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Interpersonal effects of Appearance-based Rejection Sensitivity

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ABSTRACT

Appearance-based Rejection Sensitivity (Appearance-RS) is the tendency to anxiously expect, readily perceive, and overreact to rejection based on one's physical attractiveness. In the present research, we examined how sensitivity to appearance-based rejection influenced desire for social contact. High Appearance-RS participants wanted to avoid social interaction in general (Study 1) and even close others (Study 2) following appearance-based rejection, but not appearance-based acceptance or rejection based on perceived intelligence. Results of a daily diary study revealed that high Appearance-RS participants showed greater social avoidance on days when they felt sensitive to rejection based on their looks (Study 3). High Appearance-RS individuals therefore overreact to appearance rejection by withdrawing from social interactions. Implications for motivation, interpersonal processes, and clinical disorders are discussed.

1. Introduction

One of the most powerful determinants of interpersonal attraction is physical attractiveness. Physically attractive people tend to be more popular, likeable, and are rated more positively on a variety of dimensions than their less attractive counterparts (Dion, Berscheid, & Walster, 1972; Eagly, Ashmore, Makhijani, & Longo, 1991; Walster, Aronson, Abrahams, & Rottman, 1966). Because first impressions are heavily influenced by attractiveness, people may be especially concerned about how they appear to others in initial social encounters. Indeed, the stereotype of "what is beautiful is good" is particularly potent in the early stages of relationship formation, when people have limited information to go by (Dion et al., 1972; Snyder, Tanke, & Berscheid, 1977). In short, attractiveness plays a key role in impression formation, affecting the quality of social interactions and the development of relationships.

Individuals who anxiously expect to be rejected based on their appearance feel vulnerable in situations in which they could be evaluated based on their looks. The dispositional tendency to anxiously expect, readily perceive, and overreact to rejection based on appearance is known as *Appearance-based Rejection Sensitivity* (Appearance-RS; Park, 2007). This personality processing system is characterized by a dynamic interaction between affect (i.e., anxious concerns) and cognition (i.e., expectations of rejection) based specifically on one's physical attractiveness. The construct was modeled after Downey and Feldman's (1996) more general construct of Personal Rejection Sensitivity (Personal-RS), which reflects anxious expectations of rejection in general, rather than rejection based on a specific characteristic of the individual.

Important differences exist between Appearance-RS and Personal-RS. First, whereas Personal-RS has been linked to childhood experiences of parental abuse, neglect, and exposure to family violence (Feldman & Downey, 1994), Appearance-RS has been linked to experiences of peer conditional acceptance based on appearance and to media influence (i.e., internalization of media appearance ideals and feeling pressured by the media to appear attractive), rather than to parental influence (Park, DiRaddo, & Calogero, 2009). Second, whereas Personal-RS operates across a variety of relationship contexts (e.g., with strangers, friends, family members), Appearance-RS is theorized to play a key role in the early stages of relationship formation with opposite-sex peers in particular, in which appearance concerns are likely to be salient. In fact, many of the items on the Appearance-RS scale assess appearance-rejection concerns in the context of romantic interactions (e.g., first date, blind date, internet dating). Accordingly, one aim of the present research was to examine unique effects of Appearance-RS in predicting responses to appearance-based rejection in novel interpersonal interactions, between members of the opposite-sex. In addition, we examined whether daily fluctuations in sensitivity to appearance rejection might affect people's responses toward others in everyday life.

Individuals with high Appearance-RS filter their social world through the lens of physical attractiveness.[1] Not only do they perceive themselves to be unattractive, but they frequently compare their appearance with others, feel badly about themselves when

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[1] Appearance-RS was measured as a continuous variable and should be viewed in relative versus absolute terms. For brevity's sake, we refer to individuals as having high vs. low Appearance-RS throughout the paper.

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making such comparisons, and show more symptoms of body dysmorphic disorder and eating disorders than those with low Appearance-RS (Park, 2007; Park, Calogero, Young, & DiRaddo, 2009). The link between feeling unattractive and feeling rejected is particularly strong among people with high Appearance-RS. For example, simply reminding high Appearance-RS participants of negative aspects of their appearance led them to feel more alone and rejected than those with low Appearance-RS, or those who were reminded of neutral stimuli (Park, 2007). In addition, high Appearance-RS participants who recalled a time when they were teased about their looks felt more rejected and expressed greater interest in getting cosmetic surgery than those with low Appearance-RS, or those who recalled a time when they received a positive comment about their looks (Park, Calogero, Harwin, & DiRaddo, in press).

The present research extends this literature by examining behavioral preferences following experiences of appearance-based rejection. Specifically, we examined whether feelings of appearance rejection would lead high Appearance-RS individuals to want to withdraw from others as a way of coping with the sting of rejection. We further hypothesized that Appearance-RS, rather than general personality constructs, such as self-esteem, Personal-RS, or social anxiety, would predict desire for social avoidance following appearance rejection.

Although humans are fundamentally social in nature (Baumeister & Leary, 1995), seeking connection with others could result in rejection or failure to acquire the social support or reassurance one seeks. Thus, whereas some people might respond to rejection by wanting to draw closer to others, other people might respond by wanting to avoid social interaction. Accordingly, situations that activate appearance-rejection concerns may lead high Appearance-RS individuals to preemptively withdraw from situations that could make them vulnerable to further rejection. Social situations, in particular, carry a risk of rejection – other people may not be as accepting or reassuring as one would like. Thus, rather than turning toward others as sources of validation and support following appearance rejection, high Appearance-RS individuals may seek to avoid social contact in order to protect themselves from the possibility of further rejection. The experience of appearance rejection in one situation, from one partner, may therefore generalize to a desire to avoid contact with novel others and even close others.

Supporting these ideas, research has shown that people who feel socially excluded often treat new interaction partners with aloofness, avoidance, and hostility, rather than attempt to form social connections with them (Twenge, Baumeister, Tice, & Stucke, 2001). Indeed, people who are sensitive to rejection in general are inclined to perceive rejection in others' behavior and express anger and hostility when rejection has occurred (Ayduk, Downey, Testa, Yen, & Shoda, 1999; Downey & Feldman, 1996). Along these lines, research on self-esteem and responses to self-threat has demonstrated that people with low self-esteem (LSEs) feel interpersonally insecure and chronically worry about rejection (Blaine & Crocker, 1993). Due to their pessimistic interpersonal expectations, LSEs become inhibited, interpersonally cautious, and distance themselves from relationship partners following self- or relationship- threats (Baumeister, Tice, & Hutton, 1989; Heatherton & Vohs, 2000; Murray, Holmes, MacDonald, & Ellsworth, 1998); their relationship insecurities prevent them from seeking closeness and lead them to engage instead in self-protective behaviors following threats (Murray, Holmes, & Collins, 2006).

Similarly, people with social anxiety, who expect negative social evaluations, prefer to avoid social interaction with novel others, for fear that such situations might lead to discomfort and emotional distress (Heimberg, Lebowitz, Hope, & Schneier, 1995; Maddux, Norton, & Leary, 1988). For example, Maner, DeWall, Baumeister, and Schaller (2007) found that socially anxious individuals reacted to rejection by viewing an ambiguous other as threatening and likely to reject them.

Although LSE, Personal-RS, and social anxiety have all been linked to social avoidance, they reflect general personality constructs that may not be especially sensitive to the effects of appearance-based rejection in particular. Because Appearance-RS specifically assesses appearance-rejection concerns, we expected this personality construct to have unique predictive validity in producing the hypothesized effects following appearance rejection. That is, the specific match between domain of rejection sensitivity (appearance) and rejection type (appearance rejection) was expected to influence people's desire for social contact.

Whereas previous research on Appearance-RS used intrapersonal manipulations to threaten appearance, such as having participants list or write about dissatisfying aspects of their appearance, the present studies examined effects of experiencing interpersonal, appearance rejection as a function of Appearance-RS. Because first impressions are based heavily on one's looks, we theorized that Appearance-RS would play an important role in the early stages of relationship formation. The situations created in the present studies therefore involved novel interactions with an opposite-sex stranger (Studies 1 & 2).

In Study 1, participants experienced one of two types of rejection from an opposite-sex stranger: the rejection was either based on participants' appearance or their perceived intelligence. If the match between domain of rejection sensitivity and type of rejection matters, then compared to low Appearance-RS participants, high Appearance-RS participants should show greater desire to avoid social interaction following appearance-based rejection, but not rejection based on one's perceived intelligence. In Study 2, we examined whether high Appearance-RS participants' desire to avoid social interaction in general might even extend to a desire to avoid close relationships following appearance rejection vs. acceptance. In Study 3, we applied these ideas to the real world by examining whether daily, state fluctuations in feelings of Appearance-RS affected participants' likelihood of avoiding others as a function of their trait levels of Appearance-RS.

To demonstrate the unique predictive validity of Appearance-RS, we controlled for personality variables, namely, self-esteem, self-rated attractiveness, Personal-RS, and social anxiety, and their interactions with experimental condition. If Appearance-RS is, in fact, a unique personality construct, then the interaction between Appearance-RS and experimental condition should be observed even after controlling for these variables.

1.1. Study 1

One way to cope with rejection is to draw closer to other people for affirmation, reassurance, or social support (Maner et al., 2007; Park & Maner, 2009). Such a response requires some level of interpersonal risk, however, because people must turn toward others in their vulnerable state. On the other hand, some people might respond to rejection by wanting to withdraw from others to protect themselves from the possibility of further rejection. If people anxiously expect to be rejected based on their appearance, they may prefer to avoid others following appearance rejection, rather than risk the possibility of further rejection. We therefore hypothesized that high Appearance-RS participants would want to avoid social interaction in general following interpersonal, appearance-based rejection. We further expected that receiving negative feedback about one's appearance, rather than receiving other types of negative feedback (e.g., perceived lack of intelligence), would predict desire for social avoidance among high Appearance-RS individuals.

Self-esteem, Personal-RS, self-rated attractiveness, and gender were controlled for in this study, based on previous research showing that Appearance-RS is related to LSE, Personal-RS, low self-

rated attractiveness, and is sometimes observed more among women than men (Park, 2007; Park, DiRaddo et al., 2009). We also controlled for social anxiety, because people who are socially anxious may be overly concerned with how they are perceived by others and may therefore be more influenced by negative feedback about their appearance. In addition, we controlled for relationship status, given that people in romantic relationships might already feel attractive to their partners to begin with.

2. Method

2.1. Participants and procedure

A total of 48 students (24 males, 24 females) from the Introductory Psychology Subject Pool at the University at Buffalo participated in the study for course credit. Two participants' data were excluded because they were suspicious of the feedback manipulation and one participant did not complete all of the questionnaires; thus, the final sample consisted of 45 participants (22 males, 23 females; M_{age} = 18.98, SD = 1.58). Participants first completed pretest measures of Appearance-RS and Personal-RS as part of a mass testing session a few weeks prior to the lab portion of the study. Participants were then contacted for a "Study of Interpersonal Interactions".

Upon arriving at the lab, participants were paired with an unacquainted, opposite-sex participant. Participants were told that they would be interacting with another student in two "getting to know you" sessions and then completing questionnaires about their impressions of the other person and of the interaction. In actuality, all participants were involved in only one interaction. After participants completed initial questionnaires assessing the personality and demographic control variables, participants were brought to the same room and told:

> As I mentioned earlier, in this study we are interested in examining how people form impressions of others in interpersonal interactions. In this portion of the study, both of you will interact with each other and get to know each other for the next 10 minutes. Afterwards, you will complete questionnaires about your impressions of the other person and about the interaction. Do you have any questions?

If there were no questions, the experimenter left the room so the participants could converse freely with each other for 10 minutes. Afterward, the experimenter returned and brought participants back to their separate rooms, where they were given an impression rating form to complete. The instructions were:

> Now that you have just interacted with the other student, we are interested in knowing your first impression of him/her. Your responses on this questionnaire will be shared with the other student, and he/she will share his/her responses with you. It is very important that you be as honest as possible in your responses. Please read the items below and circle the number that best reflects your response.

Participants were randomly assigned to either an *appearance rejection* condition or a *rejection based on perceived intelligence* condition. Participants in the appearance rejection condition completed a form assessing their impressions of the other person's attractiveness; participants in the perceived intelligence rejection condition completed a form assessing their impressions of the other person's intelligence (see Materials section). Participants therefore expected to give and to receive feedback about either appearance or intelligence. After rating the other participant's attractiveness or intelligence, participants rated how well the interaction had gone and their desire to interact again. This procedure is similar to that used in past research (Park & Crocker, 2008; Park & Maner, 2009).

Next, the experimenter collected the forms and walked over to each participant individually to administer the experimental manipulation. The researcher always gave both participants the same bogus feedback, depending on which condition they were randomly assigned to. In the *appearance rejection* condition, both participants received feedback, ostensibly from the other student, indicating a generally negative impression of their appearance and of the interaction. Specifically, on a scale from 1 to 7, with higher numbers indicating more positive evaluations and 4 indicating a neutral response, participants received a "4" for Physically Attractive, "3" for Very Good-Looking, "4" for Physically Appealing, "4" for Beautiful, "2" for Physically Fit, and "3" for Desirable. In addition, participants received feedback at the bottom of the form indicating that their partner did not think the interaction had gone very well (i.e., a "3" out of 7) and were not particularly looking forward to interacting with them again (i.e., a "4" out of 7). The ratings that participants received were purposely selected to be neutral to slightly negative, because people tend to discount feedback that is extremely negative (Leary, Haupt, Strausser, & Chokel, 1998).

If participants were assigned to the *rejection based on perceived intelligence* condition, they received negative feedback about their perceived intelligence, ostensibly from the other student. Specifically, they received feedback indicating that the other student had rated them a "4" for Very Intelligent, "3" for Very Smart, "4" Stupid, "4" for Very Competent, "2" Very Intellectual, and "3" for Very Educated. In addition, participants received feedback at the bottom of the form indicating that their partner did not think the interaction had gone particularly well (i.e., a "3" out of 7) and were not really looking forward to interacting with them again (i.e., a "4" out of 7).

After participants had taken a few moments to read the other person's feedback, the experimenter informed them that they would be answering some questions before the second interaction. At this point, participants indicated their desire to engage in social interaction. They were then debriefed, given course credit, and dismissed.

2.2. Materials

2.2.1. Appearance-RS scale

The original Appearance-RS scale consists of 15 scenarios in which people might anxiously expect to be rejected based on their appearance (Park, 2007). For example: "You are set up on a blind date. The date goes well and you like the person, but he/she has not called you for several days." Participants indicated their anxiety/concern about being rejected based on appearance (e.g., "How concerned or anxious would you be that your date did not call you because of the way you looked?") on a 6-point scale from 1 (*very unconcerned*) to 6 (*very concerned*), and their expectation of rejection based on appearance (e.g., "I would expect that my date would not call me because of the way I looked") on a 6-point scale from 1 (*very unlikely*) to 6 (*very likely*). Because of time constraints, the shortened, 10 scenario version of this scale (α = .91) was used in this study and in all subsequent studies; the brief version has been used in previous research and has demonstrated good internal reliability (Park, DiRaddo et al., 2009).

Appearance-RS was calculated by multiplying the degree of anxious concern with the degree of rejection expectation in each situation, and then averaging across anxious expectation of rejection scores across situations for each participant. Ratings were multiplied because we were interested in the interaction between anxious concerns and expectations, in the same way that Downey and Feldman (1996) calculated Personal-RS scores in previous

studies. Participants were considered to have high Appearance-RS if they scored high on both the anxiety and expectation of rejection dimensions across situations.

2.2.2. Rosenberg self-esteem scale

Trait self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). Participants indicated on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) their agreement with statements such as, "On the whole, I am satisfied with myself." The RSE has high internal consistency (α = .90 in this sample), test-retest reliability, and has been shown to be a reliable and valid measure of self-esteem (see Blascovich & Tomaka, 1991).

2.2.3. Personal-RS

Downey and Feldman's (1996) 8-item Rejection Sensitivity Questionnaire (RSQ) was used to assess sensitivity to rejection in general. The RSQ presents scenarios in which people might feel rejected by others (e.g., by friends, family, romantic partners). For example, "You ask your parents for help in deciding what programs to apply to" and "You approach a close friend to talk after doing or saying something that seriously upset him/her." Participants rated on 6-point scales their anxiety about the other person's response and their expectation of rejection in each scenario. The scoring of Personal-RS is the same as for Appearance-RS. The 8-item RSQ has been shown to have adequate internal and test-retest reliability (see http://www.columbia.edu/cu/psychology/socialrelations/measures_desc.html; α = .63 in this sample).

2.2.4. Social anxiety

Leary's (1983) 15-item Interaction Anxiety subscale was used to assess participants' social anxiety. Sample items included: "I often feel nervous when talking to an attractive member of the opposite-sex" and "I often feel nervous even in casual get-togethers" (α = .87). Responses were made on a scale from 1 (*not at all*) to 5 (*extremely characteristic*). This scale has been used widely and has adequate validity and test-retest reliability (Leary & Kowalski, 1993).

2.2.5. Impression rating form

After the initial interaction, both participants completed a form assessing their impressions of the other person's attractiveness (in the appearance rejection condition) or perceived intelligence (in the perceived intelligence rejection condition). Participants were presented with a series of bipolar rating scales from 1 to 7, with 1 always representing the most negative evaluation of the item and 7 representing the most positive evaluation of the item.

Participants in the appearance rejection condition rated the other participant on items anchored at: Physically Unattractive vs. Physically Attractive, Not Very Good-Looking vs. Very Good-Looking, Physically Unappealing vs. Physically Appealing, Ugly vs. Beautiful, Not Very Physically Fit vs. Very Physically Fit, and Undesirable vs. Desirable. Participants in the perceived intelligence rejection condition rated the other participant on items anchored at: Very Unintelligent vs. Very Intelligent, Not Very Smart vs. Very Smart, Stupid vs. Brilliant, Very Incompetent vs. Very Competent, Very Unintellectual vs. Very Intellectual, and Very Uneducated vs. Very Educated.[2]

2.2.6. Interaction questions

At the bottom of the impression rating form, participants responded to the item, "Overall, how well do you feel the first interaction period went?" on a scale from 1 (*very negative*) to 7 (*very positive*) and "How much are you looking forward to interacting with the other person again?" on a scale from 1 (*not at all*) to 7 (*very much*). These items were included as interaction checks to ensure that the initial interaction was generally pleasant and enjoyable.

2.2.7. Additional items

Participants reported their gender, romantic relationship status, and their self-rated attractiveness on a scale from 1 (*very unattractive*) to 7 (*very attractive*).[3]

2.2.8. Desire for social interaction

This was the dependent measure and consisted of three items (α = .66) assessing participants' desire to engage in social interactions. Specifically, they were asked: "Right now, how much would you like to…" "Meet new people," "Go on a date," and "Go to a party." Responses were made on a scale from 1 (*not at all*) to 7 (*very much*).

3. Results and discussion

3.1. Preliminary analyses

Overall, participants felt that the first interaction had gone well (M = 6.07, SD = .78) and looked forward to the second interaction (M = 5.41, SD = .85). Table 1 presents descriptive statistics and zero-order correlations among the variables of interest.

3.2. Desire for social interaction

For our primary analyses, we conducted hierarchical regression analyses to examine whether Appearance-RS uniquely interacted with experimental condition to predict desire for social interaction. Specifically, centered scores for Appearance-RS, condition (coded as 1 = appearance rejection, -1 = intelligence rejection), and covariates of self-esteem, self-rated attractiveness, Personal-RS, social anxiety, gender (coded as 1 = female, 0 = male), and relationship status (coded as 1= in a relationship, 0 = not in a relationship) were entered simultaneously at Step 1 of the regression equation. In Step 2, we entered interactions between Self-esteem and Condition, Personal-RS and Condition, Social Anxiety and Condition, and Self-rated Attractiveness and Condition into the model. In Step 3, we entered the key interaction between Appearance-RS and Condition.

Table 2 summarizes the results of the hierarchical regression analysis. Results of the final step of the model (Step 3) revealed the predicted Appearance-RS × Condition interaction (see Fig. 1). Indeed, entering the Appearance-RS × Condition interaction at the final step of the model predicted unique variance in desire to engage in social interaction (see Table 2). As expected, among participants who experienced appearance-based rejection, high Appearance-RS participants tended to report less desire for social interaction (β = −.41, p = .06) relative to low Appearance-RS participants, whereas this was not the case in the perceived intelligence rejection condition (β = .35 p = .15) (see Fig. 1). Neither the 3-way Gender × Appearance-RS × Condition interaction nor the 3-way Relationship Status × Appearance-RS × Condition interaction was significant (both ps > .12), indicating that gender and relationship status did not moderate the Appearance-RS × Condition interaction. Even when the 3-way interactions with gender and relationship status, respectively, were included in the model, the

[2] Ratings of competence in this study were limited to intelligence ratings; future studies could also assess whether receiving negative feedback about competence in other areas (e.g., social or emotional skills, artistic or athletic abilities) leads to similar effects.

[3] Although self-rated attractiveness was assessed at the end of the study, there was no significant difference in self-rated attractiveness as a function of experimental condition in Study 1 or Study 2 (both ps > .57).

Table 1
Descriptive statistics and zero-order correlations among variables (Study 1; $N = 45$).

	1. Appearance-RS	2. Self-esteem	3. Self-rated attractiveness	4. Personal-RS	5. Social anxiety	6. Desire for social interaction
M	10.24	5.49	4.49	6.64	2.79	4.54
SD	4.79	.97	1.41	1.83	.69	1.44
1	–					
2	−.42**	–				
3	−.21	.58***	–			
4	.37*	−.08	−.02	–		
5	.29*	−.42**	−.20	.10	–	
6	−.11	.29*	.30*	.14	−.16	–

Appearance-RS, Appearance-based Rejection Sensitivity; Personal-RS, Personal Rejection Sensitivity.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

Table 2
Results of hierarchical regression analyses predicting desire for social interaction (Study 1).

	Step 1	Step 2	Step 3
Gender	.07	.17	.18
Relationship status	−.18	−.09	−.09
Self-esteem	.11	.07	−.08
Self-rated attractiveness	.23	.34	.43*
Personal-RS	.13	.13	.15
Social anxiety	−.10	−.09	−.16
Appearance-RS	−.02	−.02	−.04
Experimental Condition	−.04	−.02	−.02
Self-esteem × Condition		.19	.05
Self-rated attractiveness × Condition		.21	.26
Personal-RS × Condition		.19	.30
Social anxiety × Condition		−.16	−.13
Appearance-RS × Condition			−.35*
		Step 1 $R^2 = .19$, $F(8,36) = 1.04$	
		Step 2 $\Delta R^2 = .20$, $\Delta F(4,32) = 2.55$	
		Step 3 $\Delta R^2 = .07$, $\Delta F(1,31) = 4.03$*	

Regression coefficients represent standardized betas. Gender was coded as 1 = female, 0 = male. Appearance-RS = Appearance-based Rejection Sensitivity; Personal-RS = Personal Rejection Sensitivity.
* $p < .05$.

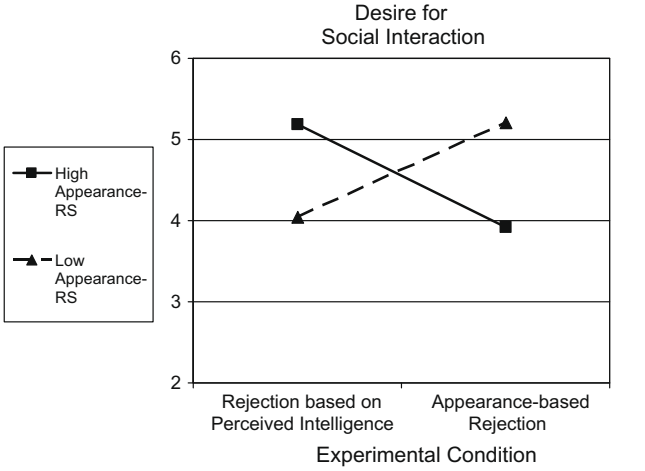

Fig. 1. Study 1. Predicted values of desire for social interaction as a function of Appearance-RS and experimental condition. Means are plotted at 1 SD above and 1 SD below the mean of Appearance-RS.

interaction between Appearance-RS and Condition remained significant ($\beta = -.54$, $p < .01$; $\beta = -.47$, $p < .05$, respectively).

In addition to these analyses, we conducted dyadic analyses to address the nested structure of the data; because each member of the dyad received the same feedback, it is possible that each member's score on the dependent variable might be more similar to one another than scores of participants from a different dyad (Kenny, Kashy, & Cook, 2006). We first measured the degree of non-independence in desire for social interaction by calculating the Pearson correlation coefficient between dyad members' scores on this variable. There was a significant correlation ($r = -.53$, $p = .05$) found when measuring the degree of non-independence in desire for social interaction.

When we analyzed the data using multilevel modeling techniques[4] to take the dyadic nature of the data into account (i.e., person nested within dyad), we obtained parallel results to the standard OLS regression analyses reported earlier: a significant Appearance-RS × Condition interaction ($B = -0.10$, $p < .05$).[5] Neither the 3-way Gender × Appearance-RS × Condition interaction nor the 3-way Relationship Status × Appearance-RS × Condition interaction was significant (both $ps > .18$), indicating that gender and relationship status did not moderate the Appearance-RS × Condition interaction. Indeed, the Appearance-RS × Condition interaction remained significant ($B = -0.20$, $p < .001$) when controlling for the 3-way interaction with gender, and remained significant ($B = -0.10$, $p < .05$) when controlling for the 3-way interaction with relationship status.

In sum, the more sensitive participants were to appearance rejection, the less they wanted to engage in social interaction after receiving negative appearance feedback, but not negative perceived intelligence feedback. Importantly, this effect was found even after controlling for self-esteem, self-rated attractiveness, Personal-RS, social anxiety, gender, relationship status, and their interactions with experimental condition.

Interestingly, whereas appearance rejection decreased high Appearance-RS participants' desire to interact with others, being rejected based on a domain other than appearance (perceived intelligence) increased participants' desire for social interaction. If individuals with high Appearance-RS are sensitive specifically to appearance rejection, then rejection based on other domains might motivate them to seek out others for reassurance and social support. It remains unclear, however, why low Appearance-RS participants tended to show decreased desire for social interaction following perceived intelligence rejection, but the reverse pattern following appearance rejection. Perhaps low Appearance-RS participants cared more about domains other than appearance, such as their intelligence, which might explain why they sought to withdraw from others following threats to such domains. Future studies could investigate this unexpected pattern of results.

[4] Dyadic analyses were conducted using the software package HLM 6.03 (Raudenbush, Bryk, & Congdon, 2005).

[5] Results from all dyadic data analyses are reported as unstandardized beta coefficients.

3.3. Study 2

A question that is left unanswered by Study 1 is whether the desire to avoid novel others extends to a desire to avoid even close others following appearance rejection. Because people with high Appearance-RS are worried about rejection to begin with, receiving negative appearance feedback is likely to exacerbate rejection concerns. Rather than draw closer to friends or significant others – the very people who might be able to provide support or reassurance during times of threat – high Appearance-RS individuals may seek to protect themselves from the possibility of further rejection, by preferring not to interact with even close others following appearance rejection vs. acceptance.

4. Method

4.1. Participants and procedure

A total of 140 (70 female, 70 male) students from the Introductory Psychology Subject Pool at the University at Buffalo participated in the study for course credit. Eight participants expressed suspicion about the study and were excluded from analyses, leaving a total of 132 participants (67 females, 65 males; M_{age} = 19.71, *SD* = 3.00).

For each session, one female and one male student participated. Upon arrival at the lab, participants were seated in separate rooms where they completed a series of pre-test measures. As in Study 1, participants were led to believe that they would be engaging in two separate interactions with another student. In reality, there was only one interaction. Participants freely conversed with each other for 10 min, and thereafter were randomly assigned to either an appearance-based rejection or acceptance condition. In the *appearance rejection* condition, participants completed the same impression rating form used in Study 1 to evaluate the other student's attractiveness; they then received negative feedback about their appearance, ostensibly from the other student, using the same procedure as in Study 1.

In the *appearance acceptance* condition, participants received favorable feedback, ostensibly from the other participant, about their appearance and the interaction. Specifically, they received a "7" for Physically Attractive, "6" for Very Good-Looking, "7" for Physically Appealing, "6" for Beautiful, "7" for Physically Fit, and "7" for Desirable. In addition, participants received feedback indicating that their partner thought the interaction had gone well (i.e., a "7" out of 7) and looked forward to interacting again (i.e., a "7" out of 7).

After participants had taken a few moments to read the other person's feedback, the experimenter informed them that they would be answering some questions before the second interaction. At this point, participants indicated their interest in being with close others. They were then debriefed, given course credit, and dismissed.

4.2. Materials

Prior to the experimental manipulation, participants completed measures of Appearance-RS (α = .90), self-esteem (α = .87), Personal-RS (α = .65), self-rated attractiveness, gender, and relationship status. After the manipulation, participants completed five items (α = .77) that assessed their desire to be with close others at the moment. Specifically, they were asked: "Right now, how much would you like to: "Talk on the phone with a friend," "Spend time with a close friend," "Hang out with friends," "Make plans with a friend or a significant other," "Write an e-mail to a close other." Participants responded to each items on a scale from 1 (*not at all*) to 7 (*very much*).

5. Results and discussion

5.1. Preliminary analyses

Overall, participants felt that the first interaction had gone well (*M* = 5.86, *SD* = 1.13) and generally looked forward to the second interaction (*M* = 4.98, *SD* = 1.23). Table 3 presents descriptive statistics and zero-order correlations among the variables of interest.

5.2. Desire to be with close others

A hierarchical multiple regression analysis was conducted to examine whether Appearance-RS interacted uniquely with experimental condition to predict desire to be with close others. In Step 1, Condition (coded as 1 = appearance rejection; −1 = appearance acceptance), centered scores for Appearance-RS, and covariates of self-esteem, Personal-RS, self-rated attractiveness, gender and relationship status (coded as in Study 1) were entered simultaneously into the model. In Step 2, interactions between the personality covariates and condition were entered into the model. In Step 3, we entered the key interaction between Appearance-RS and Condition into the model. All statistics from these models are reported as standardized beta coefficients.

Table 4 summarizes the results of the hierarchical regression analysis. Results of the final step of the model (Step 3) showed a significant main effect of Appearance-RS, qualified by the predicted Appearance-RS × Condition interaction (see Fig. 2). Indeed, entering the Appearance-RS × Condition interaction at the final step of the model predicted unique variance in desire to be with close others. As expected, high Appearance-RS participants reported significantly less desire to be with close others than low Appearance-RS participants following appearance rejection (β = −.47, p < .05), but not following appearance acceptance (β = −.09, p = .48), controlling

Table 3
Descriptive statistics and zero-order correlations among variables (Study 2; N = 132).

	1. Appearance-RS	2. Self-esteem	3. Self-rated attractiveness	4. Personal-RS	5. Desire to be with close others
M	11.19	5.38	4.86	8.53	5.01
SD	6.16	1.04	1.08	2.69	1.11
1	–				
2	−.37***	–			
3	−.18*	.43***	–		
4	.41***	−.60***	−.26**	–	
5	−.09	.05	.04	−.14	–

Appearance-RS = Appearance-based Rejection Sensitivity; Personal-RS = Personal Rejection Sensitivity.
* p < .05.
** p < .01.
*** p < .001.

Table 4
Results of hierarchical regression analyses predicting desire to be with close others (Study 2).

	Step 1	Step 2	Step 3
Gender	−.33***	.33**	−.36***
Relationship status	.01	−.04	−.03
Self-esteem	−.01	.00	−.06
Self-rated attractiveness	−.11	−.10	−.08
Personal-RS	−.05	−.05	−.01
Appearance-RS	−.19	−.20*	−.29*
Experimental Condition	−.10	−.09	−.11
Self-esteem × Condition		−.19	−.24*
Self-rated attractiveness × Condition		.08.	.08
Personal-RS × Condition		−.18	−.12
Appearance-RS × Condition			−.21*
	Step 1 R^2 = .13, F (7,124) = 2.61*		
	Step 2 ΔR^2 = .03, ΔF (3,121) = 1.30		
	Step 3 ΔR^2 = .03, ΔF (1,120) = 4.11*		

Regression coefficients represent standardized betas. Gender was coded as 1 = female, 0 = male. Appearance-RS = Appearance-based Rejection Sensitivity; Personal-RS = Personal Rejection Sensitivity.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

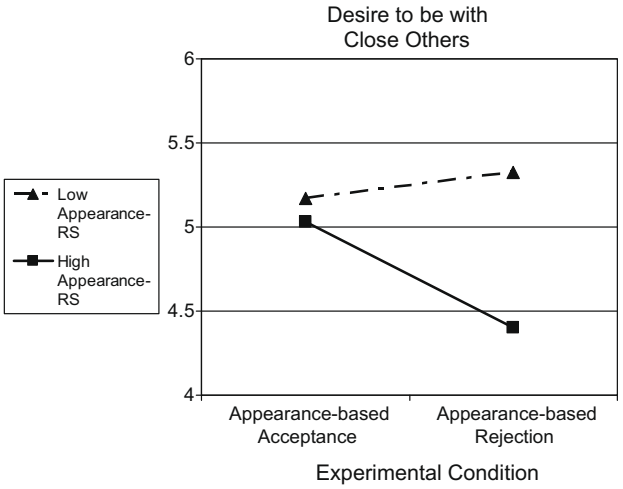

Fig. 2. Study 2. Predicted values of desire to be with close others as a function of Appearance-RS and experimental condition. Means are plotted at 1 SD above and 1 SD below the mean of Appearance-RS.

for all other variables. Neither the 3-way Gender × Appearance-RS × Condition interaction nor the 3-way Relationship Status × Appearance-RS × Condition interaction was significant (both *ps* > .55), indicating that gender and relationship status did not moderate the Appearance-RS × Condition interaction. In addition, the Appearance-RS × Condition interaction remained significant ($\beta = -.24$, $p = .05$) when controlling for the 3-way interaction with gender, but became non-significant ($\beta = -.19$, $p = .12$) when controlling for the 3-way interaction with relationship status.

As in Study 1, we also conducted dyadic analyses, given the nested nature of these data. We first measured the degree of non-independence in desire to be with close others by calculating the Pearson correlation coefficient between dyad members' scores on this variable ($r = -.13$, $p = .30$). The small, non-significant correlation indicated that there was no evidence of non-independence in these data (Kenny & Kashy, 1991). When we further analyzed the data using multilevel modeling techniques to take the dyadic nature of the data into account, we obtained parallel results to the standard OLS regression analyses reported earlier: a significant main effect of Appearance-RS ($B = -0.05$, $p < .05$), qualified by a significant Appearance-RS × Condition interaction ($B = -0.04$, $p < .05$). Neither gender nor relationship status moderated the Appearance-RS × Condition interaction (both *ps* > .54). As was found earlier, the Appearance-RS × Condition interaction remained significant ($B = -0.05$, $p < .05$) when controlling for the 3-way interaction with gender, but became non-significant ($B = -0.03$, $p < .11$) when controlling for the 3-way interaction with relationship status.

In sum, the more sensitive participants were to appearance rejection, the less they wanted to be with close others following appearance rejection vs. acceptance. Specifically, high Appearance-RS participants showed less desire to affiliate with close others after receiving negative appearance feedback, but not positive appearance feedback. The desire to withdraw from others, even close others, following appearance rejection is consistent with the finding that high Appearance-RS individuals lack interpersonal confidence and perceive themselves to be unattractive to begin with (Park, 2007). They may therefore seek to avoid even close others following rejection as a way to minimize the possibility of further rejection. This overall pattern was, for the most part, observed even after controlling for relevant variables, suggesting that Appearance-RS accounts for unique variance in predicting people's desire to avoid close others following appearance rejection.

5.3. Study 3

A limitation of the studies reported thus far is the ecological validity of the experimental manipulations: In everyday life, people are unlikely to receive explicit, negative feedback from others about their appearance. Instead, people's sensitivity to appearance rejection may fluctuate from day to day, which, in turn, could affect their desire to avoid others. To this end, the purpose of Study 3 was to examine whether daily sensitivity to appearance-based rejection predicted socially avoidant behavior.

5.4. Participants and procedure

A total of 67 participants (40 women, 27 men) were recruited from an Introductory Psychology course and participated in a two-week daily diary study for $40. The study consisted of three phases: In Phase 1, participants came to the lab in groups of up to five for an initial session where they received a consent form and completed computerized questionnaires assessing aspects of their personality. The experimenter then trained participants in the use of a personal digital assistant (PDA) hand-held computer, on which they would record their daily responses. In Phase 2, participants completed a brief survey on their PDA before going to bed each night, specifically, reporting their thoughts, feelings, and behaviors during the day.[6]

The PDA questionnaires were programmed using the Experience-Sampling Program (Barrett & Feldman-Barrett, 2000). Only the questionnaire software was enabled on each PDA so that participants were not able to use any other program. Participants were instructed to complete the survey around the same time each night, but if they forgot to, were instructed to complete the survey as soon as they remembered. As further incentive to complete the surveys in a timely manner, participants were told that each survey entry would be time stamped, so the experimenter would know when participants completed each survey, and to prevent participants from completing multiple surveys at a time. In Phase 3, participants returned to the lab to complete follow-up questions and received payment for participating.

[6] These questions were part of a larger daily diary study that participants completed.

5.5. Materials

In Phase 1, participants completed the same questionnaires as in the previous study, specifically, Appearance-RS (α = .96), self-esteem (α = .82), Personal-RS (α = .80), social anxiety (α = .83), and self-rated attractiveness. In Phase 2, participants reported on their sensitivity to appearance rejection that day ("Today, I felt sensitive to rejection based on the way I looked") on a scale from 1 (*not at all*) to 5 (*extremely*). They also indicated whether or not they had avoided others ("Today, I generally avoided others") by checking *yes* or *no*.

In Phase 3, participants came back to the lab and answered the following questions regarding their experience with the PDAs, on a scale from 1 (*not at all*) to 7 (*very much*): "How difficult was it for you to complete the daily diary survey every night?" "To what extent did filling out the daily diary survey every night interfere with your daily activities?" "How accurately do you feel you completed each daily diary survey?" and "How consistently on time did you complete the daily diary survey each night?" They were then debriefed, paid, and dismissed.

6. Results

6.1. Preliminary results

Participants completed a total of 730 daily reports, with an average of 10.90 reports per person (*SD* = 3.31). Overall, participants reported that completing the survey each night was not very difficult (*M* = 2.37, *SD* = 1.54) nor did it interfere with their daily activities (*M* = 2.72, *SD* = 1.83). Although participants did not always complete the surveys at the same time each night (*M* = 4.24, *SD* = 1.54), participants generally felt that their responses to the survey items were accurate (*M* = 5.54, *SD* = 1.26).

6.2. Primary analyses

We used multilevel generalized linear models with odds ratios to analyze whether or not participants reported avoiding others (Raudenbush & Bryk, 2002).[7] Multilevel modeling was used because it can handle missing data on the repeated measure and can adjust for bias in standard errors and statistical tests resulting from the non-independence of observations (Kenny, Korchmaros, & Bolger, 2003). Daily reports of whether or not participants avoided others represented the lower level (level 1), which were nested within persons (level 2). Using this data analytic technique, within-person effects can vary randomly across persons and person-level (level 2) variables can explain variance in within-person effects. All HLM analyses were conducted using full maximum likelihood models.

To analyze the data, we first calculated the likelihood of avoiding others (coded as 0 = did not avoid others, 1 = avoided others), after taking into account daily level differences in Appearance-RS (i.e., State Appearance-RS) and person-level differences in Appearance-RS (i.e., Trait Appearance-RS) after controlling for self-esteem, Personal-RS, self-rated attractiveness, social anxiety, and gender (coded as 1 = female, 0 = male). We then tested cross-level interactions, specifically, examining whether the within-person (level 1) effects of State Appearance-RS depended on between-person (level 2) differences in Trait Appearance-RS. Table 5 presents the means and standard deviations for the trait and state measures.
The level 1 model was:

$$\text{Log}\,[\text{probability of avoiding others/probability of not avoiding others}] = P_0 + P_1(\text{State Appearance-RS})$$

The level 2 model was:

$$\begin{aligned} P_0 &= B_{00} + B_{01}(\text{Sex}) + B_{02}(\text{Self-Esteem}) + B_{03}(\text{Trait Appearance-RS}) \\ &\quad + B_{04}(\text{Personal-RS}) + B_{05}(\text{Social Anxiety}) \\ &\quad + B_{06}(\text{Self-Rated Attractiveness}) + R_0 \\ P_1 &= B_{10}(\text{State Appearance-RS}) + B_{11}(\text{Sex}) + B_{12}(\text{Self-Esteem}) \\ &\quad + B_{13}(\text{Trait Appearance-RS}) \\ &\quad + B_{14}(\text{Personal-RS}) + B_{15}(\text{Social Anxiety}) \\ &\quad + B_{16}(\text{Self-Rated Attractiveness}) + R_1 \end{aligned}$$

These equations specify that the log odds of avoiding others is a function of: a grand mean intercept across individuals (B_{00}), that varies randomly across individuals (R_0); the main effects of the covariates (B_{01} through B_{06}); the main effect of State Appearance-RS (B_{10}), which was set to vary randomly across individuals (R_1); and the cross-level interactions between State Appearance-RS and each of the covariates (B_{11} through B_{16}).

The model yielded a significant main effect of Trait Appearance-RS, qualified by a significant Trait Appearance-RS × State Appearance-RS interaction, and a significant Social Anxiety × State Appearance-RS interaction (see Table 6 for coefficients and odds ratios of the full model). In logistic regression, a significant interaction between two continuous predictors indicates that the

Table 5
Means and standard deviations of trait and state variables (Study 3; N = 67).

Variable	*M*	*SD*
Trait measures		
Appearance-RS	10.07	7.96
Self-esteem	5.83	.84
Personal-RS	3.95	2.99
Self-rated attractiveness	5.12	1.15
Social anxiety	2.76	.81
State measure		
Daily ARS	1.85	1.12

Appearance-RS = Appearance-based Rejection Sensitivity, Personal-RS = Personal Rejection Sensitivity; Daily ARS = Daily reports of Appearance-based Rejection Sensitivity.

Table 6
Final estimation of fixed effects predicting likelihood of avoiding others as a function of trait and state measures (Study 3).

Fixed effect	Coefficient (log odds)	Odds ratio	*SE*	*t* (60)
Intercept, B_{00}	−3.11***	0.04	0.26	−11.97
Sex, B_{01}	0.15	1.16	0.24	0.64
Self-esteem, B_{02}	−0.12	0.89	0.29	−0.41
Trait Appearance-RS, B_{03}	−0.11**	0.89	0.04	−3.16
Personal-RS, B_{04}	0.06	1.07	0.09	0.74
Social anxiety, B_{05}	0.09	1.10	0.25	0.38
Self-rated attractiveness, B_{06}	−0.34	0.71	0.26	−1.32
State ARS, B_{10}	0.01	1.00	0.22	0.01
Sex × State ARS, B_{11}	0.20	1.23	0.22	0.95
Self-Esteem × State ARS, B_{12}	0.13	1.14	0.15	0.91
Trait Appearance-RS × State ARS, B_{13}	0.04**	1.05	0.02	2.61
Personal-RS × State ARS, B_{14}	0.02	1.02	0.04	0.52
Social anxiety × State ARS, B_{15}	0.36*	1.43	0.17	2.15
Self-rated attractiveness × State ARS, B_{16}	0.18	1.20	0.14	1.35

Note: ARS, Appearance-based Rejection Sensitivity; Personal-RS, Personal Rejection Sensitivity.
* $p < .05$.
** $p \leqslant .01$.
*** $p < .001$.

[7] Analyses of the daily diary data were conducted using the software package HLM 6.03 (Raudenbush et al., 2005).

odds ratio associated with the interaction is the multiplicative factor by which the odds ratio of one of the predictors (comprising the interaction) changes when the other predictor increases by one unit (Jaccard, 2001). The significant Trait × State Appearance-RS interaction indicates that for every one-unit increase in Trait Appearance-RS, the odds of avoiding others as a function of State Appearance-RS are multiplied by a factor of 1.05 (see Table 6 for odds ratios). Thus, for every one-unit increase in Trait Appearance-RS, the odds of avoiding others for State Appearance-RS are 1.05 (1.05 × 1.00 = 1.05); as State Appearance-RS increases, so does the likelihood of avoiding others. Similarly, the significant Social Anxiety × State Appearance-RS interaction indicates that for every one-unit increase in Social Anxiety, the odds of avoiding others for State Appearance-RS are 1.43 (1.43 × 1.00 = 1.43); as State Appearance-RS increases, so does the likelihood of avoiding others.

To test the contribution that each significant interaction made to overall model fit, we conducted two deviance tests. We first compared the model fit of the full model to a model in which the Trait Appearance-RS × State Appearance-RS interaction was omitted. The test of the difference in deviances between the two models was significant, $\chi^2(1) = 4.42$, $p = .03$, indicating that the inclusion of the Trait Appearance-RS × State Appearance-RS interaction significantly improved model fit. We next compared the model fit of the full model to a model in which the Social Anxiety × State Appearance-RS interaction was omitted. The test of the difference in deviances between the two models was not significant, $\chi^2(1) = 2.47$, $p = .11$, suggesting that inclusion of the Social Anxiety × State Appearance-RS interaction did not improve model fit.

7. General discussion

Overall, the results of the present research demonstrate that individuals who anxiously expect to be rejected based on their appearance exhibit a distinct pattern of responses following appearance-based rejection (either real or perceived). Specifically, high Appearance-RS participants showed less desire to affiliate with others in general after receiving negative feedback about their appearance vs. perceived intelligence (Study 1), and even wanted to avoid contact with close others after receiving negative vs. positive appearance feedback (Study 2). Furthermore, when examining real-life behaviors, individuals with high Appearance-RS showed greater social avoidance on days when they felt sensitive to rejection based on their looks (Study 3). Together, these findings suggest that compared to individuals with low Appearance-RS, those with high Appearance-RS overreact to experiences of appearance rejection by seeking less social contact.

7.1. Implications for the self and motivation

For individuals who are sensitive to appearance rejection, the desire for self-protection may trump the desire for social connection, particularly in situations in which they feel vulnerable to rejection. This is consistent with the idea that people with high Appearance-RS are vigilant for signs of rejection, especially to cues denoting appearance-based rejection. When appearance rejection has occurred, high Appearance-RS individuals seek to protect themselves from further rejection, by withdrawing from social situations in general and even their close relationships.

This process model is consistent with findings from the self-esteem and social anxiety literatures. First, research on self-esteem has shown that LSEs doubt their inclusion with others and chronically worry that others may reject them (Leary et al., 1998). For example, LSEs automatically associate failure with rejection, are biased toward detecting rejecting versus accepting information, and have difficulty disengaging attention from even the smallest indication of negative interpersonal feedback (Baldwin & Sinclair, 1996; Dandeneau & Baldwin, 2004). Not surprisingly, LSEs become cautious in their self-presentation to others and distance themselves from their close relationships following self-threats to protect themselves from further threat (Baumeister et al., 1989; Heatherton & Vohs, 2000; Murray et al., 1998). The present research revealed that Appearance-RS predicted responses to appearance rejection, even after controlling for self-esteem and its interaction with appearance rejection, suggesting that Appearance-RS is not redundant with self-esteem.

People with high Appearance-RS also tend to be socially anxious (Study 1). Socially anxious individuals are preoccupied with how they are perceived by others and worry about how they will be evaluated in social situations. Although they want to make a favorable impression on others, their low outcome expectancies regarding the likelihood that their self-presentational goals will be achieved leads them to experience anxiety (Schlenker & Leary, 1982). Because they fear social evaluation, they are inclined to avoid social situations, especially following experiences of self-threat, rejection, or social exclusion (Gazelle & Rudolph, 2004; Maner et al., 2007). Given that Appearance-RS is related to social anxiety, one reason why individuals with high Appearance-RS may seek to avoid others following appearance rejection is because they experience heightened doubts about their attractiveness and their subsequent chances for social acceptance. Indeed, social anxiety operated in a similar fashion to Appearance-RS in predicting avoidance of others: on days when individuals with high social anxiety felt sensitive to appearance rejection, they were more likely to avoid others (Study 3). However, further statistical tests revealed that only the Trait × State Appearance-RS interaction significantly improved model fit, suggesting that Appearance-RS is not redundant with general social anxiety, even though at times, they may lead to similar results.

7.2. Implications for interpersonal processes

Throughout life, physical attractiveness has been shown to facilitate interpersonal liking and the development of social bonds. As early as 3 months of age, babies prefer to look at physically attractive faces, and mothers show more attention and affection toward attractive versus less attractive infants (Langlois, Ritter, Casey, & Sawin, 1995; Langlois, Roggman, & Rieser-Danner, 1990; Ritter, Casey, & Langlois, 1991). Attractive children are liked more by peers and teachers (Dion et al., 1972) and attractive adults tend to be liked and pursued more by potential romantic partners than less attractive adults (Walster et al., 1966). Having experienced a history of rewarding social interactions, attractive people are likely to possess the confidence, optimism, and social skills that enhance their interactions with others (Langlois et al., 2000).

In contrast, people who are relatively less attractive and lack confidence in their appearance tend to have lower self-esteem and hold less optimistic expectations of interpersonal acceptance (Harter, 1993). Indeed, the less attractive people think they are, the more likely they are to anxiously expect rejection based on their appearance (Park, 2007). For people who are sensitive to appearance rejection, face-to-face interactions may exacerbate concerns about being rejected based on their looks. This may be especially true when people perceive cues or receive feedback suggesting that others think unfavorably of their appearance. In the present research, effects of Appearance-RS were found even after controlling for self-rated attractiveness and its interaction with condition. Thus, anxious expectations of appearance rejection, rather than simply perceiving oneself as unattractive, led to the outcomes observed in the present studies.

To protect themselves from further rejection, people with high Appearance-RS adopted an avoidant style of coping with interper-

sonal rejection. Although withdrawing from social contact may temporarily relieve anxiety triggered by the rejection experience, such a response could potentially isolate individuals and exacerbate rejection concerns. Indeed, research has shown that the less optimistic people are about interpersonal acceptance, the more likely they are to use socially avoidant strategies, which, ironically, increases feelings of loneliness over time (Nurmi, Toivonen, Salmela-Aro, & Eronen, 1998).

7.3. Clinical implications

The link between Appearance-RS and social avoidance may also inform research on clinical disorders, such as body dysmorphic disorder (BDD). According to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM–IV–TR; American Psychiatric Association, 2000), BDD is characterized by a preoccupation with a slight or imagined defect over some aspect of appearance that causes significant impairment in one's daily activities, relationships, or occupational functioning. A key feature of BDD is social avoidance: people with BDD frequently avoid situations in which their appearance might be visible to others; in extreme cases they may drop out of school, quit their jobs, or become housebound (Grant & Phillips, 2005; Phillips, 1996).

The findings from the present research suggest that sensitivity to appearance rejection, which has been linked to BDD symptoms (Park, Calogero et al., 2009), leads to social avoidance following instances of real or perceived appearance rejection. Although the appearance concerns of high Appearance-RS individuals are not as extreme as those with clinical levels of BDD, the behavioral consequences (e.g., social avoidance) seem similar. Given that BDD has been theoretically linked to experiences of appearance-related teasing (Phillips, 1996), it seems plausible that sensitivity to appearance rejection, which has been linked to peer conditional acceptance based on appearance (Park, DiRaddo, et al., 2009) may predispose certain individuals to developing BDD symptoms. Future research is needed to empirically test this idea.

7.4. Limitations and future directions

A limitation of the present studies was the reliance on self-report measures. Study 3, however, used a daily diary method in which participants reported their feelings and behaviors in everyday life, thereby increasing the ecological validity of the findings. Future studies could build upon these ideas by observing actual behaviors following appearance rejection, such as physical avoidance of others in the lab. Studies could also investigate whether high Appearance-RS individuals become demotivated in general following appearance rejection, or whether their response is specific to withdrawal from social interactions in particular. Researchers should also gather data on participants' sexual orientation, given that opposite-sex interactions may activate appearance concerns more for heterosexual participants than for those of other sexual orientations.

An important avenue for future research is to examine ways to reduce the negative effects of appearance rejection for individuals with high Appearance-RS. There are several levels at which interventions could be targeted. First, efforts could be made to change automatic associations between feeling unattractive and feeling rejected. For example, individuals could undergo training that conditions them to associate themselves with acceptance. Along these lines, research by Baldwin and colleagues found that LSEs were able to inhibit rejection information by repeatedly identifying a smiling/accepting face in a matrix of frowning faces (Dandeneau & Baldwin, 2004). Applying these ideas to Appearance-RS, training individuals to associate themselves with acceptance following appearance rejection might attenuate the strength of their association between feeling unattractive and feeling rejected.

To alleviate the sting of rejection, people could engage in strategies aimed at restoring self-esteem and feelings of belonging. Indeed, previous research has shown that high Appearance-RS participants who wrote about a negative aspect of their appearance and then engaged in self-affirmation (were reminded of a personal strength) or were reminded of a close relationship were buffered in their state self-esteem and mood (Park, 2007, Study 3). The effectiveness of these and other interventions could be investigated in the context of real-life situations involving threats to appearance.

8. Conclusion

We live in a culture that places tremendous emphasis on physical attractiveness. Not surprisingly, many people are concerned with how they look, especially in social encounters and in everyday life. Although concerns about appearance are relatively common, some individuals may be more sensitive to the possibility of being rejected based on their appearance than others. Instead of turning toward other people for reassurance and support following rejection, however, high Appearance-RS participants in the present research preferred to avoid others, perhaps as a way to preempt the possibility of future rejection. Although such reactions may relieve anxiety temporarily, repeatedly withdrawing from social contact over time could exacerbate feelings of rejection and reinforce socially avoidant behaviors. Future research would therefore benefit from investigating further the social motivations and interpersonal consequences of sensitivity to appearance-based rejection.

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