The Assessment of Body Image Investment: An Extensive Revision of the Appearance Schemas Inventory

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Abstract: **Objective:** *The Appearance Schemas Inventory (ASI) is a 14-item instrument that assesses body image investment in relation to certain beliefs or assumptions about the importance, meaning, and influence of appearance in one's life. Despite empirical support of the ASI, critical examination evinces several limitations of this assessment. These problems entail the inclusion of explicitly self-evaluative items and social stereotypes, few behavioral items, and a repeated failure to find expected gender differences on the ASI.* **Method:** *We initially constructed a 45-item measure (40 new items plus 5 original items) and administered it, along with the original ASI and other validational assessments, to 603 college students (468 women and 135 men).* **Results:** *The end result was a 20-item revision of the inventory (ASI-R), which included two factors: Self-Evaluative Salience and Motivational Salience. For both genders, the composite ASI-R and its two factors had high internal consistency and were significantly convergent with other pertinent measures of body image and psychosocial functioning. The ASI-R and its two subscales showed significant gender differences, whereas the original ASI did not. We also examined racial differences on the ASI-R, its correlations with body mass, and its unique contribution to the prediction of disturbed eating attitudes.* **Discussion:** *We offer this measure as an improved, psychometrically sound replacement for the ASI. © 2004 by Wiley Periodicals, Inc.* Int J Eat Disord 35: 305–316, 2004.

Key words: *body image assessment; body image investment; body image schemas; Appearance Schemas Inventory-Revised*

INTRODUCTION

Body image is a multidimensional construct that refers to subjective perceptual and attitudinal experiences about one's body, particularly one's physical appearance (Cash &

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The ASI-R may be obtained for a small fee from the first author's web site at www.body-images.com.

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Pruzinsky, 1990, 2002). Cash (1994, 2002a, 2002b) has confirmed that body image attitudes include an evaluative component (self-ideal discrepancies, body satisfaction-dissatisfaction) and an investment component (the importance or cognitive-behavioral salience of one's appearance). Much of the literature on body image focuses on the evaluative dimension and neglects body image investment (Cash & Deagle, 1997; Cash & Pruzinsky, 2002).

A core facet of body image investment concerns appearance-related self-schemas. Markus (1977) elaborated the concept of self-schemas to describe the cognitive structures used to process self-related information. Self-schemas are cognitive generalizations that individuals develop about themselves to organize and guide the processing of self-related information. Self-schemas derive from one's history of personal and social experiences and pertain to various domains within the individual (Markus, 1977; Markus, Crane, Berstein, & Siladi, 1982; Stein, 1996). Physical appearance is certainly one such domain. According to Cash's cognitive-behavioral perspective, contextual events activate schema-based processing of self-evaluative, affect-laden information about one's appearance (Cash, 1996, 2002a). The associated or resultant body image thoughts and emotions, in turn, prompt adjustive, self-regulatory activities (e.g., coping efforts). Therefore, appearance-related self-schemas are central to the understanding of body image experiences in everyday life. Cash and Labarge (1996) developed the 14-item Appearance Schemas Inventory (ASI) to assess this specific construct namely, persons' investment in certain beliefs or assumptions about the importance, meaning, and influence of their appearance in their life. Many published studies, correlational and experimental, as well as clinical and nonclinical, support the reliability and validity of this assessment (Cash, 2000b; Cash, Ancis, & Strachan, 1997; Cash & Labarge, 1996; Cash & Lavallee, 1997; Grant & Cash, 1995; Labarge, Cash, & Brown, 1998; Lavin & Cash, 2001; Strachan & Cash, 2002; Szymanski & Cash, 1995). Moreover, this evidence confirms that the ASI assesses dysfunctional body image investment, as opposed to more adaptive valuing and managing of one's appearance (Cash, 2000b).

Despite empirical support of the ASI, four shortcomings are noteworthy. First, the ASI is intended to assess self-schemas, yet three items refer to social schemas about attractive and unattractive people (e.g., ''Homely people have a hard time finding happiness.'' ''Attractive people have it all.''). Such items do not identify appearance-schematic beliefs about one's self. Rather, they concern stereotypic beliefs about the attractiveness of others and, indeed, form a distinct subscale based on principal components analysis (PCA; Cash, 2000b; Cash & Labarge, 1996). Second, several items explicitly confound body image evaluation and investment (e.g., ''The only way I could ever like my looks would be to change what I look like.'' ''The media's messages in our society make it impossible for me to be satisfied with my appearance.''). Therefore, the dysfunctionality of higher ASI scores may reflect the negative evaluation inherent in such items rather than an overemphasis of one's appearance for self-evaluation. A third weakness of the ASI is the inclusion of few behavioral items, even though body image investment (and schemas) should be manifest in one's actions. Finally, despite evidence that, compared with men, women report more cognitive-behavioral investment in their appearance as well as more evaluative dissatisfaction (e.g., Cash & Pruzinsky, 2002; Cash, Morrow, Hrabosky, & Perry, 2003; Feingold & Mazzella, 1998; Muth & Cash, 1997), the ASI scores of men and women are often comparable (Cash, 2000b). This seems to stem from men scoring higher on social-schema items, whereas women score higher on evaluatively negative self-schema items.

The purpose of the current investigation was to extensively revise the ASI in light of these shortcomings. We constructed new items to sample content from several self-

related domains of the salience of one's appearance, without explicitly assuming a particular body image evaluation. Items were sampled from six conceptual domains of the salience of one's appearance in one's life. With a sample of greater than 600 female and male college students, we administered and systematically evaluated this new pool of items as well as the original ASI. Based on psychometric criteria, we examined the reliability, factorial structure, and validity of both a long and short version of the revised instrument. We evaluated relations with other established measures of body image, selected indices of psychosocial functioning (i.e., perfectionism, self-esteem, and eating disturbance), and personal characteristics (i.e., gender, race/ethnicity, and body mass). Finally, we examined the utility of the ASI-R in combination with body image dissatisfaction in the multivariate prediction of disturbed eating attitudes.

METHOD

Participants

From a large mid-Atlantic university, 603 students volunteered to participate in the current research for extra class credit. A university review board approved the research. Participants responded to posted announcements recruiting persons 18–29 years old. Of these participants, 468 (77.6%) were women and 135 (22.4%) were men. Their mean age was 20.4 and 20.6 years, respectively. For women and men respectively, 58% and 54% were European Americans, 26% and 22% African American, 6% and 8% Asian, 4% and 5% Hispanic, and the remaining 6% and 11% were of other or unspecified ethnicity. Participants' body mass index (BMI $= kg/m^2$) ranged from 16.3 to 52.1 for women ($M =$ 24.0, $SD = 5.4$) and from 13.3 to 43.8 for men ($M = 24.1$, $SD = 3.9$). Approximately 13% of women and 6% of men reported a BMI ≥ 30, reflecting obesity. Most participants were single. Only 8% of women and 3% of men were married at the time of the study.

Procedures and Assessments

After informed consent was obtained, participants completed a battery of standardized measures of body image and psychosocial functioning, as well as a demographic questionnaire. Each participant completed these materials anonymously in a private room and subsequently read debriefing information about the research.

Body-Image Ideals Questionnaire (BIQ)

The BIQ (Cash, 2000a; Cash & Szymanski, 1995; Szymanski & Cash, 1995) is a 22-item measure that assesses self-perceived discrepancies and the importance of internalized ideals on 11 physical characteristics. These are rated first on a 4-point scale to measure perceived incongruities of one's personal ideals for these characteristics and then rated on the importance of these ideals. The BIQ is scored as the mean of the recoded cross-products of the discrepancy $\times$ importance ratings. The internal consistency (Cronbach's alpha) of this measure was .75 for women and .79 for men in the current study.

Body Image Quality of Life Inventory (BIQLI)

The BIQLI (Cash & Fleming, 2002) is a 19-item measure that assesses the reported effects of body image on numerous facets of psychosocial functioning and well-being. A 7-point scale is used to rate the negative-to-positive impact of body image. The internal consistency of the BIQLI in this study was .94 for both genders.

Situational Inventory of Body-Image Dysphoria-Short Form (SIBID-S)

The SIBID-S (Cash, 2000a, 2002c) is an abridged 20-item version of the original 48-item SIBID that evaluates negative body image emotions in various situational contexts. For each item, participants rate the frequency of dysphoric emotions on a 5-point scale ranging from n*ever* to *always or almost always*. The internal consistency of the SIBID-S was .96 for women and .94 for men.

Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3)

The SATAQ-3 (Thompson, van den Berg, Roehrig, Heinberg, & Guarda, in press) is the third revision of this instrument. All items are answered using a 5-point scale ranging from d*efinitely disagree to definitely agree*. Although the SATAQ-3 consists of four aspects of appearance-related media influences, this study used the nine-item general Internalization subscale, which assesses a person's social comparisons with and desires to look like the models and stars on television and in magazines and movies. The internal consistency for this measure was .96 for women and .95 for men.

Perfectionistic Self-Presentation Scale (PSP)

The PSP-V (Hewitt, Flett, & Ediger, 1995; Hewett et al., 2003) is a 27-item measure that consists of three subscales: Perfectionistic self-promotion, which evaluates the presentation of one's self as perfect to others; nondisplay of imperfection, which pertains to a desire not to appear imperfect to others; and nondisclosure of imperfection, which assesses nonadmission of shortcomings to others. Using a 7-point scale, participants rate their level of agreement with each statement. Higher composite scores indicate greater tendencies towards perfectionistic self-presentation. In the current sample, the internal consistency for this composite was .94 for women and .92 for men.

Rosenberg Self-Esteem Scale (RSES)

The RSES (Rosenberg, 1965) is a well-validated, 10-item measure of global self-esteem, which taps overall feelings of self-worth on a 4-point agree-disagree scale. The internal consistency of the RSES was .94 for the women and .95 for the men.

Eating Attitudes Test (EAT-26)

The EAT-26 (Garner, Olmsted, Bohr, & Garfinkel, 1982) is an abridged version of the original 40-item scale, which assesses symptoms and concerns characteristic of eating-disordered populations. The 26-item scale factors include Dieting, Bulimia and Food Preoccupation, and Oral Control. The EAT-26 was scored continuously (rather than clinically) in this study to assess variability across the full range of item responses. The internal consistency of the composite measure was .88 for women and .81 for men.

Construction of the ASI-R

The ASI-R was developed to assess certain beliefs and assumptions regarding one's personal investment in his or her appearance. Items did not explicitly confound evaluative body image (i.e., assume body dissatisfaction) or refer to social schemas (about others' appearance). The revised version incorporated new items, which focused conceptually on the salience of one's own appearance in one's life from six domains: historical salience, attentional and cognitive salience, salience to one's sense of self, behavioral salience, affective salience, and interpersonal salience. From these areas, 40 new items were developed based on their content and face validity. We also included the

14 items of the original ASI to permit comparisons of both versions. All items were rated on a 5-point scale from *strongly disagree* to *strongly agree*.

RESULTS

Of the 14 items from the original measure, 9 were excluded from the revised inventory because they were conceptually troublesome for the reasons described above. Four new items were removed from the 45-item inventory because they were vague in content and/or produced skewed response distributions. This resulted in a 41-item version of the ASI-R.

Initial analyses of the 41-item inventory revealed a high internal consistency (Cronbach's alphas $> .90$), strong convergent validity, and a well-defined factor structure. However, with the pragmatic aim of constructing a shorter, more efficient form, we systematically examined interitem correlation matrices, items' effects on Cronbach's alphas, and the representation and repetition of item content. We culled some items that repeated the themes of more comprehensible or psychometrically acceptable items. When deleting items, however, we ensured that the distinguishing content of the six domains remained represented. As a result, 21 items were eliminated from the 41-item version to produce a 20-item ASI-R. Six of these 20 items are worded in the contraindicative direction and were reverse scored.

PCA

To evaluate coherent components or subscales of the 20-item ASI-R, we conducted a PCA with varimax rotation across both genders. Examination of eigenvalues and the scree plot revealed that the best solution was a two-factor structure[1] with 12 of the 20 items loading on Factor 1 and the other eight items loading on Factor 2. Items were included on a factor of the ASI-R only if the item's loading was $\geq .40$ and unique to that factor. Loadings for Factor 1 ranged from .49 to .74 and from .54 to .72 for Factor 2. The two factors of the ASI-R correlated moderately, that is, .51 for women and .58 for men ($ps < .001$).

The first ASI-R factor assesses the self-evaluative salience of appearance or individuals' beliefs about how their looks influence their personal or social worth and sense of self. Exemplary items include the following: ''What I look like is an important part of who I am.'' ''When I meet people for the first time, I wonder what they think about how I look.'' ''I seldom compare my appearance to that of other people I see'' (reversed); and ''My physical appearance has had little influence on my life'' (reversed). The second ASI-R factor assesses persons' motivational salience of being attractive and managing their appearance. Among these items are, ''Before going out, I make sure that I look as good as I possibly can'' and ''I have never paid much attention to what I look like'' (reversed).

Reliability

The internal consistencies of the overall ASI-R and these two subscales were calculated using Cronbach's alpha. The alpha value of the composite 20-item measure was .88 for women and .90 for men. Reliability of the 12-item Self-Evaluative Salience factor was .82

[1] The same factor structure occurred for the initial 41-item version of the measure. With the 20-item version, we conducted the PCA and verified this structure separately for both genders, recognizing that the sample size for males is less than optimal for this analysis.

for women and .84 for men. Reliability of the eight-item Motivational Salience factor was .90 for women and .91 for men. Therefore, the reliabilities of the ASI-R and its two subscales were quite satisfactory for both genders.

Convergence of the ASI and ASI-R

Pearson correlations were calculated among the ASI, the ASI-R, and the two factors of the revised inventory. The ASI-R and the original 14-item scale correlated significantly for women and men, $r = .76$ ($p < .001$). Among women, the original ASI correlated with the Self-Evaluative Salience factor, $r = .79$ ($p < .001$), and with the Motivational Salience factor, $r = .45$ ($p < .001$). Among men, these correlations were .77 and .53, respectively.

Convergent Validity

Pearson correlations were computed for the ASI-R and its two factors with seven other measures that consist either of various cognitive, affective, and behavioral elements of body image or of personality and psychosocial functioning constructs known to be associated with body image. All correlations for men and women are provided in Table 1. For women, the composite ASI-R and the two factors were positively correlated with three of the four body image measures, including self-ideal discrepancies on the BIQ, body image dysphoria on the SIBID-S, and internalization of media ideals on the SATAQ-3. Although the BIQLI was negatively correlated with the ASI-R and Self-Evaluative Salience factor, it was not correlated with the Motivational Salience factor. For men, the ASI-R and the Self-Evaluative Salience factor were positively correlated with the BIQ, SIBID-S, and SATAQ-3, whereas the Motivational Salience factor only correlated with the SIBID-S. Body image quality of life, however, was negatively correlated with only the Self-Evaluative Salience factor.

Table 1 also provides the bivariate correlations calculated between the ASI-R scales and three psychosocial functioning measures, including self-presentational perfectionism (PSP-V), self-esteem (RSES), and eating attitudes (EAT-26). For women, the ASI-R and both

Table 1. Correlations between the ASI-R scales and measures of body image and psychosocial functioning for men and women

	ASI-R Composite		Self-Evaluative Salience Factor		Motivational Salience Factor	
Measures	Men ($n = 135$)	Women ($n = 468$)	Men ($n = 135$)	Women ($n = 468$)	Men ($n = 135$)	Women ($n = 468$)
Body image						
Body-Image Ideals Questionnaire	.38***	.53***	.46***	.60***	.17	.25***
Situational Inventory of Body-Image Dysphoria	.56***	.67***	.67***	.75***	.25**	.32***
Sociocultural Attitudes Toward Appearance Questionnaire-Internalization subscale	.47***	.64***	.45***	.63***	.38***	.44***
Body Image Quality of Life Inventory	−.09	−.32***	−.24**	−.44***	.15	−.03
Psychosocial functioning						
Perfectionistic Self-Presentation Scale V	.63***	.57***	.64***	.59***	.44***	.36***
Rosenberg Self-Esteem Scale	−.20*	−.40***	−.31***	−.54***	.03	−.06
Eating Attitudes Test-26	.31***	.50***	.37***	.51***	.14	.33***

Note: Continuous rather than clinical scoring of the Eating Attitudes Test-26 was used. ASI-R = Appearance Schemas Inventory-Revised.

*$p < .05$. **$p < .01$. ***$p < .001$.

factors were both positively correlated with PSP and EAT-26 scores. Although the composite scale and Self-Evaluative Salience were negatively related to the RSES, Motivational Salience was unrelated to self-esteem. For men, the PSP-V was positively correlated with the ASI-R and both of its factors, whereas the EAT-26 was correlated with only the composite scale and Self-Evaluative Salience. Self-esteem was negatively correlated with the overall ASI-R and Self-Evaluative Salience, but it was unrelated to Motivational Salience.

Gender Differences

General-linear-model one-way analyses of variance (GLM ANOVAs) were performed to evaluate gender differences on the original ASI, the ASI-R, and its Self-Evaluative Salience and Motivational Salience subscales. Means and standard deviations are provided in Table 2. As hypothesized, women reported significantly higher levels of schematic investment on the ASI-R than did men, $F(1,600) = 17.67$, $p < .001$, partial $\eta^2 = .03$. More specifically, women reported significantly more self-evaluative investment compared with men, $F(1,600) = 22.32$, $p < .001$, partial $\eta^2 = .04$. Women also reported significantly greater levels of motivational salience, $F(1,600) = 4.13$, $p < .05$, partial $\eta^2 = .01$. Reflecting one of the initial concerns that prompted the revision of the assessment, there was no gender difference on the original ASI, $F(1,598) = .54$, ns.

Racial Differences

GLM ANOVAs were also performed to evaluate any differences between Whites and African Americans on the original and revised ASI scales. There were too few persons of other ethnicities to include in the comparisons. Means and standard deviations are provided in Table 2. Compared with White women, African American women reported significantly less schematic investment in their appearance on the original ASI, $F(1,389) = 14.84$, $p < .001$, partial $\eta^2 = .04$; the composite ASI-R, $F(1,391) = 6.74$, $p < .01$, partial $\eta^2 = .02$; and the Self-Evaluative Salience factor, $F(1,391) = 13.96$, $p < .001$, partial $\eta^2 = .03$. However, African American women reported comparable schematic investment on the Motivational Salience factor compared to White women, $F(1,391) = .01$, ns. White and African American men did not differ on the original ASI, $F(1,100) = .54$, ns, or on Self-Evaluative Salience of the ASI-R, $F(1,100) = .83$, ns. However, African American men reported significantly higher overall ASI-R scores, $F(1,100) = 5.60$, $p < .05$, partial $\eta^2 = .05$, but particularly more Motivational Salience of their appearance, $F(1,100) = 16.01$, $p < .001$, partial $\eta^2 = .14$.

Associations with Body Mass

We calculated Pearson correlations to determine the relation between male and female participants' responses to the original ASI and ASI-R and their reported BMI. An

Table 2. Means and standard deviations by gender and race on the ASI and ASI-R

Group	Original ASI	ASI-R Composite	ASI-R Self-Evaluative Salience Factor	ASI-R Motivational Salience Factor
Men	2.53 (.64)	3.20 (.67)	2.96 (.75)	3.57 (.74)
African Americans	2.50 (.62)	3.38 (.62)	2.98 (.78)	3.97 (.59)
Whites	2.40 (.64)	3.05 (.64)	2.84 (.68)	3.37 (.73)
Women	2.57 (.67)	3.47 (.62)	3.30 (.73)	3.71 (.67)
African Americans	2.38 (.60)	3.35 (.57)	3.10 (.74)	3.73 (.64)
Whites	2.66 (.69)	3.53 (.62)	3.39 (.70)	3.72 (.66)

Note: ASI = Appearance Schemas Inventory; ASI-R = Appearance Schemas Inventory-Revised.

inspection of the BMI distributions indicated 10 outliers in which BMI > 40. These values were recoded to 39, in accordance with recommendations by Tabachnick and Fidell (2001). For women, BMI was modestly and positively correlated with responses to items on the original ASI ($r = .13$, $p < .01$) and the Self-Evaluative Salience factor of the ASI-R ($r = .11$, $p < .02$), but was not related to the composite ASI-R or the Motivational Salience factor. For men, BMI was related to neither the ASI nor its factor subscales.

The Prediction of Eating Disturbance

We examined the utility of the ASI-R in the multivariate prediction of disturbed eating attitudes. For men and women separately, we conducted a simultaneous linear regression analysis, entering evaluative body image (the BIQ) and the two ASI-R dimensions in predicting EAT-26 scores. Among men, the equation explained 15.7% of the EAT-26 variance, $F(3,131) = 8.14$, $p < .001$. However, only the Self-Evaluative Salience subscale of the ASI-R accounted for a significantly unique variance ($\beta = .36$, $t = 3.20$, $p < .002$). A comparison of zero-order and partial correlations for each predictor revealed that this ASI-R factor reduced the otherwise significant association between body image evaluation and the EAT-26. Among women, the regression equation accounted for 30.6% of the variance in EAT-26 scores, $F(3,464) = 68.07$, $p < .001$. Each of the three predictors explained significant variation in the EAT-26-BIQ body image dissatisfaction ($\beta = .26$, $t = 5.40$, $p < .002$), ASI-R Self-Evaluative Salience ($\beta = .29$, $t = 5.29$, $p < .001$), and ASI-R Motivational Salience ($\beta = .12$, $t = 2.69$, $p < .007$).

DISCUSSION

The current findings support the reliability and validity of the extensive revision of the ASI, an assessment of individuals' psychological investment in their own physical appearance. We undertook this revision to address what we believe to be conceptual and empirical shortcomings of the original measure. We eliminated items with content that was explicitly self-evaluative or reflected social attitudes rather than self-schemas. We constructed new items by sampling from domains of the salience of one's appearance in one's life, including affective salience, attentional/cognitive salience, behavioral salience, historical salience, salience to one's sense of self, and social salience. Both item and structural analyses produced internally consistent 41-item and 20-item versions of the ASI-R. For practical reasons, we proffer the shorter version, which is psychometrically comparable to the longer one.

The PCA indicated a two-factor structure as the best solution. The first factor assesses persons' self-evaluative salience of their appearance. The content of the 12 items reflects the extent to which individuals define or measure themselves by their physical appearance, which they deem influential in their social and emotional experiences. The second factor consists of eight items that reflect respondents' motivational salience of their appearance or the extent to which they attend to their appearance and engage in appearance-management behaviors. Both factor subscales were acceptably reliable for both genders (Cronbach's alphas > .80) and moderately intercorrelated ($r = .51$ for women and $r = .58$ for men).

Our results confirm the pertinent convergent relation between the ASI-R and other important dimensions of body image and psychosocial functioning. On the composite ASI-R and its Self-Evaluative Salience factor, both women and men with greater sche-

matic investment in appearance experienced significantly larger self-ideal discrepancies (i.e., more body image dissatisfaction), greater internalization of appearance-related media ideals, and more frequent dysphoric body image emotions in a range of situational contexts. For women, a greater self-evaluative salience of their appearance was also associated with a less favorable body image quality of life. With respect to psychosocial functioning, we found that women and men with greater self-evaluative and overall investment in their appearance reported more perfectionistic concerns about how they presented themselves to others, had poorer global self-esteem, and reported more disturbed eating attitudes. These associations support our view that the ASI-R assesses ''dysfunctional'' schematic investment in one's appearance.

The pattern of these relations with the Motivational Salience dimension of the ASI-R revealed less dysfunctionality relative to the Self-Evaluative Salience factor. Correlations were consistently more modest and sometimes not significant. In fact, motivational salience was unrelated to body image quality of life or to self-esteem for either gender. Therefore, valuing and attending to one's appearance and engaging in appearance-management (or grooming) behaviors to appear or feel attractive are not consistently maladaptive. This facet of appearance investment is quite similar to the construct measured by the Appearance Orientation subscale of the Multidimensional Body-Self Relations Questionnaire (Brown, Cash, & Mikulka, 1990; Cash, 2000a), which taps cognitive-behavioral appearance investment that is also less self-evaluatively loaded and less pathognomonic.

One impetus for developing the ASI-R was the lack of expected gender differences on the original ASI. In the current study, we replicated this null result with the original ASI. On the ASI-R, gender differences were found on the overall scale and on its two factors. Women reported more self-evaluative and motivational investment in their physical appearance than men did. Furthermore, evident in the correlations is a generally consistent pattern of stronger associations of the ASI-R with other body image variables and with self-esteem and eating attitudes for women than for men. As hypothesized, not only are women more appearance schematic than men, women's psychological investment in their appearance may be more integrally related to body image experiences and their psychological functioning. The magnitude of the gender difference on the Self-Evaluative Salience factor clearly surpassed that on the Motivational Salience factor of the ASI-R.

In constructing the ASI, Cash and Labarge (1996) did not evaluate racial differences in appearance schematicity, nor have subsequent studies done so. Most research has focused on evaluative body image, finding African American women to be more body satisfied than White women, even at heavier body weights (Celio, Zabinski, & Wilfley, 2002). In the current study, African American women reported significantly less investment in their appearance on the original ASI, the overall ASI-R, and the Self-Evaluative Salience factor than did White women, but there were no differences on the Motivational Salience factor. Therefore, African American and White women were equally motivated to manage their appearance to look nice or be attractive, whereas White women were more invested in their appearance as a criterion of self-evaluation. Conversely, although African American men did not differ from White men on the original ASI and the ASI-R Self-Evaluative Salience factor, they did report higher levels of appearance investment, especially more motivational investment in their appearance. Managing attractiveness was more important to African American than White men, but this was not more self-evaluatively salient to their body image.

Although research consistently has confirmed greater body image dissatisfaction among overweight or obese persons (Cash & Roy, 1999; Schwartz & Brownell, 2002), the current study revealed only modest correlations between the ASI-R and body mass

for women. Heavier women were slightly more likely to regard their appearance as self-evaluatively salient but not more motivationally salient. No reliable associations occurred for men. In general, actual adult body weight was largely irrelevant in persons' psychological investment in their appearance, which serves to exclude body mass as a third-variable explanation of the aforementioned relations with the ASI-R.

A final, important goal of this research was to ascertain the utility of the ASI-R in explaining eating attitudes and behaviors. As indicated above, bivariate correlations confirmed that both self-evaluative and motivational investment were related to more disturbed eating attitudes for women, whereas only Self-Evaluative Salience was significant for men. Our multiple regression analyses confirmed that the latter ASI-R dimension explained men's eating attitudes, overriding the explanatory value of the BIQ index of body image dissatisfaction. Among the women in this study, both self-evaluative and motivational investment in their appearance, as well as body image dissatisfaction, contributed significantly to the explanation of disturbed eating attitudes. These results highlight the importance of appearance investment or schematicity, beyond body image dissatisfaction, in understanding eating disturbances and disorders. Dissatisfaction is important, but the salience or meaning of appearance to one's sense of self may be pivotal, as specified in the 4th Rev. ed. of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association, 2000) for both anorexia nervosa and bulimia nervosa. Surprisingly, few studies of this putative facet of body image exist in research on eating disorders (Cash & Deagle, 1997).

Clinical trials with cognitive-behavioral body image interventions have confirmed reductions in body image investment on the original ASI, as well as improved body image satisfaction and psychosocial functioning (Cash & Lavallee, 1997; Grant & Cash, 1995; Strachan & Cash, 2002). One component of Cash's treatment program is the cognitive modification of body image schemas (Cash, 1997; Cash & Strachan, 2002). Recently, Cash and Hrabosky (2003) included the ASI-R in an outcome study and found that the intervention, consisting of body image psychoeducation and self-monitoring, led to less self-evaluative body image salience, without changes in motivational salience. Therefore, the ASI-R is a promising responsive treatment-outcome measure.

In conclusion, although the original ASI has been empirically well supported (Cash, 2000b), our revised assessment demonstrates strong reliability and validity and effectively addresses the shortcomings of the previous inventory. We believe that the ASI-R is a conceptually ''cleaner'' instrument that measures more accurately cognitive-behavioral appearance investment or schematicity. The distinction between the self-evaluative and motivational salience dimensions is both empirically and theoretically intriguing. Attending to, valuing, and managing one's physical appearance may not necessarily entail a maladaptive orientation to one's body. More clearly dysfunctional is an investment in beliefs that equate one's appearance, its comparison with others, and its potential to affect one's life as integral to one's self-worth.

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