

PARENT SOCIAL ENGAGEMENT: ASSOCIATIONS WITH EARLY ADOLESCENTS'
SOCIAL SKILLS AND SOCIAL ANXIETY

BY

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Abstract

Frequency of parent social engagement (PSE) was examined as a predictor of early adolescents' friendship-specific social skills (FSSS). The author hypothesized a stronger relation between PSE and FSSS would exist for more (compared to less) socially anxious early adolescents and a similar relation would be evident for female (compared to male) early adolescents. Data were collected from early adolescents, a parent, and a close friend. Results indicated an inverse relation between non-familial PSE and adolescents' FSSS. In addition, results showed an inverse relation between PSE and FSSS depending on adolescents' level of social anxiety. More socially anxious adolescents whose parents frequently engaged in social activities with extended family members demonstrated better FSSS than those whose parents engaged in familial social activities less often. The opposite relation was reported for less socially anxious adolescents. Implications for findings include techniques improving friendship-specific social skills of early adolescents with varying social anxiety levels.

Parent Social Engagement: Associations with Early Adolescents' Social Skills and Social Anxiety

Children with effective social skills tend to have higher academic success (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000), and fewer symptoms of anxiety and mood disturbance (Garber, 2006). In fact, the development of social competence has implications that extend into adulthood, with social competence in adolescence negatively related to internalizing problems in adulthood (Burt, Obradovic, Long, & Masten, 2008). The types of skills that are needed for social competence depend in part on social context. This study focused on a specific set of social skills that are needed to develop and maintain good friendships in early adolescence, when the development of close friendships becomes an increasingly important aspect of social competence (Buhrmester, 1990). Two factors believed to influence the emergence of social skills relevant to close friendships in adolescence were studied: parent social engagement and adolescents' symptoms of social anxiety. Parents who have regular contact with friends of their own tend to have more socially skilled children (Homel, Burns, & Goodnow, 1987). Conversely, social skills deficits have been connected to higher levels of social anxiety in youth (Beidel, Turner, & Morris, 1999; Spence, Donovan, & Brechman-Toussaint, 1999; Ginsburg, La Greca, & Silverman, 1998). This study developed a new measure of parents' social engagement to extend understanding of proposed relations between parents' social life and adolescents' friendship-related social skills. Of particular interest, the study examined how adolescents' levels of social anxiety might affect the relation between parent social engagement and friendship-specific social skills.

Parent Social Engagement and Adolescent Social Skills

Theory and research suggest that parents' social lives can influence their children's social relationships in several ways. Parke and colleagues (2002) proposed one of the most comprehensive conceptualizations of how parents can influence their children's social relationships. According to their model, parents may foster children's social relationships via three general pathways (Parke et al., 2002): (1) Parent-child interactions provide an early model of social relationships and how they function; (2) parents can teach and provide advice regarding how to interact with others (see also Vernberg Beery, Ewell, & Abwender, 1993); and (3) parents can act as social managers and supervisors of their children's peer activities (e.g., arranging, facilitating, and monitoring get-togethers; see also Vernberg et al., 1993). McDowell and Parke (2009) found support for this model in an empirical study that tested all three pathways.

Specific to parent social engagement, Parke and colleagues (2002) suggest that parents can influence children's social networks by exposing them to other children, namely children of their friends. This idea is consistent with that of Cochran and Brassard (1979), who theorized that parents expose their children to a wide or narrow social experience depending on the size of their own social networks (Cochran & Brassard, 1979). Parent social engagement may be important to children's social skills for additional reasons consistent with the ideas of Parke and colleagues (2002). Parents' relationships with other adults may serve as a model of social interaction in addition to the model provided by parent-child interactions. As suggested by social learning theory (Bandura, 1978; Bandura, 1986), parents may model network-building skills (Cochran & Brassard, 1979) and ways to approach social situations with appropriate or maladaptive behavior (de Rosnay, Cooper, Tsigaras, & Murray, 2006) that children may emulate. Supporting this idea, previous research has indicated that the quality of a parent's relationship to a best friend (i.e., self-disclosure, help, conflict resolution, companionship, and

validation) correlates with the quality of children's friendships (Simpkins & Parke, 2001). In addition, it is possible that by being socially active themselves, parents are better able to provide helpful advice, have knowledge of various peer activity opportunities for their adolescents, and be more skillful managers and supervisors of the adolescents' interactions with peers.

Despite the potential implications of parent social engagement for adolescents' social lives, this construct has received little direct empirical attention. Homel, Burns, and Goodnow (1987) examined parent social engagement and found that children's social skills (defined as "gets along better than average with other children") (Homel et al., 1987, p. 171) positively correlated with whether their parents had a dependable friend (defined as "someone whom you see regularly and whom you could turn to in a crisis") (Homel et al., 1987, p. 162) and/or the frequency of contact parents had with relatives. Parents' affiliation with organizations (e.g., business/professional, religious, sporting/leisure, etc.) was also related to children's social skills (Homel et al., 1987).

The current study attempted to expand upon this research in a number of ways. One aim of this study was to develop a measure to assess parent social engagement in a more broad array of situations, using items that are more specific to ensure a precise report from participants. The goal was to examine not only parents' socializing in person with friends, family, or organizations, but also several other contexts (i.e., through phone conversations, emailing, and time spent with coworkers). To determine which of these different behaviors qualify as reliable and cohesive descriptions of parent social behavior, the measure developed here was examined via exploratory factor analyses. A second aim was to investigate the possible relation between parent social engagement and adolescent friendship-specific social skills from multiple perspectives on adolescents' social skills (i.e., parent, adolescent, and friend reports). The study

also addressed the possibility that a significant correlation between parent social engagement and adolescents' social skills could be attributed to socially skilled adolescents enlarging their parents' social networks. Specifically, parents reported the percentage of their friendships that resulted from their adolescents' friendships (here termed *adolescent-dependent friendships*) to investigate this possible effect. Finally, the current study considered the potential moderating role of social anxiety levels in the relation between parent social engagement and adolescent social skill.

Role of Social Anxiety

One hindrance to developing better social skills is the presence of social anxiety, which has been found to be related to parents' ratings of their children's social skills deficits (Ginsburg, La Greca, & Silverman, 1998; Spence, Donovan, & Brechman-Toussaint, 1999) and more negative interactions with peers (Ginsburg et al., 1998; La Greca & Stone, 1993). Research has shown that children's social anxiety levels may be related to family sociability, with children who perceive their family as lower in sociability having higher levels of social anxiety (Bogels, van Oosten, Muris, & Smulders, 2001; Bruch & Heimberg, 1994; Bruch, Heimberg, Berger, & Collins, 1989; Arbel & Stravynski, 1991). While the psychosocial treatment literature has not shown a significant difference in efficacy between social skills training involving parents versus training without parental involvement, the literature has shown a trend toward greater improvement in the social skills of more socially anxious youth when parents are involved (Spence, Donovan, & Brechman-Toussaint, 2000). Therefore, parents' social engagement may be important especially for youth with higher levels of social anxiety because parents' frequency of social engagement provides cues regarding norms for social behavior. While higher levels of social anxiety in youth may prevent those youth from practicing and developing social skills,

adolescents' perceptions of frequent parent social engagement may encourage adolescents with more social anxiety to practice social skills such as initiating conversations. Conversely, adolescents with more social anxiety who do not have the perception of frequent parent social interaction may not practice their social skills because they do not have a model to encourage them to interact socially. Non-anxious or low-anxious youths' social skills, however, may not be influenced as greatly by the frequency of parent social engagement due to their relative comfort in social interactions with peers. In other words, varying levels of social anxiety may influence the strength of the relation between parent social engagement and adolescents' social competence with adolescents who have higher levels of social anxiety benefiting from greater exposure to parents' social interactions. However, a higher frequency of parent social engagement may not be necessary for youth with lower levels of social anxiety to function well socially. This hypothesized effect has yet to be studied empirically.

Role of Gender

Researchers have found that social anxiety relates to lower social skills (Ginsburg et al., 1998) and that girls report more social anxiety than do boys (Crick & Ladd, 1993; La Greca & Stone, 1993). In addition, parent social engagement may be more strongly related to girls' friendship skills than boys' friendship skills. Simpkins and Parke (2001) found a stronger relation of mothers' and fathers' friendship quality with adolescent friendship quality among girls compared to boys (Simpkins & Parke, 2001), and other studies have found gender differences in social skills (Buhrmester, Furman, Wittenberg, & Reis, 1988; Koesten, 2004). Therefore, the current study considered gender differences by examining gender differences in social skills, social anxiety levels, and the association between parent social engagement and adolescent social skills.

Friendships in Early Adolescence

The focus of the current study was on adolescents in 7th and 8th grade for several reasons. Seventh and eighth grade is an important transition period between childhood and young adulthood with the transition from elementary school to junior high resulting in a larger peer group (Karweit & Hansell, 1983), an increasing amount of peer interactions independent of parents (Collins & Steinberg, 2006), and instability in friendships (Hardy, Bukowski, & Sippola, 2002). As a result, this developmental period brings more opportunities for making and changing friends, making social skills particularly important at this age (Caprara et al., 2000). Parents remain important socializing agents during junior high (Vernberg et al., 1993; Lawson, Banerjee, & Field, 2007); however, when adolescents reach high school, they become much more independent from parents (Levpuscek, 2006). Thus, junior high is a critical time for parents to influence their young adolescents' developing social skills. Furthermore, social anxiety becomes more prevalent during this stage (Ost, 1987); studying the connection of varying levels of social anxiety to parent social engagement and adolescent social functioning may be particularly relevant at the stage of early adolescence.

The Current Study

The purpose of the current study was to examine the ways in which the frequency of parents' social engagement (e.g., activities with extended family members, go out with a close friend, socialize with a group of friends, and invite people over) is associated with their adolescents' friendship-specific social skills. Closely linked to this purpose was the object of measuring a broader range of specifically defined social behaviors in a multiple-item format that would promote strong internal reliability. It was hypothesized that the frequency with which parents engaged in social activities would positively correlate with adolescents' social skills even

when the proportion of parents' friendships that resulted from adolescents' friendships (here termed *adolescent-dependent friendships*) was controlled (Hypothesis 1). Controlling for adolescent-dependent friendships takes into account the influence of adolescents' friendship-specific social skills in determining parents' frequency of social activity, thereby providing greater support for the position that parents' social behavior may have affected adolescents' social skills, if the association between parent social engagement and adolescent social skill is found. Adolescents' level of social anxiety was expected to have a main effect on adolescents' social skills such that higher levels of social anxiety would correlate with lower levels of friendship-specific social skills (Hypothesis 2). Further, adolescents' social anxiety level was expected to moderate the association between parent social activity and adolescent social skill such that a stronger positive relation would exist among adolescents with higher social anxiety than among adolescents with lower social anxiety (Hypothesis 3). Finally gender was examined as a potential moderator with the prediction that the relation of parent social activity with adolescent social skills would be stronger for females than males (Hypothesis 4).

Method

Participants

A volunteer sample of 116 early adolescents (58 same-sex friend dyads) and their parents ($N = 96$) participated in the study. Participant data were needed from the adolescent, parent, and friend to be able to include their data in analyses. As a result, 28 of the adolescents' data and 8 of the parents' data were not included due to lacking parent report or due to missing data. The final sample consisted of 88 participants. The sample was 52 percent female ($n = 45$) and was between 12-14 years of age ($M = 13.06$, $SD = .66$). Participants were recruited through local community agencies working with adolescents as well as area clinics, online recruiting (e.g., Myspace), and

handing out fliers at area schools, community events, and businesses. Eligibility criteria for participation in the proposed investigation included 1) the child be enrolled in either seventh or eighth grade and 2) carry no current or prior diagnosis of Autism, Asperger's Disorder, or other Pervasive Developmental Disorder to control for confounding social deficits present in youth with these disorders.

Procedure

Prior to the assessment, either an undergraduate research assistant or a graduate student contacted parents of adolescents who indicated interest in the study. The team member then screened for eligibility criteria. If eligibility was met, adolescent participants were asked to invite their best friend to participate in the study with them. Consent forms were mailed to the parent/guardian of each adolescent to sign, which the adolescent then brought with him or her to the assessment. At least one parent of one of the adolescents was required to bring the adolescents and remain at the study site during the adolescents' participation. The assessments were conducted by undergraduate research assistants and supervised by doctoral students in clinical child psychology. Research assistants provided a written and verbal description of the study, obtained written consent from the parents (if not already received), and obtained verbal assent from each adolescent. Once consent and assent was obtained, the parent was then placed in a separate room to complete a series of questionnaires and the adolescent dyad was separated and placed in two different rooms to complete a series of questionnaires with a research assistant. All questionnaires were completed in a randomized order. Research assistants read each questionnaire aloud to the adolescent while the adolescent marked answers on the adolescent's own copy of the questionnaires. Parents completed measures on their own in a separate room or by mail if not present for the session. At the end of the assessment, the adolescents were placed

in the same room in order to have four video recorded interaction tasks for a study related to a larger project. Both adolescents and each parent that attended were provided with a \$20 gift card as compensation for their time. Parents who completed questionnaires by mail received a \$10 gift certificate. These procedures were approved by the Human Subjects Committee-Lawrence (HSC-L; Approval #16863).

Measures

Parent Social Engagement (Appendix A). This questionnaire, which was developed for use in the current study, included twelve items that assess the frequency of a parent's social activities such as getting together with friends one-on-one or in groups, whether in the home or out of the home. Possible answers for questions ranged from 0 (Almost never) to 4 (Every week). A final question asked the percentage of the parents' friendships that resulted from their children's friendships (i.e., they became friends with the parents of their adolescents' friends). This question was designed to allow possible evaluation of whether parents' friendships were the result of their own initiative or instead due to convenience and/or their children's social skills. Response options include 0, 10, 25, 50, 75 and 100%.

Interpersonal Competency (Appendix B.1 and B.2). The Adolescent Interpersonal Competence Questionnaire (AICQ; Buhrmester, 1990) is a 40-item questionnaire that assesses an adolescent's level of interpersonal competency specific to friendships. The AICQ scale assesses five domains: self-disclosure, provision of emotional support to friends, conflict management, asserting influence, and initiation of friendships. Scores demonstrate a strong correlation with closeness in best friendships and have been shown to moderately correlate with the number of friends named during an interview (Buhrmester, 1990). Items were rated on a 5-point scale ranging from 1 (Poor at this) to 5 (EXTREMELY good at this). The current study used

adolescent self-report, friend-report, and parent-report of the adolescent's interpersonal competence. Consistent with previous research, the average score across all AICQ items was used in analyses. Internal consistency was .95 for self-report, .94 for friend-report, and .94 for parent-report. The AICQ has demonstrated adequate test-retest reliability ($r = .72$ across a 2-year time span, .55 for a 4-year span, and .43 for a 6-year span) although inter-reporter agreement has been variable ($r = .11$ for agreement between father and friend of 8th grader to $r = .49$ for agreement between 8th grade teen and mother) (Burhmester, April, 2002).

Social Anxiety (Appendix C). The Social Anxiety Scale for Adolescents (SAS-A; La Greca & Lopez, 1998) consists of 22 items including 18 self-statements and 4 filler items using a 5-point scale ranging from 1 (Not at all) to 5 (All the time) according to how true the statement is for that person. The scale is composed of self-statements that assess person's fear of negative evaluation, social avoidance and distress when approaching unfamiliar social situations, and social avoidance and distress generalized to most social situations. Concurrent validity of the scale has been demonstrated with a correlation of $r = .73$ with the Social Phobia and Anxiety Inventory-Social Phobia subscale (Garcia-Lopez, Olivares, Hidalgo, Beidel, & Turner, 2001), a subscale that assesses cognitive, behavioral, and physiological symptoms associated with social phobia (SPAI-SP; Turner, Stanley, Beidel, & Bond, 1989). The Total SAS-A score has also correlated highly with the social phobia section of the ADIS-IV-L ($r = .74$; Garcia-Lopez et al., 2001) a semi-structured interview used to assess current and lifetime mood, anxiety, and substance use disorders according to the DSM-IV (ADIS-IV-L; DiNardo, Brown & Barlow, 1994). Test-retest reliability after a 10-day period for the Total SAS-A was fairly high ($r = .86$; Garcia-Lopez et al., 2001). Consistent with past research using the SAS-A (La Greca, 1999; Storch, Masia-Warner, Crisp & Klein, 2005), scoring for the SAS-A in the current study

involved averaging across all items except for the four filler items to create a single total score of social anxiety. Cut scores based on La Greca and Lopez's manual (SAS-A; La Greca & Lopez, 1998) (low: SAS-A mean ≥ 2 , average: $2 < \text{SAS-A mean} < 2.78$, and high: SAS-A mean ≥ 2.78) indicated that adolescents with a wide range of social anxiety were included in the study. Approximately forty-three percent of adolescent participants endorsed low levels of anxiety; thirty-five percent of adolescents endorsed average levels of anxiety; and approximately twenty-two percent of adolescents endorsed high levels of social anxiety. The alpha coefficient measuring internal consistency for the overall SAS-A in the current study was .94.

Results

Psychometric Analyses

Parent Social Engagement. Because this measure was developed for this study, an exploratory factor analysis with principal axis factoring with a promax rotation with Kaiser Normalization was used. To determine the most appropriate numbers of factors for the 12-item scale, the rotated solutions and internal consistencies of one-, two-, three-, four-, five-, and six-factor models were examined for their theoretical plausibility. Based on these criteria, the best-fitting model for all twelve items was a two-factor solution accounting for 45.67% of the variance in which ten items loaded onto one factor characterized by non-familial socializing (e.g., with friends, with coworkers, at parties, etc.) (eigenvalue = 3.82; $\alpha = .79$) and the final two items loaded onto a second factor characterized by socializing with extended family (eigenvalue = 1.7; $\alpha = .85$). Table 1 shows the results of the final factor analysis, the two scales and their items, and coefficient alphas for each scale. Three of the items loaded onto Factor 1 less than .40 (i.e., How often do you talk on the phone with a friend for more than 10 minutes?; How often do

you email friends?; How often do you attend community functions or events (for example, service groups, team sports, committees)?.

Table 1

Factor Analysis of Parent Social Engagement Items

Items grouped by factor	Factor 1	Factor 2
How often do you	α	α
Factor 1: Non-familial Sociability		
1. get together with a group of friends (day or night) outside the home?	0.72	0.20
2. have a group of friends over to your home?	0.62	0.30
5. go out with a friend one on one (for example, to breakfast/lunch/dinner, shopping, run errands, play a sport, etc)?	0.69	0.05
6. spend time with a close friend or best friend one on one in your home?	0.79	0.24
^a 7. talk on the phone with a friend for more than 10 minutes?	0.36	0.04
^a 8. email friends?	0.36	0.14
9. get together socially with coworkers outside your home?	0.45	0.12
10. have coworkers over to your home socially?	0.45	0.08
^a 11. attend community functions or events (for example, service groups, team sports, committees, etc)?	0.31	0.19
12. go to parties?	0.52	0.35
Factor 2: Familial Sociability		
3. get together with extended family members outside of your home?	0.15	0.77
4. have your extended family over to your home?	0.31	0.95

^aNote. N = 95. Items loading < .40 were removed from the Non-familial Sociability scale (Factor 1)

The poor loading of two of the items indicated that electronic means of communication and socializing are less related to socializing in person. The third poorly loading item indicated that frequenting community functions or events does not appear to be related to socialization in other domains. By removing these three items, the internal reliability of Factor 1 characterized by non-familial sociability was improved to .81, and the reduced parent social engagement two-factor scale accounted for 57% of the total variance explained. As a result, it appeared that

separating the twelve items into two factors and eliminating poorly loading items produced the most cohesive and theoretically plausible assessment of parent social engagement.

Scoring for the Parent Social Engagement measure involved taking the average of items 1, 2, 5, 6, 9, 10, and 12 for the first factor, and the average of items 3 and 4 for the second factor. If a parent wrote in N/A for either item 5 or 6 (which ask about socializing with coworkers), zero was entered for those items. The final question regarding adolescent-dependent friendships was used as a 1-item variable.

Interpersonal Competency. Inter-reporter reliability of the AICQ was low: parent-report with friend-report ($r = -.03$); self-report with parent-report ($r = .14$); and self-report with friend-report ($r = -.10$).

Preliminary Analyses

Independent samples t-tests were conducted to determine whether there were any gender differences on measures of adolescents' friendship-specific social skills and level of social anxiety. Results indicated that no gender differences were present for overall social skills as reported by adolescents, $t(114) = 1.05, ns$, their friends, $t(114) = 1.31, ns$, or their parents, $t(92) = .37, ns$. Gender differences in social anxiety level were not found either, $t(114) = .23, ns$. Since gender was not significantly associated with social skills or level of social anxiety, gender was not included as a covariate in subsequent analyses. Bivariate correlations were conducted to determine whether the number of parents' friendships resulting from their adolescents' friendships (adolescent-dependent friendships) was associated with differences in adolescents' friendship-specific social skills or level of social anxiety. The parents' percentage of adolescent-dependent friendships was not related to any report (parent, self, friend) of adolescents' friendship-specific social skills (r ranged from .05 to -.12) or level of social anxiety ($r = -.07$). As

a result, the percentage of adolescent-dependent friendships was not included as a covariate in subsequent analyses. Means and standard deviations for all study variables were reported in Table 2.

Table 2

<i>Descriptive Statistics of Study Variables</i>			
Variable	<i>N</i>	<i>M</i>	<i>SD</i>
Parent Social Engagement Non-familial Sociability	88	1.37	0.73
Parent Social Engagement Familial Sociability	88	1.78	1.04
Social Anxiety	88	2.20	0.73
Adolescent-dependent friendships	88	39.32	27.45
Social Skills (self-report)	88	3.74	0.56
Social Skills (friend-report)	88	3.84	0.55
Social Skills (parent-report)	88	3.35	0.54

Hypothesis Testing

Bivariate correlations among study variables are reported in Table 3.

Table 3

<i>Bivariate Correlations Among Study Variables</i>						
Variable	1	2	3	4	5	6
1. Child's Gender	-					
2. Parent Social Engagement, NFS	.00	-				
3. Parent Social Engagement, FS	.07	.22*	-			
4. Social Anxiety	-.12	.05	-.02	-		
5. Social Skills sr overall	-.01	.05	-.18	-.48**	-	
6. Social Skills fr overall	-.07	-.25*	.10	-.03	.10	-
7. Social Skills pr overall	-.13	.10	-.17	-.01	.14	-.03

Note. sr = self-report; fr = friend-report; pr = parent-report; NFS = Non-familial Sociability; FS = Familial Sociability

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

$N = 88$

H1: The frequency with which parents engaged in social activities will positively correlate with adolescents' social skills even when accounting for adolescent-dependent friendships. Results examining the relation between parent social engagement and adolescent social skills indicated a relation in the opposite direction of that expected in Hypothesis 1.

According to friend-reported social skills, adolescents whose parents more frequently socialized with friends and coworkers demonstrated poorer overall social skills ($r = -.25, p < .05$).

H2: Adolescents' level of social anxiety will have a main effect on adolescents' social skills such that higher levels of social anxiety will correlate with lower levels of social skills. In support of Hypothesis 2, correlations indicated that higher levels of self-reported social anxiety among early adolescents were indeed related to adolescents' self-reports of demonstrating poorer friendship-specific social skills in general ($r = -.48, p < .01$). Friend- and parent-reported observations of adolescent social skills, however, did not correlate with higher levels of social anxiety, ($r = -.03$ and $-.01$, respectively; *ns*). This suggests that higher levels of social anxiety in adolescents may play a detrimental role in adolescents' feelings of social competence when interacting with friends, but these self-perceptions are not related to friend or parent reports of social skills in close friendships.

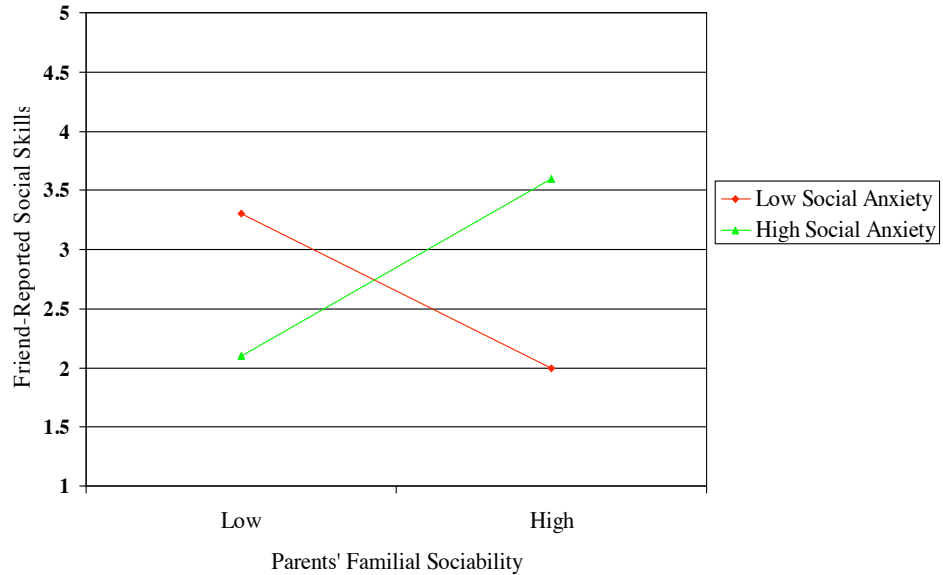
H3: Adolescents' social anxiety level will moderate the association between parent social activity and adolescent social skill such that a stronger relation will exist among adolescents with higher social anxiety than among adolescents with lower social anxiety. The moderating effects of social anxiety level on the relations between parent social engagement and adolescent friendship-specific social skills were tested in a series of hierarchical regressions in which adolescents' level of social anxiety and parent social engagement (non-familial or familial) were included as independent variables while the adolescent's friendship-specific social skills was examined as the dependent variable. Measures of social anxiety and parent social engagement were mean-centered to reduce the effects of multicollinearity in regression-based analyses. The analyses were repeated for each of the three reports (adolescent, parent, and friend) of

adolescents' friendship-specific social skills. Due to limited statistical power, separate analyses were also run using PSE-NFS and PSE-FS as independent variables.

To test the moderating effects of social anxiety level (SA) on the relation between parent social engagement non-familial sociability (PSE-NFS) and social skills (Hypothesis 3), parent social engagement non-familial sociability (PSE-NFS) and social anxiety level were entered as Step 1, and then the PSE-NFS x SA interaction was entered in Step 2, with social skills entered as the dependent variable. The regression yielded $\Delta R^2 = .001$, $\Delta F = .10$, *ns* when the interaction between parent social engagement non-familial sociability and self-reported adolescents' social anxiety level was examined as an additional predictor of adolescents' social skills. Likewise, for friend-reported social skills and parent-reported social skills, the interactions were non-significant ($\Delta R^2 = .000$, $\Delta F = .006$, *ns*; $\Delta R^2 = .002$, $\Delta F = .202$, *ns*, respectively). These results suggest that parents' non-familial sociability does not make a significant difference on adolescents' social skills depending on adolescents' levels of social anxiety.

To test the moderating effects of social anxiety (SA) on the relation between parent social engagement familial sociability (PSE-FS) and social skills, parent social engagement familial sociability (PSE-FS) and social anxiety level were entered as Step 1, and then the PSE-FS x SA interaction was entered in Step 2, with social skills entered as the dependent variable. Regressions yielded a significant interaction that accounted for additional variance in friends' reports of adolescents' social skills ($\Delta R^2 = .08$, $\Delta F = 7.47$, $p < .01$). Self-reported and parent-reported social skills did not indicate such a relation ($\Delta R^2 = .000$, $\Delta F = .04$, *ns*; $\Delta R^2 = .001$, $\Delta F = .06$, *ns*).

Figure 1. Interaction Between Parent Social Engagement Familial Sociability and Social Anxiety - Effects on Friend-Reported Social Skills



To understand the direction of these interactions, cut scores were created based on the median scores for PSE- familial sociability and social anxiety level. As evident in Figure 1, friend-reported social skills appeared to differ significantly depending upon the frequency of familial sociability by the parent and the level of social anxiety endorsed by the adolescent such that adolescents with higher levels of social anxiety seemed to have better social skills as observed by a friend when a parent was frequently engaged in social activities with extended family compared to a parent who was less frequently engaged in familial social activities. For those adolescents with lower levels of social anxiety, however, a higher frequency of sociability by the parent with extended family correlated with poorer overall social skills than when the parent had a lower frequency of familial sociability. These results suggested that parent social engagement

familial sociability made a significant difference only for friends' observations of adolescents' social skills depending on social anxiety levels of the adolescent.

H4: The relation of parent social activity with adolescent social skills will be moderated by gender such that the relation of parent social activity with adolescent social skills will be stronger for females than males. To test the moderating effects of the adolescents' gender on the relation between parent social engagement (PSE-NFS or PSE-FS) and social skills, parent social engagement (PSE-NFS or PSE-FS) and gender were entered as Step 1, and then the PSE-NFS x Gender or PSE-FS x Gender interaction was entered in Step 2, with social skills entered as the dependent variable. Regressions yielded non-significant interactions between adolescent gender and parent social engagement non-familial sociability and familial sociability for all reports of adolescents' social skills.

Discussion

A primary hypothesis asserting that parent social engagement would positively correlate with adolescents' friendship-specific social skills was not supported by analyses. Parents' familial social engagement was not significantly related to a measure of adolescents' social skills reported by three sources (parent, self, friend). Unexpectedly, adolescents whose parents reported greater social engagement with non-family members were rated lower on friendship-specific social skills by their close friend.

While initial hypotheses for the relation between parent social engagement and adolescents' social skills proposed modeling (Cochran & Brassard, 1979; de Rosnay et al., 2006) as one mechanism by which adolescents' friendship-specific social skills would be superior to those whose parents did not socialize as frequently, modeling may not have been taking place because the parents might have been conducting most of their socializing while away from their

adolescents. Other mechanisms by which theory has suggested parents influence youths' social relationships include teaching and providing advice regarding how to interact with others (Parke et al., 2002) although Vernberg and colleagues (1993) found that advice did not facilitate friendship development. Instead, direct action by parents to promote contact with friends promoted friendship development. To explain the negative correlation between parents' non-familial social engagement and adolescents' social skills, it is possible that parents who engage in frequent social interaction with non-family members are fairly busy, and as a byproduct, they have less time to spend teaching and providing advice about their youth's social interactions and also less time to arrange and facilitate get-togethers for their adolescents. In addition, parents who are very social and who have adequate social skills may not recognize instances in which their adolescent is having difficulties making or keeping friends. As a result, they may not recognize the need to help their adolescent with friendships, or they may not know how to give useful advice if their social adeptness is somewhat innate for them.

A second primary hypothesis that adolescents' social anxiety level would be negatively related to adolescents' friendship-specific social skills was partially supported by analyses. This predicted result only emerged in adolescents' self-report of their friendship-specific social skills. Reports from parents and close friends did not indicate that the adolescents' social anxiety level was related to their ability to employ skills for initiating and maintaining friendships. It is possible that a higher level of social anxiety in adolescents created a cognitive bias that the adolescents were worse at employing social skills than they were in actuality. A study by Segrin and Kinney (1995) provides some support for this hypothesis by studying socially anxious university students compared to non-socially anxious students in a surreptitiously videotaped interaction with a partner randomly assigned to them. Analyses of the observed social skills of

non-anxious compared to anxious students indicated no difference, although the socially anxious students rated their own social skills negatively, indicating a negative bias toward their social skills abilities (Segrin & Kinney, 1995). Another study by Schneider (2009), however, has noted an observed difference in the behavior of socially anxious compared to non-anxious early adolescents within close friendships such that the socially withdrawn/anxious early adolescents appeared more passive and displayed more neutral affect compared to the control group. One could assert that the social skills Schneider was measuring were not the same as those that were assessed within the current study. Therefore, it seems, reasonable to assert that the same relation with social anxiety and the type of social skills Schneider was measuring compared to social anxiety level and the social skills measured here would not necessarily coincide.

A stronger positive relation between parent social engagement and adolescent social skills for more socially anxious adolescents compared to less socially anxious adolescents was reported for a specific type of parent social engagement: familial sociability. Friends of adolescents who endorsed higher levels of social anxiety reported better social skills for the adolescents whose parents interacted often with extended family compared to adolescents whose parents interacted infrequently with extended family. Conversely, friends of less socially anxious adolescents' reported poorer adolescent social skills when adolescents' parents frequently compared to infrequently socialized with extended family.

More socially anxious adolescents may find that social interaction with a variety of extended family members such as cousins, aunts, and uncles is easier and more comfortable given that they are likely to have known them their entire lives, and they may also be reassured by the idea that family is supposed to love them regardless of their skillfulness in a social setting. In such a relaxed and protective setting, more socially anxious adolescents may not worry as

much about their performance socially and therefore may be more willing to speak up and engage around extended family. The social skills they may be able to practice more often could then produce a strong skill base and facilitate greater comfort level with the skills within the context of a close friendship.

For less socially anxious adolescents whose parents frequently socialize with extended family members, they may feel that all of their social needs are met by their interactions with extended family and as a result, they do not seek out other peer relationships with which they can hone their social skills. By socializing with extended family, less socially anxious adolescents may take certain responses to their behavior for granted in that family members may be more patient with behavior that is lacking finesse or consideration for others. In addition, a perspective that either the adolescent or family members may take is that the family will always be there, and therefore the likelihood of losing those relationships is lower. As a result, the social skills the adolescent has less incentive to practice friendship-specific social skills.

The fact that adolescents' level of social anxiety had no effect on the way in which parents' non-familial social engagement was associated with adolescents' friendship-specific social skills was somewhat surprising. It was proposed that frequent social interactions with people such as parents' friends and coworkers would provide a useful model to more socially anxious adolescents by providing more socially anxious adolescents with a template for the frequency of social interactions with which the adolescents should be engaging with their friends and also by directly modeling friendship-specific social skills. However, adolescents may not be paying as much attention to their parents' non-familial social behavior, particularly given that time with parents decreases with age (Collins & Steinberg, 2006). Additionally, it may be more important for more socially anxious adolescents to have first-hand experience practicing

friendship-specific social skills in a protected environment such as with extended family rather than observe that parents frequently socialize with friends and coworkers.

Adolescents' gender did not play a significant role in the relation between parent social engagement and social skills. Given that past research has indicated that females might be more sensitive to the qualities of parents' friendships (Simpkins & Parke, 2001), and females differ in their social skills (Buhrmester et al., 1988; Koesten, 2004), the current study hypothesized that females' friendship-specific social skills would be influenced to a greater degree than males when parents' social engagement was more or less frequent. However, females and males did not differ in friendship-specific social skills, and the connection between parents' social engagement and adolescents' friendship-specific social skills was not related either. Some research has noted a difference in specific friendship-specific social skills such as emotional support and self-disclosure (Buhrmester et al., 1988) and in certain domains (e.g., with friends vs. romantic partners) (Koesten, 2004). The measure of friendship-specific social skills in this study assessed global friendship skills rather than specific friendship skills. An interaction between gender and parents' social engagement may be more likely if specific social skills were investigated separately. Future studies with a larger sample size could explore this possibility.

Measure of Parent Social Engagement

While attempting to assess the degree to which parent social engagement related to adolescents' social skills, a broad measure that assessed specific behaviors encompassing parent social engagement was needed. The measure that was created encompassed a variety of people with whom parents interact (i.e., friends, family, coworkers, and acquaintances) within a variety of contexts (e.g., within the home, away from home, at community functions, over the phone, via email). Results of the exploratory factor analyses indicated two separate factors, familial

sociability and non-familial sociability, which seems to indicate that parents who socialize frequently with friends do not necessarily do so with extended family. The reasons for such a difference may vary. It is very likely that some parents do not have extended family within the local area and therefore may not have the opportunity to see them. Other parents who see extended family more often than friends may do so because of the value of family relations as more important than relations with non-relatives, which may or may not also be tied to cultural values.

For those items on the parent social engagement measure that loaded poorly on either factor, examination of the items indicates that electronic means of communication and sociability are less related to sociability that occurs in person. In addition, frequenting community functions or events did not appear to be related to socialization in other domains. It is possible that parents who engaged in community activities or events (e.g., service groups, team sports, committees) did so for many reasons. If they were more socially anxious, some parents may have engaged in community activities or attended events because it was a way to have built-in socializing and ensure regular interaction with peers while not having to go to the effort of initiating and planning a one-on-one or group activity. Other parents may have engaged in community activities because they wanted to serve their community. Some of these parents may have placed more emphasis on serving their community and family such that they had little time left for frequent socializing with peers.

Inter-reporter Agreement on Adolescent Social Skills

It is apparent from the low agreement regarding adolescent social skills that each reporter observed the adolescent in a different context and/or their perception may have been influenced by other factors. Results show how higher levels of social anxiety may have influenced self-

reports. Parents of adolescents may have limited occasions for noticing some of the social skills assessed. They may only be able to view some of their adolescents' social skills behaviors during brief moments when they pick up their adolescent from an activity or friend's house.

Limitations

In light of some evidence that aspects of mothers' and fathers' friendships may be differentially related to the friendship quality of their daughters (Simpkins & Parke, 2001), participation from both mothers and fathers of each adolescent would be ideal in studying the relation of parent social engagement with adolescents' social functioning. At the same time, obtaining a friend's report of an adolescent's social skill in addition to a parent's report and the adolescent's report of the adolescent's social skill is likely to be useful. Each report can provide unique information on the adolescent. The friend's report on the adolescent's social skills provides a slightly more objective report than the adolescent reporting on his or her own social skills or a parent reporting on the adolescent's social skills given that the parent may not witness a majority of the adolescent's peer interactions. The friend's perspective on the adolescent's social skills may also be shared by the adolescent's peers and may assess how well the adolescent is doing overall in peer interactions.

However, requiring participation of both parents and a friend would likely have been a limiting factor in procuring study participants. After weighing the options, a design was chosen that included participation of a close friend and one parent. One possible way to address the limitation regarding parents' gender is to conduct an analysis of whether the gender of the parent relates to outcomes of adolescents' social skills. However, for the current study, there was an insufficient number of both fathers and mothers to conduct such an analysis. Future research analyzing parent social engagement may be improved by including parents' gender as a variable.

Another limitation of the study concerned the absence of adolescent-report on parents' social engagement. Adolescent-report of parent social engagement would have provided a way to test whether adolescents' perceptions of their parents' social engagement or parents' report of their social engagement was more strongly related to adolescents' friendship-specific social skills. A similar limitation concerning reporters involved the significant correlation between adolescent self-reported social skills and self-reported levels of social anxiety. The fact that the same reporter filled out the two correlated measures indicates that correlation could represent shared method variance rather than true correlation.

Race and ethnicity were not included in analyses due to the limited power of the study and the lack of research indicating that friendship-specific social skills differ according to race and ethnicity. However, one must also recognize that the lack of research indicating a difference should not cause one to conclude that indeed there is no difference. Particularly given the varying importance of family across different cultures, race and ethnicity would likely be an important variable to consider when conducting studies examining parent social engagement and its relation to adolescent social skills.

Generalizability of findings. Generalization to the general population of early adolescents and their parents may be limited based on the representativeness of the sample to that of the United States population. Cultural differences are possible and in fact likely. In addition, the gender of the parents that participated in the study was not examined and therefore, one does not know whether the findings are more applicable to mothers or fathers or whether parents' gender is irrelevant.

Future Directions

Further research with larger power should study the percentage of time adolescents are around parents when parents are engaging in social interaction with parents' friends. Such an assessment would determine whether direct modeling makes a difference. The examination of friendship facilitation strategies (particularly enabling proximity) and parents' social skills as moderators would also further delineate the mechanism by which parent social engagement relates to adolescents' friendship-specific social skills. Finally, race and ethnicity should be investigated to determine whether the relations found in the current study could be generalized across the general population.

Implications for intervention would be informed by further investigation into the mechanisms by which parents' familial sociability is associated with socially anxious adolescents' friendship-specific social skills. Future intervention research could examine whether increasing parents' social interactions with extended family (if possible) facilitates socially anxious adolescents' acquisition of friendship-specific skills.

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Parent Social Activities

Parent Questionnaire

Appendix A

Almost Never	A few times a year	Once a month	A few times a month	Every week
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How often do you...

1. get together with a group of friends (day or night) outside the home?	0	1	2	3	4	
2. have a group of friends over to your home?	0	1	2	3	4	
3. get together with extended family members outside of your home?	0	1	2	3	4	
4. have your extended family over to your home?	0	1	2	3	4	
5. go out with a friend one on one (for example, to breakfast/lunch/dinner, shopping, run errands, play a sport, etc...)?	0	1	2	3	4	
6. spend time with a close friend or best friend one on one in your home?	0	1	2	3	4	
7. talk on the phone with a friend for more than 10 minutes?	0	1	2	3	4	
8. e-mail friends?	0	1	2	3	4	
9. get together socially with coworkers outside your home?	0	1	2	3	4	
10. have coworkers over to your home socially?	0	1	2	3	4	
11. attend community functions or events (for example, service groups, team sports, committees, etc)?	0	1	2	3	4	
12. go to parties?	0	1	2	3	4	
13. What percentage of your friendships is a result of your child's or children's friendships? (That is, you became friends with the parents of your children's friends.)	0%	10%	25%	50%	75%	100%