

The Appearance Culture Between Friends and Adolescent
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 signs of rejection based on one's appearance, and is associated with a number of psychological and social problems (Park, 2007). This study of 380 adolescents ($M_{\text{age}} = 13.84$) examined a model linking the appearance culture between friends with appearance-RS in adolescent boys and girls, via internalisation of appearance ideals, social comparison and body dissatisfaction. Gender differences were also tested. Consistent with expectations, appearance-focused characteristics of the friendship context were associated with heightened appearance-RS via internalization of appearance ideals, social comparisons, and body dissatisfaction. The appearance-focused friend characteristics that were associated with appearance-RS include exposure to friends' appearance conversations, appearance teasing that causes distress, and perceived pressure to be attractive. Notably, associations rarely differed for boys and girls, with one exception: the association between BMI and body dissatisfaction was stronger in girls than in boys.

The Appearance Culture Between Friends and Adolescent

Appearance-Based Rejection Sensitivity

Appearance-based rejection sensitivity (appearance-RS) is the tendency to anxiously expect, readily perceive, and overreact to signs of rejection based on personal appearance (Park, 2007). Appearance-RS has only attracted research in the past few years, but it has been identified as a significant correlate of a number of psychological problems, including poor self-esteem, social withdrawal, social anxiety, and a sense of self-worth that is conditional on appearance (Bowker, Thomas, Spencer & Park, 2013; Park, 2007; Park & Pinkus, 2009). High appearance-RS individuals show elevated symptoms of body dysmorphic disorder and greater endorsement of cosmetic surgery (Calogero, Park, Rahemtulla, & Williams, 2010; Park, Calogero, Young & DiRaddo, 2010). Yet, much of this research has been conducted with university students, and much more attention should be given to research with children and adolescents in order to isolate the factors that may be linked with early onset of heightened appearance-RS. At present, very little is known about appearance-RS in children and adolescents, with only one published study of appearance-RS in adolescents (Bowker et al., 2013).

Although this previous study shows that many adolescents do have very high concerns about rejection because of their appearance, many questions remain. In particular, the role of peer relationships and interactions deserves further attention, given the strong influence that peers have on a range of unhealthy attitudes and behaviours during adolescence, including body image and eating behaviours (Blodgett Salafia & Gondoli, 2011). Furthermore, it is friends, both same-sex and other-sex, who increase in their importance and influence during adolescence compared to in childhood (Bukowski, Hoza, & Boivin, 1993), eventually surpassing parents' influence in some domains, including in the domain of style, dress, and other aspects of appearance (Smetana, 2002).

In addition, the widely supported sociocultural (or tripartite influence) theory posits that social influences (including the media, family and peers) exert their influence on body image and eating behaviours via social comparison and internalisation of appearance ideals (see Keery, van den Berg & Thompson, 2004; Kopp & Zimmer-Gembeck, 2011; Muris, Meesters, van de Blom, & Mayer, 2005; Shroff & Thompson, 2006; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; van den Berg, Thompson, Obremski-Brandon & Coover, 2002). Moreover, body dissatisfaction should also play a mediational role for appearance-RS. Previous research suggests that individuals with heightened appearance-RS filter and interpret information from their environment through an ‘appearance lens’ (Park & Harwin, 2010). Heightened body dissatisfaction is likely to trigger a more pessimistic appearance lens in relation to self-evaluations, potentially contributing to increasing sensitivity to appearance-based rejection. Thus, the aim of the present study was to examine how exposure to an appearance culture in peer and friendship groups, such as more exposure to verbal exchanges and teasing about appearance, is associated with elevated appearance-RS by testing a comprehensive model whereby internalisation of appearance ideals and social comparison, as well as body dissatisfaction, were expected to mediate the association between appearance culture and appearance-RS. Figure 1 presents the hypothesised model.

Peer Appearance Culture and Appearance-RS

Two previous studies of social relationships and appearance-RS have been conducted, one with adolescents (Bowker et al., 2013) and a second with university students (Park et al., 2009). Bowker and colleagues (2013) found that peer relationships moderated associations between appearance-RS and psychological maladjustment in early adolescents. Specifically, other-sex friendships were protective, while peer-rated acceptance by other-sex classmates was a risk factor, for associations between appearance-RS and psychological maladjustment. In young adults, perceiving one’s acceptance by friends as being conditional on appearance was found to be

associated with elevated appearance-RS (Park et al., 2009). Together, these studies support the importance of peer relationships in association with appearance-RS.

Given that only two studies have been conducted, it was necessary to draw upon theory and related supporting evidence (Cafri, Yamamiya, Brannick, & Thompson, 2005; Keery et al., 2004; van den Berg, Thompson, Obremski-Brandon, & Coovert, 2002) to identify other social factors likely to be associated with elevated appearance-RS in adolescents. One prominent theory regards the role of the “appearance culture” within the adolescent friendship and broader peer contexts (Jones, Vigfusdottir, & Lee 2004). An appearance culture emerges through the many appearance-related intentional and inadvertent interactions that occur on a daily basis between friends or that occur during repeated peer interactions over time. These interactions serve to transmit and strengthen beauty and attractiveness ideals, and increasingly focus young people's attention on their appearance. This eventually results in body image dissatisfaction, eating disorders, body dysmorphic disorder and related appearance concerns (Jones, 2004; Webb & Zimmer-Gembeck, in press). The appearance culture theory can easily be applied to appearance-RS. It is likely that more contact with an appearance culture would instigate greater appearance-RS among all adolescents. Summarising across many studies (see Webb & Zimmer-Gembeck, in press, for a review), appearance culture in the present study is assessed in five areas, namely general verbal exchanges about appearance, teasing, direct pressure to conform to certain ideals (e.g., to be thinner), friends' valuing of attractiveness and appearance ideals, and simply feeling that friends are more attractive.

General verbal exchanges. Peer relationships and their influence were the particular focus in this study because young people spend a significant component of their day in verbal exchanges with their friends (Hartup & Stevens, 1999; Zimmer-Gembeck, 1999, 2002). Conversations with friends that focus on physical appearance have been described as ‘appearance training’, as these discussions direct attention to and guide the interpretation of appearance-based information, shape appearance

norms and ideals, and encourage evaluation of oneself and others according to strict appearance standards (Jones, 2004). Frequent engagement in conversations with friends about appearance has shown consistent concurrent and longitudinal associations with boys' and girls' heightened body dissatisfaction (Jones, 2004; Jones et al., 2004; Shroff & Thompson, 2006). These regular and intimate interactions may similarly contribute to sensitivity to appearance-based social rejection.

Teasing. A more critical verbal exchange is appearance teasing, which is a salient and distressing experience that clearly conveys how one's appearance diverges from accepted standards. Appearance teasing has been reliably linked with concurrent body dissatisfaction in adolescent boys and girls (Eisenberg, Neumark-Sztainer & Story, 2003; Lunde et al., 2006; Lunner et al., 2000). The significance of negative appearance feedback to appearance-RS in young adults has been empirically documented, whereby men and women with higher appearance-RS reported heightened negative affect, feelings of loneliness and rejection, and greater interest in changing their appearance via cosmetic surgery after recalling an experience of appearance teasing or being reminded of disliked aspects of their appearance (Park, 2007; Park, Calogero, Harwin & DiRaddo, 2009). Whereas appearance teasing may be damaging to how individuals evaluate their appearance, it may be particularly detrimental for rejection sensitivity, as it conveys both appearance criticism and interpersonal rejection.

Pressure. Pressure to be thin or attractive is one of the most frequently studied correlates of body dissatisfaction (Webb & Zimmer-Gembeck, in press), with adolescents who perceive greater pressure from friends also reporting higher body dissatisfaction concurrently (Peterson et al., 2007; Shomaker & Furman, 2009) and longitudinally (Blodgett Salafia & Gondoli, 2011). Feeling socially compelled to achieve a more ideal appearance could heighten one's sensitivity to appearance-based rejection by elevating the perceived importance of attractiveness, and by making the attribution of perceived interpersonal rejection to one's appearance more salient.

Valuing appearance. Social identify theory suggests that identification with a friendship group that values attractiveness and investment in appearance will result in exposure to, and pressure to adopt, attitudes and values congruent with those group norms (Tajfel, 1978). Consistent with this idea, perceptions of friends' valuing of, or preoccupation with appearance has shown consistent associations with higher body dissatisfaction in adolescent girls (Webb & Zimmer-Gembeck, in press). Further, friends' valuing of appearance was found to be positively associated with appearance-RS in young adults (Park et al., 2009). However, this association did not remain significant when controlling for self-esteem, personal-RS, self-perceived attractiveness, gender, and perceptions that peer acceptance is conditional on appearance.

Friend attractiveness. Finally, researchers have demonstrated that an individual's perceived attractiveness is influenced by their friends' attractiveness, whereby observers rated a moderately attractive individual as more attractive when described as a friend to a highly attractive individual (i.e., an assimilation effect; Melamed & Moss, 1975; Walther, Van Der Heide, Kim, Westerman & Tom Tong, 2008). On the other hand, however, Bailey and Ricciardelli (2010) reported that adult women who perceived themselves to be less attractive than peers (e.g., "My body isn't as attractive as the others around me") reported greater body dissatisfaction, while lower body dissatisfaction was found in women who rated themselves as being more attractive than peers. Friends' physical attractiveness is a visible characteristic of the friendship context that may influence perceptions and evaluations within that context, and thus may be important for understanding the development of appearance concerns. We hypothesised that rating one's friends higher on attractiveness may be associated with greater appearance-RS.

Mediators of the Association between the Friend and Peer Context and Appearance-RS

Body image researchers have been interested in how social experiences and social information exert their influence. This interest in pathways and processes linking social information

and experiences to individual attitudes and behaviours can be complex. Although many mediators have been proposed and multiple pathways to body image concerns may exist (Cafri et al., 2005; Stice, 2002); two processes – internalisation of appearance ideals and social comparison – have received some of the strongest empirical support as mediators (Keery et al., 2009; Muris et al., 2005; Shroff & Thompson, 2006). Highlighting the relevance of internalisation and social comparison to a model predicting appearance-RS, appearance-RS in young adults has been positively associated with internalisation of appearance ideals (Park et al., 2009), and social appearance comparisons (Park, 2007).

Internalisation. Internalisation of appearance ideals refers to the process of personally accepting society's appearance ideals (i.e., the impossibly thin female, and the muscular yet lean male; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). The internalised ideal becomes the personal standard against which the self and others are judged. Extensive research suggests that internalisation of appearance ideals mediates the relationship between the influence of friends, media and parents, on dissatisfaction with one's appearance (Jones et al., 2004; Keery et al., 2004; Shroff & Thompson, 2006). In other words, being exposed to appearance-related information from friends, parents, and the media will impact satisfaction with one's own appearance to the extent that the individual personally accepts society's appearance ideal as being an appropriate appearance standard. Similarly, we anticipate that the relationship between the appearance culture among one's friends and appearance-RS will be mediated by internalisation of appearance ideals.

Social comparisons. Drawing from the findings that the influence of friends, parents, and the media on body dissatisfaction is also said to occur through social appearance comparisons (Keery et al., 2004), appearance comparisons may also mediate the association between social influences and appearance-RS. Derived from Social Comparison Theory (SCT; Festinger, 1954), appearance comparisons involve comparing one's appearance to the appearance of others for the purpose of

evaluating one's own physical attractiveness (Jones, 2004). Dissatisfaction with appearance is theorised to be the result of unfavourable appearance comparisons with others (Bailey & Ricciardelli, 2010). Based on these findings, appearance comparisons are expected to mediate the relationship between the appearance culture among one's friends and appearance-RS.

Body dissatisfaction. We also hypothesised that an appearance-focused friendship context may be linked with appearance-RS through the development of body dissatisfaction. Heightened appearance-RS is likely to involve some level of dissatisfaction with or negative evaluation of own appearance in order to be sensitive to, and expect, appearance-based rejection. Thus, it is very likely that body dissatisfaction is heightened among adolescents with more exposure to an appearance culture and it is this greater body dissatisfaction that provides a bridge linking exposure to an appearance culture to heightened appearance-RS.

Gender

Friends may have different effects on the appearance concerns of boys compared to girls. Although not consistent across all studies, researchers have found body dissatisfaction to be more strongly related to appearance conversations (Jones et al., 2004; Vincent & McCabe, 2000) and perceived pressure to be thin (Halliwell & Harvey, 2006) in girls than boys, while the opposite is sometimes found for appearance teasing (Jones et al., 2004; Vincent & McCabe, 2000). Further, Park and colleagues (2009) found the association between friends' valuing of appearance and appearance-RS to be stronger in females. Female friendships tend to be higher in quality, and more intimate and supportive than male friendships (Bokhorst, Sumter, & Westenberg, 2009; Ciairano, Rabaglietti, Roggero, Bonino, & Beyers, 2007), which may affect the degree to which the individual is influenced by the relationship. Accordingly, we included both boys and girls in the current study in order to examine gender differences in the hypothesised model.

Study Aim and Hypotheses

To summarise, the aim of the present study was to examine a model linking the appearance culture among adolescent boys and girls with appearance-RS, via internalisation of appearance ideals, social comparison and body dissatisfaction. Thus, adolescents with more exposure to an appearance culture were expected to be higher in appearance-RS, but this association would occur via the mediating role of internalising this culture, engaging in more social comparison processes and exhibiting more body dissatisfaction. Finally, gender differences in the model were examined. The hypotheses tested in this study are listed below. In all analyses, BMI was controlled for due to established links with appearance concerns (Keery et al., 2004; Paxton, Eisenberg & Neumark-Sztainer, 2006).

1. When adolescents report more exposure to an appearance culture (i.e., having friends who more frequently discuss appearance, place more value on attractiveness, provide more pressure to be attractive and are rated as more attractive; and more experience with appearance teasing) they will have elevated appearance-RS.
2. Internalisation of appearance ideals, social comparison and body dissatisfaction will mediate the association between more exposure to an appearance culture and appearance-RS. However, both a direct association between appearance teasing and appearance-RS, and an indirect effect via these mediators, were anticipated.
3. Gender differences in the model were examined; however no specific a priori hypotheses were made.

Method

Participants

Participants were 380 students (57% female) from one public ($n = 150$) and two independent secondary schools ($n = 156$ and 74) in an urban area of Australia. Across the three schools,

participants were socio-economically diverse. Participants were aged 12 to 15.5 years ($M_{\text{age}} = 13.84$, $SD = 0.63$), and were predominantly white/Caucasian (82.6%), Asian (7.9%), and Aboriginal or Pacific Islander (3.4%). To retain all 380 participants in all analyses multiple imputation was used, and pooled results are reported. For structural equation modelling, full information maximum likelihood was used. The response rate was 38%, with 99% of non-participants failing to return parental consent forms.

Procedure

Study approval was obtained from the university Human Research Ethics Committee. Active parental consent was obtained, with consent forms sent home with children and returned to the school. All students who returned their consent form were entered into a draw to win a skateboard or an iPod. Participating students also received a small gift when the survey was completed. Participants completed the questionnaire in their classroom over two days, taking approximately 70 minutes in total.

Measures

Appearance-RS. Appearance-RS was measured using the Appearance-RS Scale (Park, 2007), which, drawing upon the Children's Rejection Sensitivity Questionnaire (CRSQ; Downey, Lebolt, Rincon, & Freitas, 1998), was modified to be age-appropriate. Across 10 hypothetical scenarios (e.g., "Your boyfriend/girlfriend of 3 months is considering breaking up with you"), participants indicated on a 6-point scale their anxiety/concern about being rejected based on their appearance (e.g., "How concerned or anxious would you be that they want to break up with you because of the way you look?"; 1 = not concerned, 6 = very concerned), and their expectation of appearance-related rejection (e.g., "Do you think your boyfriend/girlfriend is considering breaking up with you because of the way you look?"; 1 = No!!, 6 = Yes!!). To obtain the appearance-RS score, anxious concern was multiplied by expectation of rejection for each item, and these 10

product scores were averaged. A higher score indicated greater appearance-RS. Cronbach's α was .89 for girls and .85 for boys.

Appearance conversations with friends. The frequency of participants' appearance conversations with friends was assessed using the Appearance Conversations with Friends Scale (Jones et al., 2004). An example from the 5-item scale is; "My friends and I talk about how our bodies look in our clothes" (1 = never, 5 = very often). Averaging items formed the total score, and a higher score indicated more frequent appearance conversations with friends. Cronbach's α was .86 for girls and .79 for boys.

Appearance teasing from friends. The 6-item Weight Teasing Subscale of the Perceptions of Teasing Scale (POTS; Thompson, Cattarin, Fowler, & Fisher, 1995) was modified to measure appearance teasing, rather than weight teasing, from friends. An example item is: "Friends make jokes about your appearance." Participants rated teasing frequency (1 = never, 5 = always), as well as their degree of distress (1 = not upset, 5 = very upset). Averaging the items formed the teasing-frequency and teasing-distress scores. Cronbach's α for the frequency and distress scales were .78 and .83 for girls, and .79 and .88 for boys.

Appearance pressure from friends and peers. The Perceived Sociocultural Pressure Scale (Stice & Agras, 1998) was modified to assess perceived pressure to be attractive, rather than pressure to be thin (e.g., "I've felt pressure from my friends to look good"; 1 = none, 5 = a lot). Two items relating to dating partners were modified to be more age appropriate. The five remaining items pertaining to friends and peers were averaged to form a total score (Cronbach's α = .84 for girls & .83 for boys). A higher score indicated greater pressure to be attractive.

Friends' attractiveness. A modified version of Bleske-Rechek and Lighthall's (2010) scale was used to assess perceived attractiveness of one's best friend and friendship group (e.g.,

“Compared with other girls or boys their age, how physically attractive is your closest friend?”; 1 = not at all attractive, 7 = extremely attractive). Averaging the two items formed the total score, with a higher score indicating higher perceived attractiveness of one’s friends. Cronbach's α was .68 for girls and .60 for boys.

Friends’ valuing of appearance. A 3-item scale was devised to assess perceptions of friends’ valuing of appearance. Participants rated how important they believe appearance-related characteristics are to their friends (e.g., “How important do your friends think it is to have a good looking body?”). Responses were made on a 5-point scale (1 = very unimportant, 5 = very important). Averaging items formed a total score (Cronbach’s α = .88 for girls & .83 for boys).

Internalisation of appearance ideals. A modified version of the Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ; Heinberg, Thompson, & Stormer, 1995) was used to assess participant acceptance of society’s appearance ideals (e.g., “People who appear in TV shows and movies project the type of appearance that I see as my goal”; 1 = strongly disagree, 5 = strongly agree). Items were modified to reflect male and female appearance ideals, and two items relating to appearance comparisons were removed to form a more consistent scale (Jones, 2004). Cronbach’s α was .83 for girls and .73 for boys.

Social appearance comparisons. The 5-item Physical Appearance Comparison Scale (PACS; Thompson, Heinberg, & Tantleff, 1991) was used to assess participants’ engagement in social appearance comparisons. An example item is: “At parties or other social events, I compare how I am dressed to how other people are dressed” (1 = never, 5 = always). A total score was calculated by averaging items, and a higher score indicated more frequent social comparisons. Cronbach’s α was .79 for girls and .73 for boys.

Body dissatisfaction. The shortened 8-item Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987; Evans & Dolan, 1993) was used to evaluate body dissatisfaction. An example item is: “Have you felt ashamed of your body?” (1 = never, 6 = always). Three items were modified to be more suitable for males. Items were averaged, and a higher score indicated greater body dissatisfaction (Cronbach's $\alpha = .90$ for girls & $.88$ for boys).

Body mass index. Participants' Body Mass Index (BMI; weight kg/height m²) was measured by a trained researcher.

Overview of Analyses

Preliminary analyses included producing descriptive statistics and conducting *t*-tests to compare boys and girls. Correlations between all variables were calculated to identify simple associations and to make decisions about the final variables to include in structural equation models (SEM). Only independent variables significantly correlated with appearance-RS were included in these models. SEM was conducted using AMOS software (IBM Corporation) to test hypotheses pertaining to direct and indirect effects between the friend and peer appearance culture, individual characteristics, and appearance-RS. To evaluate the theoretical model, both goodness-of-fit indices (χ^2 , χ^2 relative to sample size, comparative fit index - CFI, and root mean square error of approximation - RMSEA) and parameter estimates for model paths were considered (Kline, 2005). To test hypotheses regarding indirect pathways, bootstrapping was used to estimate standard errors and 95% confidence intervals for all direct and indirect effects. This method was selected over Baron and Kenny's (1986) causal-steps approach as it has greater power (MacKinnon & Fairchild, 2009). Finally, multiple group SEM was employed to test gender differences in the model.

Results

Means, Standard Deviations, and Gender Differences

Means and standard deviations for girls and boys on all measures are provided in Table 1. Girls, relative to boys, reported significantly greater appearance-RS, appearance conversations, pressure to be attractive, friends' appearance valuing and attractiveness, internalisation, social comparison, and body dissatisfaction. Boys reported receiving significantly more frequent appearance teasing.

Correlations between Measures

Correlations between all continuous measures were estimated for boys and girls separately (see Table 1). Boys and girls with higher appearance-RS reported greater exposure to appearance characteristics of the friend context, including appearance conversations, the frequency of and feeling distress about appearance teasing, pressure to be attractive, and friends' appearance valuing. Appearance-RS was not associated with friends' attractiveness. Notably, when considering the correlations based on the combined sample, appearance-RS was positively associated with friends' attractiveness ($r = .11, p = .03$). Characteristics of the friendship context showed positive associations with one or more of the mediators. Internalisation, social comparison and body dissatisfaction were positively associated with appearance-RS in boys and girls. BMI was positively associated with body dissatisfaction, but not appearance-RS.

Characteristics of the Friendship Context and Appearance-RS Model

One model was estimated to test the hypothesised direct associations of friendship contextual measures with appearance-RS (Hypothesis 1), and the indirect effects via internalisation, social comparison and body dissatisfaction (Hypothesis 2). Associations of BMI with all relevant variables were freed. Bootstrapped estimates of paths, standard errors and confidence intervals are reported, with any difference between maximum likelihood and bootstrapped estimates explicitly stated. To

ensure parsimony, distress about appearance teasing, but not teasing frequency, was included.

Distress about teasing was selected over teasing frequency, as it tended to show stronger bivariate associations with other relevant constructs.

Direct and indirect associations between the friendship context and Appearance-RS.

The model demonstrated an acceptable fit with the data, $\chi^2 (8, N = 380) = 20.88, p = .007, \chi^2/df = 2.61, CFI = .99, \text{ and } RMSEA = .065 (90\% CI = .036-.100), p = .20$. Table 2 presents the paths estimates, standard errors and confident intervals. Figure 2 illustrates the significant paths, and provides the standardised bootstrapped coefficients and standard errors. All expected mediators were either directly associated with appearance-RS or were indirectly associated via body dissatisfaction. Overall, this model explained 55.1% of the variance in appearance-RS. Body dissatisfaction was associated with appearance-RS ($\beta = .41, p < .01$), and the paths from internalisation ($\beta = .23, p < .01$) and social comparison ($\beta = .31, p < .01$) to body dissatisfaction were significant.

There were significant associations between four of the five independent variables and one or more of the mediators. Paths from the independent variables of appearance conversations ($\beta = .27, p = .01$), friends' attractiveness ($\beta = .11, p = .03$), and pressure to be attractive ($\beta = .17, p = .01$), to internalisation of appearance ideals were significant. Similarly, there were significant paths from appearance conversations ($\beta = .52, p < .01$) and pressure to be attractive ($\beta = .17, p = .01$) to social comparison. Significant paths were identified from appearance conversations ($\beta = .12, p = .03$), distress about teasing ($\beta = .12, p = .01$) and pressure to be attractive ($\beta = .23, p = .01$) to body dissatisfaction. Paths from friends' appearance valuing to internalisation ($\beta = .05, p = .33$), social comparison ($\beta = .04, p = .29$), and body dissatisfaction ($\beta = -.05, p = .39$) were not significant, ruling out mediation for this independent variable. BMI showed a significant path to body dissatisfaction ($\beta = .24, p = .01$), but not appearance-RS ($\beta = -.07, p = .05$).

The direct pathways from friends' attractiveness ($\beta = -.11, p = .02$) and distress about teasing ($\beta = .08, p = .02$) to appearance-RS were also significant. All other direct pathways from the independent variables to appearance-RS were not significant ($ps \geq .05$).

Significant indirect pathways were identified from appearance conversations ($\beta = .29, p = .01$) and pressure to be attractive ($\beta = .18, p < .01$) to appearance-RS, via the three mediators: internalisation, social comparison and body dissatisfaction. Overall, 85% of the total effect of appearance conversations on appearance-RS ($\beta = .34$) occurred indirectly via the three mediators, while the direct pathway was not significant. Similarly for pressure to be attractive, 69% of the total effect ($\beta = .26$) on appearance-RS was indirect, and the direct pathway was not significant. Distress about teasing also showed a significant indirect pathway to appearance-RS ($\beta = .08, p < .01$), however the indirect pathway occurred via body dissatisfaction, but not internalisation and social comparison. Of the total effects of distress about teasing on appearance-RS ($\beta = .16$), 50% was accounted for by the indirect pathway via body dissatisfaction. Indirect pathways from friends' appearance valuing and friends' attractiveness to appearance-RS were not significant ($\beta = .01, = .81; \beta = .02, = .36$).

Lending support to the hypothesised mediational pathway, internalisation and social comparison showed significant indirect pathways to appearance-RS via body dissatisfaction ($\beta = .10, p = .01; \beta = .13, p < .01$). Social comparison ($\beta = .28, p < .001$), but not internalisation ($\beta = .02, p = .58$), also demonstrated a direct effect on appearance-RS. Of the total effects of social comparison on appearance-RS, 68% occurred directly, and 32% occurred via body dissatisfaction. The indirect pathway from internalisation to appearance-RS accounted for 83% of the total effects of internalisation.

Gender

The final aim of the present study was to test gender differences in model pathways (Hypothesis 3). One path, when unconstrained between boys and girls and compared to a model with all paths constrained to equality, was found to significantly improve the model fit. Specifically, the positive association between BMI and body dissatisfaction was stronger in girls ($\beta = .32, p < .001$) than in boys ($\beta = .12, p = .01$; χ^2 difference (1) = 12.34, $p < .01$). No other significant gender differences in model paths were found.

Discussion

As expected and confirming key propositions of appearance culture theory (Jones et al., 2004), concerns about appearance-based rejection were higher in adolescents who reported greater exposure to an appearance culture within their peer and friendship groups, as created by friends' appearance conversations, appearance teasing that causes distress, and pressure to be attractive. These findings are also consistent with two previous studies of social influences on appearance-RS (Bowker et al., 2013; Park et al., 2009), as well as with the numerous studies of body image, body dissatisfaction and appearance concerns, and their associations with more frequent appearance conversations among friends (Jones, 2004; Shroff & Thompson, 2006), a heightened experience of appearance criticism (Park, Calogero, Harwin & DiRaddo, 2009), and greater feelings of pressure to be attractive (Peterson et al., 2007; Blodgett Salafia & Gondoli, 2011).

One aim of this study was to extend research on the appearance culture and its role in appearance-RS of adolescents. However, we also extended this aim to examine a more comprehensive explanatory model that included individual processes that were expected to partially or fully account for how exposure to a peer appearance culture covaries with elevated appearance-RS. Previous research has demonstrated that, among adolescents, being exposed to appearance-focused characteristics of the friendship context (e.g., friends' appearance conversations and teasing,

and preoccupation with weight and dieting) is linked with greater body dissatisfaction to the extent that the individual reported greater internalisation of society's appearance ideals (Jones et al., 2004; Keery et al., 2006), and more frequently engaged in social appearance comparisons (Keery et al., 2006; Shroff & Thompson, 2006). We hypothesised that these same processes would explain how social influences may be linked with concerns about appearance-based rejection. Moreover, we hypothesised that heightened body dissatisfaction would be a necessary link between social influences and appearance-RS, as the negative evaluation of personal appearance may provide the pessimistic 'appearance lens' through which appearance-RS individuals view themselves (Park & Harwin, 2010). Consistent with these hypotheses, more exposure to a peer appearance culture and heightened appearance-RS do involve a heightened negative evaluation of personal appearance, and exposure to appearance-related information from friends seems to shape body dissatisfaction and subsequently appearance-RS through internalisation of appearance ideals and social comparisons. Notably, the associations of engaging in appearance conversations with friends and perceived pressure from friends to be attractive with elevated levels of appearance-RS were fully mediated by adolescents' greater internalisation of appearance ideals, social comparison, and body dissatisfaction. In contrast, distress about appearance teasing was a particularly salient aspect of this model, maintaining a direct effect on appearance-RS despite also showing an indirect pathway to appearance-RS via higher body dissatisfaction. This direct pathway to appearance-RS was not completely surprising, given that appearance teasing involves explicit expression of appearance-based disapproval, to which we know appearance-RS individuals are particularly vulnerable (Park, Calogero et al., 2009).

Although most findings were as expected, it was unexpected that appearance-RS was higher in adolescents who rated their friends as lower in attractiveness. Drawing on studies which show that attractiveness is influenced, in an assimilative manner, by friends' attractiveness (Melamed & Moss,

1975; Walther et al., 2008), adolescent attitudes toward their own appearance may be boosted by their friendship connections with attractive individuals. However, this result requires further assessment as the association between friends' attractiveness and appearance-RS was small ($\beta = -.11$).

Gender Differences

The final aim of this study was to investigate gender differences in the proposed model. Overall, gender differences were quite rare with only one gender difference found when the model was allowed to have paths that differed for boys and girls. This difference indicated that the association of BMI with body dissatisfaction was stronger in girls than in boys. This result confirms the widespread view that female appearance ideals reflect extreme thinness, while male appearance ideals typically involve developing muscularity (Jones, 2004). It may be that the link between BMI and body dissatisfaction is more complex for boys. For example, a higher BMI in boys may be linked with body dissatisfaction when higher weight is due to fat, rather than muscle mass.

It is somewhat surprising that there was only one gender difference and none of the differences involved measures of the peer appearance culture or appearance-RS, given that Bowker and colleagues (2013) found gender differences in the protective versus damaging effect of other-sex peer acceptance on psychological adjustment in association with adolescent appearance-RS. Moreover, gender differences are sometimes reported in the associations between body dissatisfaction and friendship or peer group characteristics, including appearance teasing, appearance conversations with friends, and friends' modelling of dieting behaviours (Webb & Zimmer-Gembeck, in press). Thus, further research, particularly on same-sex friend culture versus other-sex friend influences, is needed.

Limitations and Future Directions

Drawing on the body image literature, we focused on the peer appearance culture as contributing to the development or perpetuation of appearance-RS both directly and via three mediators of greater internalisation of society's appearance ideals, more frequent social appearance comparisons, and greater body dissatisfaction. However, the cross-sectional design of this study prevents conclusions about the direction of effects. It is possible that the direction of effects could be bidirectional. That is, that high appearance-RS youth are hypervigilant to, and therefore more readily report, pressure or criticism from friends about appearance. Further, due to their concerns about and preoccupation with appearance, these individuals may themselves create a stronger appearance culture among their friends, through communicating and modelling their appearance-related concerns and behaviours. This field of research would benefit strongly from studies employing longitudinal designs, which would more clearly elucidate the direction of effects.

A second limitation is our limited consideration of individual factors that might predispose some young people to elevated exposure to a peer appearance culture and appearance-RS. These factors might be considered in future research to determine whether they are also implicated in the development of social problems, as well as appearance-RS and body dissatisfaction. For example, sociability or other temperamental / personality factors may be relevant to consider. It could be that more sociable adolescents are both more involved with peers, putting them at risk of more exposure, and value relationships more highly, putting them at risk of appearance-RS.

During adolescence, there is an increase in the intimacy within friendships, the frequency of interactions with the opposite sex, and the interest and involvement in romantic relationships (Collins, Welsh & Furman, 2009; Sumter, Bokhorst, Steinberg, & Westenberg, 2009; Zimmer-Gembeck, 1999, 2002). The onset of dating involvement brings along the possibility of physical attraction and intimacy. Sexual behaviour during adolescence is accompanied by an increased

emphasis on physical appearance and attractiveness, and has important implications – positively and negatively – for adolescent adjustment (Collins et al., 2009; Zimmer-Gembeck, Siebenbruner, & Collins, 2001). In line with the body image research that has begun to uncover important differences in relation to same- and other-sex relationships (Paxton, Norris, Wertheim, Durkin & Anderson, 2005; Ricciardelli & McCabe, 2001), it is a limitation that we did not differentiate same-sex from other-sex appearance culture in the present study. Future research regarding appearance-RS should more closely consider the nature and content of different types of adolescent relationships.

Despite these limitations of the current study, our findings extend the limited, existing research on the social underpinnings of appearance-RS. The findings support the importance of peers and friends, in conjunction with individual beliefs and internalisation processes, in understanding appearance-RS in adolescents. Exposure to the many appearance-related overt and inadvertent interactions that occur between friends may create a strong appearance culture within that social context, which, when coupled with the personal acceptance of society's appearance ideals, engagement in social appearance comparisons, and heightened body dissatisfaction, provides the ideal environment for the development and perpetuation of appearance-RS.

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Table 1
Means, Standard Deviations, and Correlations Between All Variables Separated According to Gender

Measured variable	1	2	3	4	5	6	7	8	9	10	11
1. Appearance-RS	-	.42**	.28**	.32**	.48**	.23**	-.09	.23**	.50**	.56**	.08
2. Conversations	.49**	-	.33**	.28**	.44**	.48**	.10	.37**	.46**	.41**	.07
3. Teasing - frequency	.32**	.26**	-	.75**	.42**	.25**	-.01	.28**	.24**	.44**	.10
4. Teasing - distress	.35**	.20**	.68**	-	.42**	.22**	-.11	.19*	.21**	.50**	.13
5. Pressure to be attractive	.49**	.56**	.39**	.35**	-	.29**	.09	.33**	.39**	.72**	.28**
6. Friends' appearance valuing	.34**	.43**	.12	.12	.35**	-	.13	.26**	.28**	.18*	.06
7. Friends' attractiveness	.13	.36**	.15*	.13	.24**	.20**	-	.18*	.01	.01	.07
8. Internalisation	.46**	.36**	.16*	.18**	.36**	.23**	.20**	-	.25**	.40**	-.02
9. Social comparison	.65**	.61**	.26**	.26**	.49**	.33**	.21**	.47**	-	.44**	.01
10. Body dissatisfaction	.69**	.48**	.33**	.28**	.50**	.29**	.24**	.50**	.61**	-	.28**
11. BMI	.06	-.05	.03	-.05	.02	-.01	-.02	-.01	.07	.31**	-
Mean (<i>SD</i>)											
Boys	8.29 (5.15)	1.81 (.63)	1.64 (.66)	1.38 (.69)	1.60 (.66)	2.93 (.97)	4.17 (1.07)	2.47 (.83)	2.14 (.78)	1.77 (.81)	21.06 (3.61)
Girls	11.12 (6.35)	2.69 (.87)	1.49 (.53)	1.50 (.75)	1.89 (.82)	3.23 (1.07)	4.82 (1.01)	2.99 (.96)	2.88 (.96)	2.54 (1.13)	21.10 (3.18)

Correlations above the diagonal are for boys ($N = 164$), and those below the diagonal are for girls ($N = 216$)

** $p < .01$, * $p < .05$.

Table 2
Paths Estimates, Standard Errors and Confident Intervals

Model paths	Unstandardised B				Standardised B				
	Estimate	SE	Lower 95% CI	Upper 95% CI	Estimate	SE	<i>p</i>	Lower 95% CI	Upper 95% CI
<i>Direct effects</i>									
Conversations →Internalisation*	0.28	0.07	0.15	0.41	0.27	0.06	.01	0.14	0.37
Teasing-distress →Internalisation	0.07	0.07	-0.06	0.19	0.05	0.05	.31	-0.05	0.15
Friends' values →Internalisation	0.05	0.05	-0.05	0.15	0.06	0.05	.33	-0.06	0.16
Friends' attract. →Internalisation*	0.09	0.04	0.01	0.18	0.11	0.05	.03	0.02	0.20
Pressure →Internalisation*	0.21	0.07	0.08	0.37	0.17	0.06	.02	0.07	0.29
Conversations →Comparison*	0.56	0.06	0.45	0.67	0.52	0.05	<.01	0.43	0.61
Teasing-distress →Comparison	0.08	0.05	-0.02	0.18	0.06	0.04	.07	-0.01	0.13
Friends' values →Comparison	0.04	0.04	-0.03	0.13	0.04	0.04	.29	-0.04	0.14
Friends' attract. →Comparison	-0.01	0.04	-0.08	0.08	-0.01	0.04	.99	-0.01	0.09
Pressure →Comparison*	0.21	0.06	0.08	0.32	0.17	0.05	.01	0.07	0.26
Conversations →Body dissatisfaction*	0.15	0.06	0.04	0.27	0.12	0.05	.03	0.02	0.23
Teasing-distress →Body dissatisfaction*	0.17	0.06	0.05	0.31	0.12	0.04	.01	0.03	0.20
Friends' values →Body dissatisfaction	-0.05	0.05	-0.12	0.06	-0.05	0.05	.39	-0.12	0.05
Friends' attract. →Body dissatisfaction	0.02	0.04	-0.06	0.10	0.02	0.04	.64	-0.06	0.10
Pressure →Body dissatisfaction*	0.31	0.07	0.17	0.45	0.23	0.05	.01	0.11	0.31
Internalisation →Body dissatisfaction*	0.26	0.05	0.15	0.33	0.23	0.04	.04	0.12	0.28
Comparison →Body dissatisfaction*	0.34	0.05	0.23	0.45	0.31	0.05	.01	0.21	0.39
BMI →Body dissatisfaction*	0.08	0.01	0.05	0.10	0.24	0.04	.01	0.16	0.31
Conversations →Appearance-RS	0.31	0.36	-0.43	1.04	0.05	0.05	.52	-0.07	0.15
Teasing-distress →Appearance-RS*	0.69	0.32	0.09	1.32	0.08	0.04	.02	0.01	0.16
Friends' values →Appearance-RS	0.36	0.22	-0.11	0.71	0.06	0.04	.24	-0.02	0.12
Friends' attract. →Appearance-RS*	-0.61	0.24	-1.07	-0.12	-0.11	0.04	.02	-0.19	-0.02
Pressure →Appearance-RS	0.61	0.46	-0.35	1.54	0.08	0.06	.20	-0.05	0.21
Internalisation →Appearance-RS	0.15	0.30	-0.46	0.68	0.02	0.05	.59	-0.07	0.12
Comparison →Appearance-RS*	1.74	0.34	1.13	2.44	0.28	0.05	.01	0.18	0.38
Body dissatisfaction →Appearance-RS*	2.32	0.31	1.74	2.97	0.41	0.05	.01	0.32	0.53

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BMI → Appearance-RS	-0.13	0.06	-0.23	-0.01	-0.07	0.03	.05	-0.12	-0.00
<i>Indirect effects via Internalisation, social comparison and body dissatisfaction</i>									
Conversations → Appearance-RS*	1.96	0.26	1.45	2.51	0.03	0.03	.01	0.21	0.36
Teasing-distress → Appearance-RS*	0.66	0.21	0.30	1.17	0.02	0.02	<.01	0.04	0.13
Friends' values → Appearance-RS	0.03	0.16	-0.25	0.39	0.03	0.03	.81	-0.04	0.06
Friends' attract. → Appearance-RS	0.10	0.15	-0.13	0.55	0.03	0.03	.36	-0.02	0.10
Pressure → Appearance-RS*	1.42	0.30	0.91	2.04	0.04	0.04	<.01	0.12	0.25
BMI → Appearance-RS	0.17	0.03	0.11	0.24	0.02	0.02	<.01	0.06	0.14
<i>Indirect via body dissatisfaction</i>									
Internalisation → Appearance-RS*	0.60	0.14	0.33	0.86	0.02	0.02	.01	0.05	0.13
Comparison → Appearance-RS*	0.79	0.18	0.43	1.18	0.03	0.03	<.01	0.08	0.18

Note: CI = Confidence interval. Model fit statistics: $\chi^2(8, N = 380) = 20.88, p = .007, \chi^2/df = 2.61, CFI = .99,$ and $RMSEA = .065$ (90% CI = .036-.100), $p = .20$.

* $p < .05$.

Figure Headings

Figure 1. Hypothesised Model.

Figure 2. Significant Model paths. Standardised bootstrapped coefficients, with standard errors in parentheses, are shown here (and see Table 2).



