

UC Santa Cruz

UC Santa Cruz Previously Published Works

Title

Self-Perceived Gender Typicality and the Peer Context During Adolescence

Permalink

<https://escholarship.org/uc/item/1zf7v354>

Journal

Journal of Research on Adolescence, 16(1)

ISSN

1050-8392

Authors

Smith, Tara E

Leaper, Campbell

Publication Date

2006-03-01

DOI

10.1111/j.1532-7795.2006.00123.x

Peer reviewed

Self-Perceived Gender Typicality and the Peer Context During Adolescence

Tara E. Smith and Campbell Leaper

University of California Santa Cruz

This research examined adolescents' gender identity in relation to the peer context and their self-concept. Participants were 229 adolescents who completed questionnaire measures of self-concept and multidimensional gender identity. Regression analysis indicated peer acceptance partially mediated the relation between self-perceived gender typicality and self-worth. Cluster analysis revealed four groups of adolescents with differing profiles of self-perceived gender typicality, felt peer pressure for gender conformity, and peer acceptance. Findings highlight the inherently social and contextual nature of gender identity. Also, the pathologizing of gender-nonconforming youth is discussed.

The current study considered adolescents' gender identity in relation to the peer context and psychological adjustment. The study of adolescent and adult gender identity has largely emphasized the degree to which individuals adhere to culturally proscribed social-personality attributes (e.g., Bem, 1974; Spence & Helmreich, 1978). Although this approach has its merits, there are two notable limitations. First, gender identity is measured solely as an intrapsychic phenomenon, and therefore does not assess identity in relation to the social context. Second, a person's gender identity is defined from the researcher's frame of reference (i.e., in relation to specific feminine- and masculine-stereotyped attributes), and therefore does not consider how individuals construe the meaning of their own gender. Both of these limitations, however, are avoided by Egan and Perry's (2001) multidimensional model of gender identity. Their instrument includes individuals' perceptions of how typical they are for their gender

(gender typicality), how content they are with their socially proscribed gender role (gender contentedness), and how pressured they feel to conform to gender norms (felt pressure from peers and parents). In our analysis, we focused on felt pressure particularly *from peers* given the importance of the peer context for transmitting and enforcing gender norms (see Leaper, 2000; Leaper & Raasch, forthcoming; Maccoby, 1998).

Egan and Perry (2001) reported that gender typicality was positively related to girls' and boys' endorsement of self-efficacy for gender-typed activities and gender-typed traits. Thus, girls and boys self-perceived gender typicality appears to relate to their conformity to gender-stereotyped roles. Whereas gender typicality was positively correlated with adjustment (e.g., self-esteem), felt pressure was negatively associated with adjustment. Subsequent research has suggested that feeling pressure to conform to gender roles may be especially damaging to children who do not feel typical for their gender (Carver, Yunger, & Perry, 2003; Yunger, Carver, & Perry, 2004). The present investigation sought to build on this last point by hypothesizing that peer acceptance would *mediate* the relation between perceived gender typicality and self-esteem. Thus, when children are ostracized by their peers for gender nonconformity, their sense of self-worth is expected to suffer. However, if children do not experience negative sanctions from their peers for crossing gender-role boundaries, their self-worth should not suffer (or suffer less).

To complement our mediational model, we also conducted exploratory cluster analyses using gender typicality, felt pressure, and peer acceptance as grouping factors. We expected that the three variables might combine in different ways to predict self-worth and gender contentedness. For example, not all children who are low in gender typicality may experience felt pressure or peer rejection. The clusters were subsequently used in ANOVAs to test for group differences in gender contentedness and self-worth. Adolescents who viewed themselves as nontraditional (low gender typicality) and also experienced both peer pressure and peer rejection were hypothesized to have lower gender contentedness and lower self-worth than others. In contrast, nontraditional adolescents who reported high peer acceptance and low peer pressure were expected to have relatively high gender contentedness and high self-worth. These hypotheses follow from our general contention that the relation between gender identity and adjustment is best viewed as a contextually mediated phenomenon.

Finally, we want to note that our study examined a sample of adolescent girls and boys who were attending summer sports camps. This is different than the more typical use of school classrooms for recruiting participants. Sports are strongly gender typed as masculine activities with their

emphasis on physical agency and competition. However, with the passage of Title IX legislation in the U.S., American girls' athletic participation has dramatically increased and now comes close to matching boys' participation rate (Women's Sports Foundation, 2004). Nonetheless, some adolescent girls in sports may experience gender-role strain (e.g., Patrick et al., 1999). Given the different cultural meanings of this activity setting for girls and boys, we analyzed the two genders separately.

METHOD

Participants

The sample included 119 girls and 110 boys ranging in age from 12 to 17 years of age ($M = 14.4$, $SD = 1.5$) who were participating in summer sports camps. The adolescents were 80% European American, 7% Asian American or Pacific Islander, 3% Latino, 1% African American, .4% ($n = 1$) American Indian, 3% mixed, and 5% "other."

Procedure

Participants were recruited when registering with their parents for coeducational summer sports camps at a university on the central California coast. The adolescents were enrolling in a camp for either basketball, soccer, tennis, or swimming and diving. The study was described to participants as investigating how adolescents feel about themselves and the people in their lives. Consent was obtained from participants and one of their parents.

Questionnaires were administered to groups of participants during a break in camp activities a few days after consent was obtained. The questionnaire took approximately 20 minutes to complete and was given by a female researcher. It included scales assessing self-concept, gender identity, and sport self-perception. Participants were given a small gift (a mug, a tee-shirt, or a cap) for their participation in the study.

Measures

An abridged version of Harter's (1988) Self-Perception Profile was used to measure adolescents' global and domain-specific self-concept. Subscales included self-perceptions of global self-worth, peer acceptance, physical competence, and physical appearance. Using the structured alternative format, respondents were asked to select which of two opposing statements they believe better describes them, and to indicate if that statement

is "very true for me" or "sort of true for me." Subscale scores were computed by averaging across items and could range from 1 to 4. Alpha coefficients were .61 for global self-worth (three items), .64 for peer acceptance (two items), .63 for physical competence (two items), and .64 for physical appearance (two items). Possibly because of the small numbers of items used in each subscale, alphas were not as high as has been previously reported (see Harter, 1988).

A short version of Egan and Perry's (2001) Multidimensional Gender Identity Inventory was also administered to measure gender typicality, felt pressure from peers, and gender contentedness using the structured alternate format. The *gender typicality* subscale assessed the degree to which participants believed they were similar to the typical girl or boy (e.g., "Some girls think they are a good example of being a girl BUT Other girls don't think they are a good example of being a girl"). The *felt pressure from peers* referred to perceived peer pressures to conform to gender norms (e.g., "Some girls think other girls would be upset if they wanted to learn an activity that only boys usually do . . ."). The *gender contentedness* subscale assessed participants' satisfaction with the roles proscribed for their gender (e.g., "Some girls feel annoyed that they're supposed to do some things just because they're a girl . . ."). Alpha coefficients were .66 for gender typicality (six items), .61 for felt pressure from peers (two items), and .63 for gender contentedness (three items).

RESULTS AND DISCUSSION

Four sets of analyses were performed. First, we carried out two types of preliminary analyses. One-way ANOVAs tested for overall gender differences. In addition, bivariate Pearson's correlations between the self-report measures were conducted separately for girls and boys. In the second set of analyses, hierarchical regression was used to determine if peer acceptance mediated the relation between gender typicality and self-worth. Third, cluster analysis was performed to identify groups of adolescents with different constellations of gender identity and self-concept. Finally, to examine the predictive validity of the clusters, one-way ANOVAs were carried out with self-worth and gender contentedness as outcome measures. Bonferroni's multiple comparisons procedure was used to identify differences between specific clusters on each of the variables.

Preliminary Analyses

The ANOVA tests for gender differences and the bivariate correlations between measures for girls and boys are summarized in Table 1. Although

TABLE 1
Means and Zero-Order Correlations for Measures

Measure	Means		Correlations							
	Girls	Boys	1	2	3	4	5	6	7	8
1. Gender typicality	2.90 _a (.63)	3.04 _a (.61)	—	.16 ⁺	-.16 ⁺	.35**	.45**	.20*	.29**	-.01
2. Gender contentedness	2.25 _a (.54)	2.92 _b (.63)	.29**	—	.21*	.15	.02	.12	-.03	.00
3. Felt peer pressure	1.69 _a (.64)	2.34 _b (.83)	-.11	.06	—	.09	.03	.06	-.06	-.03
4. Self-worth	3.18 _a (.61)	3.32 _a (.56)	.44**	.36**	.01	—	.37**	.59**	.43**	-.03
5. Peer acceptance	3.18 _a (.63)	3.09 _a (.63)	.54**	.18 ⁺	-.19 ⁺	.34**	—	.45**	.25**	-.01
6. Appearance	2.41 _a (.79)	2.76 _b (.80)	.20*	.14	.07	.48**	.38**	—	.38**	-.03
7. Physical competence	3.01 _a (.74)	3.27 _b (.66)	.31**	.20*	-.16	.45**	.38**	.42**	—	-.01
8. Age	14.48 _a (1.36)	14.05 _b (1.47)	.04	-.18 ⁺	.10	.09	.18 ⁺	.10	-.09	—

Note. Standard deviations appear in parentheses. Means with different subscripts in the same row are significantly different ($p < .05$) using one-way ANOVAs. Girls and boys differed in gender typicality and self-worth at marginally significant ($p < .10$) levels. Correlations for girls are above the diagonal; correlations for boys are below the diagonal.

⁺ $p < .10$; * $p < .05$; ** $p < .01$.

these are not the main focus of the present study, some of the findings deserve comment: There was a nonsignificant trend ($p < .10$) for boys to score higher on gender typicality than girls, which perhaps is consistent with the context of the study. That is, being at a sports camp is more gender typed for boys than girls. In addition, boys scored significantly higher than girls in self-reported gender contentedness, peer pressure, perceived physical appearance, and physical competence. It is paradoxical yet consistent with known patterns of gender development whereby boys experience both more pressure and more contentedness regarding their gender. Boys are typically penalized for gender-role transgressions more consistently and more severely than are girls (see Kimmel, 1994; Leaper, 1994; Maccoby, 1998). At the same time, males in our society generally enjoy higher status and privilege than do females (see Leaper, 1994, 2000).

Mediational Analyses

We used mediational analysis to test our hypothesis that peer acceptance mediated the relation between gender typicality and either self-worth or gender contentedness. For mediation to be present, four conditions must be met (Baron & Kinney, 1986). First, the predictor (gender typicality) must be significantly associated with the outcome variable (self-worth). Second, the predictor (gender typicality) must be significantly related to the mediator (peer acceptance). Third, the mediator (peer acceptance) must significantly predict the outcome variable (self-worth). Fourth, the association between the predictor and the outcome variables must be diminished after controlling for the mediator. To conduct this analysis we used hierarchical regression as well as partial correlations. Additionally, mediation was assessed with the Goodman (II) test (Goodman, 1960) which generates a z -value testing the hypothesis that the mediated effect equals zero in the population.

Table 2 presents findings from the hierarchical regression predicting girls' and boys' self-worth. Because previous work indicates that physical appearance and physical competence are reliably related to global self-worth (e.g., Harter, 1988), these two variables were entered in the first step of the regression analyses as control variables. Age was also included as a control variable. In the second step, self-perceived gender typicality was entered, and it emerged as a significant predictor of self-worth. Thus, the first condition of mediation was met. Partial correlations indicated a significant relation between peer acceptance and self-worth ($r = .47, p < .01$) while controlling for age, perceived physical attractiveness, and perceived physical competence; thus, the second condition for mediation was

TABLE 2
 Hierarchical Regression Analysis for Variables Predicting Self-Worth

<i>Variable</i>	<i>B</i>	<i>SE B</i>	β
Step 1			
Physical appearance	.30	.05	.41**
Physical competence	.25	.05	.30**
Age	.02	.02	.04
Step 2			
Physical appearance	.30	.04	.41**
Physical competence	.19	.05	.22**
Age	.01	.02	.03
Gender typicality	.21	.05	.23**
Step 3			
Physical appearance	.30	.04	.41**
Physical competence	.17	.05	.20**
Age	.00	.02	.01
Gender typicality	.10	.05	.12*
Peer acceptance	.21	.06	.22**

Note. $N = 211$.

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

satisfied. In the third step in the regression, peer acceptance was entered as a predictor. This factor significantly predicted self-worth, and thereby satisfied the third requirement for mediation. With peer acceptance included in the model, the relation between gender typicality and self-worth was significantly reduced. In summary, peer acceptance partially mediated the relation between gender typicality and self-worth according to the previously outlined criteria. Mediation was further confirmed by the Goodman (II) test of mediation, $z = 3.28$, $p < .01$.

Cluster Analysis

To further examine the role of the peer group in shaping the influence of perceptions of gender typicality on self-concept, we used cluster analysis to examine the patterns of scores exhibited by individuals on relevant variables. Cluster analysis provides a way to sort respondents into groups who are similar based on a set of targeted variables (Everitt, Landau, & Leese, 2001). We specified a cluster variate composed of three variables: gender typicality, felt pressure from peers, and peer acceptance.

For the analysis, a hierarchical clustering procedure was used with Ward's method of aggregating clusters. Ward's method was used with the

TABLE 3
Means, Standard Deviations, and *F* Tests for Gender Identity Measures by Cluster and Gender

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	
	<i>Rejected and non-conforming</i>	<i>Accepted and non-conforming</i>	<i>Accepted and conforming</i>	<i>Rebellious (girls)/Conditionally-accepted (boys)</i>	<i>F</i>
Girls					
Gender typicality	2.12 _a (.58)	2.74 _b (.37)	3.58 _c (.35)	2.52 _b (.36)	70.29**
Peer pressure	1.18 _a (.37)	1.13 _a (.22)	1.60 _b (.45)	2.42 _c (.36)	70.91**
Peer acceptance	2.07 _a (.47)	3.38 _{bc} (.47)	3.45 _c (.41)	3.15 _b (.52)	32.19**
Boys					
Gender typicality	2.32 _a (.36)	2.93 _b (.41)	3.81 _c (.25)	3.25 _d (.37)	49.20**
Peer pressure	2.76 _a (.75)	1.77 _b (.46)	1.61 _b (.59)	3.00 _a (.48)	38.84**
Peer acceptance	2.37 _a (.50)	2.97 _b (.58)	3.82 _c (.25)	3.23 _b (.36)	29.04**

Note. *df* = 3, 110 for girls. *df* = 3, 97 for boys. Means with different subscripts in the same row differ significantly at $p < .05$ using Bonferroni's multiple comparisons procedure.

** $p < .01$.

squared Euclidean method of estimating distance between clusters (Everitt et al., 2001). Because previous work has indicated a main effect of gender on each of the three variables in our cluster variate (Carver et al., 2003; Egan & Perry, 2001), separate cluster analyses were warranted for girls and boys.

For both girls and boys, a four-cluster solution was chosen through examination of the fusion coefficient plot. As summarized in Table 3, the mean scores reveal four distinct and readily interpretable patterns of association between gender typicality, pressure from peers to conform to gender roles, and peer acceptance for girls as well as boys. The clusters are described below with the respective percentages of girls and boys who were represented within each cluster.

Cluster 1: Self-perceived as rejected and nonconforming ("Rejected and nonconforming" group). There were 13% of the girls and 20% of the boys who were characterized by a combination of low gender typicality scores, moderately high peer pressure scores, and low peer acceptance scores. These were adolescents who did not perceive themselves as typical for their gender and also experienced both peer pressure to conform to gender stereotypes as well as peer rejection.

Cluster 2: Self-perceived as accepted and nonconforming ("Accepted and nonconforming" group). Twenty-two percent of girls and 33% of the boys indicated moderately low gender typicality, low felt pressure from peers, and moderately high peer acceptance. Thus, these adolescents experienced their peers as both tolerant and accepting of their relative nonconformity. Perhaps this was the most revelatory category to emerge in the cluster analysis. This cluster provides an example of gender-nonconforming adolescents who feel accepted by their peers, and have positive self-worth; yet in earlier studies these youth may have been viewed at risk or troubled solely for their gender nonconformity.

Cluster 3: Self-perceived as accepted and conforming ("Accepted and conforming" group). There were 35% of the girls and 14% of the boys who indicated high gender typicality, low levels of peer pressure, and high levels of peer acceptance. These were adolescents who viewed themselves as gender typed and felt accepted by their peers without also perceiving pressure to conform to stereotyped notions of gender.

Cluster 4 (boys only): Self-perceived as pressured, accepted, and conforming ("Conditionally accepted" group). Thirty-three percent of the boys demonstrated a pattern of moderately high gender typicality, high peer pressure, and high peer acceptance. We labeled this group as *conditionally accepted* because their report of high peer pressure for gender conformity suggests their peer acceptance may be based in part on their high gender typicality. Hence, peer acceptance among the conditionally-accepted boys may have its cost.

Cluster 4 (girls only): Self-perceived as pressured, accepted, and nonconforming ("Rebellious" group). Thirty-one percent of the girls demonstrated a pattern of low perceived gender typicality, high feelings of peer pressure, and high-perceived peer acceptance. The pairing of high pressure and low typicality suggests that these girls are not complying with the standards of their peer group, yet they still perceive themselves as accepted by their peers. Accordingly, we refer to this cluster as the *rebellious* group. It is surprising that a group that did not feel very typical for their gender would feel *both* pressure from peers to conform to gender stereotypes *and* relatively accepted by their peers. However, gender nonconformity is generally tolerated more among girls than boys (see Leaper, 1994, 2000). Also, girls in the rebellious cluster may have been thinking about the traditional gender values among the dominant (and mostly nonathlete) peer group at school when reporting gender-related peer pressure; conversely, they may have been imagining their teammates

TABLE 4
Means and Standard Deviations for Girls' and Boys' Self-Worth and Gender Contentedness
By Cluster

	<i>Cluster 1</i>	<i>Cluster 2</i>	<i>Cluster 3</i>	<i>Cluster 4</i>	
<i>Measure</i>	<i>Rejected and nonconforming</i>	<i>Accepted and nonconforming</i>	<i>Accepted and conforming</i>	<i>Rebellious (girls)/ Conditionally-accepted (boys)</i>	<i>F</i>
<i>Gender Contentedness</i>					
Girls	2.14 _{ab} (0.43)	2.00 _a (0.53)	2.38 _b (0.48)	2.31 _{ab} (0.61)	2.79*
Boys	2.70 (0.75)	2.92 (0.59)	3.15 (0.55)	2.95 (0.62)	1.35
<i>Self-Worth</i>					
Girls	2.55 _a (0.58)	3.13 _b (0.58)	3.39 _b (0.48)	3.19 _b (0.61)	8.03**
Boys	2.92 _a (0.75)	3.36 _{ab} (0.47)	3.59 _b (0.43)	3.35 _b (0.42)	4.41**

Note. Means with different subscripts in the same row differ significantly at $p < .05$ using Bonferroni's multiple comparisons procedure.

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

at school (or at the camp) when reporting how accepted they felt. Thus, girls interested in athletic activity may not perceive acceptance from the larger peer group in their schools (e.g., Patrick et al., 1999), but they may experience acceptance from a more narrow group of adolescent athletes.

For future studies, we suggest comparing adolescents' gender identities in relation to different social contexts. We would like to see how gender identity is experienced among adolescents who are engaged in other masculine-stereotyped (i.e., analytical or instrumental) domains such as science clubs, as well as feminine-stereotyped (i.e., expressive or nurturing) contexts such as drama clubs. To clarify the reference group, we recommend modifying items to make explicit the particular peer group that individuals use when evaluating how accepted and pressured they feel.

Predictive Validity

Using one-way ANOVAs, we tested a series of hypotheses regarding the implications of cluster memberships for gender contentedness and for self-worth (see Table 4). With gender contentedness, cluster membership was not a significant predictor among boys, $F(3, 89) = 1.35$, but was for girls, $F(3, 105) = 2.79$, $p < .05$. Post hoc comparison tests indicated that girls

who were accepted and conforming were more content with their gender than girls who were accepted and nonconforming.

With self-worth, cluster membership was a significant predictor among girls as well as boys. As seen in Table 4, girls in the rejected group had significantly lower self-worth scores than girls in the other three groups. Also, boys in the rejected group had significantly lower self-worth than did boys in the accepted and conforming cluster as well as the conditionally accepted. Boys in the accepted and nonconforming cluster indicated moderate levels of self-worth which did not differ significantly from the other groups. We consider this set of results as the most important to emerge from our study. Not only did we identify a cluster of adolescent girls and boys who viewed themselves as *both* gender-nonconforming *and* accepted by their peers, we also found that their self-esteem was comparable with adolescents who saw themselves as gender-conforming. Thus, having a social support group appears to be more important than gender typicality itself for maintaining self-esteem. For example, our sample of athletic girls may have found support from their fellow teammates. In some high schools, other types of nontraditionally gender-typed adolescents may find support in specialized clubs (e.g., sexual-minority youth in gay/lesbian organizations; nonathletic boys in academic- or arts-oriented clubs).

GENERAL DISCUSSION

The findings of this study underscore the importance of contextualizing the relation between adolescents' gender identity and indices of adjustment. Our data indicated a positive relation between feelings of gender typicality and self-worth among both girls and boys. This finding is consistent with prior studies suggesting that adolescents who do not feel typical for their gender will have a generally negative view of the self (Carver et al., 2003; Egan & Perry, 2001; Yunger et al., 2004). However, our analyses indicated that this association was partially mediated by perceived peer group acceptance. Thus, noting only the relation between gender typicality and self-worth without considering the social context might imply that gender typicality per se leads to adjustment. For example, some people may infer that children and adolescents will enjoy healthy adjustment (e.g., high self-worth and high peer acceptance) *only* if they are high in gender typicality. They may also reason that children and adolescents will *necessarily* suffer poor adjustment (e.g., low self-worth and low peer acceptance) if they are low in gender typicality. Although these may be *probabilistic* associations, our point is that they do not necessarily follow. As our data indicate, multiple patterns of gender identity

and adjustment exist for adolescents with peer acceptance being a critical mediator. Importantly, there was no difference in the self-worth of non-conforming and conforming adolescents *if they felt accepted by their peers*. Moreover, this pattern was seen when girls and boys were tested separately. Thus, peer acceptance is likely more fundamental to adolescent adjustment than is their gender conformity.

In closing, we propose redirecting some of the focus away from the person and toward the social context when considering the relation between gender conformity and adjustment. In many instances, a gender-atypical child is classified as abnormal. This is formally exemplified in the American Psychiatric Association's (2000) inclusion of "gender identity disorder" as a mental disorder. Although the diagnosis can be made if a child demonstrates acute distress about his or her gender assignment, it also can be applied *solely* on the basis of a child preferring cross-gender-typed over gender-typed companions, activities, and interests. With regards to the latter criterion, we agree with critics (e.g., Bartlett, Vasey, & Bukowski, 2000) who have argued that this diagnosis reflects society's prejudice against gender nonconformity rather than an inherent psychological problem. Furthermore, we suggest it is intolerance that may lead to the distress that some of these children may experience about their gender identity. Alternatively, as research suggests (e.g., Pleck, 1995), gender-role conformity itself may lead to adjustment difficulties—yet our society does not classify gender-role conformity as a mental disorder.

ACKNOWLEDGMENTS

Tara Smith was a doctoral student at University of California Santa Cruz when the research was conducted; she is now assistant professor of psychology at Elizabethtown College. We thank Dan Wood, Sirinda Sincaroen, Elizabeth Daniels, Alexandra Sideroff, as well as the sport camp coaches, support staff, and participants for their assistance. Preliminary findings were presented at the Gender Development Research Conference, San Francisco, April 2004. We thank Susan Egan and David Perry for their comments and suggestions at the conference.

The research was supported by a grant from the Social Sciences Division of the University of California, Santa Cruz to the second author.

REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders DSM-IV-TR* (Text Revision, 4th ed.). Washington, DC: American Psychiatric Association.

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Bartlett, N. H., Vasey, P. L., & Bukowski, W. M. (2000). Is Gender Identity Disorder in children a mental disorder? *Sex Roles, 43*, 753–785.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Counseling and Clinical Psychology, 42*, 155–162.
- Carver, P. R., Yunger, J. L., & Perry, D. G. (2003). Gender identity and adjustment in middle childhood. *Sex Roles, 49*, 95–109.
- Egan, S. K., & Perry, D. G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology, 37*, 451–463.
- Everitt, B. S., Landau, S., & Leese, M. (2001). *Cluster analysis*. London: Oxford University Press.
- Goodman, L. A. (1960). On the exact variance of products. *Journal of the American Statistical Association, 55*, 708–713.
- Harter, S. (1988). *Manual for the adolescent self-perception profile*. Denver, CO: University of Denver.
- Kimmel, M. (1994). Masculinity as homophobia: Fear, shame and silence in the construction of gender identity. In H. Brod & M. Kaufman (Eds.), *Theorizing masculinities* (pp. 119–140). Thousand Oaks, CA: Sage Publications.
- Leeper, C. (1994). Exploring the consequences of gender segregation on social relationships. In C. Leaper (Ed.), *Childhood gender segregation: causes and consequences*. New directions for child development (No. 65, pp. 67–86) San Francisco: Jossey-Bass.
- Leeper, C. (2000). The social construction and socialization of gender during development. In P. H. Miller & E. K. Scholnick (Eds.), *Toward a feminist developmental psychology* (pp. 127–152). Florence, KY: Taylor & Francis/Routledge.
- Leeper, C., & Raasch, C. (forthcoming). The socialization of gender. In J. Grusec & P. Hastings (Eds.), *The handbook of socialization*. New York: Guilford.
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Patrick, H., Ryan, A. M., Alfeld-Liro, C., Fredricks, J. A., Hruda, L., & Eccles, J. S. (1999). Adolescents' commitment to developing talent: The role of peers in continuing motivation for sports and the arts. *Journal of Youth and Adolescence, 28*(6), 741–763.
- Pleck, J. H. (1995). The gender role strain paradigm: An update. In R. F. Levant & W. S. Pollack (Eds.), *A new psychology of men* (pp. 11–32). New York: Basic Books, Inc.
- Spence, J. T., & Helmreich, R. L. (1978). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents*. Austin: University of Texas Press.
- Women's Sports Foundation (2004). Women's sports & fitness facts and statistics. (Retrieved December 6, 2004 from www.womenssportsfoundation.org/binary-data/WSF_ARTICLE/pdf_file/28.pdf.)
- Yunger, J. L., Carver, P. R., & Perry, D. G. (2004). Does gender identity influence children's psychological well-being? *Developmental Psychology, 40*, 572–582.