1088-1113. doi: 10.1521/jscp.2005.24.8.1088

Brown, A., Furnham, A., Glanville, L., & Swami, V. (2007). Factors that affect the likelihood of undergoing cosmetic surgery. *Aesthetic Surgery Journal, 27,* 501-508. doi: 10.1016/j.asj.2007.06.004

Brunton, G., Nichole, P., Caird, J., Schucan Bird, K., Kavanagh, J., Kwan, I.,… & Thomas, J. (2013). Psychosocial predictors, assessment and outcomes of cosmetic interventions: a systematic rapid evidence review.

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,* 267-274. doi: 10.1016/j.bodyim.2011.04.002

Calogero, R. M., Park, L. E., Rahemtulla, Z. K., & Williams, K. C. (2010). Predicting excessive body image concerns among British university students: The unique role of appearance-based rejection sensitivity. *Body Image, 7,* 78-81. doi: 10.1016/j.bodyim.2009.09.005

Calogero, R. M., Pina, A., Park, L., & Rahemtulla, Z. (2010). Objectification theory predicts college women's attitudes toward cosmetic surgery. *Sex Roles, 63,* 32-41. doi: 10.1007/s11199-010-9759-5

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,* 305-316. doi: 10.1002/eat.10264

Clabaugh, A., Karpinski, A., & Griffin, K. (2008). Body weight contingency of self-worth. *Self and Identity, 7,* 337-359. doi: 10.1080/15298860701665032

Committee of Advertising Practice (2013). Help note on cosmetic interventions. Retrieved from: http://www.cap.org.uk/News-reports/Media-Centre/2013/New-guidance-for-non-surgical-and-surgical-cosmetic-advertising.aspx

Crerand, C.E., Cash, T.F. & Whitaker L.A. (2006). Cosmetic surgery of the face. In: Sarwer, D.B., Pruzinsky, T., Cash, T.F., et al (eds) *Psychological Aspects of Reconstructive and Cosmetic Plastic Surgery: Clinical, Empirical, and Ethical Perspectives.* Philadelphia,PA: Lippincott Williams & Wilkins, pp. 233–249.

Crerand, C. E., Franklin, M. E., & Sarwer, D. B. (2006). Body dysmorphic disorder and cosmetic surgery. *Plastic and Reconstructive Surgery, 122,* 1-15. doi: 10.1097/PRS.0b013e3181888ffd

Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: theory and measurement. *Journal of Personality and Social Psychology, 85,* 894. doi: 10.1037/0022-3514.85.5.894

Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108,* 593. doi: 10.1037/0033-295X.108.3.593

Crockett, R. J., Pruzinsky, T., & Persing, J.A. (2007). The influence of plastic surgery "reality TV" on cosmetic surgery patient expectations and decision making. Plastic and Reconstructive Surgery, 120, 316-324. doi: 10.1097/01.prs.0000264339.67451.71

Deci, E. L. & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268. doi: 10.1207/S15327965PLI1104_01.

Delinsky, S. S. (2005). Cosmetic surgery: A common and accepted form of self-improvement? *Journal of Applied Social Psychology, 35,* 2012-2018. doi: 10.1111/j.1559-1816.2005.tb02207.x

Department of Health (11 March, 2013). Regulation of cosmetic interventions: Research among teenage girls. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192030/Report_on_research_among_teenage_girls.pdf

Department of Health (28 March, 2013). Regulation of cosmetic interventions: Research among the general public and practitioners. Retrieved from: https://www.gov.uk/government/publications/review-of-the-regulation-of-cosmetic-interventions

Didie, E.R., & Sarwer, D.B. (2003). Motivational factors associated with the decision to pursue cosmetic breast augmentation. *Journal of Women's Health, 12,* 1-13. doi: doi:10.1089/154099903321667582.

Dittmar, H. (2005). Vulnerability factors and processes linking socio-cultural pressures and body dissatisfaction. *Journal of Social and Clinical Psychology, 24,* 1081-1087. doi: 10.1521/jscp.2005.24.8.1081

Dittmar, H. (2008). *Understanding the impact of consumer culture. Consumer Culture, Identity and Well-Being: The Search for the Good Life and the Body Perfect.* Psychology Press: Hove

Dittmar, H. (unpublished). The impact of video games on body image.

Durkin, S. J., Paxton, S. J., & Sorbello, M. (2007). An integrative model of the impact of exposure to idealised female images on adolescent girls' body satisfaction. *Journal of Applied Social Psychology, 37,* 1092-1117. doi: 10.1111/j.1559-1816.2007.00201.x

Easterbrook, M. J., Wright, M. L., Dittmar, H., & Banerjee, R. (2014). Consumer culture ideals, extrinsic motivations, and well-being in children. *European Journal of Social Psychology.* doi: 10.1002/ejsp.2020

Engeln-Maddox, R. (2005). Cognitive responses to idealized media images of women: The relationship of social comparison and critical processing to body image disturbance in college women. *Journal of Social and Clinical Psychology, 24,* 1114–1138. doi:10.1521/jscp.2005.24.8.1114

Ferguson, C. J. (2013). In the eye of the beholder: Thin-ideal media affects some, but not most, viewers in a meta-analytic review of body dissatisfaction in women and men. *Psychology of Popular Media Culture, 2,* 20-37. doi: 10.1037/a0030766

Ferguson, C. J., Muñoz, M. E., Garza, A., & Galindo, M. (2013). Concurrent and Prospective Analyses of Peer, Television and Social Media Influences on Body Dissatisfaction, Eating Disorder Symptoms and Life Satisfaction in Adolescent Girls. *Journal of Youth and Adolescence,* 1-14. doi: 10.1007/s10964-012-9898-9

Fouts, G., & Burggraf, K. (2000). Television situation comedies: Female weight, male negative comments, and audience reactions. *Sex Roles, 42,* 925–932. doi:10.1023/A:1007054618340

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 Reconstructive Surgery, 120,* 1407-1415. doi: 10.1097/01.prs.0000279375.26157.64

Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Towards understanding women's lived experience and mental health risks. *Psychology of Women Quarterly, 21,* 173–206. doi: 10.1111/j.1471-6402.1997.tb00108.x

Furnham, A., & Levitas, J. (2012). Factors that motivate people to undergo cosmetic surgery. *The Canadian Journal of Plastic Surgery, 20,* e47-e50.

Gerbner, G., Gross, L., Morgan, M., Signorelli, N., & Shanahan, á. (2002). Growing up with television: Cultivation processes. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 43–67). Mahwah, NJ: Erlbaum, Inc.

Grabe, S., & Hyde, S. H. (2009). Body objectification. MTV, and psychological outcomes amongst female adolescents. *Journal of Applied Social Psychology, 39,* 2840–2858. doi:10.1111/j.1559-1816.2009.00552.x

Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin, 134,* 460–476. doi:10.1037/0033-2909.134.3.460

Graham, N. (2010). The hard sell is cosmetic surgery advertising. *British Medical Journal, 340,* c:1223. doi: http://dx.doi.org.ezproxy.sussex.ac.uk/10.1136/bmj.c1223

Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body dissatisfaction: A meta-analytic review. *International Journal of Eating Disorders, 31,* 1–16. doi: 10.1002/eat.10005

Grogan S. (2008). Body image: Understanding body dissatisfaction in men, women and children. New York: Routledge.

Grossbard, J. R., Lee, C. M., Neighbors, C., & Larimer, M. E. (2009). Body image concerns and contingent self-esteem in male and female college students. *Sex Roles, 60,* 198–207. doi:10.1007/s11199-008-9535-y

Guðnadóttir, U., & Garðarsdóttir, R. B. (2014). The influence of materialism and ideal body internalization on body-dissatisfaction and body-shaping behaviors of young men and women: Support for the Consumer Culture Impact Model. *Scandinavian Journal of Psychology, 55,* 151-159. doi: 10.1111/sjop.12101

Halliwell, E., & Dittmar, H. (2006). The role of appearance-related self-discrepancies for young adults' affect, body image, and emotional eating: A comparison of fixed-item and respondent-generated self-discrepancy measures. *Personality and Social Psychology Bulletin, 32,* 447-458. doi:10.1177/0146167205284005

Hargreaves, D. A., & Tiggemann. (2004). Idealized media images and adolescent body image: "comparing" boys and girls. *Body Image, 1,* 351–361. doi:10.1016/j.bodyim.2004.10.002

Harrison, K. (2000). The body electric: Thin-ideal media and eating disorders in adolescents. *Journal of Communication, 50,* 119-143. doi: 10.1111/j.1460-2466.2000.tb02856.x

Harrison, K., & Cantor, J. (1997). The relationship between media consumption and eating disorders. *Journal of Communication, 47,* 40-67. doi: 10.1111/j.1460-2466.1997.tb02692.x

Henderson-King, D., & Brooks, K. D. (2009). Materialism, sociocultural appearance messages, and paternal attitudes predict college women's attitudes about cosmetic surgery. *Psychology of Women Quarterly, 33,* 133-142. doi:10.1111/j.1471-6402.2008.01480.x

Henderson-King, D., & Henderson-King, E. (2005). Acceptance of cosmetic surgery: Development and Validation. *Body Image, 2,* 137-149. doi: 10.1016/j.bodyim. 2005.03.003

Hennink-Kaminski, H., Reid, L. N., & Whitehill King, K. (2010). The content of cosmetic surgery advertisements placed in large city magazines, 1985-2004. *Journal of Current Issues and Research in Advertising, 32,* 41-57. doi: 10.1080/10641734.2010.10505284

Hogg, M. A., & Vaughan, G. M. (2008). Social Psychology (5th Edition). Pearson Prentice Hall: London

Independent Healthcare Advisory Services (2011). *Good medical practice in cosmetic surgery.* Retrieved from: http://www.independenthealthcare.org.uk/cosmetic-ihas/cosmetic-ihas-publications/cosmetic-ihas-specific-publications/menu-id-864

Independent Healthcare Advisory Services (2013). *Good medical practice in cosmetic surgery.* Retrieved from: http://www.independenthealthcare.org.uk/cat_view/51-independent-healthcare-advisory-services/73-codes-of-practice-and-guidance-notes/menu-id-565

International Society of Aesthetic Plastic Surgery (2010). Biennial Global Survey. Retrieved from: www.isaps.org/stats.php

International Society of Aesthetic Plastic Surgery (2011). ISAPS International Survey on Aesthetic/Cosmetic Procedures Performed in 2010. Retrieved from: http://www.isaps.org/isaps-global-statistics-2011.html

Jackson, A. C., Dowling, N. A., Honigman, R. J., Francis, K. L., & Kalus, A. M. (2012). The experience of teasing in elective cosmetic surgery patients. *Behavioral Medicine, 38,* 129-137. doi**:** 10.1080/08964289.2012.703976

Jávo, I. M., Pettersen, G., Rosenvinge, J. H., & Sørlie, T. (2012). Predicting interest in liposuction among women with eating problems: A population-based study. *Body Image, 9,* 131-136. doi: 10.1016/j.bodyim.2011.09.002

Jávo, I. M., & Sørlie, T. (2009). Psychosocial predictors of an interest in cosmetic surgery among young Norwegian women: A population-based study. *Plastic and Reconstructive Surgery, 124,* 2142-2148. http://dx.doi.org/10.1097/PRS.0b013e3181bcf290

Jávo, I. M., & Sørlie, T. (2010). Psychosocial characteristics of young Norwegian women interested in liposuction, breast augmentation, rhinoplasty, and abdominoplasty: A population-based study. *Plastic and Reconstructive Surgery, 125,* 1536-1543. http://dx.doi.org/10.1097/PRS.0b013e3181d5135a

Kamburoglu, H. O. & Özgür, F. (2007). Postoperative satisfaction and the patient's body image, life satisfaction, and self-esteem: A retrospective study comparing adolescent girls and boys after cosmetic surgery. *Aesthetic Plastic Surgery 31*, 739–745. doi: 10.1007/s00266-006-0133-5

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22,* 280-287. doi:10.1177/0146167296223006

Lazar, C. C., & Deneuve, S. (2013). Patients' Perceptions of Cosmetic Surgery at a Time of Globalization, Medical Consumerism, and Mass Media Culture A French Experience. *Aesthetic Surgery Journal, 33,* 878-885. doi:10.1177/1090820X13493637

Lee, S.- Y. (2009). The cognitive effects of cosmetic surgery reality shows—From a priming perspective (PhD dissertation). University of Tennessee, Knoxville, TX. Retrieved from: http://trace.tennessee.edu/utk_graddiss/58.

Levine, M. P., & Murnen, S. K. (2009). "Everybody knows that mass media are/are not [pick one] a cause of eating disorders": A critical review of evidence for a causal link between media, negative body image, and disordered eating in females. *Journal of Social and Clinical Psychology, 28,* 9–42. doi:10.1521/jscp.2009.28.1.9

Lunde, C. (2013). Acceptance of cosmetic surgery, body appreciation, body ideal internalization, and fashion blog reading among late adolescents in Sweden. *Body Image, 10,* 632-635. doi: http://dx.doi.org/10.1016/j.bodyim.2013.06.07

Luo, W. (2013). Aching for the altered body: Beauty economy and Chinese women's consumption of cosmetic surgery. *Women's Studies International Forum, 38,* 1-10. doi: http://dx.doi.org/10.1016/j.wsif.2013.01.0013

Maltby, J., & Day, L. (2011). Celebrity worship and incidence of elective cosmetic surgery: Evidence of a link among young adults. *Journal of Adolescent Health, 49,* 483-489. doi: 10.1016/j.jadohealth.2010.12.014

Markey, C. N., & Markey, P. M. (2009). Correlates of young women's interest in obtaining cosmetic surgery. *Sex Roles, 61,* 158–166. doi:10.1007/s11199-009-9625-5.

Markey, C. N., & Markey, P. M. (2010). A correlational and experimental examination of reality television viewing and interest in cosmetic surgery. *Body Image, 7,* 165-171. doi: 10.1016/j.bodyim.2009.10.006

Markey, C. N., & Markey, P. M. (2012). Emerging adults' responses to a media presentation of idealized female beauty: An examination of cosmetic surgery reality television. *Psychology of Popular Media Culture, 1,* 209 –219. doi:10.1037/a0027869

Markley Rountree, M., & Davis, L. (2011). A dimensional qualitative research approach to understanding medically unnecessary aesthetic surgery. *Psychology & Marketing, 28,* 1027-1043. doi: 10.1002/mar.20426

Marwick, A. (2010). There's a beautiful girl under all of this: Performing hegemonic femininity in reality television. *Critical Studies in Media Communication, 27,* 251-266. doi: 10.1080/15295030903583515

Mazzeo, S.E., Trace, S.E., Mitchell, K.S., & Gow Walker, R. (2007). Effects of a reality TV cosmetic surgery makeover program on eating disordered attitudes and behaviors. *Eating Behaviors, 8,* 390-397. doi:10.1016/j.eatbeh.2006.11.016

McGrath, M. H. & Mukerji, S. (2000). Plastic surgery and the teenage patient. *Journal of Pediatric and Adolescent Gynecology 13,* 105–118. doi: 10.1016/S1083-3188(00)00042-5

Mendelson, B. K., Mendelson, M. J., & White, D. R. (2001). Body-esteem scale for adolescents and adults. *Journal of Personality Assessment, 76,* 90–106. doi:10.1207/S15327752JPA7601_6

Menzel, J. E., Sperry, S. L., Small, B., Thompson, J. K., Sarwer, D. B., & Cash, T. F. (2011). Internalization of appearance ideals and cosmetic surgery attitudes: A test of the tripartite influence model of body image. *Sex Roles, 65,* 469-477. doi: 10.1007/s11199-011-9983-7

Milkie, M. A. (1999). Social comparisons, reflected appraisals, and mass media: The impact of pervasive beauty images on black and white girls' self concepts. *Social Psychology Quarterly, 62,* 190–210. doi:10.2307/2695857

Mintel (2010). Press Release: Non-surgical cosmetic procedures top the million mark for the first time. Available at: http://www.mintel.com/press-centre/beauty-and-personal-care/non-surgical-cosmetic-procedures-top-the-million-mark-for-first-time

Molina, A. R., Baker, R. H., & Nduka, C. (2012). 'What women want'—the UK's largest cosmetic surgery survey. *European Journal of Plastic Surgery, 35,* 607-612. doi: 10.1007/s00238-011-0635-5

Nabi, R. L. (2009). Cosmetic surgery makeover programs and intentions to undergo cosmetic enhancements: A consideration of three models of media effects. *Human Communication Research, 35,* 1-27. doi: 10.1111./j14682958.2008.01336.x

Niemiec, C. P., Ryan, R. M., Patrick, H., Deci, E. L., & Williams, G. C. (2010). The energization of health-behavior change: Examining the associations among autonomous self-regulation, subjective vitality, depressive symptoms, and tobacco abstinence. *The Journal of Positive Psychology, 5,* 122-138. doi:10.1080/17439760903569162

Office for National Statistics (2011) Ethnicity across the English regions and Wales. Available at: http://www.ons.gov.uk/ons/rel/census/2011-census/key-statistics-for-local-authorities-in-england-and-wales/rpt-ethnicity.html#tab-Ethnicity-across-the-English-regions-and-Wales

Patrick, H., Neighbors, C., & Knee, C. R. (2004). Appearance related social comparisons: The role of contingent self-esteem and self-perceptions of attractiveness. *Personality and Social Psychology Bulletin, 30,* 501–514. doi:10.1177/0146167203261891

Park, L. E., Calogero, R. M., Harwin, M. J., & DiRaddo, A. M. (2009). Predicting interest in cosmetic surgery: Interactive effects of appearance-based rejection sensitivity and negative appearance comments. *Body Image, 6,* 186-193. doi: 10.1016/j.bodyim.2009.02.003

Park, L. E., Calogero, R. M., Young, A. F., & DiRaddo, A. M. (2010). Appearance-based rejection sensitivity predicts body dysmorphic disorder symptoms and cosmetic surgery acceptance. *Journal of Social and Clinical Psychology, 29,* 489-509. doi: 10.1521/jscp.2010.29.5.489

Park, J. S., & Cho, C-H. (2010). Factors explaining college students' intention to receive cosmetic surgery in the future: A structural equation modelling approach. *Journal of Medical Marketing, 11,* 127-143. doi: 10.1057/jmm.2010.36

Pearl, A. & Weston, J. (2003). Attitudes of adolescents about cosmetic surgery. *Annals of Plastic Surgery, 50,* 628–630.

Posavac, H. D., Posavac, S. S., & Weigel, R. G. (2001). Reducing the impact of media images on women at risk for body image disturbance: Three targeted interventions. *Journal of Social and Clinical Psychology*, *20*, 324-340. doi: 10.1521/jscp.20.3.324.22308

Reed, D. L., Thompson, J. K., Brannick, M.T., & Sacco, W. P. (1991). Development and validation of the Physical Appearance State and Trait Anxiety Scale (PASTAS). *Journal of Anxiety Disorders, 5,* 323-332. doi: 10.1016/0887-6185(91)90032-O

Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport and Exercise, 7*, 269-286. doi:10.1016/j.psychsport.2005.06.002.

Ricciardelli, L. A. & McCabe, M. P. (2004). A biopsychosocial model of disordered eating and the pursuit of muscularity in adolescent boys. *Psychological Bulletin, 130,* 179–205. doi: 10.1037/0033-2909.130.2.179

Richardson, S. M., Paxton, S. J., & Thomson, J. S., (2009). Is BodyThink an efficacious body image and self-esteem program? A controlled evaluation with adolescents. *Body Image, 6,* 75-82. doi: 10.1016/j.bodyim.2008.11.001.

Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research, 31,* 209-219. doi: 10.1086/383436

Roberts, A., & Good, E. (2010). Media images and female body dissatisfaction: The moderating effects of the five-factor traits. *Eating Behaviors, 11,* 211-216. doi.org/10.1016/j.eatbeh.2010.04.002

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78. doi: 10.1037/0003-066X.55.1.68.

Sarwer, D. B., Cash, T. F., Magee, L., Williams, E. F., Thompson, J. K., Roehrig, M., … Romanofski, M. (2005). Female college students and cosmetic surgery: An investigation of experiences, attitudes, and body image. *Plastic and Reconstructive Surgery, 115,* 931-938. doi: 10.1097/01.PRS.0000153204.37065.D3

Sarwer, D. B., & Crerand, C. E. (2004). Body image and cosmetic medical treatments. *Body Image, 1,* 99-111. doi: 10.1016/S1740-1445(03)00003-2

Sarwer, D. B., & Crerand, C. E. (2008). Body dysmorphic disorder and appearance enhancing medical treatments. *Body Image, 5,* 50-58. doi: 10.1016/j.bodyim.2007.08.003

Sarwer, D. B., Infield, A. L., Baker, J. L., Casas, L .A., Glat, P. M., Gold, A. H.,… 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,* 245–250. doi:10.1016/j.asj.2008.02.003

Sarwer, D. B., LaRossa, D., Bartlett, S. P., Low, D. W., Bucky, L. P., & Whitaker, L. A. (2003). Body image concerns of breast augmentation patients. *Plastic and Reconstructive Surgery, 112,* 83-90.

Sarwer, D. B., Wadden, T.A., Pertschuk, M.J., & Whitaker, L.A. (1998). The psychology of cosmetic surgery: A review and reconceptualization. *Clinical Psychology Review, 18,* 1-22. doi: 10.1016/S0272(97)00047-0

Schaefer, L. M., Thompson, J. K., Heinberg, L. J., Calogero, R. M., Nerini, A., Dittmar, H., ... & Paxton, S. J. (2012). Validation of the Sociocultural Attitudes Towards Appearance Questionnaire-4 (SATAQ-4) in Italian, British, and Australian Women. In *Austin, TX: In Annual Academy of Eating Disorders-International Conference on Eating Disorders (ICED).*

Schofield, M., Hussain, R., Loxton, D., Miller, Z. (2002). Psychosocial and behavioural health covariates of cosmetic surgery: Women's health Australia study. *Journal of Health Psychology, 7,* 445-457. doi: 10.1177/1359105302007004332.

Sheldon, K. M., & Kasser, T. (2008). Psychological threat and extrinsic goal striving. *Motivation and Emotion, 32,* 37-45.

Shroff, H., & Thompson, J.K. (2006). The tripartite influence model of body image and eating disturbance: A replication with adolescent girls. *Body Image, 3,* 17-23. doi:10.1016/j.bodyim.2005.10.004

Simis, K. J., Verhulst, F. C., & Koot, H. M. (2001). Body image, psychosocial functioning, and personality: How different are adolescents and young adults applying for plastic surgery? *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 42,* 669–678.

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,* 65-74. doi: 10.1111/j.1471-6402.2009.01542.x

Solvi, A. S., Foss, K., von Soest, T., Roald, H. E., Skolleborg, K. C., & Holte, A. (2010). Motivational factors and psychological processes in cosmetic breast augmentation surgery. *Journal of Plastic, Reconstructive & Aesthetic Surgery, 63,* 673-680. doi: 10.1016/j.bjps.2009.01.024

Sperry, S., Thompson, J.K., Sarwer, D.B., & Cash, T.F. (2009). Cosmetic surgery reality tv viewership relations with cosmetic surgery attitudes, body image, and disordered eating. *Annals of Plastic Surgery, 62,* 7-11. doi: 10.1097/SAP.0b013e31817e2cb8

Spilson, S. V., Chung, K. C., Greenfield, M. L., Walters, M. (2002). Are plastic surgery advertisements conforming to the ethical codes of the American Society of Plastic Surgeons? *Plastic and Reconstructive Surgery, 109,* 1181-1186.

Stice, E., & Shaw, H. E. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. *Journal of Social and Clinical Psychology, 13,* 288-308. doi: 10.1521/jscp.1994.13.3.288

Stice, E., & Shaw, H. E. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings. *Journal of Psychosomatic Research, 53,* 985-993. doi: 10.1016/S0022-3999(02)00488-9.

Striegel-Moore, R., & Franko, D. (2002). Body image issues among girls and women. In T. F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp. 183–191). New York: Guilford Press.

Swami, V. (2009). Body appreciation, media influence, and weight status predict consideration of cosmetic surgery among female undergraduates. *Body Image, 6,* 315-317. doi:10.1016/j.bodyim.2009.07.001

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,* 211-218. doi: 10.1007/s00238-007-0185-z

Swami, V., Chamorro-Premuzic, T., Bridges, S., & Furnham, A. (2009). Acceptance of cosmetic surgery: Personality and individual difference predictors. *Body Image, 6,* 7-13. doi: 10.1016/j.bodyim.2008.09.004

Swami, V., Taylor, R., & Carvalho, C. (2009). Acceptance of cosmetic surgery and celebrity worship: Evidence of associations among female undergraduates. *Personality and Individual Differences, 47,* 869-872. doi: 10.1016/j.paid.2009.07.006

Swiss Medical Association (2006). Annexe 2 au code de déontologie. Available at: http://www.plastic-surgery.ch/index.php?lg=FR&sn=02&c=05&sc=01

Sypeck, M. F., Gray, J. J., & Ahrens, A. H. (2004). No longer just a pretty face: Fashion magazines; depictions of ideal female beauty from 1959 to 1999. *International Journal of Eating Disorders, 36,* 342–347. doi:10.1002/eat.20039

Tait, S. (2007). Television and the domestication of cosmetic surgery. *Feminist Media Studies, 7,* 119–135. doi: 10.1080/14680770701287076

Tam, K-P., Kin-Shing Ng, H., Yeung, V. W-L., & Cheung, F. Y-L. (2012). Attitudes toward cosmetic surgery patients: The role of culture and social contact. *The Journal of Social Psychology, 152,* 458-479.

Thompson, J. K., Heinberg, L., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance.* Washington, DC: American Psychological Association.

Thompson, J. K., & Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a new risk factor for body-image disturbance and eating pathology. *Current Directions in Psychological Science, 10,* 181-183. doi: 10.1111/1467-8721.00144

Thompson, J. K., Van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2003). The Sociocultural Attitudes towards Appearance Scale (SATAQ-3): Development and validation. *International Journal of Eating Disorders, 35,* 293–304. doi: 10.1002/eat.10257

Tiggemann, M. (2003). Media exposure, body dissatisfaction and disordered eating: Television and magazines are not the same. *European Eating Disorders Review, 11,* 418–430. doi:10.1002/erv.502

Tiggemann, M. (2005). Television and adolescent body image: The role of program content and viewing motivation. *Journal of Social and Clinical Psychology, 24,* 361–381. doi:10.1521/jscp.24.3.361.65623

Tiggemann, M., & Slater, A. (2004). Thin ideals in music television: A source of social comparison and body dissatisfaction. *International Journal of Eating Disorders, 35,* 48 –58. doi:10.1002/eat.10214

Unanue, W., Dittmar, H., Vignoles, V. L., & Vansteenkiste, M. (2014). Materialism and well-being in the UK and Chile: Basic need satisfaction and basic need frustration as underlying psychological processes. *European Journal of Personality*. doi: 10.1002/per.1954

van den Berg, P. A., Mond, J., Eisenberg, M., Ackard, D., & Neumark-Sztainer, D. (2010). The link between body dissatisfaction and self-esteem in adolescents: Similarities across gender, age, weight status, race/ethnicity, and socio-economic status. *Journal of Adolescent Health, 47,* 290–296. doi:10.1016/j.jadohealth.2010.02.004

Van Strien, T., Frijters, J. E. R., Bergers, G. P. A., & Defares, P. B. (1986). The Dutch Eating Behavior Questionnaire (DEBQ) for assessment of restrained, emotional, and external eating behavior. *International Journal of Eating Disorders, 5,* 295–315. doi: 10.1002/1098-108X(198602)5:2<295::AID-EAT2260050209>3.0.CO;2-T

Vansteenkiste, M. & Ryan, R.M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration, 23*, 263-280. doi: 10.1037/a0032359.

Verstuyf, J., Vansteenkiste, M., & Soenens, B. (2012). Eating regulation and bulimic symptoms: The differential correlates of health-focused and appearance-focused eating regulation. *Body Image, 9*, 108-117. doi:10.1016/j.bodyim.

Vlachopoulos, S. P., Katartzi, E. S., & Kontou, M. G. (2011). The basic psychological needs in physical education scale. *Journal of Teaching in Physical Education, 30*, 263-280. doi: 10.1348/096317909X481382.

von Soest, T., Kvalem, I. L., Skolleborg, K. C., Roald, H. E. (2006). Psychosocial factors predicting the motivation to undergo cosmetic surgery. *Plastic and Reconstructive Surgery, 117,* 51-62. doi: 10.1097/01.prs.0000194902.89912.f1

Want, S. C. (2009). Meta-analytic moderators of experimental exposure to media portrayals of women on female appearance satisfaction: Social comparisons as automatic processes. *Body Image, 6,* 257–269. doi:10.1016/j.bodyim.2009.07.008

Wiederman, M. W., & Pryor, T. L. (2000). Body dissatisfaction, bulimia, and depression among women: The mediating role of drive for thinness. *International Journal of Eating Disorders, 27,* 90-95. doi: 10.1002/(SICI)1098-108X(200001)27:1<90::AID-EAT10>3.0.CO;2-0

Wilkinson, S. (1998). Focus groups in health research: Exploring the meanings of health and illness. *Journal of Health Psychology, 3,* 329–348.
doi: 10.1177/135910539800300304

World Health Organization. Global database on Body Mass Index. Retrieved from: http://apps.who.int/bmi/index.jsp?introPage=intro_3.html

Yu, H., Jeong, Y., Baek, T., Joo, I. (2010). How many plastic surgeons' websites contain information recommended by the ASPS advertising code of ethics? *The Internet Journal of Law, Healthcare, and Ethics, 6*. doi: 10.5580/1385

Zuckerman, D. & Abraham, A. (2008). Teenagers and cosmetic surgery: Focus on breast augmentation and liposuction. *Journal of Adolescent Health, 43,* 318–324. doi: 10.1016/j.jadohealth.2008.04.018

APPENDICES

The appendices include materials (ethical approval, information sheets, questionnaires, participant debriefing, parental consent, interview schedule) for all Studies in this thesis. Please note that:

(1) Advertisements created for this research are not included as Appendices due to copyright issues of images.

(2) In cases where the same information sheets, and participant debriefings were used in more than one Study, I do not duplicate this information. This relates to Studies 1 and 2.

(3) Given that Study 3 was a replication of Study 1, ethical approval was obtained from the University of Sussex at the same time for both Studies. Therefore, only one receipt of ethical approval is available, which is included in Appendix 1 for Study 1. Furthermore, given that the questionnaires for these Studies were identical (except that Study 3 was presented in French), I only include the English version under Appendix 1. There is therefore no Appendix relating to Study 3.

APPENDIX 1: ETHICAL APPROVAL AND QUESTIONNAIRE FOR STUDY 1
(PAPER 1)

Ethical Approval

University of Sussex
School of Life Sciences Research Governance Committee

CERTIFICATE OF APPROVAL

Title of Project	The impact of cosmetic surgery advertising on women's body image and attitudes towards cosmetic surgery
Principal Investigator	Helga Dittmar
Student	Eleni-Marina Ashikali
Collaborators	
Duration of approval (not greater than 4 years)	6 months

This project has been given ethical approval by the School of Life Sciences Research Governance Committee.

December 2010……………………………………………………………………………….

Signed: ………….. …Jennifer Rusted………………..

             Chair of the Research Governance Committee

Date: …………9 February 2010…………….

Questionnaire, Part 1 of the Study

Consumer Culture: Marketing and Advertising

The following study is concerned with consumer culture and consumer decision-making. Please note that although this study is interested in advertisement perception, it is academic, not commercial research. In the first part of the study, we would like to find out about your advertising preferences. You will see two sets of advertisements from European companies wanting to expand their business to the UK, each of which consists of two advertisements. We would like you to indicate which advertisement from each set you prefer, and for what reasons.

After looking at the advertisements and stating your preferred choice, we will give you a questionnaire, in which you will be asked to rate how you feel about important aspects of your life and how you feel about a number of given statements because this can influence advertisement perception.

We will email you the second part of the study a week after you complete the first one. The second part of the study is very important because it will involve collecting background information about you, which can also influence advertisement perception, and this needs to be done at a different time from when you look at and evaluate advertisements. Upon completion of both studies, you will have the opportunity to receive a summary of the findings once the study is complete.

Your participation in this study is entirely voluntary; you are free to withdraw at any stage. Any research findings reported will on a strictly anonymous basis, and you can choose to withdraw any data that you provide during the course of this study for whatever reasons. All responses will be reported in aggregate form; no person's responses will be singled out in any way.

If you wish to take part, please click on "Next" to read and sign the consent form.

Thank you for your participation, it is greatly appreciated and very valuable! If you would like to receive a summary of the findings, please contact me on E.Ashikali@sussex.ac.uk

Participant Consent Form

Name of Investigator: Eleni-Marina Ashikali

1. I consent to participate in the following research project, the particulars of which- including details of tests or procedures- have been explained to me.

2. I authorise the investigator to use the tests or procedures referred to under (1) above.

3. I acknowledge that:

    (a) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied, before or after the close of the project;

    (b) I am free to withdraw from the project at any time without giving reason or incurring any subsequent penalties;

    (c) The project is for the purpose of research and/or teaching;

    (d) I have been informed that the confidentiality of the information I provide will be safeguarded, and that all personal information provided by myself will remain confidential. No information that identifies me will be made publicly available.

Date: _____

Please click on "I consent" if you agree with all the above points, and to start the study.

The current study will take place in two parts. You will be invited to complete the second part a week after completion of the first part. In order to match up your responses from both parts of the study, without violating your anonymity or data protection, we would like to create a unique identifier code for you. Please enter below:

The second letter of your first name   _____

Your date of birth (just the day e.g. 15)   _____

The first letter of your Mother's first name   _____

The first letter of your Father's first name   _____

N.B in case you do not know one or more of the above, please put 0.

Consumer Decision-Making: Which product would you prefer?

In this part of the study, we would like to find out about your advertising preferences. You will see two sets of advertisements from European companies wanting to expand their business to the UK, each of which consists of two advertisements. We would like you to indicate which advertisement from each set you prefer, and for what reasons.

After looking at the first set of advertisements, click on "Next". You will then be given the option to choose one of the two advertisements. Please click on the name of the advertisement you prefer, and give your reasons why. Click on "Next" again, and repeat the same steps for the second set of advertisements.

How do you see yourself as a person?

Perceptions of advertising may be influenced by the ideals people hold for themselves. We would therefore like to ask you about the ideals you are thinking of for yourself **right now**. Like most people, you probably like some things about yourself, but there may be other things that you would like to change.

Please think about **things that you would like to change about yourself**, and then complete the sentences below. On the top line, next to "I…", write any word or words to describe something about yourself that you would like to change. On the bottom line, next to "but I would like…", please write how you would **ideally** like to be instead.

Then, please indicate for each sentence> **how different** you are from your ideal (how big the gap is); **how concerned** you are about this difference (how much you worry about it); **how achievable** your ideal is. Please be as truthful as you can.

		A little				Extremely	
I …………………………………… but I would like ……………………… …………………………………… …	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6
I …………………………………… but I would like ……………………… …………………………………… .	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6
I …………………………………… but I would like ……………………… …………………………………… .	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6

Halliwell, E., & Dittmar, H. (2006). The role of appearance-related self-discrepancies for young adults' affect, body image, and emotional eating: A comparison of fixed-item and respondent-generated self-discrepancy measures. *Personality and Social Psychology Bulletin, 32,* 447-458. Doi: 10.1177/0146167205284005

How do you feel about important aspects of your life?

Perceptions of advertising may also be influenced by how you feel. Therefore, we would like to ask you how you feel about different aspects of your life **right now**. How anxious, tense, or nervous do you feel right now about different aspects of your life? Please click on the number that most honestly and accurately describes how anxious, tense, or nervous you feel about the different life areas presented.

Not at all	Slightly	Moderately	Quite a lot	Exceptionally so
0	1	2	3	4

My family relationships	0	1	2	3	4
My financial debt	0	1	2	3	4
My buttocks	0	1	2	3	4
My academic performance	0	1	2	3	4
My intelligence	0	1	2	3	4
My belongings	0	1	2	3	4
My stomach (abdomen)	0	1	2	3	4
My financial position	0	1	2	3	4
My legs	0	1	2	3	4
The extent to which I look overweight	0	1	2	3	4
My friendships	0	1	2	3	4
My hips	0	1	2	3	4
My body odour	0	1	2	3	4
My social relationships	0	1	2	3	4
My size	0	1	2	3	4
My muscle tone	0	1	2	3	4
My love life	0	1	2	3	4
My clothes	0	1	2	3	4
My waist	0	1	2	3	4
My home	0	1	2	3	4

Reed, D. L., Thompson, J. K., Brannick, M. T., & Sacco, W. P. (1991). Development and validation of the Physical Appearance State and Trait Anxiety Scale (PASTAS). *Journal of Anxiety Disorders, 5,* 323-332. Doi: 10.1016/0887-6185(91)90032-O.

Industry Preferences: A country comparison

In this study, we are investigating a number of different products and services. All of the companies, including the ones you have not seen advertised, are interested in how people living in the UK perceive their particular industry. We will first ask you about the products and services that you have seen. Please read each statement and indicate your agreement using the scale below.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

It makes sense to have minor cosmetic surgery rather than spending years feeling bad about the way you look   1 2 3 4 5 6

Cosmetic surgery is a good thing because it can help people feel better about themselves   1 2 3 4 5 6

In the future, I could end up having some kind of cosmetic surgery   1 2 3 4 5 6

People who are very unhappy with their physical appearance should consider cosmetic surgery as an option   1 2 3 4 5 6

If cosmetic surgery can make someone happier with the way they look, then they should try it   1 2 3 4 5 6

If I could have a surgical procedure done for free I would consider trying cosmetic surgery   1 2 3 4 5 6

If I knew there would be no negative side effects or pain, I would like to try cosmetic surgery   1 2 3 4 5 6

I have sometimes thought about having cosmetic surgery   1 2 3 4 5 6

I would seriously consider having cosmetic surgery if my partner thought it was a good idea   1 2 3 4 5 6

I would never have any kind of plastic surgery   1 2 3 4 5 6

I would seriously consider having surgery in order to keep looking young   1 2 3 4 5 6

If it would benefit my career I would think about having plastic surgery   1 2 3 4 5 6

I would seriously consider having cosmetic surgery if I thought my partner would find me more attractive	1 2 3 4 5 6
Cosmetic surgery can be a big benefit to people's self-image	1 2 3 4 5 6
If a simple cosmetic surgery procedure would make me more attractive to others, I would think about trying it	1 2 3 4 5 6

Henderson-King, D., & Henderson-King, E. (2005). Acceptance of cosmetic surgery: Development and Validation. *Body Image, 2,* 137-149. doi: 10.1016/j.bodyim.2005.03.003

And a few open-ended questions…

Imagine for a moment that you are seriously considering having a cosmetic surgery procedure yourself. What are your expectations of what the surgery would do for you?

_____

_____

_____

_____

_____

Do you think the media influences women's attitudes towards cosmetic surgery? Please click on the relevant answer and explain your reasons. YES / NO because_____

_____

_____

_____

_____

_____

And now questions about a different service/product.

Flower delivery is a good things because it can help people feel loved	1 2 3 4 5 6
I have sometimes thought about using a flower delivery company	1 2 3 4 5 6
It makes sense to order flowers once in a while rather than working hard to grow your own flowers	1 2 3 4 5 6
If I knew that a flower delivery was reliable, I would consider using it for myself or others	1 2 3 4 5 6

If a flower delivery can brighten someone's day up, then they should use it	1	2	3	4	5	6
I would consider using a flower delivery service for my partner, if I thought that he/she would appreciate it	1	2	3	4	5	6
Receiving flowers can be a big benefit to people's self-esteem and mood	1	2	3	4	5	6
In the future, I could end up using a flower delivery company	1	2	3	4	5	6
I would seriously consider using a flower delivery service in order to keep my house looking beautiful	1	2	3	4	5	6
I would never consider ordering flowers	1	2	3	4	5	6

And finally…The Study & You

As you know, the study generally concerns itself with the expansion of two European companies to the UK, consumer decision-making and diverse dimensions of you and an individual. What do you think the specific purpose of the study might be?

_____

_____

_____

_____

During the course of this study, you have seen advertisements relating to cosmetic surgery. Although the particular clinics advertised are not yet present in the UK, we do have further information on a number of cosmetic surgery providers in the UK. If you would like to receive some information on diverse clinics around the UK, please click on the box below:

Finally, we need some information about you to make sure that different groups of people are represented in this study.

Gender:

Age:

Ethnic Background:

Height:

Weight:

Occupation:

Approximate yearly income:

Questionnaire, Part 2 of the Study

Consumer Culture: Marketing and Advertising

The following study is concerned with consumer culture and consumer decision-making. In this part of the study, we would like to find out information about you to see how different people respond to advertising.

Your participation in this study is entirely voluntary; you are free to withdraw at any stage. Any research findings reported will on a strictly anonymous basis, and you can choose to withdraw any data that you provide during the course of this study for whatever reasons. All responses will be reported in aggregate form; no person's responses will be singled out in any way.

If you wish to take part, please click on "Next" to read and sign the consent form.

Thank you for your participation, it is greatly appreciated and very valuable! If you would like to receive a summary of the findings, please contact me on E.Ashikali@sussex.ac.uk

Participant Consent Form

Name of Investigator: Eleni-Marina Ashikali

(1) I consent to participate in the following research project, the particulars of which- including details of tests or procedures- have been explained to me.

(2) I authorise the investigator to use the tests or procedures referred to under (1) above.

(3) I acknowledge that:

(4) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied, before or after the close of the project;

(5) I am free to withdraw from the project at any time without giving reason or incurring any subsequent penalties;

(6) The project is for the purpose of research and/or teaching;

(7) I have been informed that the confidentiality of the information I provide will be safeguarded, and that all personal information provided by myself will remain confidential. No information that identifies me will be made publicly available.

Date: _____

Please click on "I consent" if you agree with all the above points, and to start the study.

Before you start, we would like to recreate the code that is unique to you (remember from Study 1?). Again, please enter below:

The second letter of your first name _____

Your date of birth (just the day e.g. 15) _____

The first letter of your Mother's first name _____

The first letter of your Father's first name _____

N.B in case you do not know one or more of the above, please put 0.

Please click on "Next" to start the questionnaire.

How do you see yourself as a person?

Perceptions of advertising may be influenced by the ideals people hold for themselves. We would therefore like to ask you about the ideals you are thinking of for yourself **right now**. Like most people, you probably like some things about yourself, but there may be other things that you would like to change.

Please think about **things that you would like to change about yourself**, and then complete the sentences below. On the top line, next to "I…", write any word or words to describe something about yourself that you would like to change. On the bottom line, next to "but I would like…", please write how you would **ideally** like to be instead.

Then, please indicate for each sentence> **how different** you are from your ideal (how big the gap is); **how concerned** you are about this difference (how much you worry about it); **how achievable** your ideal is. Please be as truthful as you can.

		A little				Extremely	
I ……………………………………… but I would like ……………………… ………………………………………... …	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6
I ……………………………………… but I would like ……………………… ……………………………………… .	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6
I ……………………………………… but I would like ……………………… ……………………………………… .	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6

Halliwell, E., & Dittmar, H. (2006). The role of appearance-related self-discrepancies for young adults' affect, body image, and emotional eating: A comparison of fixed-item and respondent-generated self-discrepancy measures. *Personality and Social Psychology Bulletin, 32,* 447-458. Doi: 10.1177/0146167205284005

How do you feel about important aspects of your life?

How people feel about important aspects of their life can influence perceptions of advertising. Please think about yourself in general. How anxious, tense, or nervous have you felt over the **past 6 months** about different aspects of your life? Please click on the number that most honestly and accurately describes how anxious, tense, or nervous you feel about the different life areas presented.

Not at all	Slightly	Moderately	Quite a lot	Exceptionally so
0	1	2	3	4

My family relationships	0 1 2 3 4
My financial debt	0 1 2 3 4
My buttocks	0 1 2 3 4
My academic performance	0 1 2 3 4
My intelligence	0 1 2 3 4
My belongings	0 1 2 3 4
My stomach (abdomen)	0 1 2 3 4
My financial position	0 1 2 3 4
My legs	0 1 2 3 4
The extent to which I look overweight	0 1 2 3 4
My friendships	0 1 2 3 4
My hips	0 1 2 3 4
My body odour	0 1 2 3 4
My social relationships	0 1 2 3 4
My size	0 1 2 3 4
My muscle tone	0 1 2 3 4
My love life	0 1 2 3 4
My clothes	0 1 2 3 4
My waist	0 1 2 3 4
My home	0 1 2 3 4

Reed, D. L., Thompson, J. K., Brannick, M. T., & Sacco, W. P. (1991). Development and validation of the Physical Appearance State and Trait Anxiety Scale (PASTAS). *Journal of Anxiety Disorders, 5,* 323-332. Doi: 10.1016/0887-6185(91)90032-O.

How do you feel about the media?

Media models today are very glamorous, attractive, and thin. Such models are also present in advertising for a number of products and services. We are interested in how these models are perceived by women, and how they may influence advertising effectiveness. Please read the following statements, and indicate your answer using the scale below.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

I want to look like media models   1   2   3   4   5   6

I want to be like media models   1   2   3   4   5   6

I dislike media models   1   2   3   4   5   6

I identify with media models   1   2   3   4   5   6

I am close to media models   1   2   3   4   5   6

I am distant from media models   1   2   3   4   5   6

Dittmar, H. (unpublished). The impact of video games on body image.

You and Consumer Culture: Attitudes & Beliefs

People differ in their opinions, values and general attitudes towards consumer culture. We are interested in whether these differences may have an influence on consumers' decision-making. In this section, you will be asked about your attitudes and beliefs in relation to society in general, consumer culture, and also about yourself. Please read each statement and indicate your agreement using the scale below.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

Advertising is generally effective   1   2   3   4   5   6

I'd be happier if I could afford to buy nicer things   1   2   3   4   5   6

Advertising presents a true picture of the product advertised   1   2   3   4   5   6

Advertisements help me find products that match my personality and interests	1	2	3	4	5	6
I try to keep life simple, as far as possessions are concerned	1	2	3	4	5	6
I like to own things that impress people	1	2	3	4	5	6
It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like	1	2	3	4	5	6
From advertising I learn what is in fashion and what I should buy for keeping a good social image	1	2	3	4	5	6
The things I own say how well I'm doing in life	1	2	3	4	5	6
Buying things gives me a lot of pleasure	1	2	3	4	5	6
I have a high self-esteem	1	2	3	4	5	6
Advertising gives me a good idea about products by showing me the kinds of people who use them	1	2	3	4	5	6
I admire people who own expensive homes, cars, clothes	1	2	3	4	5	6
My life would be better if I owned certain things I don't have	1	2	3	4	5	6
I like a lot of luxury in my life	1	2	3	4	5	6
You can get ideas about fashion and ways to act from advertisements	1	2	3	4	5	6

Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research, 31,* 209-219. doi: 10.1086/383436

What goals and aspirations do you have?

People's life goals and aspirations may also influence how they perceive advertisements. Therefore, we would like to find out more about your personal goals. Please read the following list of goals and indicate how important it is for you to achieve them in the future using the scale below.

Not at all important	A little important	So/So	Quite important	Very Important
1	2	3	4	5

People will show affection to me, and I will to them	1	2	3	4	5
I will choose what I do, instead of being pushed along by life	1	2	3	4	5
Most everyone who knows me will like me	1	2	3	4	5
I will have a committed, intimate relationship	1	2	3	4	5
I will successfully hide the signs of aging	1	2	3	4	5
I will have a job that pays well	1	2	3	4	5
I will overcome the challenges that life presents me	1	2	3	4	5
I will have insight into why I do the things I do	1	2	3	4	5
My name will be known by many different people	1	2	3	4	5
I will assist people who need it, asking nothing in return	1	2	3	4	5
I will express my love for special people	1	2	3	4	5
I will be efficient	1	2	3	4	5
I will be financially successful	1	2	3	4	5
I will keep up with fashions in clothing and hair	1	2	3	4	5
I will feel that there are people who really love me	1	2	3	4	5
I will feel free	1	2	3	4	5
I will achieve the "look" I've been after	1	2	3	4	5
I will deal effectively with problems in my life	1	2	3	4	5
I will have enough money to buy everything I want	1	2	3	4	5
I will feel good about my abilities	1	2	3	4	5
I will be admired by many people	1	2	3	4	5
I will help the world become a better place	1	2	3	4	5
Someone in my life will accept me as I am, no matter what	1	2	3	4	5
My image will be one that other's find appealing	1	2	3	4	5
I will have many expensive possessions	1	2	3	4	5
The things I do will make other people's lives better	1	2	3	4	5
People will often comment on how attractive I look	1	2	3	4	5

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22,* 280-287. doi:10.1177/0146167296223006

Your eating habits

People's eating habits and behaviours may also influence how appealing they find advertising, particularly that which relates to image. We would therefore like to find out about your eating habits. Think about your eating **in general**. Please read the following questions and answer them using the scale below.

Never	Seldom	Sometimes	Often	Very often
1	2	3	4	5

If you have put on weight, do you eat less than you usually do? 1 2 3 4 5

Do you try to eat less at mealtimes than you would like to eat? 1 2 3 4 5

How often do you refuse food or drink because you are concerned about your weight? 1 2 3 4 5

Do you watch exactly what you eat? 1 2 3 4 5

Do you deliberately eat foods that are slimming? 1 2 3 4 5

When you have eaten too much, do you eat less than usual the following days? 1 2 3 4 5

Do you deliberately eat less in order not to become heavier? 1 2 3 4 5

How often do you try not to eat between meals because you are watching your weight? 1 2 3 4 5

How often in the evening do you try not to eat because you're watching your weight? 1 2 3 4 5

Do you take into account what you weigh with what you eat? 1 2 3 4 5

Do you have a desire to eat when…

you are irritated? 1 2 3 4 5

you have nothing to do? 1 2 3 4 5

you are depressed or discouraged? 1 2 3 4 5
you are lonely? 1 2 3 4 5

somebody lets you down? 1 2 3 4 5

you are cross? 1 2 3 4 5

you are approaching something unpleasant to happen?	1 2 3 4 5
you are anxious, worried or tense?	1 2 3 4 5
things are going against you or when things have gone wrong?	1 2 3 4 5
you are frightened?	1 2 3 4 5
you are disappointed?	1 2 3 4 5
you are emotionally upset?	1 2 3 4 5
you are bored or restless?	1 2 3 4 5

Van Strien, T., Frijters, J. E. R., Bergers, G. P. A., & Defares, P. B. (1986). The Dutch Eating Behavior Questionnaire (DEBQ) for assessment of restrained, emotional, and external eating behavior. *International Journal of Eating Disorders, 5,* 295–315. doi: 10.1002/1098-108X(198602)5:2<295::AID-EAT2260050209>3.0.CO;2-T

Industry preferences: A country comparison

As you already know, in this study, we are investigating a number of different products and services. In Part 1 of the study, you saw advertisements from European companies planning to expand to the UK. We would now like to find out about your more enduring attitudes regarding a number of products and services. Please read each statement and indicate your agreement using the scale below.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

Flower Delivery Industry

Flower delivery is a good thing because it can help people feel loved	1 2 3 4 5 6
I have sometimes thought about using a flower delivery company	1 2 3 4 5 6
It makes sense to order flowers once in a while rather than working hard to grow your own flowers	1 2 3 4 5 6
If I knew that a flower delivery was reliable, I would consider using it for myself or others	1 2 3 4 5 6

If a flower delivery can brighten someone's day up, then they should use it   1   2   3   4   5   6

I would consider using a flower delivery service for my partner, if I thought that he/she would appreciate it   1   2   3   4   5   6

Receiving flowers can be a big benefit to people's self-esteem and mood   1   2   3   4   5   6

In the future, I could end up using a flower delivery company   1   2   3   4   5   6

I would seriously consider using a flower delivery service in order to keep my house looking beautiful   1   2   3   4   5   6

I would never consider ordering flowers   1   2   3   4   5   6

Cosmetic Surgery Industry

It makes sense to have minor cosmetic surgery rather than spending years feeling bad about the way you look   1   2   3   4   5   6

I would consider having cosmetic surgery, if I thought that no one would find out   1   2   3   4   5   6

Cosmetic surgery is a good thing because it can help people feel better about themselves   1   2   3   4   5   6

In the future, I could end up having some kind of cosmetic surgery   1   2   3   4   5   6

Knowing that people were aware of my surgical procedure would make me feel embarrassed   1   2   3   4   5   6

People who are very unhappy with their physical appearance should consider cosmetic surgery as an option   1   2   3   4   5   6

If cosmetic surgery can make someone happier with the way they look, then they should try it   1   2   3   4   5   6

If I was to have cosmetic surgery, I would not want people to know about it   1   2   3   4   5   6

If I could have a surgical procedure done for free I would consider trying cosmetic surgery   1   2   3   4   5   6

If I knew there would be no negative side effects or pain, I would like to try cosmetic surgery   1   2   3   4   5   6

I have sometimes thought about having cosmetic surgery   1   2   3   4   5   6

I would seriously consider having cosmetic surgery if my partner thought it was a good idea	1 2 3 4 5 6
I would never have any kind of plastic surgery	1 2 3 4 5 6
I would seriously consider having surgery in order to keep looking young	1 2 3 4 5 6
If it would benefit my career I would think about having plastic surgery	1 2 3 4 5 6
I would not want my friends or colleagues to know that I underwent cosmetic surgery	1 2 3 4 5 6
I would seriously consider having cosmetic surgery if I thought my partner would find me more attractive	1 2 3 4 5 6
Cosmetic surgery can be a big benefit to people's self-image	1 2 3 4 5 6
Cosmetic surgery is a private matter, and if I was to have it, I would not want people to know about it	1 2 3 4 5 6
If a simple cosmetic surgery procedure would make me more attractive to others, I would think about trying it	1 2 3 4 5 6
I would not be ashamed of telling people that I've had cosmetic surgery	1 2 3 4 5 6

Henderson-King, D., & Henderson-King, E. (2005). Acceptance of cosmetic surgery: Development and Validation. *Body Image, 2,* 137-149. doi: 10.1016/j.bodyim.2005.03.003

17. Have you previously had cosmetic surgery?

No   Yes

Please expand giving as many details as you can (e.g. type of procedure, your age at the time)

18. Do you know anyone who had had cosmetic surgery?

No   Yes

Please expand giving as many details as you can (e.g. who, how close you are to him/her, type of procedure)

19. Please state how familiar you are with the following TV shows

	Not at all	A little	Moderately	Very
Nip/Tuck				
Extreme Makeover				
The Swan				
Dr. 90210				

Participant Debriefing

A large body of research has shown that women experience body dissatisfaction when exposed to the cultural thin-ideal. One area of body image which remains largely under-investigated is the influence of cosmetic surgery media on women's body image. This type of media has increased dramatically over the past few years, being present in magazines as articles or advertisements, and on TV as reality shows or documentaries. The current study therefore, seeks to investigate whether exposure to cosmetic surgery advertisements leads to negative feelings about one's body image. It also explores the influence of different types of cosmetic surgery advertisements. Therefore, depending on which condition you were in, you may have seen cosmetic surgery advertisements which included either general information about the clinic, discount incentives, or information on risk factors/success rates. Alternatively, you may have seen advertisements unrelated to cosmetic surgery. The general expectations are that cosmetic surgery advertisements will make women feel worse about their body, and to hold more favourable feelings towards surgical procedures.

If you have any concerns about body image and eating behaviours, you can find information on http://eating-disorders.org.uk and on http://www.campaignforrealbeauty.com/

Now that you are aware of the true purpose of the study, you have the option to withdraw your participation, should you wish to. However, we hope that you will submit your responses as your participation is extremely valuable. If you would like to withdraw from the study, please click on "withdraw"; if you would like to confirm and submit your participation, please click on "submit".

Your participation is greatly appreciated! THANK YOU!

APPENDIX 2: ETHICAL APPROVAL AND QUESTIONNAIRES FOR STUDY 2
(PAPER 1)

Ethical Approval

<table>
<tr><td colspan="2" align="center">Life Sciences & Psychology Cluster based Research Ethics Committee
CERTIFICATE OF APPROVAL</td></tr>
<tr><td>Reference Number:</td><td>HDEA0111</td></tr>
<tr><td>Title of Project:</td><td>Cosmetic surgery advertising and women's body image</td></tr>
<tr><td>Principal Investigator:</td><td>Helga Dittmar</td></tr>
<tr><td>Student:</td><td>Eleni-Marina Ashikali</td></tr>
<tr><td>Collaborators:</td><td></td></tr>
<tr><td>Duration of Approval</td><td>3 months</td></tr>
<tr><td>Expected Start Date:*</td><td>January 2011</td></tr>
<tr><td colspan="2">This project has been given ethical approval by the Life Sciences and Psychology Cluster based Research Ethics Committee (C-REC).</td></tr>
<tr><td colspan="2">*NB. If the <u>actual</u> project start date is delayed beyond 12 months of the <u>expected</u> start date, this Certificate of Approval will lapse and the project will need to be reviewed again to take account of changed circumstances such as legislation, sponsor requirements and University procedures.

Please note and follow the requirements for approved submissions:

Amendments to protocol.

Any changes or amendments to approved protocols must be submitted to the C-REC for authorisation prior to implementation.
Feedback regarding the status and conduct of approved projects

Any incidents with ethical implications that occur during the implementation of the project must be reported immediately to the Chair of the C-REC.
The principal investigator is required to provide a brief annual written statement to the committee, indicating the status and conduct of the approved project. These reports will be reviewed at the annual meeting of the committee. A statement by the Principal Investigator to the C-REC indicating the status and conduct of the approved project will be required on the following date(s):

December 2011</td></tr>
<tr><td>Authorised Signature</td><td>Jennifer Rusted</td></tr>
<tr><td>Name of Authorised Signatory

(C-REC Chair or nominated deputy)</td><td>Jennifer Rusted</td></tr>
</table>

Date	14.01.2011

Questionnaire, Part 1 of the Study

How do you feel about yourself and advertising in general?

Perceptions of advertising may also be influenced by how you feel about yourself, as well as by your general attitudes toward advertising. Please think about how you feel **right now** and indicate your agreement with the following statements ranging from strongly disagree (1) to strongly agree (6).

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

I like what I look like in pictures.	1	2	3	4	5	6
Advertising is generally effective.	1	2	3	4	5	6
My self-esteem is influenced by my academic performance.	1	2	3	4	5	6
Advertisements help me find products that match my personality and interests.	1	2	3	4	5	6
I like what I see when I look in the mirror.	1	2	3	4	5	6
It is important to my self-respect that I have a family that cares about me.	1	2	3	4	5	6
There are lots of things I'd change about my looks if I could.	1	2	3	4	5	6
I couldn't respect myself if I didn't live up to a moral code.	1	2	3	4	5	6
I wish I looked better.	1	2	3	4	5	6
I wish I looked like someone else.	1	2	3	4	5	6
Advertising presents a true picture of the product advertised.	1	2	3	4	5	6
My looks upset me.	1	2	3	4	5	6
Advertising gives me a good idea about products by showing me the kinds of people who use them.	1	2	3	4	5	6
I'm pretty happy about the way I look.	1	2	3	4	5	6
Knowing that my family members love me makes me feel good about myself.	1	2	3	4	5	6

I feel ashamed of how I look.	1	2	3	4	5	6
I can't respect myself if others don't respect me.	1	2	3	4	5	6
I worry about the way I look.	1	2	3	4	5	6
You can get ideas about fashion and ways to act from advertisements.	1	2	3	4	5	6
I'm looking as nice as I'd like to.	1	2	3	4	5	6

Mendelson, B. K., Mendelson, M. J., & White, D. R. (2001). Body-esteem scale for adolescents and adults. *Journal of Personality Assessment, 76,* 90–106. doi:10.1207/S15327752JPA7601_6

Industry Preferences: A country comparison

In this study, we are investigating a number of different products and services. All of the companies, based in France and Switzerland, are interested in how people living in the UK perceive their particular industry. We will therefore ask you questions about the products and services that you have seen advertised during the course of this study. Please read each statement and indicate your agreement using the scale below.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

I have sometimes thought about using a flower delivery company.	1	2	3	4	5	6
It makes sense to have minor cosmetic surgery rather than spending years feeling bad about the way you look.	1	2	3	4	5	6
If I knew there would be no negative side effects or pain, I would like to try cosmetic surgery.	1	2	3	4	5	6
Risks associated with cosmetic surgery are minor.	1	2	3	4	5	6
Complications after cosmetic surgery are rare.	1	2	3	4	5	6
If a flower delivery can brighten someone's day up, then they should use it.	1	2	3	4	5	6
I would seriously consider using a flower delivery service in order to keep my house looking beautiful.	1	2	3	4	5	6
Cosmetic surgery is a good thing because it can help people feel better about themselves.	1	2	3	4	5	6

In the future, I could end up having some kind of cosmetic surgery.	1	2	3	4	5	6
Cosmetic surgery can go wrong, and leave people looking less attractive than they were before.	1	2	3	4	5	6
It makes sense to order flowers once in a while, rather than working hard to grow your own flowers.	1	2	3	4	5	6
Cosmetic surgery is less dangerous than other surgical procedures.	1	2	3	4	5	6
People who are very unhappy with their physical appearance should consider cosmetic surgery as an option.	1	2	3	4	5	6
If I could have a surgical procedure done for free I would consider trying cosmetic surgery.	1	2	3	4	5	6
I would consider using a flower delivery service for my partner, if I thought that he/she would appreciate it.	1	2	3	4	5	6
If I knew that a flower delivery service was reliable, I would consider using it for myself or others.	1	2	3	4	5	6
Cosmetic surgery can be dangerous to one's health.	1	2	3	4	5	6
I would never consider ordering flowers.	1	2	3	4	5	6
There are psychological risks associated with having cosmetic surgery.	1	2	3	4	5	6
If cosmetic surgery can make someone happier with the way they look, then they should try it.	1	2	3	4	5	6
I would never have any kind of plastic surgery.	1	2	3	4	5	6
Receiving flowers can be a big benefit to people's self-esteem and mood.	1	2	3	4	5	6
Flower delivery is a good thing because it can help people feel loved.	1	2	3	4	5	6
I have sometimes thought about having cosmetic surgery.	1	2	3	4	5	6
Cosmetic surgery can be a big benefit to people's self-image.	1	2	3	4	5	6

Henderson-King, D., & Henderson-King, E. (2005). Acceptance of cosmetic surgery: Development and Validation. *Body Image, 2,* 137-149. doi: 10.1016/j.bodyim.2005.03.003

11. If cost were not an issue, **how likely** would you be to do each of the following in order to improve your appearance and that of your home now or in the future? If you do not own a flat/house, imagine which of these behaviours you would engage in if you did.

Highly Unlikely	Unlikely	Slightly Unlikely	Slightly Likely	Likely	Highly Likely	I have already done this
1	2	3	4	5	6	7

Plant flowers	1	2	3	4	5	6	7
Hire a gardener	1	2	3	4	5	6	7
Diet	1	2	3	4	5	6	7
Exercise	1	2	3	4	5	6	7
Use soil fertiliser	1	2	3	4	5	6	7
Breast augmentation surgery (implants)	1	2	3	4	5	6	7
Liposuction	1	2	3	4	5	6	7
Laser hair removal	1	2	3	4	5	6	7
Teeth bleaching	1	2	3	4	5	6	7
Plant trees	1	2	3	4	5	6	7
Lip augmentation	1	2	3	4	5	6	7
Artificial tanning (sunbeds/solarium)	1	2	3	4	5	6	7
Rhinoplasty (nose reshaping)	1	2	3	4	5	6	7
Lip augmentation	1	2	3	4	5	6	7
Artificial tanning (sunbeds/solarium)	1	2	3	4	5	6	7

12. Are there any other appearance-enhancing activities, either for yourself or your home that you would engage in now or in the future?

Questionnaire, Part 2 of the Study

As with Part 1, we only include scales that are new to this Study.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

When I see advertisements for clothes, I wish I looked like the models. 1 2 3 4 5 6

What I look like is an important part of who I am. 1 2 3 4 5 6

I'd be happier if my body was more perfect. 1 2 3 4 5 6

My self-esteem does not depend on whether or not I feel attractive. 1 2 3 4 5 6

I aspire to look like the actresses in TV and films. 1 2 3 4 5 6

I would be more successful in life if I had a perfect body. 1 2 3 4 5 6

I always do whatever I can to look my best. 1 2 3 4 5 6

My self-esteem is influenced by how attractive I think my face or facial features are. 1 2 3 4 5 6

It bothers me a lot that I don't have the perfect body. 1 2 3 4 5 6

Having the perfect body is essential to my popularity. 1 2 3 4 5 6

My sense of self-worth suffers whenever I feel I don't look good. 1 2 3 4 5 6

I spend a lot of time making sure my body looks good. 1 2 3 4 5 6

I wish I looked like the girls or women who model underwear. 1 2 3 4 5 6

When I think I look attractive, I feel good about myself. 1 2 3 4 5 6

My life would be better if I had the perfect body. 1 2 3 4 5 6

I would be more popular if my body was more perfect. 1 2 3 4 5 6

I would like my bodies to look like the bodies in magazines. 1 2 3 4 5 6

Having the perfect body is important to me. 1 2 3 4 5 6

My self-esteem is unrelated to how I feel about the way my body looks.	1	2	3	4	5	6
I think that people with perfect bodies have it all.	1	2	3	4	5	6
I wish my body was like those shown in music videos.	1	2	3	4	5	6
Having the perfect body would be one the greatest achievements in my life.	1	2	3	4	5	6
I spend a lot of money on making my body look good.	1	2	3	4	5	6
I wish I looked like a film star.	1	2	3	4	5	6

Bell, B. (2011). Body Perfect Internalization Scale (BPIS): A new measure of sociocultural body and beauty ideal internalization for adolescent girls. In Understanding adolescent girls' vulnerability to the impact of the mass media on body image and restrained eating behaviour: The role of media type, body perfect internalisation, and materialism. (Doctoral dissertation). Retrieved from: University of Sussex Research Online: http://sro.sussex.ac.uk/39670/1/Bell,_Beth_Teresa.pdf

Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: theory and measurement. *Journal of Personality and Social Psychology, 85,* 894. doi: 10.1037/0022-3514.85.5.894

APPENDIX 3: ETHICAL APPROVAL AND INTERVIEW SCHEDULE FOR STUDY 4 (PAPER 3)

Ethical Approval

Life Sciences & Psychology Cluster based Research Ethics Committee **CERTIFICATE OF APPROVAL**	
Reference Number:	HDEA0211
Title of Project:	Cosmetic Surgery and the Adolescent Girl
Principal Investigator:	Helga Dittmar
Student:	Eleni-Marina Ashikali
Collaborators:	
Duration of Approval	2 months
Expected Start Date:*	March 2011
This project has been given ethical approval by the Life Sciences and Psychology Cluster based Research Ethics Committee (C-REC).	
*NB. If the <u>actual</u> project start date is delayed beyond 12 months of the <u>expected</u> start date, this Certificate of Approval will lapse and the project will need to be reviewed again to take account of changed circumstances such as legislation, sponsor requirements and University procedures.	
Please note and follow the requirements for approved submissions: Amendments to protocol. • Any changes or amendments to approved protocols must be submitted to the C-REC for authorisation prior to implementation. Feedback regarding the status and conduct of approved projects • Any incidents with ethical implications that occur during the implementation of the project must be reported immediately to the Chair of the C-REC. The principal investigator is required to provide a brief annual written statement to the committee, indicating the status and conduct of the approved project. These reports will be reviewed at the annual meeting of the committee. A statement by the Principal Investigator to the C-REC indicating the status and conduct of the approved project will be required on the following date(s): December 2011	
Authorised Signature	Jennifer Rusted
Name of Authorised Signatory	

(C-REC Chair or nominated deputy)	**Jennifer Rusted**
Date	11.02.2011

Information Sheet

Cosmetic Surgery and the Teenage Girl

This is a study where you can freely express your opinion about beauty, the media, and cosmetic surgery as part of a small group of women. Discussion will first be based around excerpts from two articles which were recently published in a UK magazine and newspaper, followed by a more general discussion regarding your own personal views and perceptions of cosmetic surgery. This is a very important and timely Study, which can provide important insights into young women's feelings towards cosmetic surgery- something which has not previously been investigated. We are therefore extremely appreciative of your participation, and thank you for taking the time to help!

Before beginning, there are a few points regarding the methodology of the Study that we need to clarify:

(1) Please note that in order to keep an accurate account of the discussions and opinions expressed, we must record all discussions and transcribe them later on.

(2) We assure you that your anonymity will be maintained, and that only the researcher will have access to the recordings. To help us with this, we ask that you do not refer to other participants by name during the discussion.

(3) Although you maintain the right to withdraw from the Study at any point, and for whichever reasons, we kindly ask you to bear in mind that due to the joint nature of the discussion, it would be hard to withdraw individual contributions after the discussion has commenced. We therefore ask that you take part in the Study only if you think you feel comfortable discussing the topic of cosmetic surgery.

Thank you for your time and help!

Eleni-Marina Ashikali

University of Sussex

Pevensey Building 1 2D5

e.ashikali@sussex.ac.uk

Participant Consent Form

<p align="center">Cosmetic Surgery and the Teenage Girl</p>

Name of Investigator: Eleni-Marina Ashikali

(1) I consent to participate in the following research project, the particulars of which- including the fact that discussions will be recorded and transcribed- have been explained to me.

(2) I authorise the investigator to use the tests or procedures referred to under (1) above.

(3) I acknowledge that:

- I have been informed that although I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied, before or after the close of the project, I should consider the difficulty of wanting to do so, due to the joint nature of the discussion;

- I am free to withdraw from the project at any time without giving reason or incurring any subsequent penalties, while bearing in mind the difficulty of doing so due to the joint nature of the discussion;

- The project is for the purpose of research and/or teaching;

- I have been informed that the confidentiality of the information I provide will be safeguarded, and that all personal information provided by myself will remain confidential. No information that identifies me will be made publicly available.

- In order to help maintain anonymity, I should refrain from using other participants' names during the course of the Study.

Date: _____

Signature: _____

Interview Schedule

Part 1: Prom Surgery Article (Sugar Magazine)

Do you think Bailey Goodale's surgery was justified? Why/Why not?

Do you think the surgery she had may have changed her life for the better or for worse? In which ways?

Do you understand why Bailey may have felt pressure to look good for her prom night? Do girls at your school feel the same pressures? Do you feel the same pressures?

Would you consider surgery before your final School Event?

The other girl in the article, Mayeli, did not go to her prom because she was insecure about the way she looked. Have worries about the way you look stopped you from doing things you wanted to do?
(if yes) Do you think cosmetic surgery could help you overcome these insecurities?

Part 2: Bullying Article (Evening Standard)

Do you think appearance-related bullying happens a lot?

Do you think that cosmetic surgery can help to stop such bullying or do you think this is not a good strategy?

Do you think that teenage girls having cosmetic surgery are vain, as critics of McGeorge, the doctor who performed surgery on the 14-year-old girl?

Part 3: General Opinions

Have you talked with your friends about cosmetic surgery?

How present do you feel cosmetic surgery is within the media?

Where do you see cosmetic surgery in the media? TV programs? Internet advertisements? Magazine articles?

Do you think cosmetic surgery is presented in different ways in different media?

Do you think cosmetic surgery is portrayed in a realistic way in the media? Why/Why not?

How do you think risks are portrayed in cosmetic surgery media?

What kinds of expectations do you think media portrayals raise in girls your age?

Do you think that cosmetic surgery media may influence girls your age? How?

Do you personally feel any pressure from the media to consider cosmetic surgery?

Adolescents: desire, considerations, & expectations

In your opinion, what percentage of girls your age would consider having cosmetic surgery?

Do you know anyone who's had cosmetic surgery? How would you feel if one of your close friends was seriously considering cosmetic surgery? What would your advice be to her? Why?

Excluding all considerations regarding costs and risks, would you ever consider having cosmetic surgery? Now or in the future?

      (if yes) What kind?

If you were to have a surgical procedure, what would your expectations be of what it would do for you?

APPENDIX 4: ETHICAL APPROVAL AND QUESTIONNAIRES FOR STUDY 5 (PAPER 4)

Ethical Approval

Life Sciences & Psychology Cluster based Research Ethics Committee **CERTIFICATE OF APPROVAL**	
Reference Number:	HDEA1011
Title of Project:	The effect of cosmetic surgery reality TV shows on adolescent girls' body image and attitudes towards cosmetic surgery
Principal Investigator:	Helga Dittmar
Student:	Eleni-Marina Ashikali
Collaborators:	
Duration of Approval	6 months
Expected Start Date:*	January 2012

This project has been given ethical approval by the Life Sciences and Psychology Cluster based Research Ethics Committee (C-REC).

*NB. If the underlined actual project start date is delayed beyond 12 months of the expected start date, this Certificate of Approval will lapse and the project will need to be reviewed again to take account of changed circumstances such as legislation, sponsor requirements and University procedures.

Please note and follow the requirements for approved submissions:

Amendments to protocol.

- Any changes or amendments to approved protocols must be submitted to the C-REC for authorisation prior to implementation.

Feedback regarding the status and conduct of approved projects

- Any incidents with ethical implications that occur during the implementation of the project must be reported immediately to the Chair of the C-REC.

The principal investigator is required to provide a brief annual written statement to the committee, indicating the status and conduct of the approved project. These reports will be reviewed at the annual meeting of the committee. A statement by the Principal Investigator to the C-REC indicating the status and conduct of the approved project will be required on the following date(s):

December 2012

Authorised Signature	Jennifer Rusted
Name of Authorised Signatory	**Jennifer Rusted**

Date	15 December 2011

Parental Consent

Dear Parents,

Programmes about 'makeovers' feature prominently on current TV, and researchers from the University of Sussex are carrying out research on sixth form girls' responses to popular reality shows. Specifically, the study aims to gain a better understanding of whether cosmetic surgery shows influence the thoughts adolescent girls have about themselves and their attitudes towards cosmetic surgery.

Girls will see a short video excerpt taken from a popular cosmetic surgery makeover programme or from a home makeover program. They will then be asked to fill out a questionnaire about their attitudes towards makeover procedures, feelings towards their body, and about their more enduring attitudes towards material goods and appearance. Girls will watch the video and complete the questionnaire in their groups, with a teacher and a researcher present at all times. The whole study should last no more than 30-40 minutes. Girls do not have to take part on the day if they do not want to, and they can withdraw from the study whenever they wish. After the study, girls will be given detailed information about the study, followed by a group discussion about cosmetic surgery to ensure that any issues raised by the excerpts are addressed.

The school has seen the questionnaires that will be used for this research and the Head-teacher has given consent for the project to go ahead, subject to parents not returning this letter. If you have any questions, please contact Eleni-Marina Ashikali on tel: 075 1573 0395 or email e.ashikali@sussex.ac.uk.

If you do NOT want your child to take part then please sign and return the slip below by Saturday, March 24th.

....
I do **not** want my child (full name...Class/Form...........) to take part in the research for University of Sussex, as described in the letter.

Signed..(Parent/Guardian)

Date..........................

Questionnaire, Part 1 of the Study

Participant Consent Form

1. I **consent** to participate in the following research project and all the relevant details about the study have been explained to me.

2. I **acknowledge** that:

    a. I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied, before or after the close of the project.

    b. I am free to withdraw from the project at any time without giving reason or incurring any subsequent penalties.

    c. The project is for the purpose of research and/or teaching.

    d. I have been informed that the confidentiality of the information I provide will be safeguarded, and that all personal information provided by myself will remain confidential. No information that identifies me will be made publicly available.

Signed _____ **Date:** _____
(Participant)

_____

PART 1: YOUR FEELINGS AND ATTITUDES TOWARDS YOURSELF AND MAKEOVER PROGRAMS

Now that you have seen a makeover video, we are interested in finding out how you feel about yourself, and what your opinions are on makeover programs. In this part of the questionnaire, we are particularly interested in your immediate responses to the video you just watched, so we therefore ask you to answer the following questions in terms of how you are feeling **right now**.

How do you see yourself as a person?

Perceptions of makeover programs may be influenced by the ideals people hold for themselves. We would therefore like to ask you about the ideals you are thinking of for yourself **right now**. Like most people, you probably like some things about yourself, but there may be other things that you would like to change.

We would like you to complete the three sentences below. To do so, in the space next to the word "I…", please write something about yourself that you would like to change. This can by anything at all. Then, in the space next to the words "but I would like…", please describe how you would ideally like this to be.

    For example:

I   <u>something about yourself that you would like to change</u>

But I would like   <u>how you would like that to ideally be</u>

Once you have completed the sentences, please indicate for each one:

    How **different** you are from your ideal, i.e., how big is the gap between you and your ideal

    How **concerned** you are about this difference, i.e., how much does the gap between your and your ideal worry you

    How **achievable** your ideal is, how easy you think it is to become your ideal.

		A little				**Extremely**	
I …………………………………………………... …………………………………………………… but I would like …………………………………………………... …………………………………………………...	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6
I …………………………………………………… …………………………………………………… but I would like …………………………………………………... …………………………………………………...............…	How different	1	2	3	4	5	6
	How concerned	1	2	3	4	5	6
	How achievable	1	2	3	4	5	6

Halliwell, E., & Dittmar, H. (2006). The role of appearance-related self-discrepancies for young adults' affect, body image, and emotional eating: A comparison of fixed-item and respondent-generated self-discrepancy measures. *Personality and Social Psychology Bulletin, 32,* 447-458. doi:10.1177/0146167205284005

How do you feel about different aspects of your life?

In this section, we would like to find out how you feel about aspects of your life, as well as what external factors might influence your feelings about yourself, as these may have an impact on your opinions and perceptions of makeover shows. Please read each statement and indicate your agreement using the scale below.

1 = strongly disagree   4 = slightly agree

2 = disagree   5 = agree

3 = slightly disagree   6 = strongly agree

Right now...	1	2	3	4	5	6
1. It is important to my self-respect that I have a family that cares about me.	1	2	3	4	5	6
2. I like what I look like in pictures.	1	2	3	4	5	6
3. I'm looking as nice as I'd like to.	1	2	3	4	5	6
4. I can't respect myself if others don't respect me.	1	2	3	4	5	6
5. My looks upset me.	1	2	3	4	5	6
6. There are lots of things I would change about my looks if I could.	1	2	3	4	5	6
7. Knowing that my family members love me makes me feel good about myself.	1	2	3	4	5	6
8. I worry about the way I look.	1	2	3	4	5	6
9. I feel ashamed of how I look.	1	2	3	4	5	6
10. I couldn't respect myself if I didn't live up to a moral code.	1	2	3	4	5	6
11. I'm pretty happy about the way I look.	1	2	3	4	5	6
12. I think I have a good body.	1	2	3	4	5	6
13. I like what I see when I look in the mirror.	1	2	3	4	5	6
14. I'm proud of my body.	1	2	3	4	5	6

15. My self-esteem is influenced by my academic performance.	1	2	3	4	5	6
16. I wish I looked better.	1	2	3	4	5	6
17. I wish I looked like someone else.	1	2	3	4	5	6

Mendelson, B. K., Mendelson, M. J., & White, D. R. (2001). Body-esteem scale for adolescents and adults. *Journal of Personality Assessment, 76,* 90–106. doi:10.1207/S15327752JPA7601_6

What are your opinions on the industries which create makeover programs?

In this study, we are investigating a number of makeover programs, such as image and home makeovers. We would like to find out your general opinions on the industries which create these makeover programs, as these can affect how you perceive the programs themselves. Please read each statement and indicate your agreement using the scale below.

1 = strongly disagree	**4 = slightly agree**
2 = disagree	**5 = agree**
3 = slightly disagree	**6 = strongly agree**

Right now...	1	2	3	4	5	6
1. I like the interior design of my bedroom.	1	2	3	4	5	6
2. It makes sense to have minor cosmetic surgery than spending years feeling bad about the way you look.	1	2	3	4	5	6
3. If I knew there would be no negative side effects or pain, I would consider trying cosmetic surgery.	1	2	3	4	5	6
4. Risks associated with cosmetic surgery are minor.	1	2	3	4	5	6
5. Complications after cosmetic surgery are rare.	1	2	3	4	5	6
6. I wish I could change how my bedroom looks.	1	2	3	4	5	6
7. If I could re-design my bedroom for free, I would consider doing it.	1	2	3	4	5	6

8. Cosmetic surgery is a good thing because it can help people feel better about themselves.

1   2   3   4   5   6

9. In the future I could end up having some kind of cosmetic surgery.

1   2   3   4   5   6

10. Cosmetic surgery can go wrong and leave people looking less attractive than they were before.

1   2   3   4   5   6

11. Some day, I might consider giving my bedroom a makeover.

1   2   3   4   5   6

12. Cosmetic surgery is less dangerous than other surgical procedures.

1   2   3   4   5   6

13. People who are very unhappy with their physical appearance should consider cosmetic surgery as an option.

1   2   3   4   5   6

14. If I could have a surgical procedure done for free, I would consider trying cosmetic surgery.

1   2   3   4   5   6

15. Home makeovers can make people feel better.

1   2   3   4   5   6

16. If someone is unhappy with their bedroom/home, then they should consider a makeover.

1   2   3   4   5   6

17. Cosmetic surgery can be dangerous to one's health.

1   2   3   4   5   6

18. I have sometimes thought about a bedroom makeover.

1   2   3   4   5   6

19. There are psychological risks associated with having cosmetic surgery.

1   2   3   4   5   6

20. If cosmetic surgery can make someone happier with the way they look, then they should try it.

1   2   3   4   5   6

21. I would never have any kind of cosmetic surgery.

1   2   3   4   5   6

22. I would never consider any kind of home makeover.

1   2   3   4   5   6

23. I am happy about how my house looks.

1   2   3   4   5   6

24. I have sometimes thought about having cosmetic surgery.   1   2   3   4   5   6

25. Cosmetic surgery can be a big benefit to people's self image.   1   2   3   4   5   6

Henderson-King, D., & Henderson-King, E. (2005). Acceptance of cosmetic surgery: Development and Validation. *Body Image, 2,* 137-149. doi: 10.1016/j.bodyim.2005.03.003

Questionnaire, Part 2 of the Study

PART 2: YOUR GENERAL OPINIONS AND VALUES, AND YOUR ATTITUDES TOWARDS THE MEDIA

Now that we have found out more about your feelings and attitudes towards yourself and makeover programs, we are interested in finding out about your more general attitudes and life values. We therefore ask you respond in terms of your more general and enduring attitudes and that you use a **6-month frame** when completing the **remainder of the questionnaire**.

How do you feel about yourself and makeover programs in general?

People differ in their opinions, values and general attitudes towards the media. We are interested in whether these differences may have an influence on how makeover programs are perceived. In this section, you will be asked about your attitudes and beliefs in relation to society in general, consumer culture, and also about yourself. Please read each statement and indicate your agreement using the scale below.

1 = strongly disagree   **4 = slightly agree**

2 = disagree   **5 = agree**

3 = slightly disagree   **6 = strongly agree**

	1	2	3	4	5	6
1. I'd be happier if I could afford to buy nicer things.	1	2	3	4	5	6
2. Makeover programs present a true picture of how much effort is needed in making changes in my life.	1	2	3	4	5	6
3. Makeover programs give me ideas about changes I could make in my life.	1	2	3	4	5	6
4. I try to keep my life simple as far as possessions are concerned.	1	2	3	4	5	6
5. I like to own things that impress people.	1	2	3	4	5	6
6. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.	1	2	3	4	5	6

7. From makeover programs I learn about new ways to reinvent my life.	1	2	3	4	5	6
8. The things I own say how well I'm doing in life.	1	2	3	4	5	6
9. Buying things gives me a lot of pleasure.	1	2	3	4	5	6
10. I have high self-esteem.	1	2	3	4	5	6
11. Makeover television programs are enjoyable to watch.	1	2	3	4	5	6
12. I admire people who own expensive homes, cars, clothes.	1	2	3	4	5	6
13. My life would be better if I owned certain things I don't have.	1	2	3	4	5	6
14. I like a lot of luxury in my life.	1	2	3	4	5	6
15. I can get ideas about changing different aspects of my life from makeover programs.	1	2	3	4	5	6

Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research, 31,* 209-219. doi: 10.1086/383436

What goals and aspirations do you have?

People's life goals and aspirations may also influence how they perceive makeover programs. Therefore, we would like to find out more about your personal goals. Please read the following list of goals and indicate **how important** it is for you to achieve them in the future using the scale below.

0 = not at all important 1 = a little important 2 = so/so 3 = quite important 4 = very important

	0	**1**	**2**	**3**	**4**
1. People will show affection to me, and I will to them.	0	1	2	3	4
2. I will choose what I do, instead of being pushed along by life.	0	1	2	3	4
3. Almost everyone who knows me will like me.	0	1	2	3	4
4. I will have a committed, intimate relationship.	0	1	2	3	4

5. I will successfully hide the signs of ageing.	0	1	2	3	4
6. I will have a job that pays well.	0	1	2	3	4
7. I will overcome the challenges that life presents me.	0	1	2	3	4
8. I will have insight into why I do the things I do.	0	1	2	3	4
9. My name will be known by many different people.	0	1	2	3	4
10. I will assist people who need it, asking nothing in return.	0	1	2	3	4
11. I will express my love for special people.	0	1	2	3	4
12. I will be efficient.	0	1	2	3	4
13. I will be financially successful.	0	1	2	3	4
14. I will keep up with fashions in clothing and hair.	0	1	2	3	4
15. I will feel that there are people who really love me.	0	1	2	3	4
16. I will feel free.	0	1	2	3	4
17. I will achieve the "look" I've been after.	0	1	2	3	4
18. I will deal effectively with problems in my life.	0	1	2	3	4
19. I will have enough money to buy everything I want.	0	1	2	3	4
20. I will feel good about my abilities.	0	1	2	3	4
21. I will be admired by many people.	0	1	2	3	4
22. I will help the world become a better place.	0	1	2	3	4
23. Someone in my life will accept me as I am, no matter what.	0	1	2	3	4
24. My image will be one that other's find appealing.	0	1	2	3	4
25. I will have many expensive possessions.	0	1	2	3	4
26. The things I do will make other people's lives better.	0	1	2	3	4
27. People will often comment on how attractive I look.	0	1	2	3	4

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22,* 280-287. doi:10.1177/0146167296223006

Feelings, goals, and aspirations in terms of personal appearance may also have an impact on perceptions of makeover programs. In this part we would therefore like to ask you how you feel about different aspects of your image. Please state your agreement with the following statements using the scale below.

1 = strongly disagree	**4 = slightly agree**
2 = disagree	**5 = agree**
3 = slightly disagree	**6 = strongly agree**

	1	2	3	4	5	6
1. What I look like is an important part of who I am.	1	2	3	4	5	6
2. My self-esteem is unrelated to how I feel about the way my body looks.	1	2	3	4	5	6
3. I'd be happier if my body was more perfect.	1	2	3	4	5	6
4. I aspire to look like the actresses in TV and films.	1	2	3	4	5	6
5. I would be more successful in life if I had a perfect body.	1	2	3	4	5	6
6. I always do whatever I can to look my best.	1	2	3	4	5	6
7. It bothers me a lot that I don't have the perfect body.	1	2	3	4	5	6
8. Having the perfect body is essential to my popularity.	1	2	3	4	5	6
9. I spend a lot of time making sure my body looks good.	1	2	3	4	5	6
10. I wish I looked like the girls or women who model underwear.	1	2	3	4	5	6
11. When I think I look attractive, I feel good about myself.	1	2	3	4	5	6
12. My self-esteem does not depend on whether or not I feel attractive.	1	2	3	4	5	6
13. My life would be better if I had the perfect body.	1	2	3	4	5	6

14. I would be more popular if my body was more perfect.	1	2	3	4	5	6
15. My self-esteem is influenced by how attractive I think my face or facial features are.	1	2	3	4	5	6
16. I would like my body to look like the bodies in magazines.	1	2	3	4	5	6
17. Having the perfect body is important to me	1	2	3	4	5	6
18. I think that people with perfect bodies have it all.	1	2	3	4	5	6
19. My sense of self-worth suffers whenever I feel I don't look good.	1	2	3	4	5	6
20. I wish my body was like those shown in music videos.	1	2	3	4	5	6
21. Having the perfect body would be one the greatest achievements in my life.	1	2	3	4	5	6
22. I spend a lot of money on making my body look good.	1	2	3	4	5	6
23. I wish I looked like a film star.	1	2	3	4	5	6

Bell, B. (2011). Body Perfect Internalization Scale (BPIS): A new measure of sociocultural body and beauty ideal internalization for adolescent girls. In Understanding adolescent girls' vulnerability to the impact of the mass media on body image and restrained eating behaviour: The role of media type, body perfect internalisation, and materialism. (Doctoral dissertation). Retrieved from: University of Sussex Research Online: http://sro.sussex.ac.uk/39670/1/Bell,_Beth_Teresa.pdf

Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: theory and measurement. *Journal of Personality and Social Psychology, 85,* 894. doi: 10.1037/0022-3514.85.5.894

And finally, some information about yourself

Gender: MALE / FEMALE

Age: _ _ _ _

Name of your school: _

Ethnic background (please select one):

       White (British)

       White (other)

       Asian

       Black

       Hispanic

       I prefer not to answer

       Other (please specify): _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Approximate height: _ _ _ _ _ _ _ _ _ _ _

Approximate weight: _ _ _ _ _ _ _ _ _ _ _

Personal monthly spending money: _ _ _ _ _ _ _ _ _

Have you previously undergone any kind of cosmetic surgery? YES / NO

     If YES, please tell us a little more about the procedure(s) you underwent. What procedure was it? How old were you? Why did you decide to undergo the procedure?

_ _
_ _
_ _ _ _

Do you know anyone who has had cosmetic surgery? YES / NO

     If YES, please tell us a little more about it. What is/was your relationship with this person? What procedure did he/she undergo? How did it make you feel?

_ _
_ _
_ _ _ _

Participant Debrief

Please retain this sheet for your information

Cosmetic surgery television programs have been very popular since their creation in 2004, and cosmetic surgery associations have expressed concern about how they may impact viewers, criticising that such shows portray surgery as trivial and do not adequately inform viewers of the risks associated with it.

The aim of this study was to investigate the effect of cosmetic surgery reality television programs on body image and on the attitudes towards cosmetic surgery of girls your age. Moreover, it examined whether the content of the programs played a role in your responses to the programs and, particularly whether it had an effect on your perception of risks associated with cosmetic surgery.

You were therefore exposed to one of three conditions: a cosmetic surgery program portraying surgery in as relatively trivial (no risks/complications/pain), a cosmetic surgery program presenting surgery in a more serious manner with mentions of risks and complications, or the control condition, a home makeover program.

We expect that girls who watched either of the cosmetic surgery programs will report more body dissatisfaction than girls who watched the home makeover video. In terms of attitudes towards cosmetic surgery, we expect that girls who saw the "trivial" cosmetic surgery program will hold more favourable attitudes, whereas those who watched the "serious" cosmetic surgery program will be aware of risks associated with cosmetic surgery to a greater extent.

If you have any concerns about body image or eating behaviours, you can find information on www.eating-disorders.org.uk and on www.campaignforrealbeauty.com.

Now that you are aware of the true purposes of the study, you have the option to withdraw your participation, should you wish to. However, we hope that you will submit your responses, as your participation is extremely valuable to us.

Your participation is greatly appreciated, thank you!

What would you like to do with your responses? (Please circle)

Submit   **Withdraw**