Effects of Cosmetics Use on the Physical Attractiveness and Body Image of American College Women

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ABSTRACT. Thirty-eight American female college students completed several body-image measures and were photographed while wearing their typical facial cosmetics and following the removal of their makeup, in a counterbalanced within-subject experimental design. Results indicated more positive body-image cognitions and affect in the cosmetics-present than the cosmetics-absent condition. The more makeup typically worn by the subject, the greater the body-image differences between the two cosmetics conditions. Sixteen peer judges rated the attractiveness of the women in either the cosmetics-present or the cosmetics-absent photograph. Male judges were less favorable when the women were cosmetics free; female judges were not differentially affected. Findings are discussed in the context of a dynamic state-trait perspective that physical appearance is not simply a fixed, immutable attribute, but rather is altered by individuals to manage and control their self- and social images.

HISTORICALLY, RESEARCH ON THE PSYCHOLOGY of physical appearance has focused primarily on effects of physical attractiveness (PA) as a static or fixed attribute of individuals (cf. Cash, 1981; Hatfield & Sprecher, 1986). Unfortunately, this dominant approach ignores the fact, among others, that individuals often actively control and modify their physical appearance and physical aesthetics across situations and within relatively brief periods of

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time. They gain and lose weight, and they vary their grooming—clothing, hairstyles, and, largely among women, use of facial cosmetics. Such grooming variations between and within persons indeed influence perceived PA as well as inferred personality characteristics (e.g., Brown, Cash, & Noles, 1986; Cash, 1981; Graham & Kligman, 1985; Kaiser, 1985; Solomon, 1985).

Although the literature is by no means voluminous, researchers have begun to examine the psychosocial correlates and consequences of cosmetics use. Cash (1987, 1988) has reviewed the available research evidence and, from a self-presentational perspective, has argued that cosmetics use specifically and grooming behaviors in general function to manage and control not only social impressions but also self-image (e.g., body image, self-perceptions, and mood states). On the social perceptual side, for example, Graham and Jouhar (1981) compared social judgments about women preselected as average in PA who were photographed without cosmetics or with professionally applied makeup. In the eyes of both male and female raters, the cosmetic make-over enhanced PA and generally produced more favorable personality attributions. More recently, Cox and Glick (1986) examined how several average-looking women were perceived socially when cosmetics free versus how they were perceived after a professional make-over. They found that although the cosmetics manipulation per se exerted no reliable effects on perceived attractiveness, raters' judgments of the amount of cosmetics did correlate positively with attributions of PA, femininity, and sexiness.

On the self-perceptual side, several mostly correlational studies suggest a link between cosmetics use and a more positive body image and feelings of social confidence and effectiveness (e.g., Cash & Cash, 1982; Cash, Rissi, & Chapman, 1985; Theberge & Kernaleguen, 1979; Wright, Martin, Flynn, & Gunter, 1970). The control of facets of self-image (e.g., body-image experiences) is posited to be a key motivator of the self-management of appearance (Cash, 1987; Cash & Horton, 1983). If this is so, the effects of cosmetics use on self-image is an important topic for experimental research.

Two purposes of the present studies were to examine experimentally the effects of self-applied cosmetics, as they are typically used, on (a) peers' social judgments of women's PA and (b) the cognitive and affective aspects of the women's body image. A third purpose was to consider whether the magnitude of such body-image effects is related to the amount of cosmetics typically worn.

Method

Subjects

Thirty-eight female college students at a university in the southeastern United States were recruited from introductory psychology classes during the spring
of 1986. They earned extra credit for participation in the research. Subjects ranged in age from 18 to 27 years ($M = 19.6$); 63% were White, 32% Black, and 5% Asian. Only women who indicated they used some facial cosmetics at least on occasion were eligible. Volunteers were asked to bring their makeup kits to their individually scheduled appointments for the study, which was described as a consumer products survey.

**Materials and Procedure**

Upon arrival at the research laboratory, each subject was introduced to the project by a female experimenter, who administered several questionnaires including the Cash Cosmetics Use Inventory (CCUI; Cash et al., 1985). The CCUI is a matrix of 15 facial cosmetics products (e.g., foundation, mascara, lipstick, and blush) and 12 situations (e.g., attending class, shopping with same-sex friend, dinner date, and job interview). For each situation the subjects rate on a scale from 0 to 3 the frequency of use for each cosmetics product. The quantity-of-use index is the grand mean of ratings across situations.

Next the subject was led to a private room where a basin, towel, mirror, and cleansing cream were provided. She was asked to remove all facial makeup. Subsequently the female experimenter returned and took a frontal, full-body, Polaroid photograph of the subject in a standardized pose. While the photograph was developing and the experimenter was absent, the subject completed items on an abbreviated Body Parts Satisfaction Scale (BPSS; Hatfield & Sprecher, 1986), after looking at herself in the mirror. The three items pertinent to this study were ratings of satisfaction with overall face, with body (below the neck), and with overall physical appearance. Ratings were from *extremely dissatisfied* (1) to *extremely satisfied* (6). The experimenter returned, presented the subject with her photograph, and asked the subject to rate how physically attractive she believed her peers would perceive her as pictured. Ratings were from *extremely attractive* (1) to *extremely unattractive* (9). This rating was made unobserved by the experimenter.

The subject was instructed to reapply her makeup, using her own products in the manner and amount most characteristic of her. The subject was photographed once more, completed the abbreviated BPSS, and rated her photograph as she believed peers would judge her PA. Finally, the subject was debriefed and asked to sign a nondisclosure agreement that she would not discuss the specifics of the study with classmates and a release form permitting the research use of her photographs for ratings by others. Six of the 38 women refused to permit the use of their photographs.

Because the order of the experimental conditions might influence the results (Cash & Cash, 1982), conditions were counterbalanced. For half of the subjects the cosmetics-absent assessment preceded the cosmetics-present
assessment, as described above. For the other half, conditions were in the reverse order.

The photographs of the 32 consenting subjects were rated by 16 peers (8 male and 8 female) unacquainted with the subjects and unaware of the nature of the study. Each judge rated all photographs in one of the two cosmetics conditions (but not both) using the same 9-point scale of PA that the subjects themselves had used; in other words, no rater saw any woman with and without her cosmetics. Thus, four PA scores, averaged across raters of each sex, were obtained for each subject, reflecting the Cosmetics Condition (present vs. absent) × Sex of Rater (male vs. female) design.

Results

A 2 × 2 (Cosmetics Condition × Sex of Rater) analysis of variance (ANOVA) was conducted to determine effects on social perceptions of subjects’ PA. A significant interaction was found, $F(1, 31) = 17.4, p < .001$. Analysis of simple effects revealed that ratings by male, but not female, judges were significantly affected by the presence versus absence of cosmetics on the women in the photographs ($p < .01$). As shown by the means in Table 1, men judged the subjects as less physically attractive when cosmetics free than when cosmically adorned and as less attractive than the female judges rated subjects in either cosmetics condition.

The second set of analyses were 2 × 2 (Cosmetics Condition × Order of Conditions) ANOVAs on the body-image measures—satisfaction with face, with body, and with overall appearance—and self-perceptions of PA. Significant main effects of the cosmetics condition were found for face satis-

### TABLE 1

Means and Standard Deviations of Dependent Measures for the Cosmetics-Absent and Cosmetics-Present Conditions

<table>
<thead>
<tr>
<th>Dependent measure</th>
<th>Cosmetics absent</th>
<th></th>
<th>Cosmetics present</th>
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<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face</td>
<td>3.6</td>
<td>1.3</td>
<td>4.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Body</td>
<td>3.5</td>
<td>1.3</td>
<td>3.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Overall appearance</td>
<td>3.5</td>
<td>1.1</td>
<td>4.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Ratings of physical attractiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>4.4</td>
<td>1.9</td>
<td>5.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Male peers</td>
<td>5.0</td>
<td>0.9</td>
<td>5.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Female peers</td>
<td>5.5</td>
<td>0.9</td>
<td>5.3</td>
<td>1.5</td>
</tr>
</tbody>
</table>
faction, $F(1, 36) = 24.2$, $p < .001$; overall appearance satisfaction, $F(1, 36) = 37.0$, $p < .001$; and self-rated PA, $F(1, 36) = 31.9$, $p < .001$; but not for body satisfaction ($F < 1$). As shown in Table 1, subjects reported more satisfaction with their faces and with their overall appearance and believed they would be regarded by peers as more attractive when they were wearing their customary makeup than when not.

Significant Cosmetics Condition $\times$ Order of Conditions interactions occurred for two body-image measures: face satisfaction, $F(1, 36) = 8.7$, $p < .01$, and self-rated PA, $F(1, 36) = 6.2$, $p < .05$. However, simple effects analyses indicated that the same significant effect as the main effect occurred for each order and both dependent measures and that the pattern of this interaction was not consistent for the two measures. Therefore, the interactions provided no systematic or substantive qualification of the main effects.

The accuracy of subjects’ beliefs about their PA with and without cosmetics was compared by a $t$ test on discrepancy scores (i.e., self-rated PA minus mean peer-rated PA). The difference between conditions was significant, $t(31) = 3.4$, $p < .01$, and reflected the subjects’ tendency to overestimate their own attractiveness with makeup ($M = +0.32$) and an even greater tendency to underestimate their attractiveness without makeup ($M = -0.63$).

Finally, Pearson correlations were calculated between subjects’ typical amount of cosmetics use (scores on the CCUI) and each of the difference scores between presence versus absence conditions for those body-image measures that were significantly affected by the conditions. Greater cosmetics use was significantly associated with greater effects on satisfaction with overall appearance, $r(36) = .42$, $p < .01$, and on self-rated PA, $r(36) = .37$, $p < .05$, but not on face satisfaction, $r(36) = .03$.

**Discussion**

The results largely confirm our hypotheses that facial cosmetics, as typically self-applied, influence both social perceptions of college women’s PA and the women’s own self-perceptions (i.e., body image). Male peers who judged the photographs of women wearing their typical cosmetics deemed them to be more physically attractive than did men who saw them without their cosmetics. Female peers were equally favorable whether makeup was worn or absent, an unexpected finding inconsistent with that of Graham and Jouhar (1981). Methodological differences between the two studies could be responsible for the inconsistency, particularly since Graham and Jouhar used facial photographs of professionally made over women of uniformly average natural PA, and we used full-body photographs of a random sample of women with and without their typical (and sometimes minimal) cosmetics use. Thus, the physical alteration in the present study was possibly more subtle, and female raters, as experienced users of cosmetics, were able to see through subtle
changes produced by makeup. Certainly, such interpretations are speculative at this point.

Our results provide clear evidence that these college women’s body images were more favorable with their customary cosmetics than without them. The observed body-image differences here included affective satisfaction, not only with the face but also with the overall appearance, and cognitive appraisal of attractiveness to peers. The presence or absence of cosmetics did not alter below-the-neck body-image affect, a null result arguing against an experimental demand artifact in explanation of the body-image effects. With respect to subjects’ cognitive appraisal of their attractiveness to others, on the average women overestimated their own PA with cosmetics and underestimated it when cosmetics free.

The internal correlational analyses of our data indicate that greater affective (i.e., satisfaction with overall appearance) and cognitive (i.e., appraisals of PA) body-image differences with and without cosmetics were associated with the typical use of more cosmetics. Whether this effect reflects a positive compensatory effect of cosmetics use on body image or a negative deteriorative effect of cosmetics withdrawal on body image cannot be determined from the present data. However, these results do support the emerging evidence (cf. Cash, 1987, 1988) that, at least within American society, cosmetics alter both the social stimulus value and the self-perceptions of women. Because self-adornment practices and styles often convey cultural and subcultural symbols and norms (Kaiser, 1985; Morris, 1985), the present results would likely be limited in sociocultural generality.

The narrow view of our results concerns the effects of cosmetics per se. The broader view challenges a pure trait perspective on both the PA variable and the body-image construct. Although persons can be assessed in terms of their average or typical PA, their aesthetics may vary in ways that are controlled or controllable by the individuals themselves and may depend in part on their social self-presentational motivations (Cash, 1987; Cash et al., 1985; Cash & Wunderle, 1987; Daly, Hogg, Sacks, Smith, & Zimring, 1983). Similarly, although individuals do possess a dispositional body image, their thoughts and feelings about their physical appearance may also vary as a function of situational context and mood state (e.g., Cash & Brown, 1987; Cash, Cash, & Butters, 1983; Noles, Cash, & Winstead, 1985). Needed research on physical appearance should consider this self-management aspect of aesthetic states of appearance.

REFERENCES


Received April 11, 1988