Review Article

Gender differences in respect to self-esteem and body image as well as response to adolescents' school-based prevention programs

Abstract

This review explores the impact of gender roles on adolescents' self-esteem and body image, and the influence of prevention programs on these two factors when delivered in mixed-gender vs. uni-gender groups. Self-esteem is a large part of adolescents' self-understanding; it is dynamic and susceptible to internal and external influences during adolescence. Gender roles influence adolescents' self-esteem. While self-confidence is a stereotypical male feature, the presentation of self-confidence by girls is considered a breach of traditional gender roles. Therefore, it is not surprising that boys report higher self-esteem than girls. Boys are more likely to be in situations that encourage competition, conflict, power, and excitement, where as girls are more likely to encounter situations of intimacy, self-disclosure, support, and co-rumination. While girls tend to develop emotions related to internalizing problems, boys tend to develop emotions related to externalizing them. A consideration of the body ideal for males (muscular and lean) and females (thin) can explain why adolescent girls report more dissatisfaction with their bodies than boys. Body dissatisfaction can have harmful emotional, psychological and physiological effects. During adolescence, girls appear to be more vulnerable than boys) to the negative psychological health effects of stress; they present significantly higher levels of adaptation, depressive symptomatology and eating disorders. Boys tend to display a higher prevalence of externalized behavioral problems, such as aggression, antisocial behavior and delinquency. Gender differences have been reported in message/concept internalization among adolescents. Moreover, there are conflicting results with respect to the impact of prevention programs on adolescents' body image and self-esteem when delivered in mixed-gender vs. uni-gender groups. Further research is needed to explore these programs' impact when delivered in different settings or to different populations, to enable drawing clear conclusions.

Keywords: adolescent, self-esteem, body image, prevention program, school-based

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Introduction

This review focuses on gender differences among adolescents in self-esteem, body image, and their responses to the school-based prevention programs that challenge these subjects. Since youngsters spend most of their time in school, school-based programs may be the most effective way to reach them.[1] Several well-designed studies have shown that school-based prevention programs have the potential to reduce risky behaviors in adolescents, and to increase healthy ones.[2,3]

Gender differences have been reported from a very early age in children's and adolescents' perceptions, expression of emotions, and behavior.[4] Adolescents face a number of unique developmental challenges, including coping with sudden changes in their bodies, managing their sexual interests, forming new kinds of relationships, and planning their academic and occupational futures. Gender affects how youths manage all of these challenges.[5] These differences may to some extent be attributed to the different roles and expectations that adolescents have learned; for example, parents may perceive the use of aggressive and confrontational coping strategies as acceptable for males but not for females.[6]

Cross-cultural differences have been found in Western countries among boys' and girls' cognitive–behavioral roles in life. Girls and female adolescents more frequently develop cognitions and emotions related to internalizing problems (e.g., sadness, anxiety, anger inhibition, eating disorders), while boys and male adolescents develop cognitions and emotions related to externalizing problems (e.g., aggressiveness, dominance).[7]

Coping research suggests that compared to boys, girls accept greater responsibility for academic failure, use social support more often, and have fewer inadequate reactions.[8] However, gender differences in coping with interpersonal and emotional problems are inconsistent. In some studies, gender differences were found only in seeking support, with females using this coping strategy to a greater extent than males.[9,10] Other studies found that females report a higher amount of perceived impersonal stress and use more social support than boys.[8] Under peer stress, females chose disengagement strategies more often than other strategies.[11] Females have a higher use of isolation, self-blame, wishful thinking, rumination and crying, while males rely on physical activity and higher use of aggression.[8] In addition, perceived interpersonal stress has been shown to have a negative impact on emotional and behavioral problems in girls, but only on emotional problems in boys.[12]

Gender roles are embedded in the cultural context. Thus, intercultural differences also influence gender differences; for example, Turkish male adolescent's showed significantly higher levels of assertiveness than females, but no gender differences in assertiveness were reported among Swedes.[13] It has also been noted that Black girls have higher academic outcomes (e.g., better grades) than Black boys, a result that may be linked to greater racial discrimination toward the latter and how they cope with it.[14] Moreover, unlike the case of White youths, Black girls do not tend to have lower self-esteem than Black boys.[15] Having said this, further exploration of the masking effects of culture on gender differences is beyond the scope of this review.

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The objectives of this review are to explore the gender differences among youth in self-esteem and body image, review the results of programs that target mixed-gender vs. uni-gender groups, and discuss recommendations for future programs.

Gender differences in youths' dangerous behavior

Adolescence is universally viewed as a challenging period during which youth shave to deal with a range of different concerns related to the demands of the transition from childhood to young adulthood. A host of problems become evident within different cultural contexts. For example, adolescents report conflicts with parents, mood disruption, issues with academics, family, financial hardship, self-image, puberty and peer and romantic relationships, as well as risky health behaviors.[8]

Several specific gender-typed pathologies have been reported to increase in adolescents. In a longitudinal study among 315 adolescents performed by Charbonneau et al.,[16] girls appeared to be more vulnerable to the negative psychological health effects of stress than boys. In a cross-sectional study, Aunola et al.,[17] examined 1185 adolescents' at14years of age and found that girls present significantly higher levels of adaptation and have fewer behavioral problems than boys, but also a lower level of self-esteem, and a higher level of depressive symptomatology than boys. In another study, gender differences were also found: boys tended to display a higher prevalence of externalized behavioral problems, such as aggression, antisocial behavior and delinquency, than girls.[18]

In a cross-sectional study examining 81,247 adolescents in 9th and 12th grades et al.,[19] found that abnormal eating habits in both genders are highly connected with concerns about appearance. For females reporting disordered eating, 73% reported having strong concerns regarding their looks, compared to only 39% of females not reporting disordered eating. For males, 41% of those reporting disordered eating reported having strong look-related concerns, versus only 25% of those not reporting disordered eating. Cultural differences were also observed in the frequency of disordered eating. For both genders, overall disordered eating was more prevalent among Hispanic and American Indian youth. Among females, Whites reported the third highest prevalence and Blacks the lowest, while among males, Blacks and Whites reported the lowest prevalence.[19]

Risky behavior among youth is a serious public problem. Adolescents, who suffer from one problematic behavior, for example, drug/alcohol abuse, are likely to engage in others as well, such as early sexual intercourse and aggressive behaviors, because problematic behaviors tend to have the same individual and environmental predictors.[20] The differences between the genders can be attributed to a variety of factors, including girls' and women's dependence on relationships or affiliated needs,[21] ovarian and adrenal hormonal changes at puberty,[22] genetic factors,[23] body dissatisfaction,[24] greater cognitive vulnerability,[25] exposure to negative life events,[26] gender intensification and adherence to traditional gender roles,[27] and interactions among these factors.[25,28]

Gender roles and self-esteem

Self-esteem is a large part of adolescents' self-understanding and is likely to be a fluctuating and dynamic construct, susceptible to internal and external influences during adolescence.[29] Self-esteem is widely recognized as a central aspect of psychological functioning during adolescence. Boys seem to score higher than girls on self-esteem during adolescence.[30] One possible explanation for this difference is gender roles. Many qualities associated with the male role are consistent with high self-esteem. In addition, self-confidence is a stereo typically masculine trait. Boys are expected to develop self-confidence, where as the presentation of self-confidence in girls is considered a breach of traditional gender roles.[31] Thus, it is not surprising that in a meta-analysis performed by Costa et al.,[32] that examined NEO (Neuroticism Extraversion Openness) Personality Inventory data from 26 cultures, including females and males of college age (18-21years) and adults (age 22 or over), females ranked themselves as higher for neuroticism, agreeableness, warmth, and openness to feelings, whereas males saw themselves as more assertive and open to ideas. With respect to abilities, girls did better on verbal tasks, and boys were better at spatial tasks and mathematical word problems. In achievement contexts, girls chose easier tasks, avoided competition, and had lower expectations than boys. Adolescent girls scored significantly higher than boys in social competence, and lower for aggressive behavior and body image.[33]

In a descriptive study with 360 children aged 11years Zakriski et al.,[34] found that gender differences may reflect the sexes differential tendencies to place themselves in situations conducive to particular behaviors. For example, boys may chose situations that encourage competition, whereas girls may seek opportunities for self-disclosure. In boys-only uni-gender groups, there was more competition and conflict than in girls-only groups or mixed-gender groups. Girls-only groups displayed more nurturance and empathy than boys-only groups or mixed-gender groups.[35] In a cross sectional study with 284 children (mean age 9.9years) and 324 adolescents (mean age 13.8), Rose[36] found that girls engage in co-rumination-extensively discussing problems and focusing on negative feelings. In early and middle adolescence, girl's friendships focused on issues of intimacy, love, and communion, where as boys' friendships tended to focus on power, and excitement.

Gender differences in adolescents' relationships with their peers have been noted. In a longitudinal study by De Goede et al.,[37] with 930 adolescents-593 in early adolescence (mean age 12.4years) and 337 in middle adolescence (mean age 16.7years), girls reported a significantly higher level of support from their best friends compared to boys, and this level increased from early to late adolescence. Higher initial levels of support were related to lower initial levels of negative interaction. Boys, on the other hand, initially perceived more negative interactions with friends than girls. A cross-sectional study by Parker et al.,[38] that included 399 young adolescents in 5th to 9th grade found that girls are more jealous than boys, and have a reputation for greater passive and social aggression.

Gender differences in same-sex friendship shave also been noted in other studies.[39–41] Friendships among girls are characterized by greater intimacy, self-disclosure, empathy, interdependence, caring and co-rumination of woes and fears. Boys generally interact in larger friendship groups with a focus on companionship, competition, risky activities, excitement, efforts at direct control, and inhibition of feelings and intimacy. These different styles of emotional response may render girls more vulnerable to depression (especially following negative relationship events), but protect them from externalizing behavior (e.g., aggression, recklessness); the opposite holds true for boys.[42] To summarize, gender roles have a significant impact on adolescents' self-esteem and thus an influence on how adolescents place themselves in different social situations. It may also affect adolescents' body image.

Gender differences in body image

Body image is the dynamic perception of one's body-how it looks, feels, and moves. It can change with mood, physical experience,

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and environment.[43] There are many different factors affecting body image, including gender, media, parental relationships and puberty, as well as weight and popularity.[44]

Body image is closely linked to psychological well-being during adolescence and can have harmful effects when a child is dissatisfied with his/her body. Furthermore, the importance of body-image dissatisfaction is growing due to its implication as a risk factor for the development of eating disorders, depression, emotional distress, self-mutilation, low self-esteem, appearance rumination and unnecessary cosmetic surgery.[35,45]

Rosenblum & Lewis[46] analyzed 115 teenagers (55 boys and 60 girls) in a longitudinal study. Data were collected when the children were 13, 15, and 18years of age. They found that ratings of physical attractiveness and body image remain relatively stable across the early teenage years, but become increasingly negative around age 15-18years because of pubertal changes.

Adolescents experience significant physical changes in their bodies during puberty and are likely to experience highly dynamic perceptions of their body image. Puberty for boys brings characteristics that are typically admired by society-height, speed, breadth and strength. Puberty for girls brings with it characteristics that are often perceived as less laudable, as girls generally get rounder and gain body fat. These changes can serve to increase girls' body dissatisfaction.[43,47] In a cross-sectional study, Lawler & Nixon[45] examined 239 adolescents (54% female), with a mean age of 16years. They found that girls scored significantly higher than males on body dissatisfaction, with 80.8% of the girls reporting a desire to alter their body size as compared to54.8% of the boys.

Body image issues are especially prevalent in girls, but as boys enter puberty their expectations of height and muscle mass change as well. Girls typically want to be thinner, whereas boys frequently want to be bigger.[48] In Western society, the ideal body for males is muscular and lean, whereas for females, a thin body is viewed as more desirable. Tatangelo & Ricciardelli[49] examined 68 pre-adolescents in a qualitative study. They demonstrated that fitness is an important element of boys' and girls' body ideals. For boys the emphasis was on sport, and this was promoted by their peer interactions and the sportsmen they admired. For girls the focus was on looking good, and this was reinforced by their peer conversations, and the actresses and singers they admired. The impact of media exposure is affected by gender. Repeated exposure, for girls, to media images of unrealistic beauty idols significantly impacts the development and maintenance of body image through internalization of cultural ideals, but the influence on boys is controversial.[45,50–52]

Girls usually want to be thinner than they are. They invest in a thin ideal, overestimate males' preference for slender female bodies, view themselves as fatter than other girls, compare themselves negatively to female media models, and consequently become dissatisfied with their bodies.[5] The preference toward thinness appears to increase as girls develop from childhood to adolescence.[53] Wertheim, Paxton & Blaney[54] concluded from cross-sectional studies that about 40-50% of pre-adolescent girls report a preference for being thinner, whereas during adolescence, this number increases to over 70%. Adolescent girls often think that being thinner will make them happier, healthier, attractive and better looking. Furthermore, many studies find that "larger" girls are more likely to be dissatisfied with their body and to feel less good about themselves in general.[53]

For boys, pubertal development is usually a positive experience, as most boys move closer to the common ideal masculine shape.

Boys build muscle and their shoulder width increases. These physical characteristics fit the "ideal" cultural messages formen's body shape and size,[55] and body dissatisfaction among boys has been reported to either decrease or remain stable as they move toward adulthood.[51] Nevertheless, body dissatisfaction is a substantial concern among adolescent boys as well. Bearman et al.,[47] found, in a longitudinal study of 428 adolescent girls and boys aged 13.5years, a rate of body dissatisfaction among adolescent boys of23%. Today, boys are under increasing pressure to meet their unrealistic lean and muscular body ideal.[48,56] These concerns can also lead to health problems such as eating disorders and compulsive body building.[57] The drive for lean muscularity is displayed among male adolescents across cultures, and is a common source of boys' body-image concerns, with many boys wishing to be stronger and more muscular than they are. In addition, many adolescent boys want to be leaner, and this is becoming even more important with the rising prevalence rates of obesity.[55]

Body mass is the most consistent biological factor correlated with body-image dissatisfaction, although the relation seems to differ between genders.[58] A cross-sectional study by Austin et al.,[59] that included 4254 5th-graders (boys and girls) found that boys report dissatisfaction when they are above or below average weight and a higher satisfaction grade when they are of average weight. In contrast, girls' body dissatisfaction increased as a function of body weight. Underweight girls reported greater satisfaction, where as girls of average weight reported dissatisfaction, which increased further in overweight girls. These findings are consistent with other studies.[60,61]

For both genders, the desire to alter shape or weight during adolescence is common, and is associated with emotional distress, dramatic measures to alter appearance such as cosmetic surgery or steroid use, and psychiatric disturbances such as depression and eating disorders.[47] Nevertheless, the gender difference in body image generates different beauty ideals and thus different age-related stresses.

Gender differences in prevention program outcomes (single vs. mixed groups)

In recent years, the issue of dangerous behaviors among youth has generated an increasing demand for prevention programs. Such programs are usually delivered in groups, since social interactions with peers can lead to sharing experiences, perceptions and positions.[62] Thus the school-based setting is considered a good space for adolescent prevention programs. Nevertheless, since there are gender differences in message/concept internalization, the question of single-gender vs. mixed-gender setting needs to be investigated in the prevention field.

Stice et al.,[63] reviewed, in a meta-analysis, 66 published and unpublished studies that focused solely on eating disorder-prevention programs that were evaluated in controlled trials, and delivered to girls-only vs. mixed-gender groups covering a wide range of ages (8-55years). They found that conducting uni-gender interventions with girls and women was more effective for the prevention of eating disorders than mixed-gender settings. Some studies have found a positive effect on the measure of self-esteem and body image in boys vs. girls in a mixed-gender group,[64,65] whereas others did not find any such differences.[66,67]

Richardson et al.,[64] examined the efficacy of a prevention program focusing on body image and self-esteem of 277 participants (150 boys and 127 girls), all 7th grade students from four secondary schools in Australia. The impact of the program on boys and girls was different. The girls in the intervention group reported higher media literacy and

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lower internalization of the thin ideal compared to the control group. However, boys reported higher media literacy and body satisfaction than the control group.

Similar differences were also found in Wilksch et al.,[65] which examined the efficacy of a prevention program delivered to 540 adolescents with a mean age of13.62years that focused on reducing eating disorder risks. They found a significant improvement in self-esteem and body dissatisfaction only among boys post-test and at a 6month follow-up. No significant differences were found among girls. Other studies reported that girls were more affected than boys by the intervention. For example, in Bird et al.,[68] study, which examined the influence of school-based body-image intervention on 43 girls and boys aged 10–11years compared to 45 children in the control group, improvement on measures of body image was found in girls, but not boys. Among the girls, there were improvements in body satisfaction, and reductions in body-satisfaction and appearance-related conversations, appearance-related and restrained eating, and emotional eating. In addition, there were improvements in knowledge of the intervention topic. In contrast, boys reported significantly lower levels of internalization of cultural appearance ideals and appearance-related conversations. Other studies also reported that in mixed-gender groups, girls are more influenced by the intervention than boys.[69,70] Some studies found no significant effect of gender on changes in self-esteem or body image in a school-based program delivered to 5th- and 6th- graders.[66,67]

Mixed effects of gender on program results have also been reported in uni-gender interventions. In a school-based body-image intervention delivered in three 50-minute sessions to 104 young adolescent girls (90 girls were in the control group) in the 7th grade, a significant positive outcome was reported in the intervention group relative to the control group on the subjects of knowledge, risk factors for body dissatisfaction, body image, dietary restraint and self-esteem, post-intervention and at a 3-month follow-up.[71] In another study, performed in four weekly health class periods with 178 adolescents aged 15.2years, significant improvements were noted in the short term, but did not last until the follow-up (3months after program conclusion). Girls reported decreased body dissatisfaction, decreased physical appearance comparisons, and increased appearance satisfaction, relative to controls.[72] A similar impact was reported by Ross et al.,[73]

Stanford & McCabe,[74] who delivered two sessions of a universal prevention program for 121 young adolescent boys between the ages of 12 and 13years focusing on body-image concerns, body-change strategies and accepting differences, found no improvement in body-image concerns or body-change strategies but a significant increase in satisfaction with muscles, increasing self-esteem and lowered level of negative effect. Nevertheless, in another study performed by the same researcher, five sessions of a prevention program for body-image concerns that focused on self-esteem and peer relationships were delivered to 421 adolescent boys between the ages of 11 and15years. No differences were found between the intervention and the control group post-intervention or at any of the follow-ups.[75] Intervention programs are an effective way of promoting positive body image and self-esteem in adolescents. However, there are differences between the genders in the influence of these programs. In addition, different effects are found for uni-gender vs. mixed-gender interventions.

Summary and Conclusion

The present review looks at gender differences among adolescents and their impact on self-esteem and body image, as well as the influence of prevention programs on adolescents' self-esteem and body image when presented to mixed-gender vs. uni-gender groups. Overall, the findings revealed that gender differences start at a very young age, and due to differences in gender roles and physical development, impact adolescents' body image and self-esteem differently between genders.[31]

Physical development for boys, contrary to girls, is usually a positive experience. Therefore, more boys are satisfied with their bodies than girls. Nonetheless, today we are seeing more boys who aspire to have a lean and muscular body and to be closer to the "athletic body ideal".[55] Body mass emerged as a potent predictor of body dissatisfaction. It is directly impacted through negative evaluation of one's own body, especially comparing oneself to the "body ideal". Therefore, body mass can explain the differences in body dissatisfaction between the genders. The differences in gender tendencies can be attributed to differences in the age of the examined participants, weight status and differences in socioeconomic backgrounds as well as different intensities of exposure to media messages. We assume that since boys have late physical development, internalization of the muscular-body ideal comes later in life.[76]

The reviewed studies presented mixed results on gender differences with respect to the impact of intervention programs to promote self-esteem and positive body image, in both mixed-gender and uni-gender programs. The differences in intervention outcomes could be attributed to the deliverer's characteristics (gender, experience, personality, etc.), program components (content, intensity, way of delivery), and setting-girls only vs. boys only vs. mixed gender groups. Since risky behavior among youth is linked with other behaviors, further effort is warranted to develop interventions that are successful among both genders, focusing on gender differences in the context of physical development and societal influences.

To the best of our knowledge, there are no comparative reports of the same program delivered to mixed-vs. Uni-gender groups (boys only, girls only and mixed groups). It is suggested that future research focus on understanding how gender differences impact programs' outcomes and how we should challenge these differences.

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