

## Research Article

# The Role of Athletics in the Self-Esteem of Tomboys

May Ling Halim,<sup>1</sup> Elizabeth Dalmut,<sup>2</sup> Faith K. Greulich,<sup>1</sup> Sheana Ahlqvist,<sup>3</sup>  
Leah E. Lurye,<sup>1</sup> and Diane N. Ruble<sup>1</sup>

<sup>1</sup> Department of Psychology, New York University, 6 Washington Place, New York, NY 10003, USA

<sup>2</sup> Department of Psychology, Princeton University, Green Hall, Princeton, NJ 08540, USA

<sup>3</sup> Department of Psychology, Stony Brook University, Stony Brook, NY 11794, USA

Correspondence should be addressed to May Ling Halim, mayling@nyu.edu

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Many girls self-identify as tomboys, yet little is known about their experiences. Tomboys deviate from gender stereotypes; they also may be more highly aware of gender status differences. Because tomboys may feel different from others and more keenly feel the lower status of their gender group, they may suffer from lower levels of self-esteem. Yet many tomboys also tend to participate in athletics, an activity that often leads to higher levels of self-esteem. Two studies sought to disentangle the interactive effects of tomboy identification and athleticism on self-esteem. Study 1 sampled 144 female undergraduates and Study 2 sampled 66 girls aged from 8 to 13. In both studies, greater self-identification as a tomboy during childhood was associated with lower current self-esteem, but only for less athletic participants. Tomboys who were highly athletic had high levels of self-esteem. Together these findings suggest that participating in athletics can protect tomboys from decreased self-esteem.

## 1. Introduction

Peppermint Patty, Marcie, Sally—these were girls in the colorful cast of the Peanuts Gallery comic strip, each unique in her own way. Peppermint Patty flew around the comic strip in her chin-length hair, freckles, shorts, and sandals with cheer and enthusiasm. She coached a baseball team. Her best friend was Marcie, but she also remained steadfast to “Chuck”. Sally dawdled from one scene to the next with her pert blonde hair and curly bangs, and her dress with matching socks. She avoided the baseball and football neighborhood games when she could and focused her attention on winning the heart of Linus. Although these girls are just characters, they illustrate the range of individual differences in gender typicality—from starkly tomboy (Peppermint Patty) to clearly girly-girl (Sally).

Such variations are particularly noticeable in middle elementary school. There are girls who are “traditional girls” with female-typical interests and preferences. At the same time many girls in middle childhood—estimated from one-third to one-half of all girls—view themselves as tomboys and engage in male-typical behavior [1–6]. This variation

in gender typing during middle childhood is intriguing developmentally because of its contrast to an earlier period in preschool and kindergarten, when extreme enthusiasm for one’s own gender group and gender-typed behaviors is normative [7]. Whereas at age 4 it is common for the majority of girls to revel in the pleasures of wearing pink, frilly dresses [8], at age 8, this is no longer so. Elementary school-aged girls tend to show increasing interest in masculine activities and behaviors. They like to play more sports, play more with male-typed toys, and wear pants [9–11]. Some girls also actively begin to dislike feminine activities and interests [12], and they avoid pink objects and female-typed activities [13]. Tomboyism is thus an important topic to study both because of its high prevalence and because it reflects intriguing changes in gender development.

Yet, overall, there have been few empirical studies on tomboys, and even fewer studies on their psychological adjustment. Given that tomboys, by definition, deviate from gender norms, one might predict that girls like Peppermint Patty are at risk for lower self-esteem. Alternatively, given that many tomboys engage in sports and that athleticism has been positively associated with self-esteem (e.g., [14, 15]),

tomboys may show healthy levels of self-esteem. The present research aims to examine directly whether tomboys are vulnerable to lower self-esteem compared to traditional girls and whether such an association is influenced by engagement in athletics. We begin by briefly examining two lines of research that lead to the prediction that being a tomboy would be associated with lower self-esteem: gender typicality and gender public regard, two dimensions of gender identity [16]. We then review research that suggests that tomboys' involvement in athletics may influence this association.

## 2. Gender Typicality

Although tomboyism can be considered normative in light of its high prevalence, girls who identify as tomboys may still feel gender atypical when comparing themselves to feminine gender stereotypes or gender ideals [17]. Indeed one study of elementary school-aged girls found that self-identification as a tomboy was associated with feeling less gender typical [4]. Historically, controversy surrounded the question of whether being typical of one's gender group benefited or harmed one's psychological adjustment. Bem [18, 19] suggested that conforming to gender norms stifles people from developing a full repertoire of skills and behaviors. This limited set of abilities would in turn prevent one from being able to adapt to a variety of situations and would result in maladjustment. Instead, Bem [18, 19] proposed that androgyny, embracing both femininity and masculinity, was optimal for well-being. In contrast to Bem's [18, 19] perspective, Kagan [20] proposed that behaving in a gender-typical manner was best for psychological adjustment because this would avoid feeling different from same-sex others and would encourage a healthy sense of self as a male or female.

Recent research supports the idea that feeling less gender typical is associated with worse psychological adjustment [21–23]. In one study conducted in Israel, girls who reported possessing male-typed traits, performing male-typed behaviors, and preferring male-typed interests and occupations had lower social self-esteem and were more dissatisfied with their gender compared to other girls [24]. In extreme cases, youth who exhibited strong cross-gender-typed behavior and were strongly dissatisfied with their gender tended to exhibit poor adjustment as well [25, 26]. Thus because tomboys may feel gender atypical in the face of gender stereotypes, they may suffer from lower self-esteem.

## 3. Gender Public Regard

In addition to the gender typicality literature, another line of research would also suggest that tomboys may have lower self-esteem than traditional girls. As children transition from early to middle childhood, they become increasingly aware of status differences between men and women (see [7]). Studies on children's changing gender stereotypes and their understanding of gender discrimination (e.g., [27–31]) suggest that children in middle elementary school develop a sense of gender public regard. Gender public regard has been defined as the awareness that other people may evaluate one's

gender group and hold it in high or low esteem [32, 33]. If tomboys are the girls who have a stronger sense that others evaluate women less favorably than men in terms of status and competence, as indeed retrospective qualitative interviews would suggest [12], then their personal self-esteem may suffer due to this realization, as self-perceptions may reflect the perceptions of others (e.g., [34, 35]).

## 4. Tomboys and Athleticism

Based on the gender typicality and public regard literatures we would predict that tomboyism would be linked to lower self-esteem. But is this true for all tomboys? Or does some other factor play an important role in moderating the association? Of note is that tomboys often participate in athletics [36]. Thus examining tomboyism and athleticism in concert may be crucial in understanding the nature of tomboyism in relation to self-esteem. On one hand, as stated earlier, the gender development literature would predict that tomboyism would be linked to lower self-esteem. On the other hand, athletic participation has been associated with higher self-esteem [14, 15, 37–41] and reduced risk of depression, internalizing behavior, and suicidal ideation [15, 42]. Physical activity experiences also help girls develop important relationships and gain confidence [43]. Thus, whether tomboys suffer from poor psychological adjustment compared to traditional girls presents an interesting quandary, as athleticism and tomboy identification are inherently confounded. Because of the robust positive effects of athleticism on self-esteem, we expected that tomboyism would be associated with lower self-esteem only for less athletic individuals. For highly athletic individuals, tomboyism would not be associated with self-esteem.

## 5. Study Overview

The current paper sought to directly examine whether tomboys have lower self-esteem than traditional girls, and whether this difference depends on level of athleticism. We were interested in whether these effects would be evident in girls in middle childhood and early adolescence. Also we sought to examine whether the effect of once having been a tomboy is evident on a girl's adjustment years later. Thus we conducted two studies. In Study 1, female collegiate athletes and nonathletes reflected on their athletic participation and self-esteem. In Study 2, girls in middle childhood reported on their athleticism and self-esteem. In both studies, we chose to operationalize a tomboy as any girl who self-identified with the label "tomboy", consistent with the majority of past research (e.g., [2, 3, 5, 6, 10, 12, 44]). There is still controversy over how to define tomboyism (see [44]). However, generally tomboys are often defined as girls who are more masculine than traditional girls in peer choice, activities, interests, appearance, and gender identity [2, 4, 6, 9]. We hypothesized that for both samples, we would observe an interaction between athleticism and tomboyism. We predicted that, across both samples, tomboys who do not experience the protective buffer of athletic participation would show lower

levels of psychological adjustment compared to athletic tomboys and to both athletic and nonathletic traditional girls.

## 6. Study 1

### 6.1. Method

**6.1.1. Participants.** One hundred forty-four female undergraduates at a northeastern university volunteered to participate. Their mean age was 20.30 years ( $SD = 1.38$ ). About half of the participants ( $n = 73$ ) belonged to a varsity athletic team at the university. We recruited all participants through e-mail announcements and targeted athletes by sending the announcement to varsity team rosters.

**6.1.2. Procedure.** Each participant completed an online survey which asked participants about their current self-esteem and athletic participation. After completing the survey, participants were debriefed and thanked.

### 6.1.3. Measures

**Tomboy Identity.** Tomboy identity was assessed by asking participants, "At any time in your childhood would you describe yourself as a tomboy?" Responses could range from 1 to 5 (1 = Not at all, 5 = Tomboy). Tomboys are often discussed as a dichotomous variable; either a girl is or is not a tomboy. However, the data showed that in our sample, the full scale was used, suggesting a continuous construct. Overall the sample leaned toward a moderately high tomboy identity ( $M = 3.64$ ,  $SD = 1.35$ ).

To get a better sense of what childhood tomboy identification represented in our sample, we also asked participants to rate on a 5-point scale (1 = Not important, 5 = Very important) how important 6 attributes were to being a tomboy. These attributes included the following: *playing games associated with boys*, *participating in athletics*, *playing in groups that are primarily composed of boys*, *having little concern about appearance*, *having short hair*, and *primarily playing alone*. We also asked participants about their activities during a period when tomboyism may be most likely: "During your free time between ages 9 through 12... with whom did you typically play?" (1 = Girls, 3 = Mixed, 5 = Boys) and "...did you typically engage in sports-like activities or activities that were associated with the opposite sex?" (1 = Female-typed activities, 3 = Mixed, 5 = Male-typed activities). We also asked participants who identified as tomboys at what age they began being tomboys, and "If you stopped identifying as a tomboy, at about what age did this occur?"

**Athletic Participation.** Participants were asked if they were currently on a varsity-level college athletic team and if they currently played any club sports. In addition, we asked all participants to list their top three extracurricular activities most important to them. Based on responses, participants were divided into three categories of athletic participation:

varsity college athletes ( $n = 73$ ), nonvarsity athletes ( $n = 42$ ), and nonathletes ( $n = 29$ ). Varsity college athletes played both team sports and individual sports, which included soccer, ice hockey, field hockey, water polo, volleyball, softball, basketball, crew, squash, track and field, cross-country, swimming, and golf. Nonvarsity athletes included those who played on club sports teams (71%), which also spanned both team and individual sports, such as those mentioned previously and also fencing, skiing, and horseback riding. Nonvarsity athletes also included those who mentioned any kind of physical exercise as one of their extracurricular activities, which primarily included dance and jogging. Nonathletes were those participants who did not list any type of physical activity as one of their extracurricular activities. Childhood tomboy identification was weakly positively correlated with athletic participation,  $r(144) = .18$ ,  $P = .032$ , suggesting that tomboy identification encompassed more than only participating in sports.

**Self-Esteem.** Self-esteem was measured with the Rosenberg Self-Esteem Scale [45], which included 10 items on a scale from 1 (strongly disagree) to 7 (strongly agree) ( $\alpha = .88$ ;  $M = 5.50$ ,  $SD = .88$ ). A sample item was, "On the whole, I am satisfied with myself."

### 6.2. Results and Discussion

**6.2.1. Tomboy Definition and Associated Attributes.** The current sample defined a tomboy as a girl who plays games associated with boys ( $M = 4.06$ ,  $SD = .86$ ), participates in athletics ( $M = 3.95$ ,  $SD = 1.10$ ), plays in groups that are primarily composed of boys ( $M = 3.95$ ,  $SD = .90$ ), and has little concern about her appearance ( $M = 3.62$ ,  $SD = .90$ ). They did not consider having short hair ( $M = 2.63$ ,  $SD = 1.26$ ) or primarily playing alone ( $M = 1.79$ ,  $SD = .98$ ) as definitive attributes of a tomboy. Consistent with their definitions, in the current sample childhood tomboy identification was positively correlated with playing with boys more ( $r(143) = .53$ ,  $P < .001$ ) and engaging in male-typed activities more ( $r(143) = .64$ ,  $P < .001$ ) from ages 9 to 12. The average age for beginning to be a tomboy was 7.40 years ( $SD = 2.33$ ; range = 3.00 to 14.00 years). The average age for ceasing to identify as a tomboy was 13.16 years ( $SD = 2.19$ ; range = 8 to 19 years). Eleven participants reported continuing to currently identify as tomboys.

**6.2.2. Athleticism, Tomboyism, and Self-Esteem.** We predicted that tomboyism would be associated with lower self-esteem, but that this relation would be moderated by athleticism. To examine this hypothesis we treated self-esteem as the dependent variable in a multiple regression analysis with tomboy identity and athletic status entered on the first step and the two-way interactions between tomboy identity, a continuous measure, and athletic status entered on the second step. Before performing the analysis, we centered tomboy identity around its mean. We also created two dummy codes for the three levels of athletic participation and made nonathletes the reference group.

Initial regression analyses indicated that, in the second step of the model, nonvarsity athletes and nonathletes did not significantly differ in mean level of self-esteem,  $B = .22$ ,  $t(138) = 1.04$ , *ns*. Nonvarsity athletes' and nonathletes' slopes also did not significantly differ from one another across levels of tomboy identity in predicting self-esteem,  $B = .08$ ,  $t(138) = .54$ , *ns*. Thus, to increase statistical power, we collapsed the nonvarsity athletes and the nonathletes into one group and repeated regression analyses with only two groups—varsity athletes and non-varsity women.

When evaluated on the first step of the regression model, we found that athlete status significantly predicted current self-esteem, but tomboy identity did not. However, consistent with our hypothesis, on the second step, a significant interaction between tomboy identity and athlete status on current self-esteem subsumed these effects,  $B = .26$ ,  $t(140) = 2.44$ ,  $P = .016$  (see Figure 1), significantly increasing the amount of variance accounted for in current self-esteem,  $F_{\Delta}(1, 140) = 5.94$ ,  $P = .016$ ,  $\Delta R^2 = 4\%$ . Examining the interaction more closely, we found that for varsity athletes, the simple slope of tomboy identity was not significant,  $B = .05$ ,  $t(140) = .65$ , *ns*. However, for nonvarsity participants, the simple slope of tomboy identity was negative and significant,  $B = -.21$ ,  $t(140) = 2.90$ ,  $P = .004$ . Thus, as predicted, the data suggest that stronger tomboy identity negatively affected the self-esteem of only nonvarsity participants.

To check whether these results were driven by a small subsample of unusual participants (e.g., nonathletic tomboys), we examined the number of participants who fell into each tomboy/athlete category. Above we examined tomboy identification as a continuous measure. However, for this purpose, we temporarily categorized participants who reported 4's or 5's on the tomboy identification measure as tomboys. Using these categories, 52 participants were tomboy/varsity athletes (36%), 40 participants were tomboy/nonvarsity female undergraduates (28%), 31 participants were nontomboy/nonvarsity female undergraduates (22%), and 21 were nontomboy/varsity athletes (15%). These proportions suggest that nonathletic tomboys made up a substantial number of our participants and that our results were not driven by a small sample of outliers.

These findings are the first to suggest that identifying as a tomboy can indeed be associated with lower self-esteem, but only under certain conditions. When female undergraduates are highly athletic, the association between identifying as a tomboy and lower self-esteem appears to be absent. Hence, the data suggest that high levels of athleticism can buffer tomboys from having lower self-esteem. Interestingly, participants who played club sports or engaged in other types of physical exercise did not differ from participants who were not primarily occupied by physical activities, contrary to what past research would suggest about the beneficial effects of overall physical activity [43]. A limitation of the study is that the sample included many relatively high-level athletes with moderately high levels of tomboy identification, which may not be representative of the general population. Study 2 aimed to address both of these issues by recruiting a sample of girls currently in their childhood and early adolescent

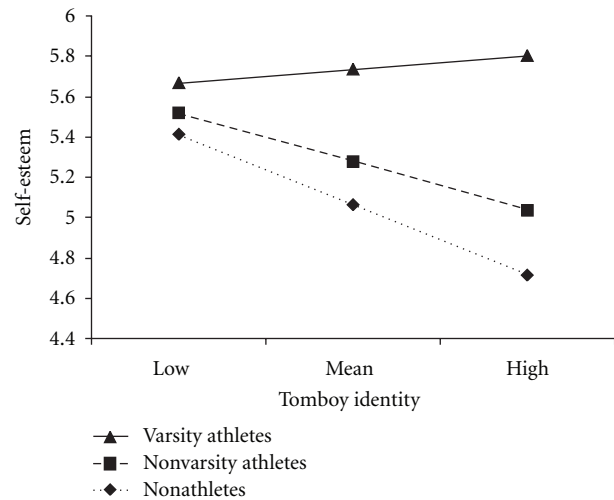


FIGURE 1: Study 1: Females undergraduates' predicted values of self-esteem by childhood/early adolescent tomboy identity moderated by athletic participation. Low and high tomboy identity are 1 *SD* below and above the mean of tomboy identity.

years and who, as a sample from local schools, did not include an overrepresentation of high-level athletes or of tomboys.

## 7. Study 2

### 7.1. Method

**7.1.1. Participants.** Sixty-six girls were recruited with parent permission from public and private elementary schools in New York City, as well as from university faculty and staff. These girls were a subset of a larger study on gender development including both boys and girls. We included only girls ages 8 and above because our self-esteem measure was not age appropriate for younger children who were thus not given the measure. About 87% of the girls were White, with a small number of Latina and African-American girls. Their ages ranged from 8.04 to 13.79 years ( $M = 10.36$ ,  $SD = 1.35$ ). We chose to examine this age group because the literature suggests that tomboyism is most prevalent during the elementary school years [3, 5]. Indeed in Study 1, the average age women reported becoming tomboys was around age 7. Furthermore, the average age for tomboyism to cease has been reported to be around age 13 [5], which Study 1 replicated as well, so we extended our investigation to early adolescents in addition to elementary-school-aged girls to fully capture the full spectrum of ages when tomboyism is the most relevant in development. To check for differences between children and early adolescents, we divided our sample into 8 to 10 year olds ( $n = 46$ ) and 11 to 13 year olds ( $n = 20$ ) where appropriate.

**7.1.2. Procedure.** Questionnaires were administered in one of two set orders to minimize possible effects of reactivity across measures. Interviewers (9 women) were trained in the standardized administration of all measures. Sessions were



conducted at the child's school, home, or the university and typically lasted between 30 and 40 minutes. At the end of each session participants were debriefed and thanked.

### 7.1.3. Measures

**Tomboy Identity.** Tomboy identity was assessed by asking participants the open-ended question, "Do you now think of yourself as a tomboy?" Responses were coded as 1 = No, 2 = Somewhat (e.g., if a child answered, "A little bit" or "Sort of"), or 3 = Yes ( $M = 1.76, SD = .81$ ). We assessed tomboy identity in an open-ended format, different from Study 1, because we were interested in what kinds of responses girls would provide. Some critics have suggested that the label of "tomboy" is outdated. However all of the participants understood the "tomboy" label. Also, one might assume that being a tomboy is a strict categorical classification—either one is a tomboy or is not. Allowing participants to answer the question in an open-ended format let us probe whether this assumption was supported. Children's responses suggest that tomboyism is a more continuous construct, consistent with our observations in Study 1. Further, in response to an open-ended question on what it means to be a tomboy (as part of a larger study, see [4]), 55% of the sample mentioned gender-based interests and activities, 50% mentioned sports, 42% mentioned appearance, 38% mentioned personal-social attributes, and 20% mentioned gender-based social relationships, largely in the male direction (e.g., a tomboy is someone who has male-stereotyped interests and likes male-stereotyped activities versus a tomboy is someone who avoids female-stereotyped interests and dislikes female-stereotyped activities).

**Athleticism.** Athleticism was measured as a scale composed of eight items ( $\alpha = .73$ ). We used four items based on the physical competence subscale of the Perceived Competence Scale for Children [46] (e.g., "Some kids do very well at all kinds of sports, but other kids do not feel that they are very good when it comes to sports", "Some kids think they could do well at just about any new sports activity they haven't tried before, but other kids are afraid they might not do well at sports they haven't tried"). Children chose which group they were more like and whether it was "sort of true" or "really true" for them (1 = Really not at all true, 2 = Sort of not true, 3 = Sort of true, and 4 = Really true). Higher numbers indicated greater athleticism. One might propose that the physical competence and self-esteem [45] constructs overlap in what they measure. However, past research has suggested that physical competence and general self-worth are distinct [46]. Moreover, the correlation between the physical competence subscale and self-esteem [45] was sufficiently low,  $r(66) = .23, P = .064$ . In addition to these four items from the physical competence subscale, children reported how much they liked basketball, baseball, softball, and sports in general (1 = Doesn't like a lot, 2 = Doesn't like a little, 3 = Likes a little, 4 = Likes a lot). The basketball and baseball items were pulled from a separate measure on personal preferences of gender-typed toys and

were accompanied by color pictures of the balls, whereas the other two items were not. We chose these particular sports since they are among the most common sports that girls play (in a national U.S. survey, 55% of girls played basketball and 38% of girls played baseball or softball) [47]. Scores could range from 1 to 4. Athleticism was moderate in the sample ( $M = 2.79, SD = .64$ ). Athleticism was positively correlated with tomboy identity,  $r(66) = .29, P = .019$ , but not to such a large degree that collinearity would present a problem in inferring the separate and interactive effects of each factor on self-esteem.

**Self-Esteem.** Self-esteem was measured with the 10 items from the Rosenberg Self-Esteem Scale [45] ( $\alpha = .71$ ). However, we narrowed the available responses from a 7-point scale to a 4-point scale (1 = Strongly disagree, 2 = Somewhat disagree, 3 = Somewhat agree, 4 = Strongly agree) for children's ease of response ( $M = 3.39, SD = .42$ ). Elementary-school-aged girls ( $M = 3.35, SD = .46$ ) and early adolescent girls ( $M = 3.49, SD = .30$ ) did not significantly differ in level of self-esteem,  $t(64) = 1.26, ns$ .

**7.2. Results and Discussion.** Similar to the pattern that we found in Study 1, we predicted that greater tomboy identification during childhood would be associated with higher self-esteem, but that this relation would be moderated by athleticism. To examine this prediction we treated self-esteem as the dependent variable in a multiple regression analysis with tomboy identity and athleticism entered on the first step and the two-way interaction between tomboy identity and athleticism entered on the second step. Before performing the analysis, we centered tomboy identity and athleticism at their respective means.

Results confirmed our hypothesis. When evaluated on the first step of the regression model, both tomboy identity and athleticism significantly predicted self-esteem. However, a significant interaction between tomboy identity and athleticism subsumed the two effects,  $B = .24, t(62) = 2.41, P = .019$  (see Figure 2) and significantly increased the amount of variance accounted for in self-esteem,  $F_{\Delta}(1, 62) = 5.83, P = .019, \Delta R^2 = 7\%$ . Analysis of the simple slopes revealed that the simple slope of tomboy identity was not significant for more athletic girls,  $B = -.04, t(62) = .59, ns$ . In contrast, the simple slope of tomboy identity was significant and negative for less athletic girls,  $B = -.34, t(62) = 3.39, P = .001$ . Hence, the data suggest that tomboy identity negatively predicts the self-esteem of less athletic girls, but not of more athletic girls.

To ensure that these relations were applicable to both elementary-school-aged girls and early adolescent girls we conducted another regression. We treated self-esteem as the dependent variable with age group (dummy coded with elementary-school-aged girls as the reference group), tomboy identity, and athleticism entered on the first step, the 3 two-way interactions between age group, tomboy identity, and athleticism entered on the second step, and the three-way interaction among age group, tomboy identity, and athleticism entered on the third step. Results revealed that the 3-way

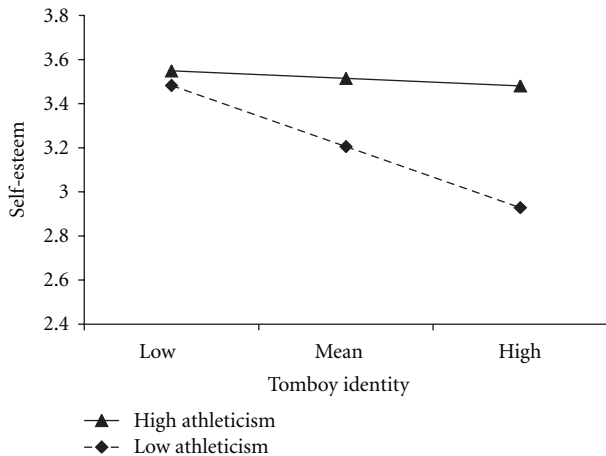


FIGURE 2: Study 2: Girls' predicted values of self-esteem by tomboy identity moderated by athleticism. Low and high tomboy identity are 1 SD below and above the mean of tomboy identity.

interaction was not significant,  $B = -.32$ ,  $t(62) = 1.22$ ,  $ns$ , indicating that the tomboy identity by athleticism interaction was consistent across age groups. Results also revealed no significant 2-way interactions involving age group (age group  $\times$  athleticism:  $B = .10$ ,  $t(62) = .47$ ,  $ns$ ; age group  $\times$  tomboy identification:  $B = .22$ ,  $t(62) = 1.49$ ,  $ns$ ), nor a significant main effect for age group,  $B = .06$ ,  $t(62) = .57$ ,  $ns$ .

The present study supported our predictions. As in Study 1, tomboys tended to have lower self-esteem, but only if they were low on athleticism. When tomboys were more athletic their self-esteem levels remained high.

## 8. General Discussion

Our study is the first to investigate whether self-identified tomboys are at risk for lower self-esteem, a question of importance given that a large number of girls identify as tomboys in middle childhood and early adolescence. Indeed, in our Study 2 sample, 53% of girls from ages 8 to 13 reported being "somewhat" or clearly tomboys. Studying the link between tomboyism and self-esteem is also important because childhood and early adolescent tomboyism usually occurs right before mid- to late adolescence, when girls become susceptible to a drop in self-esteem [48] and face a higher risk of experiencing depression relative to boys [49].

We also considered it crucial to understand the way in which athleticism plays a role in tomboys' self-esteem, as tomboys often participate in sports [36], and as the very definition of tomboyism often involves sports by others and by tomboys themselves as we found in Study 1. Furthermore, in recent years, girls and women of all ilk have been participating in sports in record numbers at all levels including during elementary school and in college [43]. About 70% of girls between the 3rd and 5th grade, and about 72% of girls between the 6th and 8th grade, in the United States are moderately to highly involved in sports [47]. However, despite a high rate of sports participation as a group, in adolescence, girls' rates of physical activity decline dramatically, and girls and women consistently lag behind boys and

men in rates of sports participation [43, 50]. Thus studying athleticism in relation to self-esteem can have practical application for both tomboys and traditional girls alike.

In addition, the nature of tomboyism and athleticism in relation to self-esteem presented an interesting quandary. Tomboyism was predicted to be associated with lower self-esteem because of lower feelings of gender typicality and greater awareness of male-female status disparities. In contrast, athletics has been robustly related to positive psychological adjustment. Is tomboyism associated with lower self-esteem in girls and young women, and does this depend on level of athleticism? Our results indicated that tomboyism was indeed associated with lower self-esteem in girls and young women, but only when these girls and young women were also relatively nonathletic. It was striking that such similar patterns emerged in both the collegiate and elementary school samples. In each sample, only tomboys who were relatively low on athletic involvement exhibited lower self-esteem compared to nontomboys. Athletic tomboys exhibited high levels of self-esteem on par with nontomboys.

The interactive effects of tomboy identification and athleticism on self-esteem emerged in both samples, through multiple measures, indicating robustness in the pattern we found. This also suggests that the interactive effects of athleticism and tomboyism are important, not just in childhood, but at different stages of development. Particularly remarkable is that tomboyism in childhood was associated with self-esteem years later for nonathletic young women, which may suggest the high impact of tomboyism across the life span. Alternatively, tomboyism in childhood may have some stability and may be associated with similar gender stereotype deviance in young adulthood. Indeed, there is some evidence for moderately stable individual differences in gender typing, at least in childhood [51–53].

The results of these studies raise new questions about the process underlying the interactive effects of athleticism and tomboy identification. One possible underlying process that may be involved is that of contingencies of self-worth [54]. Athletic tomboys may stake a large part of their self-esteem upon the domain of athletics, which is likely full of mostly positive evaluations, rather than on their gender identity. Alternatively, they may hold both athletics and gender identity as important to their self-concepts, but the positive feedback from their athletic participation may buffer them from any decrements in self-esteem due to either feeling different from female peers (less gender typicality) or to a heightened awareness of the lower status of females (gender public regard). Indeed, athletics has been found to improve self-perceptions of physical appearance and physical competence [39], increase gender flexibility [39], and lead to a more positive global physical self-concept [14], which all have been posited to lead to increased self-esteem.

Alternatively, instead of different contingencies of self-worth as an underlying process, athletic tomboys may simply feel more gender typical since they may be surrounded by many girls who are similar to them. Much research supports the idea that feelings of belongingness are vital for overall psychological well-being [55]. Future research should directly assess feelings of gender typicality in tomboys and

traditional girls and then examine whether these feelings of gender typicality can explain a link between tomboyism and self-esteem when athleticism is absent. It would also be interesting to examine whether tomboys and traditional girls differ in their level of awareness of male-female status disparities, and whether this difference is related to psychological adjustment.

In addition to investigating the mechanism involved, describing who exactly nonathletic tomboys are would be another interesting direction of future research. The distribution of our two samples along the dimensions of tomboyism and athleticism suggests that this population is substantial and not just an errant minority. Other research, too, supports the idea of ample variation in tomboys [24]. This study found that tomboys had multiple kinds of gender role orientations (e.g., masculine, feminine, androgynous). Perhaps then this nonathletic tomboy group has unique qualities that have yet to be understood that make them vulnerable to lower self-esteem. It may be that athletic tomboys are atypical in an “appropriate” or normative way that is valued by others, whereas nonathletic tomboys are atypical in an “inappropriate” or nonnormative way that is devalued by others (e.g., dressing more like a boy).

Another unanswered question is why, in Study 1, the nonvarsity college women who played club sports or exercised independently were still at risk of lower self-esteem with increasing tomboy identification. Perhaps a sense of competence needs to accompany mere athletic participation in order for athleticism to buffer young women who were once tomboys from lower self-esteem. Indeed, our operationalization of athleticism in Study 2 included both questions of self-perceived athletic competence and also interest in sports. With these two factors, the athletic girls in Study 2 showed a similar pattern to the college varsity women in Study 1. An advantage of our studies was the use of multiple methods in measuring athleticism, and showing consistent results. At the same time, this is a limitation because we cannot clearly point to which aspect of athleticism, or which combination of them, is vital as a psychological boon to girls’ and young women’s mental health.

In both studies we chose to use self-identification as a tomboy as our measure of tomboyism. As stated earlier, the large majority of the existing, though small, literature on tomboyism employs the same method. By also using self-identification, our study can be more readily compared to findings in past research. Also, perhaps self-identification is most important in determining whether tomboyism has any effect on one’s psychological functioning, as self-identification is part of an inward, reflective process that may represent greater internalization of a label and a stronger sense of group membership. However, we acknowledge the benefit in measuring tomboyism in other ways, such as by parent or teacher identification (e.g., [9, 10]). Future research should look at the correspondence between self- and other-labeling as a tomboy.

In short, across two studies, our findings suggest that being a tomboy can indeed put one at risk for lower self-esteem in childhood, early adolescence, and as young women, but only when athleticism is absent. Tomboys who were highly

athletic had just as high levels of self-esteem as traditional girls. Thus, in a fictional world, we would not have to worry about the Peanut Gallery. Peppermint Patty, playing baseball, should be just fine in feeling as good about herself as dear Sally.

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