Cosmetic Facial Surgery:
The Influence of Self-esteem on Job Satisfaction and Burnout

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nuanced relationship between unconscious bias and discrimination and exploring the impact of self-esteem in shaping work life.

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Abstract

Using knowledge-based theories of self-esteem, we investigate the relationship between employed adults' change in self-esteem following cosmetic facial surgery with changes in their job satisfaction and workplace burnout. Quantitative data are collected from patients who have undergone cosmetic facial surgical procedures within a four-year period. The survey responses of 106 employed adults are analysed by the use of hierarchical moderator regression. The findings show a positive relationship between change in self-esteem and change in job satisfaction, and a negative relationship with change in burnout. Cumulative effects are identified. For those who strongly perceive an improvement in their post-operative self-esteem, the longer the time since surgery, the greater the increase in job satisfaction and decrease in burnout; while for those who strongly perceive their self-esteem has not improved, the greater the decrease in job satisfaction. These results demonstrate that the influence of change in self-esteem following surgery extends into the workplace.

Keywords: job satisfaction, burnout, self-esteem, cosmetic surgery, beauty premium, attractiveness bias

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Introduction

In the last few decades, an increasing amount of money has been spent, predominantly by women, on expensive methods to artificially enhance their physical attractiveness (Sarpila, 2014). These methods include surgical procedures generally referred to as cosmetic surgery. When procedures are performed by specialist plastic surgeons, they are known as aesthetic plastic surgery (Royal Australasian College of Surgeons, 2011). Cosmetic surgery has been seen as a radical departure from non-surgical procedures as it permanently changes existing features of the body, often through high-technology invasive techniques (Davis, 2002). Despite the high cost, there has been a major worldwide expansion. In 2013, over 50,000 aesthetic plastic surgical procedures were carried out in the United Kingdom, representing a 16.5 per cent annual increase (British Association of Aesthetic Plastic Surgeons [BAAPS], 2014). In the same year, more than 11 million surgical and non-surgical aesthetic procedures took place in the United States, costing more than 12 billion dollars (American Society for Aesthetic Plastic Surgery [ASAPS], 2013). By the end of the first decade of the twenty-first century, cosmetic surgery had become a billion-dollar industry in Australia (Australian Health Ministers Conference [AHMC], 2011) with estimates of between 4.2% and 6.1% of the Australian adult population having undergone a procedure (Tranter and Hanson, 2013).

While research demonstrates that most people who undergo aesthetic surgery report higher post-operative self-esteem (Cash et al., 2002), as far as we can ascertain, no major investigation has been carried out into job-related outcomes. Our aim is to investigate the relationship between employed adults' change in self-esteem following aesthetic surgery with changes in their job satisfaction and workplace burnout. Although job satisfaction and burnout are two of the most researched concepts in workplace studies, they have not been examined in relation to the impact of aesthetic plastic surgery. This investigation is valuable because the influence of aesthetic

surgery may be more far-reaching than current research demonstrates. Work is a central part of the lives of people in the labour market. It is, therefore, important to investigate whether the effects of surgery extend beyond patients' perceptions of themselves into the broader realms of how they feel about their jobs.

There are several questions that need to be addressed. Is aesthetic plastic surgery worthwhile in terms of job-related psychological rewards? Are there any negative workplace effects? Are there any enduring workplace effects? This research investigates these questions by an examination of variations within a sample of people who have undergone aesthetic plastic facial surgery. Knowledge-based theories of self-esteem (e.g., Baumeister et al., 2003; Swann et al., 2007) are used to develop hypotheses. Hierarchical moderator regression is employed to analyse the survey responses of over 100 workers who underwent aesthetic facial plastic surgery within a four-year period. We focus on facial surgery because facial attractiveness is apparent to observers, and is also highly correlated with likeability (Surawski and Ossoff, 2006). Implications of the findings for research and practice are discussed. For purposes of simplicity, we will use the term aesthetic surgery to denote aesthetic plastic surgery.

Job satisfaction, burnout and self-esteem

Job satisfaction is the extent to which people like their jobs (Spector, 1997). Burnout refers to an individual's long term diminished interest in work as characterised by, for example, emotional exhaustion (Freudenberger, 1980). Although extant literature has little to tell us about the influence of aesthetic surgery on job satisfaction or burnout, we do know that aesthetic surgery is associated with changes in the patient's self-esteem. The most universally accepted definition of aesthetic plastic surgery describes it as a procedure to reshape normal structures of the body with the aim of improving patients' appearance and self-esteem (AHMC, 2011; American Medical Association, 1989). A meta-analysis of extant literature concluded that individuals were motivated to have surgical procedures to achieve these ends (Sarwer et al., 1998). It is also well-established that, for many patients, aesthetic surgery leads to increased satisfaction with their own appearance and improvements in self-esteem (Cash et al., 2002; Von Soest et al., 2006; Von Soest et al., 2009).

Research also demonstrates that self-esteem is positively related to job satisfaction (e.g., Judge and Bono, 2001; Pierce et al., 1989; Wu and Griffin, 2012). Individuals with high self-esteem are likely to experience a positive attitude to

seeking out tasks and occupations that are consistent with their interests; thus, they experience higher levels of job satisfaction (Korman, 1970). They are less likely to stay in a dissatisfying job (Spector, 1982) and more likely to interpret stressful work situations as challenging rather than threatening (Locke et al., 1996; Makikangas and Kinnunen, 2003). Empirical studies also show that self-esteem is negatively related to burnout (Carmel, 1997; Janssen et al., 1999).

Knowledge-based theories of self-esteem

The theoretical basis for establishing a relationship between changes in self-esteem following aesthetic surgery and workplace outcomes can be developed by the use of knowledge-based theories of self-esteem. Self-esteem is a core human need and one of the major traits that form individuals' basic evaluation of themselves and their success in life (Judge et al., 1997). Self-esteem is measured by many factors including a person's perception of his/her likeability, physical appearance, social skills, and competence in socially valued domains (such as academic prowess) (Blascovich and Tomaka, 1991).

Knowledge-based theories of self-esteem hold that individuals are motivated, or driven, to acquire information about themselves in areas that contribute to their self-esteem. The results of a recent meta-analysis found evidence of 'the existence of multiple motives' in individuals (Kwang and Swann, 2010: 275). Research has focussed on self-enhancement and self-consistency -- or self-verification -- motivation (Ferris et al., 2015). Self-enhancement motivation (Baumeister, 1993; Baumeister et al., 2003) has a long pedigree. It arises from the proposition that humans have a vital need to see themselves in a positive or favourable light (Allport, 1937). Self-enhancement motivation drives individuals to gain information that makes them believe well of themselves. People with high self-esteem who are motivated by self-enhancement tend to conduct strategies of self-advancement, processing information that puts them in a positive light; while those with low self-esteem who are motivated by self-enhancement conduct strategies of self-protection, avoiding negative information about themselves (Tice, 1991). From this perspective, an increase in self-esteem following aesthetic surgery drives individuals to collect more positive information than previously while lower self-esteem is likely to drive them to avoid negative information.

In contrast, self-consistency motivation (Swann, 1983; Swann et al., 1989; Swann et al., 2007) drives individuals to gain information that confirms what they believe of themselves, either positive or negative. People with high self-esteem who are motivated by self-enhancement search for positive evaluations whereas people with low self-esteem often prefer negative evaluations. From this perspective, an increase in self-esteem following aesthetic surgery drives individuals to collect more positive information than previously. A post-operative decrease in self-esteem, conversely, drives them to gather less positive -- or more negative -- information.

Therefore, from the perspectives of both motivations, an increase in self-esteem following aesthetic surgery drives individuals to collect more positive information about themselves than previously. Self-enhancement motivation drives them to collect more information that puts them in a better light; self-consistency motivation drives them to collect information that confirms that they feel better about themselves. In this way, they gain greater confidence, and thereby enjoy better quality workplace interactions. A decrease in self-esteem, however, drives individuals to gain less positive information than previously. Self-enhancement motivation drives them to collect information that protects them; self-consistency motivation may drive them to collect information that confirms their less positive -- more negative -- feelings about themselves. Overall, at best they may maintain their confidence but they are more likely to lose confidence, thereby enjoying poorer quality workplace interactions.

Hypothesis 1a .Following aesthetic surgery, there will be a positive relationship between change in self-esteem and change in job satisfaction.

Hypothesis 1b. Following aesthetic surgery, there will be a negative relationship between change in self-esteem and change in burnout.

While it is generally held that an individual's self-esteem is relatively stable (Baumeister, 1993), empirical work has demonstrated that self-esteem can shift to a different -- and persisting -- level at major transition points in life, for example, when personal identities are altered (Harter, 1993). Surgically-induced change in physical appearance is likely to constitute such a point in time for many patients. The endurance of post-operative higher levels self-esteem has been demonstrated in several empirical studies (e.g. Klassen et al., 1996; Shakespeare and Cole, 1997; Song et al., 2006). While no major study has investigated the persistence of self-esteem following aesthetic facial surgery, lasting improvements in self-esteem have been

identified in breast reduction and augmentation patients (Cash et al., 2002; Goin et al., 1997) and body contouring patients (Song et al., 2006). Further, while most people who undergo aesthetic surgery report satisfaction with the outcome of procedures, research shows that some have psychosocial disturbances that are long-lasting (Honigman et al., 2004).

The outcomes of a persisting change in level of self-esteem on labour market outcomes will not merely be maintained, they are likely to be cumulative: that is, the difference in workplace outcomes between individuals with higher and lower levels of post-operative self-esteem are likely to become wider over the passage of time. This comes about in the following way. Information-gathering is conducted by employees in a dynamic labour market which, over time, offers opportunities for an individual's advancement but also possibilities of failure or stagnation. Individuals who experience an improved level of self-esteem continually collect more positive information and become more confident, reaping increasing labour market rewards and more suitable work. Positive information, therefore, is reinforced and strengthened over time. Job satisfaction continues to grow and the harmful effect of work stressors on employee burnout continues to decline. In contrast, individuals with lowered self-esteem collect information over time that continually reduces positive attitudes and, for some, may reinforce and strengthen negative attitudes. Thus, differences in workplace outcomes associated with higher and lower post-operative self-esteem should increase over time.

Hypothesis 2a. The longer the time since aesthetic surgery, the greater the increase in job satisfaction between individuals with improved levels self-esteem relative to individuals with lowered levels of self-esteem.

Hypothesis 2b. The longer the time since aesthetic surgery, the greater the decrease in burnout between individuals with improved levels self-esteem relative to individuals with lowered levels of self-esteem**.**

Method

Data

Two major private aesthetic plastic surgery clinics were contacted in Melbourne, Australia (May - July 2013). Both clinics agreed to invite their adult patients who had undergone aesthetic facial plastic surgery during a four-year period (August 2008 - August 2012) to participate in an independent university online survey. Drawing on a wide range of research in the organisation, sociology, medicine

and psychology literatures a survey was developed. Two medical experts provided feedback on early drafts. Data collection was conducted in August 2013. Patients were contacted by the clinics via email. One week later, a follow-up email was administered by the clinics as a reminder to non-respondents. This process resulted in 82 responses (29% response rate) for clinic 1 and 39 responses (32% response rate) for clinic 2. In total, a sample of 121 aesthetic facial plastic surgery patients was generated (30% response rate). Unlike similar studies, where a proportion of the patient population was recruited by their surgeons or surgical nurses (e.g. Rankin et al., 1998; Rankin and Borah, 2003), all facial surgical patients in this patient population were offered the opportunity to participate in the study. For this reason, the response rate in this study is lower than in other studies (e.g., Rankin et al., 1998). Due to missing data, the effective sample consisted of 106 respondents. This sample was not significantly different from the full sample on any of the variables used in the analysis.

This sample size is similar to other studies that use cosmetic surgical patients (e.g. Rankin et al., 1998). The large majority of patients (79%) were female. The age of the patients ranged from 19 to 68 with a mean age of 42 years. The most common relationship status was ‘married’ or ‘in a relationship’ (60%) followed by ‘single’ (25%). The majority of the sample classified their occupation as managerial, professional, technical or scientific (69%). A further 13 per cent were in clerical, sales or secretarial occupations. 7.5 per cent had skilled manual jobs and 10 per cent had semi-skilled or unskilled manual jobs. Almost half of the sample had a rhinoplasty (nose surgery) (48%), followed by blepharoplasty (eyelid surgery) (31%), facelift/Minimal Access Cranial Suspension (MACS) lift (27%), mid-cheek lift (11%), temporal lift (8%) and otoplasty (ear surgery) (3%). 28 patients (24%) indicated that they had undergone more than one procedure. In this instance, the most common surgical combination was facelift/MACS lift performed concurrently with blepharoplasty.

This sample is representative of people who undergo aesthetic plastic surgery surgical procedures in Australia and other major developed countries. The very wide gender discrepancy is typical of these patients (ASAPS, 2011; BAAPS, 2012; Tranter and Hanson, 2013). Middle-aged people (35-50) have been identified as the age group most likely to have experienced these procedures (ASAPS, 2011). Having a partner was also found to have a positive an influence upon the decision to undertake

cosmetic surgical procedures (Tranter and Hanson, 2013). Professionals are more likely than non-professionals to have undergone cosmetic surgery, though this was found to be an income effect rather than an occupation/education effect (Tranter and Hanson, 2013). Finally, rhinoplasty and ageing-face procedures have been found to be the most common procedures (Litner et al., 2008).

Measures

All of the survey change items used the following scale anchors: 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. In each case, a continuous measure was constructed by taking the mean of the item responses.

Outcome variables

Change in job satisfaction. Patients responded to four statements related to change in job satisfaction following facial cosmetic surgery. Questions were adapted from Cammann et al., (1983) and Taylor and Bowers (1972): 'All in all, compared to before my surgery, I am more satisfied with -- my job, my co-workers, my supervisor, my pay' (alpha = .91).

Change in burnout. Patients responded to four statements related to change in burnout following surgery. Questions were adapted from the Maslach Burnout Inventory (Maslach and Jackson, 1981): 'Compared to before my surgery -- I feel less emotionally drained from my work, I feel less burned out from my work, I feel less frustrated by my job, working with people directly is less stressful' (alpha = .93). The responses were reverse-coded.

Predictor variable

Change in self-esteem. Patients responded to five statements related to change in self-esteem. Questions were adapted from Rosenberg (1965): 'Compared to before my surgery -- I take a more positive attitude towards myself, I take a more positive attitude towards myself, I have more respect for myself, I feel I have more to be proud of, I feel I have better qualities' (alpha = .89).

Moderator variable

Number of years since surgery. Patients were asked in which year they underwent surgery and a calculation was made of the length of time since the operation (continuous: 1 to 4 years).

Control variables

Our analysis also included several control variables to improve generalisability and to reduce the chance that unmeasured variables could explain the results. The control variables comprised employee age (continuous: 19 to 68 years), gender (1 = Male, 0 = Female); relationship status (1 = Single, 0 = Other); occupational groups in which beauty might act as a productive resource (1 = White collar, 0 = Blue collar); whether the individual had changed their job since the operation (1 = Yes, 0 = No) (Antoniou et al., 2006; Boswell et al., 2005; Clark et al., 1996; Johnson et al., 2005; Leiter, 1990; Purvanova and Muros, 2010).

Results

We first assessed the discriminant validity of the multi-item measures reported by the research participants. We used AMOS (Arbuckle, 1997) to conduct a confirmatory factor analysis with three latent variables representing job satisfaction, burnout and self-esteem. The fit indices used with small samples showed a good fit to the data (CFI = .91; IFI = .94). CFI and IFI values that are closer to 1 reflect better-fitting models (Byrne, 2001). We compared the three-factor model against a two-factor one (with a single latent variable representing both job satisfaction and burnout). The two-factor model generated indices with significantly poorer fit than the three-factor model (CFI = .75; IFI = .75; $\Delta\chi^2$ [df = 2] = 187. 164, $p < .001$).

The means, standard deviations and correlations for all variables included in the regression analyses are shown in Table 1. For change in self-esteem, mean = 3.53, median = 3.6; for change in job satisfaction mean = 2.78, median = 3; and for change in burnout, mean = 2.59, median = 2.75.

Insert Table 1 about here

We followed procedures recommended by Aiken and West (1991) and centred the values for the continuous predictor and moderator variables before creating the interaction term. The inclusion of multiplicative terms in regression analyses might raise concerns about multicollinearity, but the variance inflation factors (VIF) associated with the predictor and moderator variables were low, none reaching 1.6. These results indicate inconsequential levels of multicollinearity (Hair et al., 2006).

The regression results are reported in Table 2.

Insert Table 2 about here

Hypotheses 1a and 2a were tested in the job satisfaction regression. In order to test Hypothesis 1a, control variables and predictors were entered in the first step.

None of the coefficients on the control variables, including gender, were significant. The coefficient on the change in self-esteem variable was significant ($b = .29$, $p < 0.01$) and Hypothesis 1a was supported. In order to test Hypothesis 2a, the interaction term was entered in the second step. The coefficient was significant ($b = .18$, $p < .01$). To better understand the result, following procedures suggested by Aiken and West (1991), we plotted separate regression lines for individuals with high and low changes in self-esteem. The profile plots are shown in Figure 1. The simple slope coefficients were also calculated. Employees with high values of change in self-esteem demonstrated a significant increase in job satisfaction the longer the amount of time since their operation ($b = .21$, $p < .05$); for those with a low values of change in self-esteem, there was also a significant decrease in job satisfaction the longer the time since their operation ($b = -.22$, $p < .05$). Following the introduction of the two-way interaction, change in r-square = .06 ($p < .01$). Taken together the results support Hypothesis 2a.

Insert Figure 1 about here

Hypotheses 1b and 2b were tested in the burnout regression. In order to test Hypothesis 1b, control variables and predictors were entered in the first step. The coefficient on the change in self-esteem variable was significant ($b = -.35$, $p < .01$), and Hypothesis 1b was supported. In order to test Hypothesis 2b, the interaction term was entered in the second step. The coefficient was significant ($b = -.14$, $p < .05$). The profile plots are shown in Figure 2. In the case of burnout, the simple slopes show that employees with high values of change in self-esteem demonstrate a significant net decrease in burnout the longer the amount of time since their operation ($p = -0.20$, $p < .05$); for those with low values of change in self-esteem, the slope was nonsignificant ($p = .15$, $p =$ ns). Following the introduction of the two-way interaction, change in r-square = .03 ($p < .05$). Taken together the results support Hypothesis 2b.

Insert Figure 2 about here

Discussion and conclusions

This study demonstrated that change in self-esteem following aesthetic facial plastic surgery was associated with how employees subsequently felt about their jobs. The results showed a positive relationship between change in self-esteem and change in job satisfaction, and a negative relationship between change in self-esteem and change in burnout. Cumulative effects were also identified. The longer the passage of

time since surgery, the greater the increase in job satisfaction and decrease in burnout between individuals with high and low levels of post-operative self-esteem. These results support our hypotheses. They confirm existing research which found that aesthetic surgery 'produces positive psychological benefits by significantly improving quality-of-life outcomes that persist long term' for some people (Rankin et al., 1998: 2139). They also support evidence that, for other people who undergo procedures, aesthetic surgery leads to disappointment (Honigman et al., 2004). We also produce a new result: that the positive and negative influence of post-operative self-esteem extends into the workplace.

There were more detailed findings. For those who strongly perceived that their self-esteem had improved, the longer the time since surgery, the greater the increase in job satisfaction and decrease in burnout. While for those who strongly perceived that their post-operative self-esteem had not improved, the longer the time since surgery, the greater the decrease in job satisfaction; burnout, however, did not significantly change. The likelihood is that, over time, lack of improvement in self-esteem was associated with failure to achieve promotion or find a more suitable job, leading to increasing dissatisfaction with the current job (March and Simon, 1958). Burnout levels, however, were likely to remain constant in this situation, that is, burnout did not change when the job remained the same or similar. Further research in this area is recommended.

Research implications

The theoretical contribution of this paper lies in the focus on the influence of self-esteem as a factor that motivates a person's search for information about themselves which results in biased interpretations through self-enhancement and/or self-consistency motivation. Empirical findings that aesthetic plastic surgery might make things better for some patients but worse for others have a theoretical basis. Further research that directly investigates separate knowledge-based motivations is highly recommended.

This study contributes to the literature on physical attractiveness in the labour market. Although beauty is 'culturally and temporally bound', people who are considered physically attractive tend to be held in high regard (Aquino et al., 2014: 32; Brooks, 2013). Extensive research has demonstrated that such individuals receive a 'beauty premium' in terms of factors related to job success, while those considered unattractive are suffer a 'plainness penalty' (Hamermesh and Biddle, 2 011: 1174;

Langlois et al., 2000; Hosoda, Stone-Romero and Coats, 2000). Explanations were often presented in terms of an attractiveness bias whereby the characteristics of physically attractive people are over-estimated through a beauty-induced halo effect or 'what is beautiful is good' stereotype (Dion, Berscheid and Walster, 1972; Eagly et al., 1991; Jackson, Hunter and Hodge., 1995; Surawski and Ossoff, 2006). Yet, a recent major study demonstrated that at least part of the influence of the attractiveness bias on workplace outcomes comes about via its impact on the self-esteem of the physically attractive employee (Judge et al., 2009). Our research also demonstrates the importance of self-esteem in affecting workplace outcomes but proposes that, following cosmetic surgery, a change in self-esteem led to the collection of biased information. Further studies should include a control measure to represent other people's evaluations of change following surgery, for example, by using the ratings of pre and post-operative photographs of survey participants (e.g. Cash and Horton, 1983; Dayan, Clark and Ho, 2004).

Practical implications

The findings of our study have important practical implications for organisations and labour market participants. Society's obsession with physical appearance is not a transient phenomenon (Fink and Penton-Voak, 2002) and the beauty premium at the workplace persists (Borland and Leigh, 2014). Evidence demonstrates that, though some individual patients report a decline in the quality of life following cosmetic surgery, many report an improvement (for example, Dayan et al., 2004). Yet, while aesthetic surgery may improve the well-being of some employees, the distorting effects of the attractiveness bias constrain rational decision-making by managers (Derous et al., 2016) and have long been recognised as problematic for companies. The most able employees may not be recruited or rewarded and those perceived to be less attractive may be overlooked or treated unfairly. In relation to our study, the self-esteem induced by feelings of being beautiful -- in contrast to acknowledgement of being good at the job -- is also unlikely to lead to optimal company performance. Job satisfaction and burnout are important motivating/demotivating factors for employees. Job satisfaction motivates employees and burnout demotivates. Employee motivation should arise from self-esteem related to levels of work achievement, not from feeling physically attractive (or not). Only when self-esteem arises from the recognition of talent and effort can the best outcomes occur for organisations. It is important, therefore, for HR practitioners to

establish and develop procedures, not just to avoid poor decision-making, but to prevent the reinforcement of the psychological link between physical appearance and self-esteem. Recruiting and rewarding beauty sends the wrong signals to individuals, harming both organisations and employees. Employee self-esteem could be developed in ways more valuable and relevant to the organisation. If employees are made aware that beauty does not merit rewards or status in the workplace, then they may feel less encouraged to alter their appearance with the risk of short and long term negative outcomes.

Our result, therefore, might prompt HR practitioners to become proactive agents of change. If organisations strictly imposed objective processes for selection and promotion, then that the attractiveness bias would be less manifest. People notice attractive individuals and are well-disposed to them (Hakim, 2011). Thus, managers should put into practice procedures that allow evaluations to be based on likeability Supervisors should be trained in how to avoid any unconscious bias. Unconscious bias is most likely to occur when candidates are interviewed (Derous et al., 2016). The use of structure throughout the interview is recommended (Kristof-Brown, Barrick and Franke, 2002). Criteria – with associated questions – should be formulated well in advance of interviews; all candidates should be asked the same questions preferably with the same set of interviewers; standard rating sheets should be employed and reference checks conducted; initial reactions in interviews should be questioned and reliance on confirmatory information-gathering discouraged (Derous et al., 2016). In specific relation to unconscious reactions to visual beauty or plainness, the development of blind rapport building has been proposed, where applicants and interviewers are visually separated (e.g., by telephone and computer-mediated interviews) (Buijsrogg, Derous and Duyck, 2014). Photographs should be removed from application forms (Derous et al., 2016).

These measures should have particularly strong effects for females. The overwhelming majority of people who undergo surgical procedures to change their appearance are women (Davis, 2002; Frederick, Lever and Peplau, 2007). This situation can be explained, at least in part, by the different opportunity structures historically available to different genders where beauty was an important factor for female advancement. It seems likely that deep-seated socialisation processes continue to assert their influence on women in relation to the importance of physical attractiveness in developing self-esteem (Davis, 2002). The workplace is an important

area where stereotypes can be effectively broken down as, except with regard to a few occupations, productivity does not depend on appearance. The sharp rise in educational success and qualifications for women in most developed countries in the last half-century (Richardson and Woodley, 2003) means that, in time, if workplaces reward talent and effort, females may come to rely less on the traditional emphasis on beauty as a basis for self-esteem.

Limitations and strengths

Limitations of the study must be taken into account. The findings demonstrate that a person's self-esteem is associated with his/her feelings about work. We examined employees' perceptions of change. Our model may have been strengthened by variables that measured pre-operative attitudes to allow for calculation of difference scores. Such an approach, however, has been soundly criticised by some researchers (e.g. Edwards, 1995). There may be confounding effects, biasing the coefficients. For example, there may be an omitted variable in the form of a measure of outsider perceptions of change in beauty. There may also a be a problem of simultaneity (Baumeister et al., 2003) whereby, for example, people who report high values of levels of change in self-esteem may also report high values of levels of change in job satisfaction and low values levels of change in burnout. It is very difficult to collect a sufficient pre-surgery data from a large enough sample to provide sufficient statistical power for multivariate techniques of analysis. Studies that utilised pre- and post-operative survey data have a very small sample size (e.g. Song et al., 2006) or did not extend their investigation into the patient's workplace experiences (e.g. Cash et al., 2002). Finally, our results may not be applicable over longer periods such as lifetime careers.

Nevertheless, these limitations are more than balanced by the strengths of a large, representative sample of people who have undergone aesthetic facial surgery. We were able to examine workplace outcomes in the same labour market context, thereby controlling for important influences such as wage and work intensification levels and unemployment. In doing so, we identified that, in the contemporary context, changes in self-esteem following cosmetic surgery were associated with people's change in feelings about their jobs, both positive and negative.

Key points:

1. Change in self-esteem following cosmetic facial surgery was associated with subsequent job attitudes, both in the short and longer term.
2. Some employees experienced higher self-esteem and greater job satisfaction; others experienced the reverse.
3. Some experienced higher self-esteem and less burnout; others experienced the reverse.
4. Job satisfaction and burnout are important motivating/demotivating factors for employees.
5. Motivation should arise from self-esteem related to work effort not from feeling physically attractive.
6. HR managers should impose objective processes for selection and promotion to break the attractiveness bias.
7. Most cosmetic surgery patients are women and such processes should help break down gender stereotypes.

References

Aiken LS and SG West (1991). Multiple regression: Testing and interpreting interactions. Sage, Thousand Oaks, CA.

Allport, G. W. (1937). Personality: A psychological interpretation. Holt, New York, NY.

American Society for Aesthetic Plastic Surgery (ASAPS) (2011) 15th annual Cosmetic surgery national data bank statistics. http://www.surgery.org/sites/default/files/ASAPS-2011-Stats.pdf (accessed 21 May 2014).

American Society for Aesthetic Plastic Surgery (ASAPS) (2013) Available at: http://www.surgery.org/media/news-releases/the-american-society-for-aesthetic-plastic-surgery-reports-americans-spent-largest-amount-on-cosmetic-surgeryhttp://www.surgery.org/sites/default/files/ASAPS-2011-Stats.pdf

(accessed 6 April, 2016).

Antoniou AS, F Polychroni and AN Vlachakis (2006) Gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece. Journal of Managerial Psychology 21(7), 682–690.

Aquino, K, L Sheppard, MB Watkins, J O'Reilly and A Smith, (2014) Social sexual behavior at work. Research in Organizational Behavior 34, 217-236.

Arbuckle JL (1997) Amos users' guide: Version 3.6. Small Waters Corporation, Chicago, IL.

Australian Health Ministers' Advisory Council (2011). Cosmetic medical and surgical procedures A national framework. Final report. http://www.health.nsw.gov.au/pubs/2012/pdf/cosmetic_surgery.pdf (accessed 12 September 2015).

Baumeister RF (1993) Understanding the inner nature of low self-esteem. In RF Baumeister (ed) Self-esteem: The puzzle of low self-regard, 201–218. Plenum Press, New York.

Baumeister RF, JD Campbell, JI Krueger and KD Vohs (2003) Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? Psychological Science in the Public Interest 4(1), 1–44.

Borland J and A Leigh (2014) Unpacking the beauty premium: What channels does it operate through, and has it changed over time? Economic Record. 90, 288, 17-32.

Boswell WR, JW Boudreau and J Tichy (2005) The relationship between employee job change and job satisfaction: The honeymoon-hangover effect. Journal of Applied Psychology 90(5), 882–892.

British Association of Aesthetic Plastic Surgeons (BAAPS) (2012) Britons tighten belts (in more ways than one), available at: http://www.baaps.org.uk/about-us/audit/1105-britons-tighten-belts-in-more-ways-than-one (accessed 6 April, 2016).

British Association of Aesthetic Plastic Surgeons (2014) Press release. Britain sucks: Over 50,000 cosmetic surgery procedures in 2013 – Liposuction up by 41%. Available at: http://baaps.org.uk/about-us/press-releases/1833-britain-sucks (accessed 6 April, 2016).

Buijsrogge A, E Derous and W Duyck (2012) Why your port-wine stain isn't hired: Stigmatization during interviews. Poster Presented at the 27th Conference of the Society of Industrial and Organizational Psychology, San Diego, California.

Byrne BM (2001) Structural equation modeling with AMOS. Erlbaum, Mahwah, NJ.

Cammann C, M Fichman, GD Jenkins and J Klesh (1983) Michigan organizational assessment questionnaire. In SE Seashore, EE Lawler, PH Mirvis and C Cammann (eds) Assessing organizational change: A guide to methods, measures, and practices, 71–138. Wiley, New York.

Carmel S (1997) The professional self-esteem of physicians scale, structure, properties, and the relationship to work outcomes and life satisfaction. Psychological Reports 80(2), 591–602.

Cash TF, LA Duel and LL Perkins (2002) Women's psychosocial outcomes of breast augmentation with silicone gel-filled implants: A 2-year prospective study. Plastic Reconstructive Surgery 109(6), 2112–2121.

Cash TF and CE Horton (1983) Aesthetic surgery: Effects of rhinoplasty on the social perception of patients by others. Plastic and Reconstructive Surgery 72(4), 543–548.

Clark A, A Oswald and P Warr (1996) Is job satisfaction U-shaped in age? Journal of

Occupational and Organizational Psychology 69(1), 57–81.

Davis, K (1995) Reshaping the female body: The dilemma of cosmetic surgery. Routledge, New York.

Davis K (2002) 'A dubious equality': Men, women and cosmetic surgery. Body & Society 8(1), 49–65.

Dayan S, K Clark and AA Ho (2004) Altering first impressions after facial plastic surgery. Aesthetic Plastic Surgery 28(5), 301–306.

Derous E, A Buijsrogge, N Roulin and W Duyck (2016) Why your stigma isn't hired: A dual-process framework of interview bias. Human Resource Management Review 26(2), 90–111.

Dion K, E Berscheid and E Walster (1972).What is beautiful is good. Journal of Personality and Social Psychology, 24(3), 285-290.

Eagly AH, RD Ashmore, MG Makhijani and LC Longo (1991) What is beautiful is good, but…: A meta-analytic review of research on the physical attractiveness stereotype. Psychological Bulletin 110(1), 109–128.

Edwards, JR (1995) Alternatives to difference scores as dependent variables in the study of congruence in organizational research. Organizational Behavior and Human Decision Processes 64, 307-324.

Ferris DL, H Lian, DJ Brown and R Morrison (2015) Ostracism, self-esteem, and job performance: When do we self-verify and when do we self-enhance? Academy of Management Journal, 58, 279-297.

Fink B and I Penton-Voak (2002) Evolutionary psychology of facial attractiveness. Current Directions in Psychological Science 11, 154-158.

Frederick, D A, J Lever, and LA Peplau, (2007) Interest in cosmetic surgery and body image: Views of men and women across the lifespan. Plastic and Reconstructive Surgery 120, 1407-1415.

Freudenberger HJ and G Richelson (1980) Burn-out: The high cost of high achievement. What it is and how to survive it. Anchor Press. Garden City, NY.

Harter S (1993) Causes and consequences of low self-esteem in children and adolescents. In RF Baumeister (ed) Self-esteem: The puzzle of low self-regard, 87–111. Plenum Press, New York.

Jackson LA, JE Hunter and CN Hodge (1995) Physical attractiveness and intellectual competence: A meta-analytic review. Social Psychology Quarterly 58(2), 108-122.

Goin MK, JM Goin and MH Gianini (1977) The psychic consequences of a reduction mammaplasty. Plastic and Reconstructive Surgery 59(4), 530–534.

Hair J, B Black, B Babin, RE Anderson and RL Tatham (2006) Multivariate data analysis. Pearson Prentice Hall, Upper Saddle River, NJ.

Hakim, C (2010) Erotic capital. European Sociological Review 26, 499-518.

Hakim, C (2011) Honey money: The power of erotic capital. London: Penguin.

Hamermesh DS (2011) Beauty pays: Why attractive people are more successful. Princeton University Press, Princeton, NJ.

Honigman RJ, KA Phillips and DJ Castle (2004) A review of psychosocial outcomes for patients seeking cosmetic surgery. Plastic and Reconstructive Surgery 113(4), 1229–1237.

Hosoda M, EF Stone-Romero and G Coats (2003) The effects of physical attractiveness on job-related outcomes: A meta-analysis of experimental studies. Personnel Psychology, 56, 431-462.

Jackson LA, JE Hunter and CN Hodge (1995) Physical attractiveness and intellectual competence: A meta-analytic review. Social Psychology Quarterly, 58, 108-122.

Janssen PPM, WB Schaufelioe and I Houkes (1999) Work-related and individual determinants of the three burnout dimensions. Work & Stress 13(1), 74–86.

Johnson S, C Cooper, S Cartwright, I Donald, P Taylor and C Millet (2005) The experience of work-related stress across occupations. Journal of Managerial Psychology 20(2), 178–187.

Judge TA and JE Bono (2001) Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. Journal of Applied Psychology 86(1), 80–92.

Judge TA, C Hurst and LS Simon (2009) Does it pay to be smart, attractive, or confident (or all three)? Relationships among general mental ability, physical attractiveness, core self-evaluations, and income. Journal of Applied Psychology 94(3), 742–755.

Kristof-Brown A, MR Barrick and M Franke (2002) Applicant impression management: Dispositional influences and consequences for recruiter perceptions of fit and similarity. Journal of Management 28, 27–46.

Kwang T and WB Swann Jr (2010) People embrace praise even when they feel unworthy? A review of critical tests of self-enhancement versus self-verification. Personality and Social Psychology Review 14, 263 -280.

Langlois, J.H, I Kalakanis, AJ Rubenstein, A Larson, M Hallam and M. Smoot (2000) Maxims or myths of beauty? A meta-analytic and theoretical review. Psychological Bulletin 126, 390–423.

Leiter MP (1990) The impact of family resources, control coping, and skill utilization on the development of burnout: A longitudinal study. Human Relations 43(11), 1067–1083.

Litner JA, BW Rotenberg, M Dennis and PA Adamson (2008) Impact of cosmetic facial surgery on satisfaction with appearance and quality of life. Archives of Facial Plastic Surgery 10(2), 79–83.

Locke EA (1976) The nature and causes of job satisfaction. In MD Dunnette, LM Hough and HC Triandis (eds) Handbook of industrial and organizational psychology, 1297–1343. Rand McNally College Publishing Company, Chicago, IL.

Locke EA, K McClear and D Knight (1996) Self-esteem and work. International Review of Industrial and Organizational Psychology 11, 1–32.

Mäkikangas A and U Kinnunen (2003) Psychosocial work stressors and well-being: Self-esteem and optimism as moderators in a one-year longitudinal sample. Personality and Individual Differences 35(3), 537–557.

March, JC and HA Simon (1958) Organizations.Wiley, New York.

Maslach C and SE Jackson (1981) The measurement of experienced burnout. Journal of Occupational Behavior 2, 99–113.

Pierce JL and DG Gardner (2004) Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. Journal of Management 30(5), 591-622.

Rankin M, G Borah, A Perry and P Wey (1998) Quality-of-life outcomes after cosmetic surgery. Plastic and Reconstructive Surgery 102(6), 2139–2145.

Rankin, M and GL Borah (2003) Perceived functional impact of abnormal facial appearance. Plastic and Reconstructive Surgery 111(7), 2140–2146.

Richardson, J T and A Woodley (2003) Another look at the role of age, gender and subject as predictors of academic attainment in higher education. Studies in Higher Education 28, 475-493.

Royal Australasian College of Surgeons (2011) Plastic and reconstructive surgery. Retrieved from http://www.surgeons.org/surgical-specialties/plastic-and-reconstructive/

Sarpila O (2014) Attitudes towards performing and developing erotic capital in consumer culture. European Sociological Review 30(3), 302–314.

Sarwer DB, TA Wadden, MJ Pertschuk and LA Whitaker (1998) The psychology of cosmetic surgery: A review and reconceptualization. Clinical Psychology Review 18(1), 1–22.

Shakespeare, V and RP Cole (1997) Measuring patient-based outcomes in a plastic surgery service: breast reduction surgical patients British Journal of Plastic Surgery 50, 242–248.

Song AY, JP Rubin, V Thomas, JR Dudas, KG Marra and MH Fernstrom (2006) Body image and quality of life in post massive weight loss body contouring patients. Obesity 14(9), 1626–1636.

Spector PE (1997) Job satisfaction: application, assessment, causes, and consequences. Sage, Thousand Oaks, CA.

Spector PE (1982) Behavior in organizations as a function of employees' locus of control. Psychological Bulletin 91(3), 482–497.

Surawski MK and EP Ossoff (2006) The effects of physical and vocal attractiveness on impression formation of politicians. Current Psychology 25(1) 15–27.

Swann WB Jr (1983) Self-verification: Bringing social reality into harmony with the self. In J Suls and AG Greenwald (eds) Psychological perspectives on the self, vol 2, 33–66. Erlbaum, Hillsdale, NJ.

Swann WB Jr, C Chang-Schneider and K Larsen McClarty (2007) Do people's self-views matter? Self-concept and self-esteem in everyday life. American Psychologist 62(2), 84–94.

Swann WB Jr, BW Pelham and DS Krull (1989) Agreeable fancy or disagreeable truth? Reconciling self-enhancement and self-verification. Journal of Personality and Social Psychology 57(5), 782–791.

Taylor JC and DG Bowers (1972) Survey of organizations: A machine-scored standardized questionnaire instrument. University of Michigan, Ann Arbor, MI.

Tice, DM (1991) Esteem protection or enhancement? Self-handicapping motives and attributions differ by trait self-esteem. Journal of Personality and Social Psychology 60, 711–725,

Tranter B and D Hanson (2015) The social bases of cosmetic surgery in Australia. Journal of Sociology 51(2), 189–206.

Von Soest T, IL Kvalem, HE Roald and KC Skolleborg (2009). The effects of cosmetic surgery on body image, self-esteem, and psychological problems Journal of Plastic, Reconstructive & Aesthetic Surgery 62(10), 1238–1244.

Von Soest T, IL Kvalem, KC Skolleborg and HE Roald (2006) Psychosocial factors predicting the motivation to undergo cosmetic surgery. Plastic Reconstructive Surgery 117(1), 51–62.

Wu CH and MA Griffin (2012) Longitudinal relationships between core self-evaluations and job satisfaction. Journal of Applied Psychology 97(2), 331–342.

Table 1. Correlation matrix

Variables	Mean	SD	1	2	3	4	5	6	7	8
Controls										
1 Age	42.32	13.26	–							
2 Gender	.21	.41	-.04	–						
3 Relationship status	.24	.43	-.39 **	.05	–					
4 Occupation	.73	.45	.10	.08	-.00	–				
5 Changed jobs	.27	.45	-.38 **	-.04	.24*	.00	–			
Predictors										
6 Change in self-esteem	3.54	.85	-.06	.10	-.02	-.07	.05	–		
7 Years since surgery	2.23	1.26	.09	-.02	-.05	.06	.07	.01	–	
Outcome variables										
8 Change in job satisfaction	2.78	.66	.04	.14	.14	.01	.09	.34 **	.01	–
9 Change in burnout	2.59	.73	-.09	.21 *	.06	.02	.09	.37 **	.05	.61 **

N = 106 * p < 0.05 ** p < 0.01

Table 2. Hierarchical moderator regression results

	Change in job satisfaction		Change in burnout	
	Step 1	**Step 2**	**Step 1**	**Step 2**
Constant	2.16 **	2.27 **	3.60 **	3.51 **
	(.36)	(.35)	(.40)	(.40)
Controls				
Age	.01	.01	.01	.01
	(.01)	(.01)	(.01)	(.01)
Gender	.17	.13	-.35	-.31
	(.17)	(.16)	(.18)	(.18)
Relationship status	.27	.22	-.02	-.02
	(.17)	(.16)	(.18)	(.18)
Clinic	.08	.03	-.14	-.11
	(.16)	(.15)	(.18)	(.17)
Occupation	.06	-.02	-.08	-.01
	(.16)	(.16)	(.18)	(.18)
Changed jobs	.13	.16	-.08	-.11
	(.16)	(.15)	(.18)	(.17)
Predictor variables				
Years since surgery	-.01	-.01	-.03	-.31
	(.05)	(.05)	(.06)	(.06)
Change in self-esteem	.29 **	.26 **	-.35 **	-.33 **
	(.08)	(.08)	(.09)	(.09)
Interaction term				
Years X change in self-esteem	–	.17 **	–	-.14 **
	–	(.06)	–	(.07)

R^2		
Change in R^2	.24	.24
	.06 **	.03 **

N = 106 * p < 0.05 ** p < 0.01

Note. Table entries are unstandardised regression coefficients. Standard errors in parentheses.

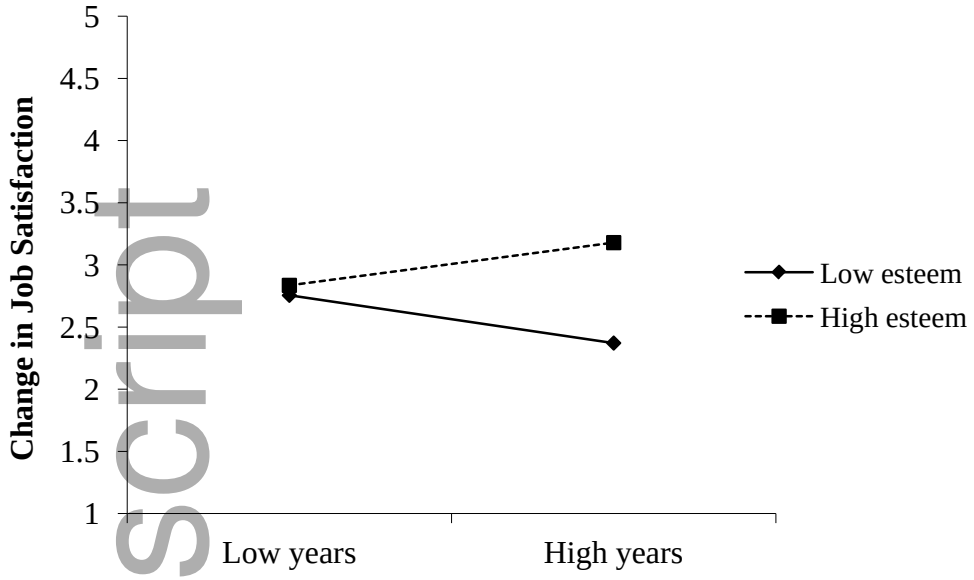

Figure 1. Profile plots: Change in job satisfaction

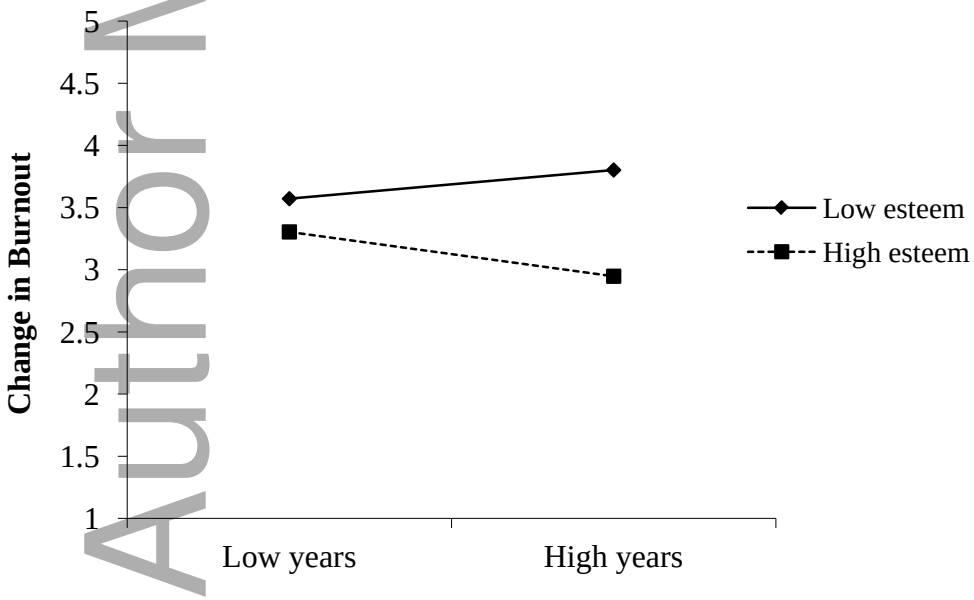

Figure 2. Profile plots: Change in burnout