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Physical and psychological correlates of appearance orientation

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Abstract

Objectification theory posits that the sexualization of women in our culture socializes them to 'self-objectify' — that is, to place considerable emphasis on their appearance and to have diminished confidence in competence-related activities. Recent studies have found that self-objectification is associated with a number of negative consequences for women such as symptoms of disordered eating, body shame, and poor math performance. The present study is the first to consider both physical and personality correlates of self-objectification. In a sample of young women, we investigated, using multiple regression procedures, whether certain physical and personality traits would predict the variance in a measure of appearance orientation. We found that narcissistic and neurotic traits were positively related to the dependent variable, and that women who had higher facial-attractiveness ratings were also more appearance focused, but only if they had low perfectionism scores. Results are discussed in the context of expectancy effects on personality development.

1. Introduction

There is abundant evidence that the visual and evaluative scrutiny of the female body is a fundamental feature of male heterosexuality (Buss, 1994; Mazur, 1986). It is also clear that this behaviour contributes, in large part, to the tendency for women, more than men, to be viewed and treated as sexual objects in our culture (see Fredrickson & Roberts, 1997). There is less agreement, however, on the reasons for this sex-biased behaviour. One popular viewpoint is that because certain physical characteristics of the female advertise her health and fertility — that is, her ability to bear live children — these have evolved as the pre-eminent influences in mate selection for the male. Consequently they are the features that he has learned to regard as sexually and aesthetically pleasing (Barber, 1995; Buss, 1994).

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It has become very clear that social benefits — beyond those related to reproduction — accrue to individuals who are physically attractive. Not only is it believed that physically attractive individuals possess more desirable personal traits, such as greater warmth, intelligence, and dominance, but they are offered assistance more readily, secure better jobs, and generally wield more influence than their less attractive counterparts (see Berscheid & Walster, 1974; Feingold, 1992 for reviews). Moreover, these effects appear to be more salient for women because attractive women consistently receive higher ratings than men (by both male and female judges) on a number of desirable qualities such as sociability, good character, and mental health (Feingold, 1998).

In recent years, some have moved beyond providing explanations for the sexualization of women to studies that have examined the psychological consequences of this behaviour for women. An appealing theoretical framework within which to consider these issues has been presented by Fredrickson and Roberts (1997). They have proposed that sexualization serves to socialize women, from an early age, to *self-objectify*. That is, because of the manner in which women are regarded in our society, they learn to see themselves primarily as objects designed for visual inspection and assessment. The result is a heightened focus on grooming and other image-enhancing behaviours, and a diminution in their confidence in activities other than those related to appearance. We see this attitude both reflected in, and promoted by, the media. For example, it was found that articles offering "self-improvement" suggestions in female teen magazines focused almost entirely on self-beautification rather than non-appearance factors such as identity development (Evans, Rutberg, Sather, & Turner, 1991). There is also a deeply entrenched and popular belief that competence and attractiveness in women are inversely related — a fact that is aptly demonstrated by a recent study. A female job applicant was rated by judges as significantly more capable, and assigned a higher starting salary, when she was depicted without cosmetics than when she was depicted wearing cosmetics (Kyle & Mahler, 1996).

A basic tenet of objectification theory is that there is considerable variability in the degree to which women self-objectify. Consequently self-objectification has been conceptualized as a relatively stable individual difference trait. To date, research has focused on the psychological and experiential *consequences* of sexual objectification. For example, in studies of college-aged women, self-objectification was positively and significantly related to heightened body shame and to symptoms of disordered eating (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Noll & Fredrickson, 1998). It was also related to diminished math performance in women but not men — a finding which was consistent with the authors' prediction that self-objectification consumes considerable mental and emotional resources (Fredrickson et al., 1998). Fredrickson and her colleagues acknowledge that many elements will influence the degree to which individuals self-objectify, but no systematic research has yet been done to identify any of these factors. The purpose of the present study was to examine this issue in a preliminary way by investigating whether certain physical and personality characteristics account for the variability in women's focus on their appearance. Previous research has indicated that appearance orientation is positively correlated with body surveillance — that is, viewing one's body as an outside observer (McKinley & Hyde, 1996). Although correlational research cannot establish causality, the discovery of associations among factors is an important first step.

As physical attractiveness is a highly admired attribute, we can assume that beautiful women experience more evaluative gazing and greater sexualization than less attractive women. We

reasoned, therefore, that they would also be more prone to self-objectification than their less attractive counterparts. Certain core personality factors are also likely to contribute to the tendency to self-objectify. In this study, we have focused on three particular personality constructs because of their aetiological significance in related body-image research.

Numerous studies have found that neuroticism [N] (a biologically-based and higher-order personality trait) is the single strongest psychological correlate of poor body image, low self-esteem, and general negative affectivity (see Claridge & Davis, 2000, submitted for a review). Research evidence indicates that high N participants react more strongly to a wide variety of arousing or stressful stimuli and return to baseline states more slowly than low N participants (Eysenck & Eysenck, 1991). Because neuroticism reflects worry, anxiousness, and emotional sensitivity, we hypothesized that individuals with this temperamental predisposition would also be more vulnerable to the sexualization process than their more stable counterparts and, therefore, more likely to self-objectify.

Although earlier measurements of perfectionism viewed it as a unitary trait, recent theoriests have shown that perfectionism is most appropriately examined as a multidimensional construct that includes both self-imposed expectations of perfection and success, as well as those imposed by those around us. Research has also indicated that high perfectionism is a central feature of many psychological disturbances, including depression and eating-related disorders (Bastiani, Rao, Weltzin, & Kaye, 1995; Blatt, 1995; Slade, 1982). These findings mesh with evidence that perfectionism correlates positively with weight preoccupation and body dissatisfaction among young women in the general population (Hewitt, Flett, & Ediger, 1995; Minarik & Ahrens, 1996). We propose that women who are goal directed and who set high personal standards are also more likely to conform to social expectations. In our image-conscious culture, they are therefore more likely to internalize a concern with their physical appearance than those who are less perfectionistic. Women for whom many, rather than few, roles (the ''superwoman'') were important for their sense of self-worth, reported a greater number of eating disorder symptoms (Timko, Striegel-Moore, Silberstein, & Rodin, 1987).

Finally, women's attentiveness to their appearance has often been viewed as a demonstration of their vain and narcissistic self-interest. However, some have pointed out that because of the advantages of being physically attractive, the use of appearance-enhancing behaviours are actually highly adaptive coping strategies employed by women to improve their economic and social prospects (see Fredrickson & Roberts, 1997). Because of the potential relevance of these issues, narcissistic personality characteristics were also examined in the statistical analysis.

2. Method

2.1. Participants

One hundred and two White women were recruited from the campus of a large Canadian university by posters requesting volunteers to take part in a ''short psychology study''. Their mean age was 21.46 years (SD = 3.49), and their mean Body Mass Index (weight [kg]/height [m^2]) was 23.23 (SD = 4.89).

2.2. Measures

Appearance Orientation was assessed by the 12-item Appearance Orientation subscale of the *Multidimensional Body-Self Relations Questionnaire* (Cash, 1994). High scorers place greater importance on how they look, and they engage in more grooming behaviours to manage their appearance. This scale is similar to the *Self-Objectification Questionnaire* (Fredrickson et al., 1998) as it reflects the degree of concern respondents have with their appearance without including an evaluative component of how they appraise their appearance.

Facial Attractiveness was operationally defined as the mean of 8 judges' (4 females between the ages of 23–31 years, and 4 males between the ages of 24–30 years) ratings of Polaroid photographs taken of each participant. Ratings were given on a scale of 0–10, to the nearest 0.5. With the participant facing the camera, two photographs were taken at a fixed distance of 3 feet from the camera — a distance that provided a head and shoulders image. For one picture, the participant was asked to smile, and for the other she was asked not to smile. In each photo, a black gown with a high neckline was worn in order to remove the possible influence of clothing and jewellery on the judges' ratings.

The judges were told that they should examine all the photographs before beginning their ratings in order to become familiar with the quality of Polaroid photographs. They were instructed to use the value "5" to rate a face that they considered "average" (i.e., not attractive or unattractive), and to use that as the standard from which to move up or down the scale when they assigned a rating to each pair of photographs. They were also told to assume that facial attractiveness, like most other physical variables, would be more or less normally distributed, and so they would expect to find many more observations in the middle range than ones at either extreme.

Narcissism was assessed by *The Narcissistic Personality Inventory* [NPI] (Raskin & Hall, 1979). This is a 40-item, forced choice questionnaire whose items are based on the diagnostic criteria, as defined by DSM-III, for Narcissistic Personality Disorder. A factor analysis of the NPI (Raskin & Terry, 1988) identified seven factors: authority, exhibitionism, superiority, vanity, exploitiveness, entitlement, and self-sufficiency. The reliability and validity of the NPI has been established in clinical (e.g., Priftera & Ryan, 1984) and non-clinical samples (Emmons, 1984; 1987; Raskin & Hall, 1981). Although there are a number of scales that have been developed to assess narcissism, this is the most commonly used, particularly in non-clinical research. Because some of the subscales have relatively few items, and because they tend to be moderately to highly intercorrelated, our analyses will employ, as is often done, the total NPI score (e.g. Davis, Claridge, & Brewer, 1996; Eyring & Sobelman, 1996; Smalley & Stake, 1996).

Neuroticism was assessed by the 24-item neuroticism-stability (N) scale of the *Eysenck Personality Questionnaire-Revised* (Eysenck & Eysenck, 1991). This is a measure of emotional lability or reactivity and the degree to which individuals are nervous, easily made anxious, and preoccupied by things that might go wrong.

Perfectionism was assessed by the 45-item *Multidimensional Perfectionism Scale [MPS]* (Hewitt & Flett, 1989). This questionnaire comprises three low to moderately correlated subscales. The items of the *Self-Oriented [SOP]* subscale reflect self-imposed expectations of perfection, whereas *Other-Oriented [OOP]*, and *Socially-Prescribed [SPP]* perfectionism subscales reflect the perception that expectations of perfection are being imposed on oneself by external forces — either other individuals or society in general.

2.3. Procedure

When participants were recruited for the study, they were not aware that they would be asked to have their photographs taken. After arriving at the laboratory and giving written informed consent, each participant completed the questionnaire package, had her height and weight measured, and was paid a small sum for her participation. At this point, the experimenter mentioned that a separate study was being conducted in our laboratory and that the researchers were attempting to collect a large number of photographed faces in order to study "impression formation". Each participant was invited to take part and to have her picture taken. She was also offered an additional small stipend. Of the eligible participants who completed the first study, only three declined to take part in the second study. This paradigm gave us confidence that the questionnaire responses were not biased by the knowledge that each participant was going to have her photograph taken.

3. Results

Table 1 lists the means and standard deviations for all variables used in the analyses. For the personality variables, these are very similar to statistics published in other studies with comparable samples (e.g., *Appearance Orientation*: Cash, 1994; *Narcissism*: Davis, Claridge, & Cerullo, 1997a; Raskin & Terry, 1988; *Neuroticism*: Eysenck & Eysenck, 1991; *Perfectionism*: Hewitt, Flett & Ediger, 1995; Hobden & Pliner, 1995).

A multiple regression analysis was used to test the combined contribution of narcissism, neuroticism, perfectionism, and objective ratings of facial attractiveness on appearance orientation by entering these together as independent variables in the model. As indicated by the consistently low values obtained for the variance inflation factor, multicollinearity among the independent variables was not a problem in this analysis.

Results indicated that neuroticism and narcissism predicted the criterion variable, in the positive direction, after accounting for all other variables in the model. However, contrary to expectation, none of the perfectionism subscales, nor facial attractiveness, related to appearance orientation. A summary of these results is presented in Table 2.

Table 1
Means and standard deviations of all variables used in the analyses

Variable	Mean	Standard deviation
Appearance Orientation	3.60	0.56
Facial Attractiveness	5.00	1.11
Narcissism	15.36	7.25
Neuroticism	14.88	5.09
Self-Oriented Perfectionism	73.63	15.18
Other-Oriented Perfectionism	59.00	12.77
Socially-Prescribed Perfectionism	55.11	15.28

Table 2
Multiple regression analysis with *Appearance Orientation* as the dependent variable showing the full model main effects

Variable	Parameter Est.	SE	$t(H_0)$	p	VIF
Intercept	2.47	0.40			
Facial Attractiveness	0.06	0.05	1.29	0.1989	1.08
Neuroticism	0.04	0.01	2.84	0.0056	1.44
Narcissism	0.03	0.01	3.14	0.0023	1.28
Self-Oriented Perfectionism	−0.005	0.004	−1.02	0.3116	1.56
Socially-Prescribed Perfectionism	−0.002	0.004	−0.35	0.7300	1.55
Other-Oriented Perfectionism	0.005	0.005	1.03	0.3082	1.38
$R^2 = 0.17$					

At this point we decided to explore the possibility that facial attractiveness interacted with one of the personality variables in predicting appearance orientation. To test this, we entered in the regression model, together with the main-effect variables, an interaction term for facial attractiveness and each of the personality variables. We found a statistically significant interaction of facial attractiveness and self-oriented perfectionism. Narcissism and neuroticism also remained as significant main effects.[1] Table 3 presents a summary of this regression model including only the significant main effects and the significant interaction term.

A plot of the facial attractiveness×self-oriented perfectionism interaction can be seen in Figure 1. Here the four regression lines illustrate the relationship between self-oriented perfectionism and appearance orientation, at different levels of attractiveness. It can be seen that appearance orientation increases as attractiveness ratings increase — that is, as hypothesized, attractive women report being more focused on their physical appearance than do their less attractive counterparts. However, this relationship only obtains at low to moderate levels of perfectionism. As self-oriented perfectionism increases, the relationship between attractiveness and appearance orientation is systematically eroded so that at relatively high levels of perfectionism differences in attractiveness do not influence appearance orientation.

Table 3
Multiple regression analysis, with *Appearance Orientation* as the dependent variable, showing only the significant main effects and interaction terms in the model

Variable	Parameter Est.	SE	$t(H_0)$	p
Intercept	−1.90	1.32		
Facial Attractiveness	1.004	0.27	3.72	0.0003
Neuroticism	0.03	0.01	2.92	0.0044
Narcissism	0.03	0.01	3.41	0.0009
Self-Oriented Perfectionism	0.06	0.02	3.24	0.0016
Self-Oriented Perfectionism×Facial Attractiveness	−0.01	0.003	−3.51	0.0007
$R^2 = 0.26$				

[1] Given that body size might also play a role in influencing appearance orientation, the model was refit including Body Mass Index [weight(kg)/height(m^2)], derived from measured height and weight, as an additional independent variable. It was not a significant predictor, nor did its presence in the model change the size or significance of the parameter estimates for the other independent variables or the interaction term.

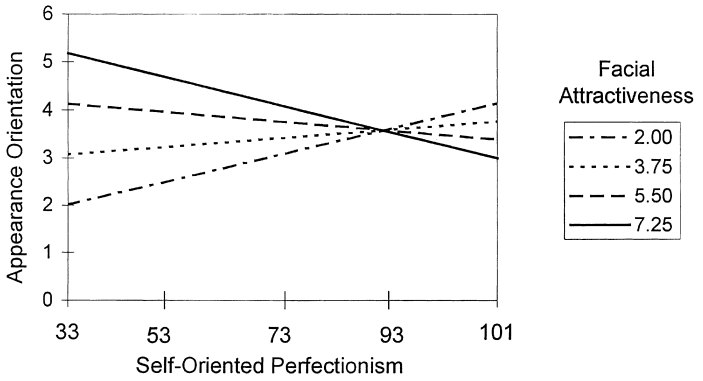

Fig. 1. Fitted Appearance Orientation as a function of Facial Attractiveness and Self-Oriented Perfectionism.

Table 4
A matrix of pairwise correlation coefficients among variables[a]

	AO	FA	NAR	N	SOP	OOP	SPP
AO		0.16	0.27*	0.16	0.05	0.17	0.06
FA			0.21	−0.13	0.09	0.12	−0.12
NAR				−0.31*	0.18	0.28*	−0.03
N					0.19	0.02	0.46*
SOP						0.48*	0.46*
OOP							0.25
SPP							

[a] AO = Appearance Orientation; FA = Facial Attractiveness; NAR = Narcissism; N = Neuroticism; SOP = Self-Oriented Perfectionism; OOP = Other-Oriented Perfectionism; SPP = Socially-Prescribed Perfectionism; * = < 0.01.

According to the procedures recommended by Aiken and West (1991), *post hoc* probing of the perfectionism × facial attractiveness interaction was carried out by simple slope analysis. It was found that at the levels of attractiveness illustrated in Figure 1, the slopes defining the relationship between perfectionism and appearance orientation (holding the other independent variables constant) were significantly different from zero ($p < 0.05$).

Finally, Table 4 presents a matrix of all pairwise simple correlations among the variables used in the above analyses. There is very little intercorrelation among the variables except for the expected low to moderate relationships among the perfectionism subscales. It is noteworthy, however, that physical attractiveness was not correlated with any of the personality variables. Of additional interest is the observation that neuroticism was negatively correlated with narcissism.

4. Discussion

We predicted that a proportion of the variance in appearance orientation would be explained by a linear function of both physical and psychological characteristics. With respect to the former, our results indicated, as hypothesised, that women with attractive faces place greater

emphasis on their appearance than do their less attractive counterparts, but only at relatively low levels of self-oriented perfectionism (SOP). As described earlier, objectification theory provides one explanatory mechanism for understanding the relationship between attractiveness and focus on appearance. Women who are attractive are more likely to be the subject of visual scrutiny and evaluation and, therefore, are more likely to self-objectify.

A regression plot of the attractiveness×SOP interaction (see Figure 1) has indicated that as SOP scores increase, the influence of attractiveness on the dependent variable operates in opposite directions. Very attractive women become less focused on appearance as SOP increases, whereas unattractive women become more focused. The latter association seems logical; the former is more difficult to explain. One possibility is that because high SOP women tend to set high standards in most aspects of their lives, those who are also beautiful can afford to place a lower priority on their appearance (and perhaps more on non-appearance pursuits) than can high SOP women who are less attractive.

Another interesting finding in our study was that narcissism was positively related to appearance orientation, independent of the other variables in the model. Two matters deserve consideration here. The first concerns the definition and measurement of narcissism. It has recently been argued that narcissism is best conceptualized as a continuum of self-functioning with the healthier aspects of the construct anchoring one pole and the more pathological aspects, the other (Watson, Hickman & Morris, 1996). As operationalizations of narcissism move from the maladaptive end to the more adjusted end they are more likely to predict good self-esteem and lower personal shame. In the present study, narcissism was assessed by the NPI. Since the development of this scale, considerable evidence has demonstrated that its items tend to reflect the more adaptive aspects of narcissism because it correlates positively with a number of traits that are indicative of good psychological functioning such as body satisfaction and good self-esteem (see Davis, Claridge, & Cerullo, 1997b; Watson et al., 1996). Based on this association it appears that high appearance orientation is related to psychological characteristics associated with good adjustment.

On the other hand, and in accord with the tenets of objectification theory, Miller (1992) has pointed out other important aspects of narcissism. He has explained that there are many sources of self-affirmation available to all of us; these range along a continuum from those that risk almost no interpersonal vulnerability to those that require a great deal of interpersonal vulnerability. At the low risk end of this dimension are activities related to the physical self (e.g., appearance-related activities). As these require little if any interpersonal interaction, they tend to be overused in self-esteem regulation by the narcissist. Although these pursuits may have *short-term* benefits, they are likely to be maladaptive in the long term *and* if taken to excess because, in the process, individuals tend to neglect the development of competence in other sources of self-fulfilment such as work, hobbies, family, and friendships which are potentially more lasting. This point is especially relevant to the argument presented by Fredrickson and her colleagues that self-objectification consumes valuable energy and resources that could be directed to other pursuits in a person's life, and a more balanced lifestyle (Fredrickson & Roberts, 1997).

Finally, and not unexpectedly, neuroticism was positively related to appearance orientation, which supports evidence that emotionally reactive women are more likely to perceive and respond to social cues than those with low levels of this trait. In this context, the deleterious psychological consequences of self-objectification (see Fredrickson et al., 1998; Noll & Fredrickson, 2000, in press) appear to be exacerbated in high N women.

In conclusion, this study has identified certain factors that may affect why some women more than others attach great importance to their appearance and assiduously engage in behaviours to enhance their physical selves. Fredrickson and her colleagues have demonstrated that, in general, this trait is higher among women than among men, and they have argued that this occurs largely because of the pervasive manner in which women's bodies are observed, evaluated, and potentially sexualized in our culture. Our data have shown that both narcissistic and neurotic traits are positively related to appearance orientation. In addition, physically attractive women are more prone to focus on their appearance than those who are less attractive, but only when they exhibit low to moderate levels of self-oriented perfectionism. Despite the correlational nature of this study — and therefore our inability to establish firmly the direction of causality — it is nevertheless reasonable to assume that core personality factors and physical characteristics can influence the development of traits, such as self-objectification, that are essentially learned. However, future research in this area would benefit from studying these issues longitudinally and from a developmental perspective.

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