Peer Crowd Affiliation and Internalizing Distress in Childhood and Adolescence: A Longitudinal Follow-Back Study

Mitchell J. Prinstein
Yale University

Annette M. La Greca
University of Miami

Concurrent and longitudinal associations between peer crowd affiliation and internalized distress were examined in a sample of 246 youth (148 girls, 98 boys). Children completed measures of depression, social anxiety, loneliness, and self-esteem when they were in grades 4 to 6 (Time 1), and again 6 years later during adolescence (grades 10–12; Time 2). At Time 2, adolescents also reported their self-concept and their identification with reputation-based peer crowds, including Populars, Jocks, Brains, Burnouts, Non-Conformists, and None/Average crowds. Results indicated that adolescents’ report of peer crowd affiliation was concurrently associated with self-concept and levels of internalizing distress. Follow-back analyses of internalizing trajectories revealed that Populars/Jocks had experienced significant declines in internalizing distress across development, whereas Brains exhibited some increases in internalizing distress between childhood and adolescence.

Numerous ethnographic and empirical investigations have provided evidence to support the existence of peer crowd groupings among American adolescents (e.g., Brown, 1989a; Brown, Eicher, & Petrie, 1986; Buff, 1970; Coleman, 1961; Urberg, 1992; Varenne, 1982). Unlike interaction-based peer cliques that are composed of friendship networks, peer crowds are reputation-based groups of adolescents who do not necessarily affiliate

Requests for reprints should be sent to Mitch Prinstein, Yale University, Department of Psychology, P.O. Box 208205, New Haven, CT 06520-8205. E-mail: Mitchell.Prinstein@yale.edu
with one another yet are presumed to share similar values, attitudes, and behaviors (Brown, 1989a). Curiously, studies spanning several generations and geographic areas reveal similarly themed crowds, including athletically oriented groups (i.e., the “Jocks”), deviant groups (i.e., the “Burnouts” or “Dirts”), high-status elite groups (i.e., the “Populars” or “Preps”), academically oriented groups (i.e., the “Brains”), and adolescents who are defined by lower frequencies of affiliation with others (i.e., the “Loners”); however, evidence of the existence of these reputation-based groups is available almost exclusively for White youth (Brown & Mounts, 1989).

The ubiquity of peer crowds in White American culture suggests that these groupings may serve unique developmental functions among at least a subset of adolescents. Theorists have suggested that crowds may contribute to adolescents’ identity development through social comparison and symbolic appraisal (Brown & Lohr, 1987). Using peer crowds as stereotyped templates of extreme values and behaviors, adolescents are able to define themselves through their identification with these peer groups (Brown, Mory, & Kinney, 1994; McLellan & Pugh, 1999). Peer crowds also serve an important relational function during the time when many adolescents are entering new schools and interacting with greater numbers of peers (Brown et al., 1994). The crowd system acts as a social map to help adolescents select possible friends and romantic partners, judge the potential success of interpersonal overtures, and maintain peer relationships (Brown et al., 1994).

In addition to these cognitive–developmental functions, empirical evidence also confirms that peer crowd affiliation is associated with actual differences in adolescents’ behavior, particularly health-risk behaviors. Recent studies have revealed that adolescents who report affiliation with deviant peer crowds also report higher levels of illegal behavior, aggression, alcohol and marijuana use, and risky sexual behavior, including promiscuous and unsafe sex (La Greca, Prinstein, & Fetter, 2001; Mosbach & Leventhal, 1988; Sussman et al., 1990). In contrast, affiliation with academically oriented peer crowds (e.g., “brains”) is frequently associated with the lowest levels of these externalizing and risk-taking behaviors (Dolcini & Adler, 1994; La Greca et al., 2001). Studies on socialization suggest that crowd stereotypes may influence the development of externalizing behaviors among adolescents who affiliate with crowd members, or aspire toward the norms associated with a particular crowd reputation (Brown et al., 1994).

Despite the numerous findings on adolescent crowd affiliation as a possible predictor of externalizing behavior, however, few studies have examined possible links between crowd affiliation and measures of internalized distress. Such a link would be consistent with theories stated above. As a
mechanism for social comparison and symbolic appraisal by peers, it might be expected that adolescents attach significant personal meaning to their presumed peer crowd (Brown & Lohr, 1987; Brown et al., 1994). Theorists have consistently suggested that peer experiences can have important implications for identity development and self-esteem. Sullivan (1953) and Mead (1934) emphasized the role of interpersonal experiences in forming self representations, suggesting that disapproval by peers can influence adolescents’ perceptions of their self-worth, and increase the potential for negative affect and loneliness. Bandura (1989) also highlighted the role of social comparisons with peers as a method for self-assessment of competence. Thus, adolescents’ perceived crowd affiliation should be closely associated with their self-concept. Adolescents who report affiliation with academically oriented crowds should also report high levels of perceived scholastic competence, adolescents in athletically oriented crowds should report high levels of athletic ability, and so on. Such evidence would also offer good construct validity for the construct of peer crowds, yet associations between crowd affiliation and self-concept have rarely been examined (Brown & Lohr, 1987).

Adolescents’ perceptions of their crowd and its reputation also may be associated with internalized distress and global self-esteem. Depressed affect, social anxiety, and loneliness each have been previously associated with adolescents’ actual and perceived success in social interactions with peers (e.g., La Greca & Lopez, 1998; Panak & Garber, 1992); thus adolescents who feel that they are an affiliate of a low-status crowd may be at greater risk for internalized distress.

As a relational construct, crowd affiliation may also contribute to adolescents’ risk for or resilience from internalized distress through differential provision of social opportunities. For instance, adolescents in some crowds (e.g., Populars, Jocks) may have increased opportunities to develop friendships and romantic relationships (Brown 1999; Brown et al., 1994; La Greca & Moore, 2002). Affiliates of these crowds are also less frequent victims of overt aggression (Prinstein & Cohen, 2001). Thus, adolescents who perceive themselves as affiliates of the Jocks or Populars crowds might also report low levels of internalized distress because they have more access to rewarding social interactions. Indeed, Brown and Lohr (1987) revealed that adolescents who reported affiliation with high-status crowds (e.g., Jocks, Populars) were most likely to report high levels of self-esteem. In contrast, unaffiliated adolescents, particularly those who placed a high level of importance on peer crowd membership, exhibited low levels of self-esteem. Unfortunately, no prior study has examined associations between peer crowd affiliation and adolescents’ report of depressed affect, social anxiety, or loneliness.
The present study extended past research on symbolic appraisal and interpersonal theories of internalizing distress by examining potential associations among adolescents’ perceptions of their peer crowd affiliation; adolescents’ perceptions of their crowd’s acceptance/rejection among peers; and their global self-esteem, depressed affect, social anxiety, and loneliness. It was anticipated that adolescents who reported affiliation with Populars and Jocks would also believe that their crowd was well liked, and, accordingly, these adolescents would report low levels of internalizing distress.

In addition to the need for additional data on internalizing correlates of peer crowd affiliation, few data are available on possible determinants of peer crowd affiliation. This is a surprising omission, given the large body of research on determinants of childhood peer status (Newcomb, Bukowski, & Pattee, 1993). Because the data for this investigation were part of a 6-year longitudinal project on childhood peer relations and adolescent psychological adjustment, the present study offered a unique opportunity to examine possible antecedents of peer crowd affiliation. Specifically, adolescents’ depressed affect, social anxiety, loneliness, and self-esteem were measured at an initial time point, when participants were in elementary school (i.e., grades 4–6). Six years later (i.e., in grades 10–12), levels of internalizing distress were assessed again, in addition to adolescents’ perceived crowd affiliation. This allowed for an exploration of two sets of hypotheses. First, using a follow-back design, levels of childhood internalizing distress were examined for adolescents who reported affiliation with different peer crowds during high school. Without prior research on determinants of peer crowd affiliation, preliminary hypotheses were generated from the literature on predictors of peer acceptance and rejection. Specifically, it was anticipated that compared with their peers, adolescents’ in high-status crowds (e.g., Populars, Jocks) would have low levels of internalizing distress in childhood, whereas affiliates of deviant crowds (i.e., Burnouts) would have the highest levels of childhood distress.

Second, because identical measures of internalizing distress were used at both time points, it was also possible to explore changes in depressed affect, social anxiety, loneliness, and global self-esteem between childhood and adolescence that were associated with adolescent peer crowd affiliation. Note that this design did not allow for the ability to make conclusions about the prospective effects of crowd affiliation on later adjustment. Rather, this initial longitudinal investigation of peer crowds offered important information on the manner in which adolescents’ perceptions of crowd affiliation may be associated with different developmental trajectories of internalizing distress. Conceivably, crowd affiliation may be a predictor or product of these changes in internalizing distress, given that crowd groupings are presumed to be most salient for adolescents during
the transition from preadolescence to adolescence (Brown et al., 1994)—that is, between Time 1 and Time 2 of this study.

Analyses of internalizing trajectories were guided by several specific hypotheses based on theories of adolescent development. First, it was anticipated that adolescents’ identification with academically oriented crowds would be associated with declines in social–emotional functioning over time, corresponding with the devaluation of adult–prescribed values in adolescence. Several investigations have suggested that adolescents’ interest in academic matters, and the status afforded to academically-oriented adolescents, sharply decline during adolescence as youth place increasing importance on peer values, such as peer affiliation and romantic involvement (Brown et al., 1984; Kinney, 1993). Past research indicates that compared with preadolescents, high school-age youth spend significantly less time on schoolwork or talking about academic matters (Leone & Richards, 1989). Juvonen and Murdock (1995) revealed that peers’ acceptance of high-achieving students also decreases between preadolescence and the teenage years. Adolescents who self-identify with academically oriented crowds, such as the Brains, deviate from this norm and may experience increasing levels of internalizing distress as the contrast between their interests and other adolescents’ values becomes increasingly salient. This may be especially true for girls. Past work has revealed stronger associations between academic achievement and self-image for boys than for girls during the transition to adolescence (Roberts, Sarigiani, Petersen, & Newman, 1990), suggesting that girls’ affiliation with academically oriented crowds may be significantly associated with increasing trajectories of internalizing distress. Gender differences were therefore explored.

It was also anticipated that adolescents’ increasing attention to physical development and romantic affiliations during the pubertal years may elevate the standing of adolescents who identify with the athletically oriented (i.e., Jocks) and Populars crowds, because these crowds are typically defined by reputations of physical prowess and attractiveness, respectively. Thus, adolescents who affiliate with Jocks and Populars may experience decreasing levels of internalizing distress during this same developmental period.

In sum, this study utilized a unique data set to examine preliminary hypotheses regarding peer crowd affiliation and internalizing distress. The use of a longitudinal data set permitted an exploration of childhood factors and developmental trajectories that may be associated with adolescent peer crowd affiliation; however, the methodological design also necessitated the use of a self-reported measure of perceived crowd affiliation, given that adolescents from three elementary schools at the initial time point had dispersed across 25 high schools by Time 2. Accordingly, this
study also allowed for an examination of the hypothesis that adolescents’ perceptions of their crowd affiliation would be concurrently associated with their self-concept; global self-esteem; and internalizing distress, including depressed affect, social anxiety, and loneliness.

METHODS

Participants

Participants were 246 adolescents (148 girls, 98 boys) in grades 10 to 12 who were between 15 and 18 years of age ($M = 16.77, SD = .90$). The sample was 45.5% White ($n = 112$), 37.0% Hispanic American ($n = 91$), 13.0% African American ($n = 32$), and 4.5% Asian American/Other ($n = 11$). Socioeconomic status (SES), as categorized by Hollingshead Social Class was 36.3% Level I, 41.0% Level II, 15.7% Level III, 4.7% Level IV, and 2.3% Level V ($M = 47.83, SD = 11.95$).

Procedure

The sample was drawn from a longitudinal data set constructed as part of a larger project on children’s peer relations, social support, and psychological adjustment. A sample of 490 children (232 boys, 258 girls) participated at Time 1, including over 85% of all fourth, fifth, and sixth graders in three suburban elementary schools. At this time point, children completed a series of questionnaires and peer nominations in their classrooms, aided by research assistants.

Six years later, these students were tracked through the county public school database. By Time 2, 184 of the students were unable to be contacted (112 had withdrawn from the local school district and 72 did not have accurate contact information or could not be contacted). Of the remaining 306 who were able to be contacted, 250 students (82%) agreed to participate. These 250 students were dispersed across 25 high schools within the greater metropolitan area. All high schools were in communities with similar demographic and socioeconomic profiles. Four of the participants did not complete all of the questionnaires, and were excluded from data analyses. The final sample of 246 students with complete data at both time points did not differ from the 244 students who did not participate at Time 2 on any measures of peer status, social–psychological functioning, or demographic variables, with the exception of gender. The final sample included proportionally more girls (60.1%) than did the original sample (45.2%), $\chi^2(1) = 11.18, p < .001$. 
At Time 2, adolescents completed questionnaires on peer crowd affiliation and several measures of internalizing distress during individual home interviews conducted by trained research assistants. Parents provided information regarding ethnicity and SES. Written informed consent was obtained from adolescents and their parents prior to participation.

Measures

Self-report measures of depression, social anxiety, loneliness, self-esteem, and self-concept were administered at both Time 1 and Time 2. At Time 2, an assessment of peer crowd affiliation was also conducted.

**Peer Crowd Questionnaire.** At Time 2, adolescents completed the Peer Crowd Questionnaire (PCQ; La Greca et al., 2001; Prinstein, Boergers, Spirito, Little, & Grapentine, 2000). This measure is similar in design to self-report assessments of peer crowd affiliation utilized in prior investigations (e.g., Mosbach & Leventhal, 1988; Urberg, 1992). Items were generated by asking two focus groups of adolescents to provide a description and name of local peer crowds. This procedure closely followed the first step of the Social Type Rating Procedure utilized by Brown and colleagues (Brown, 1989b; Clasen & Brown, 1985). Each focus group included 8 to 10 volunteer high school students and recent high school graduates, mostly from the three high schools with the largest proportions of study participants. The gender and ethnic distribution of the students in each focus group closely approximated the population sampled in the present study. Focus group participants were given a brief introduction to the concept of crowds. Next, adolescents were asked to provide a list of crowds, and these crowd labels and reputations were discussed and refined during the subsequent focus group discussions. Five peer crowds were consistently reported, including (1) Jocks (i.e., athletic, likely to be on a school team), (2) Brains (i.e., enjoys academics, good grades), (3) Burnouts (i.e., skipping school, getting into trouble), (4) Populare (i.e., leaders, social, involved in activities), and (5) Non-Conformists (i.e., enjoys alternative music and clothes). Focus group participants reported that Populare and Jocks typically enjoyed higher status than did Burnouts, Non-Conformists, and Brains. These peer crowd reputations were consistent with prior work in this area of research (e.g., Brown, 1989a; Mosbach & Leventhal, 1988; Urberg, 1992).

The PCQ was administered in two parts. First, as an orienting task, adolescents were asked if they were familiar with each peer crowd and its reputation (i.e., Jocks, Brains, Burnouts, Populare, Non-Conformists, or
None/Average), if they could identify a group of adolescents from their school or neighborhood that fit each crowd description, and to provide a crowd name they were familiar with to fit each description. Adolescents were also asked to generate additional descriptions of peer crowds that exist in their school or neighborhood; however, few adolescents reported additional peer crowds, and thus these responses were not sufficient in number to be included. Next, adolescents were asked to select the one crowd that best described them and the one peer crowd that their classmates would use to identify them. Consistent with prior research (Mosbach & Leventhal, 1988; Sussman et al., 1990; Urberg, 1992), the former question was used to indicate perceived peer crowd affiliation.

Lastly, adolescents were asked to report their perceptions of the status of their peer crowd (“How much is your crowd liked or disliked by other teens”). Responses were based on a 5-point scale (1 = very disliked, 3 = neutral, 5 = very liked); this score was used in supplemental analyses as an index of perceived crowd acceptance or rejection.

Prior work (La Greca et al., 2001) with the PCQ has yielded promising support for the predictive validity of adolescents’ report of peer crowd affiliation. For instance, consistent with their reported reputations, adolescents who reported affiliation with the Burnouts and Non-Conformists were most likely to engage in illegal behavior, substance use, risky sexual

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1 Although affiliation with a “None/Average” crowd was assessed using a single item in this study, it should be noted that there may be important differences between students who self-identify with the Average crowd as compared with those who do not identify with a crowd (i.e., “None/Loners”), or adolescents who desire to become affiliated with a specific peer crowd (“Wannabees”).

2 Nine students identified an additional peer crowd that was specific to a subset of African American students (i.e., “Bros”). This crowd was defined by members’ preference for low-riding cars and listening to music with loud bass.

3 Due to missing data, it was not possible to utilize the responses to the latter item in analyses for this manuscript. From available data, however, it appeared that adolescents’ self-classification and perceived classification by classmates matched for approximately 75% of respondents. A large proportion of disagreement (60% of “misclassified adolescents”) was due to adolescents who self-classified as “Average” but believed that classmates would classify them as a Popular/Jock, Brain, or Burnout. When possible, reanalyses were conducted excluding all “misclassified” adolescents. This yielded a virtually identical pattern of findings. Reanalysis of available data using only adolescents’ perceptions of classification by classmates also yielded the same pattern of results. Exploratory analyses revealed that adolescents who believed their classmates would unfavorably misclassify them as a Brain or Burnout reported greater levels of depressed affect, $F(1, 218) = 4.46, p < .05$, and lower self-esteem, $F(1, 215) = 4.21, p < .05$, as compared with adolescents whose self-classification matched their perceptions of classification by classmates and adolescents who believed they were favorably misclassified by classmates as a Popular/Jock.
behavior, and general risk-taking behavior. Adolescents who reported affiliation with the Brains were least likely to engage in these risk-taking behaviors. Additionally, Brains had higher academic achievement scores as compared with adolescents from the other peer crowds. Construct validity data for adolescents’ self-reported peer crowd affiliation comes from a related dataset including both peer-nominated crowd affiliation scores and continuous scores of self-reported peer crowd affiliation using a revised version of the PCQ (Prinstein, 2001; Prinstein & Cohen, 2001). Preliminary analysis of this dataset indicated that adolescents’ self-reported crowd affiliation was consistently, significantly associated with peer-nominated crowd affiliation for the same crowd, median \( r = .41 \), all \( p < .001 \), and was not significantly associated with peer-nominated crowd affiliation for other crowds, median \( r = .01 \).

**Depression.** The Children’s Depression Inventory (CDI; Kovacs, 1982) is a 27-item measure designed to assess cognitive and behavioral depressive symptoms. For each item, children choose from one of three statements, scored 0 through 2, that best describes their level of depressive symptoms in the previous 2 weeks. A summed, total score is computed, with higher scores reflecting more depressive symptoms (possible range: 0–52). Good psychometric properties have been reported for the CDI as a reliable and valid index of depressive symptoms (Saylor, Finch, Spirito, & Bennett, 1984); it can be used with youth between the ages of 7 and 18 years of age (Kazdin, 1990). In the current sample, internal consistency (Cronbach’s \( \alpha \)) was .83 at Time 1 and .86 at Time 2.

**Social anxiety.** The Social Anxiety Scale for Children–Revised (SASC-R; La Greca & Stone, 1993) and the Social Anxiety Scale for Adolescents (SAS-A; La Greca & Lopez, 1998) were used at Time 1 and Time 2, respectively, to evaluate social anxiety. The SASC-R and SAS-A are conceptually identical, with minor wording modifications to make them appropriate for children or adolescents. The scales contains 18 descriptive self-statements and 4 filler items. Each item is rated on a 5-point scale according to how much the item “is true for you” (1 = not at all, 5 = all the time). The measure assesses three domains of social anxiety, including fear of negative evaluation from peers (e.g., “I worry about what other kids think of me”), social avoidance and distress for new situations (e.g., “I get nervous when I meet new kids”), and social avoidance and distress more generally (i.e.,

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4In this study, one item that reflected suicidal ideation was omitted in response to concerns from the Institutional Review Board.
pervasive social distress, discomfort, and inhibition; e.g., “I feel shy even with peers I know well”). A total score that ranged from 18 to 90 was used for the present study.

Psychometric support for the SASC-R and SAS-A has been very satisfactory (see La Greca, 1999). For example, Confirmatory Factor Analysis for both instruments revealed a good fit between the three-factor model of social anxiety and children’s or adolescents’ responses (La Greca & Lopez, 1998; La Greca & Stone, 1993). Construct validity has been supported by patterns of relations between subscale and total scores on the SASC-R and the SAS-A and youngsters’ self-appraisals and perceived sociometric status (for details, see La Greca, 1999). Prior studies have demonstrated good internal consistency (.89–.90) and good test–retest reliability over a 4-month period (.70; La Greca, 1999). Internal consistency for the total score in this sample was .90 at Time 1 and .89 at Time 2.

**Self-esteem and self-concept.** The Self-Perception Profile for Children (SPPC; Harter, 1985) and Self-Perception Profile for Adolescents (SPPA; Harter, 1988) are developmentally compatible measures that assess youngsters’ judgments of competence or adequacy in different areas of self-concept. The child version (SPPC) includes six subscales of self-concept (social acceptance, physical appearance, scholastic competence, behavioral conduct, athletic competence, and global self-worth). The adolescent version includes these same six subscales, plus three additional subscales that are specific to adolescents (romantic appeal, friendship competence, and job competence). In this study, the global self-worth subscale was included as a measure of global self-esteem at Time 1. At Time 2, all eight subscales were administered. All subscales contain five items, and each item is coded with a score of 1 through 4; mean scores are computed, with higher scores reflecting greater perceived competence. Harter (1985, 1988) reports good internal consistency for these subscales on both the SPPC and SPPA (Cronbach’s αs ranged from .74–.93), as well as considerable support for the validity of these subscales. In the current sample, αs for each subscale were satisfactory: scholastic competence = .78, social acceptance = .82, physical appearance = .88, behavioral conduct = .70, athletic competence = .90, romantic appeal = .78, friendship competence = .81, job competence = .62, and global self-worth = .83.

**Loneliness.** To assess feelings of loneliness, the Loneliness and Social Dissatisfaction Scale (LSDS; Asher, Hymel, & Renshaw, 1984; Asher & Wheeler, 1985) was administered. This scale includes 16 primary items (e.g., “I have nobody to talk to”) and 8 filler items each rated on a 5-point scale (i.e., not true at all, hardly ever true, true sometimes, true most of the
time, always true). A total score is computed as a sum of the 16 primary items, with some items reverse coded. Total scores can range from 16 to 70, with higher scores reflecting greater loneliness. Previous research has found the LSDS to be internally consistent (Cronbach’s $\alpha = .90$) and internally reliable (Spearman-Brown reliability coefficient = .91) among a sample of third to sixth graders. Internal consistency in this sample was .83 at Time 1 and .75 at Time 2. Evidence for validity in past research includes a significant, although modest, negative relation between the LSDS and sociometric status, as indicated by both friendship nominations, $r = .25$, and play ratings, $r = .31$ (Asher et al., 1984).

RESULTS

Preliminary Analyses: Descriptive Information on Peer Crowd Affiliation

Preliminary analyses included an examination of the composition of peer crowds across adolescents’ ethnicity, grade, age, and gender. Chi-square analyses revealed no significant differences in the distributions of perceived peer crowd affiliation across ethnicity, $\chi^2(6) = 11.83$, grade, $\chi^2(6) = 9.79$, or age, $\chi^2(9) = 10.38$. There was, however, a significant $\chi^2$ for gender, $\chi^2(5) = 14.87$, $p < .05$, which revealed that girls were more likely to report affiliation with Populars and boys were more likely to report affiliation with Jocks. Similarly, girls were more likely than were boys to report affiliation with Non-Conformists, whereas the reverse was true for affiliation with Burnouts. Analyses were initially conducted using all six peer crowds. Because nearly identical patterns of results were revealed for Populars and Jocks and for Burnouts and Non-Conformists, these crowds were combined to increase power, consistent with prior work in this area (e.g., Urberg, 1992). The four resulting groups were Populars/Jocks (52 girls, 61.2%; 33 boys, 38.8%), Brains (19 girls, 65.5%; 10 boys, 34.5%), Burnouts (including Non-Conformists; 16 girls, 47.1%; 18 boys, 52.9%), and None/Average (61 girls, 62.2%; 37 boys, 37.8%). These four groups did not differ significantly by gender, $\chi^2(3) = 4.22$.

Preliminary Analyses: Internalizing Distress from Childhood to Adolescence

Correlation coefficients were computed between each domain of internalizing distress (i.e., depressed affect, social anxiety, loneliness, self-esteem,
and social self-concept) at Time 1 and Time 2 (see Table 1). As expected, at both Time 1 and Time 2, measures of internalizing distress revealed moderate associations suggesting that these instruments measure distinct aspects of internalizing distress. Also, correlations between the same measures taken at Time 1 and Time 2 revealed mild levels of stability across the 6-year interval, $r_s$ between .21 and .33, all $p_s < .01$ (see Table 1).

**Adolescent Self-Concept and Perceived Peer Crowd Affiliation**

As a mechanism that fosters adolescent identity development, it was anticipated that adolescents’ perceived peer crowd affiliation would be closely matched with domains of self-concept. A MANOVA using the seven domain-specific subscales of the SPPA as a set of dependent variables revealed a significant effect of adolescents’ perceived peer crowd, Wilks’ $F(21, 690) = 5.32, p < .0001$, which was significant at a univariate level for five of the seven SPPA subscales (see Table 2). The results were generally consistent with hypotheses. Populars/Jocks reported the highest levels of physical appearance, social acceptance, athletic ability, and romantic appeal; Brains reported the highest levels of scholastic competence, and Burnouts reported the lowest levels of competence in behavioral conduct. No differences were revealed for self-concept in friendship competence.

**Peer Crowd Affiliation and Internalizing Distress**

Three of the primary study goals were (1) to examine concurrent associations between perceived peer crowd affiliation and internalizing distress, (2) to examine associations between perceived peer crowd affiliation and childhood internalizing distress (i.e., follow-back analyses), and 3) to examine trajectories of internalizing distress (i.e., changes in internalizing distress from Time 1 to Time 2) as a function of perceived peer crowd affiliation. To reduce the overall familywise error rate, split-plot repeated-measures MANOVAs were conducted to simultaneously test all three questions. Four $2 \times 4$ (Time 1 and 2) repeated-measures MANOVAs were therefore conducted that corresponded to the four areas of internalizing distress (i.e., depression, social anxiety, loneliness, and self-esteem). Significant crowd main effects for distress at Time 2 revealed concurrent associations between perceived crowd affiliation and internalizing distress; significant
## TABLE 1
Intercorrelations among Internalizing Adjustment Variables at Time 1 and Time 2

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Depression</td>
<td>Social Anxiety</td>
</tr>
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<td>Time 1</td>
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<tr>
<td>Social anxiety</td>
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<td>Loneliness</td>
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<td>.60***</td>
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<td>Self-esteem</td>
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<td>-.31**</td>
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<tr>
<td>Social self-concept</td>
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<td>-.43***</td>
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<tr>
<td>Time 2</td>
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<td></td>
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<tr>
<td>Depression</td>
<td>.28**</td>
<td>.20**</td>
</tr>
<tr>
<td>Social anxiety</td>
<td>.09</td>
<td>.33**</td>
</tr>
<tr>
<td>Loneliness</td>
<td>.17**</td>
<td>.19**</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>-.20**</td>
<td>-.10</td>
</tr>
<tr>
<td>Social self-concept</td>
<td>-.06</td>
<td>-.13*</td>
</tr>
</tbody>
</table>

**Note.** $n = 246$ for all correlations.

* $p < .05$; ** $p < .01$; *** $p < .001$. 
Crowd main effects for distress at Time 1 revealed follow-back associations between perceived crowd affiliation in adolescence and childhood internalizing distress; and Time × Crowd interactions were examined to explore developmental trajectories of internalizing distress associated with perceived crowd affiliation. All significant effects were followed by univariate and simple effects analyses as reported below. Means, standard deviations, and graphic depictions of results are displayed in Table 3 and Figures 1 through 4.

To explore a potential moderating role of gender, 2 (time) × 2 (gender) × 4 (crowd) repeated-measure MANOVAs were also conducted. Because the addition of this variable produced interaction cell sizes too small for reliable parameter estimates, these analyses were conducted in an exploratory manner. Only two significant gender interaction effects were revealed and are reported below.5

5Several gender main effects were revealed for internalizing distress at Time 1 and Time 2. Girls reported significantly greater levels of depressed affect (M = 7.41, SD = 5.72) than did boys (M = 5.72, SD = 4.94) at Time 2 only, F(1, 244) = 4.99, p < .05. Girls also reported greater levels of social anxiety at Time 1 (M = 45.34, SD = 13.07), F(1, 244) = 7.93, p < .01, and at Time 2 (M = 40.19, SD = 12.32), F(1, 244) = 4.56, p < .05, as compared to boys (Time 1: M = 40.57, SD = 12.88; Time 2: M = 36.95, SD = 10.49).

### TABLE 2

Means of Self-Concept Domains at Time 2 by Peer Crowd Affiliation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Populars/Jocks (n = 85)</th>
<th>Brains (n = 29)</th>
<th>Burnouts (n = 34)</th>
<th>None/Average (n = 98)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic ability</td>
<td>3.08 (.73)</td>
<td>2.30 (.90)</td>
<td>2.39 (.56)</td>
<td>2.61 (.74)</td>
<td>12.83***</td>
</tr>
<tr>
<td>Behavioral conduct</td>
<td>3.09 (.53)</td>
<td>3.34 (.65)</td>
<td>2.61 (.44)</td>
<td>3.09 (.49)</td>
<td>11.81***</td>
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<tr>
<td>Friendship competence</td>
<td>3.54 (.52)</td>
<td>3.56 (.60)</td>
<td>3.38 (.65)</td>
<td>3.42 (.63)</td>
<td>1.10</td>
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<td>Physical appearance</td>
<td>2.95 (.67)</td>
<td>2.56 (.61)</td>
<td>2.42 (.63)</td>
<td>2.70 (.76)</td>
<td>5.59**</td>
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<tr>
<td>Romantic appeal</td>
<td>3.06 (.59)</td>
<td>2.55 (.70)</td>
<td>2.87 (.65)</td>
<td>2.98 (.67)</td>
<td>4.88*</td>
</tr>
<tr>
<td>Scholastic competence</td>
<td>3.09 (.55)</td>
<td>3.55 (.57)</td>
<td>3.01 (.58)</td>
<td>3.07 (.58)</td>
<td>6.22***</td>
</tr>
<tr>
<td>Job competence</td>
<td>3.32 (.53)</td>
<td>3.22 (.52)</td>
<td>3.20 (.49)</td>
<td>3.30 (.47)</td>
<td>.18</td>
</tr>
<tr>
<td>Social acceptance</td>
<td>3.61 (.37)</td>
<td>3.07 (.64)</td>
<td>3.13 (.47)</td>
<td>3.27 (.54)</td>
<td>14.07***</td>
</tr>
</tbody>
</table>

*Note.* Values in parentheses represent standard deviations. Row means with different subscripts are significantly different, p < .05.

*p < .05; **p < .001; ***p < .0001.
Peer Crowd Differences in Internalizing Distress from Time 1 to Time 2

**Depressed affect.** A significant crowd effect was revealed, Wilks’s $F(6, 482) = 2.84, p < .01$ for Time 1 and Time 2. Post hoc analyses, Tukey honestly significant difference, all $ps < .05$, indicated that Brains reported significantly lower levels of depression as compared with the other three peer crowds at Time 1, and Burnouts reported significantly higher levels of depression than did Populars/Jocks at Time 2 (see Table 3).

A marginal Time $\times$ Crowd interaction effect, Wilks’s $F(3, 242) = 2.28, p = .08$, suggested that the pattern of change in depressed affect differed across the four peer crowds. Analyses of simple effects, using a conservative experiment wise Bonferroni correction (.05/20 simple effect analyses) of $p < .003$, revealed a statistically significant decrease in depressed affect from Time 1 to Time 2 for Populars/Jocks only, paired $t(84) = 3.14, p < .002$. Depression scores for adolescents in the Brains, Burnouts, and None/Average groups did not significantly change between Time 1 and Time 2 (see Figure 1).

Exploratory analyses revealed a significant Time $\times$ Gender interaction effect for depressed affect, Wilks’s $F(1, 238) = 8.62, p < .01$. Simple effects
analyses suggested that depressed affect significantly decreased over time for boys, $t(97) = 4.41, p < .0001$, but not for girls, $t(147) = -.21$.

**Social Anxiety.** Table 3 and Figure 2 illustrate the results for the analysis of social anxiety. A crowd main effect, Wilks’s $F(6, 482) = 2.52, p < .05$, was revealed for Time 2 only. Post hoc analyses indicated that Brains reported significantly greater levels of social anxiety at Time 2 than did Populars/Jocks (see Table 3).

A significant Time × Crowd interaction was revealed, Wilks’s $F(3, 242) = 2.68, p < .05$ (see Figure 2). Simple effects analyses suggested that adolescents in the Populars/Jocks, paired $t(84) = 3.61, p < .001$, None/Average, paired $t(97) = 3.79, p < .0001$, and Burnouts peer crowds, paired $t(33) = 2.07, p < .05$, had significant decreases in social anxiety from Time 1 to Time 2. There were no significant decreases in social anxiety over time for Brains.

**Loneliness.** A significant crowd main effect, Wilks’s $F(6, 482) = 4.25, p < .0001$, was revealed for loneliness at Time 1 and Time 2. Post hoc analyses indicated that at Time 1, children in the Brains crowd reported lower levels of loneliness than did children in the None/Average crowd.
PEER CROWD AFFILIATION

At Time 2, adolescents in the Populars/Jocks crowd reported the lowest levels of loneliness, as compared with the other three peer crowds. A significant Time × Crowd interaction effect, Wilks’s $F(3, 242) = 3.68, p < .05$ (see Figure 3), followed by analyses of simple effects revealed that only adolescents in the Brains crowd exhibited a significant increase in loneliness from Time 1 to Time 2, paired $t(28) = -4.48, p < .0001$; adolescents in the other three peer crowds showed no significant change in loneliness over time.

Exploratory analyses revealed a three-way interaction effect (Time × Gender × Crowd) for loneliness, Wilks’s $F(3, 240) = 2.78, p < .05$. Two-way interaction effects were conducted separately by gender followed by simple effects analyses. A Time × Crowd interaction effect was revealed for girls’ loneliness, Wilks’s $F(3, 146) = 4.85, p < .01$, but not for boys’ loneliness, Wilks’s $F(3, 95) = 1.75$. Simple effects analyses indicated that girls in the Populars/Jocks group exhibited a significant decrease in loneliness between Time 1 and Time 2, paired $t(52) = 2.99, p < .01$, and Brains exhibited a significant increase in loneliness between these time points, paired $t (19) = -4.63, p < .0001$.

Self-esteem. A significant crowd main effect, Wilks’s $F(6, 482) = 2.81, p < .05$, was revealed for Time 2 only. Post hoc analyses suggested
that Burnouts reported significantly lower levels of self-esteem at Time 2 that did Populars/Jocks.

A significant Time × Crowd interaction, Wilks’s $F(3, 242) = 3.30, p < .05$, was observed (see Figure 4). Subsequent analyses suggested that self-esteem significantly decreased between Time 1 and Time 2 for adolescents in the Brains crowd, paired $t(28) = 3.19, p < .004$; however, there were no significant changes over time in self-esteem for adolescents in the Populars/Jocks, Burnouts, or None/Average crowds.

**Perceptions of Peer Crowd Acceptance/Rejection and Internalizing Distress**

A final set of analyses was conducted to examine adolescents’ perceptions of their peer crowd’s acceptance/rejection among peers and adolescents’ internalizing distress. A significant ANOVA, $F(3, 213) = 8.99, p < .0001$, confirmed that Populars/Jocks reported the greatest level of perceived crowd acceptance as compared with the other three peer crowds (see Table 4). Next, zero-order correlations were computed to examine the relation between adolescents’ perceptions of their own peer crowd and their reports
of internalizing distress (see Table 4). High levels of adolescents’ perceived peer crowd acceptance were associated with lower levels of depression and loneliness, and higher self-esteem. When these results were examined within each peer crowd, the results indicated that among the Brains, perceptions of peer crowd rejection were significantly associated with internalizing distress. In contrast, for Burnouts, perceptions of peer crowd acceptance or rejection were not significantly related to internalizing distress.

**DISCUSSION**

This investigation offers several unique findings that further substantiate the importance and function of peer crowds among American adolescents. The results suggest that adolescents’ perceptions of their peer crowd affiliation are meaningfully related to their self-concept and to adolescents’ concurrent and childhood levels of depressed affect, social anxiety, loneliness, and global self-esteem. Most interestingly, adolescents’ perceived crowd affiliation was associated with their developmental trajectories of internalizing distress in a manner that is consistent with past research and theory.
Peer crowds become conspicuously salient during the developmental period associated with rapid identity development, and the theme of these crowds is remarkably similar to the values and attributes most relevant to adolescents’ identity (i.e., physical appearance, behavioral conduct, social acceptance, scholastic competence, romantic appeal, athletic ability, and so forth). Theorists suggest that peer crowds both reflect and promote this process of identity development as a useful tool for social comparison and self-reflection among adolescents (Brown et al., 1994). The results of the present study corroborated this idea with a consistent pattern of findings between adolescents’ perceptions of domain-specific competence and perceived crowd affiliation. Adolescents who felt most competent in athletic ability, social acceptance, physical appearance, and romantic appeal also identified most closely with peer crowds that were based on reputations of competence in these domains (i.e., Jocks and Populars). Similarly, adolescents who identified with academically oriented crowds reported greater levels of scholastic competence than did their peers. Crowds are based on reputational similarities in competencies, values, behaviors, and interests; and adolescents’ reports of their crowd affiliation reflect their perceptions of these reputations among peers. These findings suggest that adolescents believe these reputations are somewhat accurate reflections of their own perceived strengths in self-concept.

Adolescents may believe that their crowd affiliation also reflects their position in the peer status hierarchy, as indicated by consistent concurrent associations among adolescents’ perceived crowd, perceived crowd

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**TABLE 4**

Zero-Order Correlations between Adolescents’ Perceptions of Peer Crowd Acceptance/Rejection and Four Domains of Internalizing Distress

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall</th>
<th>Populards/ Jocks</th>
<th>Brains</th>
<th>Burnouts</th>
<th>None/ Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressed affect</td>
<td>-.20**</td>
<td>-.04</td>
<td>-.46*</td>
<td>-.05</td>
<td>-.20</td>
</tr>
<tr>
<td>Social anxiety</td>
<td>.13</td>
<td>-.06</td>
<td>-.37*</td>
<td>.09</td>
<td>-.05</td>
</tr>
<tr>
<td>Loneliness</td>
<td>-.34**</td>
<td>-.36**</td>
<td>-.31</td>
<td>-.05</td>
<td>-.27*</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>.28**</td>
<td>.20</td>
<td>.45*</td>
<td>.07</td>
<td>.24</td>
</tr>
<tr>
<td>Peer crowd acceptance/rejection: M (SD)</td>
<td>3.81 (.90)</td>
<td>4.16 (.88)ₐ</td>
<td>3.55 (.91)ᵇ</td>
<td>3.40 (.77)ᵇ</td>
<td>3.69 (.82)ᵇ</td>
</tr>
</tbody>
</table>

Note. Peer crowd status was scored on a 5-point scale (1 = disliked/5 = liked). Means with different subscripts are significantly different, p < .05. 
*p < .05; **p < .01
acceptance/rejection, and internalized distress. Populars and Jocks are defined, in part, by their high status within the adolescent peer group, perhaps because these crowds have stereotypes for being competent in the traits most valued in adolescence. Indeed, adolescents in the present sample who reported affiliation with the Populars/Jocks were most likely to believe that members of their crowd were well-liked by peers. The results confirmed that these adolescents also reported the highest levels of global self-esteem, and lowest levels of depressed affect, social anxiety, and loneliness. Because peer crowds and their relative standing among peers are often explicitly defined among adolescents (i.e., through the use of specific crowd labels, different seating arrangements in the school cafeteria, and so forth), it is not surprising that adolescents’ perceptions of crowd affiliation are linked to other indicators of subjective distress and dissatisfaction in the social domain.

It is also possible that crowd reputations are based, in part, on adolescents’ internalizing distress. Hogue and Steinberg (1995) reported that members of interaction-based cliques share similar levels of depressed affect, and affiliation within cliques high in internalized distress predicts increases in individuals’ depression. The longitudinal, follow-back data in this study allowed for a preliminary examination of psychological antecedents of adolescent crowd affiliation, yet the results were not fully consistent with hypotheses.

It was anticipated that, like sociometrically popular children, adolescents in the Jocks and Populars crowds would exhibit the lowest levels of childhood internalized distress. In fact, levels of childhood internalizing distress for Populars/Jocks did not differ from other adolescents. The results highlight three issues relevant to work on determinants of peer reputations. First, although many short-term longitudinal studies have been conducted on antecedents of sociometric status in childhood, prior work has rarely examined long-term predictors, such as childhood antecedents of acceptance and rejection among peers in adolescence. As compared with the study of children, peer acceptance and rejection have rarely been examined in adolescence (Coie, Dodge, & Kupersmidt, 1990). It may be that peer status is relatively unstable across the developmental transition to adolescence; this is a second important issue to consider. Coie and Dodge (1983) reported only moderate stability for peer-rated “like most,” “like-least,” and social preference ratings across a 4-year interval, rs between .28 and .45; only 21% of sociometrically popular students and 19% of sociometrically rejected children in fifth grade retained their sociometric status after the transition into adolescence, and into high school. Lastly, the findings highlight important theoretical differences in peer reputation constructs that should be considered in the study of determinants. Most
prior research has examined antecedents of peer sociometric status. However, it may be that predictors of peer crowd affiliation would be more similar to predictors of peer-perceived popularity than to factors that antedate sociometric popularity, in that measures of peer crowd affiliation and peer-perceived popularity both reflect reputations rather than preferences among peers (LaFontana & Cillessen, 1999; Parkhurst & Hopmeyer, 1998). Continued study of the possible determinants of peer crowd affiliation, including more frequently studied predictors of status (e.g., aggression and leadership) would be especially important in future research.

Unlike the Populars/Jocks, the results revealed significant childhood social–psychological strengths for adolescents who reported affiliation with the academically oriented crowd (i.e., the Brains). Adolescent Brains reported lower levels of depression and loneliness in childhood than did their peers, and also reported low levels of social anxiety and high levels of self-esteem in childhood. This pattern of results is most interesting in conjunction with the findings on internalizing trajectories. Between childhood and adolescence, only adolescent Brains exhibited a significant decrease in self-esteem, and an increase in loneliness. Brains were also the only group that failed to report decreases in social anxiety over time, and, in contrast to affiliates of higher status crowds, Brains did not demonstrate significant decreases in depressed affect over time.

Although the direction of effects cannot be determined in this study (i.e., whether internalizing trajectories predicted or were produced by perceived crowd affiliation), the results were generally consistent with hypotheses and prior work on the adjustment correlates of high academic achievement across development. High academic achievement is typically associated with peer acceptance and favorable psychological adaptation during the elementary school years (Ladd, 1990; O’Neil, Welsh, Parke, Wang, & Strand, 1997), but may be associated with psychological vulnerability in adolescence (Luthar & Zigler, 1991). For example, high academic ability is associated with low levels of peer acceptance in adolescence, and youth may hide their scholastic achievements from peers in an effort to preserve their peer status (Juvonen & Murdock, 1995). These developmental changes parallel adolescents’ transition from the unquestioned acceptance of adult prescribed values to the adoption of values emphasized in peer culture (Brown et al., 1994). It may be that adolescents who do not feel competent in peer-preferred values (i.e., athletic ability, romantic competence, and physical attractiveness) retain their predominant identification with academically oriented crowds, and subsequently feel isolated as they recognize that this crowd’s values do not conform to peer norms (Kinney, 1993). The results of the present study suggested that this may be particu-
larly true for those Brains who believed that their crowd was disliked by peers.

Overall, the data support hypotheses regarding the possible unique functions served by peer crowds among American adolescents. Future studies might further explore gender differences in the patterns of social–psychological adjustment across development. In this study, a pattern of declining adjustment over time for Brains was more clearly demonstrated for girls than for boys. This is consistent with girls’ increased vulnerability to internalizing symptoms during the transition to adolescence, as well as prior findings that revealed a weaker association between academic achievement and self-image for girls, than for boys (Hankin & Abramson, 2001; Nolen-Hoeksema & Girgus, 1994; Roberts et al., 1990). Further exploration of these potential gender differences is an important direction for future work, particularly in studies with adequate power to examine effects of this size in both genders. It would also be helpful to examine internalizing distress at additional time points, both within and beyond the 6-year interval that was utilized in this study.

Investigators should be especially cautious in generalizing these results to adolescents outside of White American culture, particularly in light of mixed empirical results that support the existence of similarly themed crowds among ethnic minority populations (Brown & Mounts, 1989; Phillips, Hughes, & Wilkes, 1998). Past research has suggested that adolescents from ethnic minority backgrounds typically comprise a separate peer crowd defined by its members’ ethnic background, or are underrepresented as members of other reputation-based crowds (Brown & Mounts, 1989). Similarly, in this study there was some mixed evidence from focus groups of the existence of one peer crowd that was partially defined by the ethnicity of its members (i.e., the “Bros”).

Adolescents’ affiliation and comparison with reputation-based crowds may promote a process of identity development (McLellan & Pugh, 1999). However, this developmental function of crowds may be most relevant to adolescents in the majority ethnic group (i.e., White adolescents in American culture). For youth who constitute an ethnic minority, ethnicity may be a more salient feature contributing to self-concept (McGuire, McGuire, Child, & Fujioka, 1978). Indeed, in North America, non-White youth engage in a process of ethnic identity development that is less relevant for White adolescents (Phinney, 1989). Thus, some non-White adolescents may identify more with a specific ethnic group than with the reputations of peer crowds that predominate within the majority culture. In contrast, most White adolescents’ identity development is aided by identification with reputation-based crowds that focus on attributes other than ethnicity.
Interestingly, no significant ethnic differences were observed in the composition of peer crowds in this study. However, unlike previous investigations, no ethnic group constituted a clear majority; thus, minority status may have been less salient among this group of adolescents. Few investigations have explored the role of peer crowds among ethnic minority youth, particularly in integrated communities, or in a predominantly non-White context (Brown & Mounts, 1989); this is an important direction for future research. Peer crowds within ethnic minority groups may be unique in structure or function, as compared with previously studied crowds. Indeed, some of these crowds may have existed in the high schools attended by adolescents in this study, but not in sufficient numbers to be included in analyses.

Of course, replication of these findings might also include the use of both peer-reported and self-reported measures of peer crowd affiliation. For this study of adolescents’ perceived affiliation with reputation-based crowds, a self-reported instrument was used. Thus, the results were most consistent with symbolic interaction theories in that adolescents’ self-perceptions reflected their presumed reputations among others. The use of a peer-reported measure would help to determine the similarity between adolescents’ perceptions and the perceptions of external informants. Recent results suggest that self-identified and peer-reported crowd affiliation are similarly related to adolescents’ engagement in health-risk behaviors; a similar analysis of internalizing distress is an important direction for future research (see Urberg, Değirmencioğlu, Tolson, & Halliday-Scher, 2000 and footnote 3).

Overall, these findings offer promise for future investigations on the association between peer crowd affiliation and internalizing distress, and provide a modest first step toward understanding how internalizing trajectories may be linked with adolescent crowd affiliation. This study suggested that in addition to associations between adolescents’ crowd affiliation and their engagement in health-risk behavior, adolescents’ perceptions of their peer crowd appear to offer meaningful information about adolescents’ self-concept, as well as concurrent and past histories of internalizing distress.

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