Some years ago, a plastic surgeon contacted the Centre for Appearance Research with a problem. Why was it, he wanted to know, that although there was great diversity in the extent of physically disfiguring conditions in his outpatient clinics, and a similar diversity in the degree of distress and behavioural avoidance in his patients, he could identify no pattern relating the two? An examination of what was then the best available literature revealed a lack of clarity in outcomes, processes, and relevant models to investigate this relationship. Thus began a long-term research programme to explain the antecedents of good and poor psychosocial outcome in relation to visible differences.

More variability in psychological adjustment to appearance problems is associated with subjective, rather than objective assessments of appearance. So on what basis should referrals for surgery be made, and how should surgical success be evaluated?


Psychosocial adjustment to visible difference

Tim Moss and Ben Rosser examine outcomes and explanations

Appearance adjustment is a continuum; differentiations between manifestations of good and poorer adjustment can blur, from one time to another, within and between individuals. However, those with what we understand to be poorer adjustment often demonstrate similar patterns of experiential and behavioural responses – such as depression, shame, anxiety and associated defensive social avoidance (see also Lansdown et al., 1997).

Depression is less often observed as a response to appearance concern than may be anticipated, although it can form part of the array of responses (e.g. Rumsey et al., 2002). The dissatisfaction that surrounds poor adjusters’ experience of their appearance can also result in shame – a sense of unacceptable inadequacy with profound negative emotional repercussions. Shame extends far beyond embarrassment, to feelings of disgrace. This impacts not only upon the individual’s self-regard but also motivates their behaviour, affecting their interactions and having serious implications upon their quality of life (Gilbert et al., 1994). Shame and depression are associated with negative subjective appearance evaluation, defined and reinforced by both the individual and others.

It is the social nature of appearance – an externalised representation of self – that empowers the perceived response we receive to our appearance with significant influence over our sense of self-worth. Correspondingly, increased levels of anxiety have been demonstrated in relation to appearance issues (see Rumsey et al., 2002).

This appearance anxiety stems from both fear of negative evaluation by others and associated difficulty managing social interactions, and can often manifest as both subtle and more overt social avoidance.

Outcome measures

Given the diversity of outcomes associated with poor and good adjustment, we are left with difficulties in measurement and assessment. Generic anxiety, depression, or mood measures risk missing critical aspects of the spectrum of adjustment issues related to appearance.

Measures designed to assess ‘body image’ are largely inappropriate, having been designed around issues of weight and size, predominantly in women only general population or college samples.

In order to develop a new measure that was sensitive to issues around appearance in a clinical visibly different population, the Derriford Appearance Scale (Carr et al., 2004) was created, based on interview responses of plastic surgery outpatients. It is applicable to appearance concern both in medical settings (including plastic surgery and burns) and the general population. It comprises a composite measure that includes aspects of self-reported thoughts, feelings and behaviour to reflect the degree of distress and dysfunction around appearance. The development and validation of these instruments has supported our contention that the key issues in adjustment are around social avoidance and distress, fear of negative evaluation, and internalised and externalised shame.
Explanations and models of adjustment

Typically, models in this area have been descriptive and derived observationally, rather than being theoretically grounded. Consequently, the degree of explanatory power that they offer has been limited. We see three stages in the development of understanding: descriptive demographic observations, intuitive explanations, and psychological explanations.

Descriptive demographic observations: Age and sex

Appearance research predominantly suggests that women typically report appearance concerns more frequently, and to a greater level of distress than do men. This is the case in both the general and clinical populations with visible differences (e.g. Harris & Carr, 2001). It is likely that this reflects both an internalisation of appearance being culturally valued more in women than men, and fewer social roles with no appearance component open to women than men. However, the focus of concern differs between the sexes; it is important to recognise that there are consistently more female participants in appearance research potentially biasing what we have come to constitute as ‘appearance difficulties’. Regardless of numbers, men can experience significant appearance concerns and deserve acknowledgement and aid.

The role of age and consistency of appearance adjustment across the lifespan is still debatable. Late adolescence to early adulthood appears to be a period of increased appearance salience and concern – possibly due to the increased importance of relationships during this time, in combination with dramatic physical change.

It has been suggested that as our view of ourselves becomes more stable and consistent through ageing, we may find it easier to accept our appearance (Rumsey & Harcourt, 2004). However, appearance concerns may persevere regardless of age (e.g. Harris & Carr, 2001; Lansdown et al., 1991), suggesting that it is not only the stabilisation of the self-concept that is of importance, but also the form and extent to which these features stabilise.

In order to properly understand age and sex differences in adjustment in visible difference, we need to move beyond observation and speculation, and place these notions in a more coherent theoretical context.

‘Intuitive’ explanations – Location and severity

The location of a visible difference relates to appearance concern less directly than might be expected. Difference of visible features (e.g. hands or face) can cause immediate concern because they are exposed. However, this is not necessarily greater than distress associated with less visible locations. Everyday visibility can at least provide individuals with a predictable social world, in which their appearance is observed and (successfully or otherwise) dealt with.

A keloid scar – concealment of areas of concern that will eventually be revealed can cause problematic effects on adjustment and intimacy

A body part that is exposed less often (e.g. on the torso) can be problematic for other reasons. Models of secrecy (e.g. Smart & Wegner, 1999) have suggested that concealment of areas of concern that will eventually be revealed cause equally problematic effects on adjustment and intimacy. Our own data demonstrate that levels of distress in those with ‘hidden disfigured’ body parts to be as great as those with more obvious disfigurements (Carr et al., 2004).

Of the ‘intuitive’ explanations, the extent of the physical severity is most often predicted to be associated with distress. However, no relationship between objective severity and adjustment has been demonstrated in studies of those with a variety of conditions including psoriasis (Fleischer et al., 1996), vitiligo (Thompson et al., 2002), or craniofacial disfigurement (Sarwer et al., 2001).

Recent work with a range of patient populations has implicated subjective (rather than objectively rated) severity as being critical in adjustment (Moss, 2005;
Ong et al., 2007), and has also shown that objective and subjectively rated severity are not closely correlated. This is consistent with a standard cognitive behavioural approach, rather than being the outside world which is the cause of difficulties, the subjective appraisal and related cognition are most associated with adjustment.

**Psychological explanations:**

**Social skills and the self-concept**

That which is ‘intuitively correct’ is often challenged by empirical evidence. Of the many potential psychological approaches to further understanding of adjustment to disfigurement, the most widely cited are those around social skills and the self-concept.

The importance of social interaction and social support for the maintenance of positive appearance adjustment has been illustrated in a range of studies (e.g. Kleve et al., 2002). Individuals who are lacking in social skills, are less likely to have access to the support networks and social exchange that is necessary for good mental health.

Social skills training can lead to more positive adjustment (e.g. Robinson et al., 1996), reducing social distress and anxiety. What is less clear is the mechanism by which this operates. Robinson et al. contend that it is through facilitating individuals to elicit more positive feedback from others in social interactions, thus developing a more positive sense of self.

But this essentially symbolic interactionist approach has been called into question. There is good evidence that rather than being passive interpreters of social feedback, we actually construct versions of social feedback consistent with our self-view (Kenny & DePaulo, 1993). That is, those individuals who have a positive view of themselves will preferentially attend to and recall positive feedback and more crucially interpret ambiguous feedback in a positive way. Social skills training in this population may, in part, operate through a process of enhancing self perception.

Self-schema explanations for body image concerns are widely used within non-clinical populations. Some use the
notions of body image investment, evaluation, and affect (Cash & Labarge, 1996), where investment is both cognitive and behavioural (the extent to which individuals prioritise body concerns in thoughts and actions), evaluation is a cognitive, comparative process against personal standards and affect is an emotional association with the body. Cash argues that only by understanding these together can body image and body image disorders be understood.

Based on a synthesis of models of self-concept organisation from a social-cognition perspective, Moss and Carr (2004) have demonstrated that those who struggle to cope with a different appearance have more negative personal appearance information within their self-concept, and also organise it differently compared with those who are better adjusted. Specifically, appearance information is more central, more compartmentalised, and embedded in a more complex self-concept organisation. Centrality is essentially the extent to which, within a multifaceted self-concept, appearance information is present in those aspects of the self which an individual feels are closer to their ‘core’ identity.

Appearance information is thus more salient, and more likely to form part of the working self-concept. Compartmentalisation is the extent to which various aspects of the self also include non-appearance information. The inclusion of non-appearance information in self-aspects can be a protective factor when appearance is negatively evaluated. Complexity is the extent of the self-concept, and also the extent to which different aspects of the self have overlapping and/or independent content. Depending on whether the content of the self-concept is evaluated positively or negatively, complexity can act as a protective or vulnerability factor. Those having difficulty in relation to adjustment to their appearance are those whose complex self-concept contains large quantities of negatively rated appearance information.

**Profound questions ahead**
The movement from intuitive explanations to more theoretically sound approaches offers potential for design of more meaningful interventions, and for posing profound questions about the nature and causes of good and poor adjustment. Future research will support interventions by examining the social and familial origins of appearance self-concept vulnerabilities and understanding the outcomes of surgery. We are now in a position to prospectively investigate not only changes levels of adjustment through surgery, but the psychological processes by which individuals differ in the benefit they receive.

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**Ben Rosser** is with the Centre for Appearance Research, University of the West of England
Benjamin2.Rosser@uwe.ac.uk

**Tim Moss** is with the Centre for Appearance Research, University of the West of England
tim.moss@uwe.ac.uk