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The Broader Impact of Friend to Friend (F2F):

Effects on Teacher-Student Relationships, Prosocial Behaviors, and Relationally and Physically Aggressive Behaviors

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Abstract

Girls often harm others' social standing by starting rumors about peers or by excluding others from peer group activities, which is called relational aggression. Although relational aggression is not a new phenomenon, there have been relatively few interventions designed to address this, especially for urban ethnic minority girls. The Friend to Friend (F2F) program, developed through an iterative participatory action research process, has proven to be effective in improving targeted relationally aggressive urban girls' social problem-solving knowledge and decreasing levels of relational aggression, with effects being maintained 1 year after treatment. In the current article, we examine the broader effects of the F2F program. Findings suggest that the indicated F2F program has broader effects such as increasing prosocial behaviors, decreasing relational and physical aggression, and improving teacher-student relationships among non-targeted boys. In addition, the program demonstrated some effects for non-targeted girls including an increase in prosocial behaviors and improved teacher-student relationships. Implications for examining the cost-effectiveness of indicated interventions such as F2F are discussed.

Keywords

relational aggression; school-based intervention; physical aggression; urban; ethnic minority; school climate; teacher-student relationship; participatory action research; community-based participatory research

There has been a growing recognition that school-age children aggress toward one another in many ways besides through physical aggression or verbal aggression (i.e., hitting, pushing, name calling, and shoving). Specifically, children can harm one another through their peer relationships, which has been termed "relational aggression" (Crick & Grotpeter, 1995). Relational aggression consists of behaviors such as starting rumors or using social exclusion to harm others. It is associated with a host of negative psychosocial outcomes for youth as

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well as a harmful impact on broader constructs such as classroom climate and relationships with teachers (Elsaesser, Gorman-Smith, & Henry, 2013; Goldstein, Young, & Boyd, 2008; Leff, Waasdorp, Waanders, & Paskewich, 2014). Relational aggression is particularly prevalent among girls and occurs frequently among urban ethnic minority youth (Leff et al., 2009), suggesting the need to intervene with these at-risk children. To address this need, the Friend to Friend (F2F)-indicated group intervention was designed for urban relationally aggressive African American girls (Leff et al., 2007; Leff et al., 2009). F2F has demonstrated success in improving these at-risk girls' problem-solving knowledge and decreasing their relational aggression, with effects maintained 1 year later (Leff et al., 2015). The goal of the current article is to examine the broader impact of F2F for all students in participating classrooms, on teacher-student relationships and classroom-level aggression.

Relational Aggression and Psychosocial Maladjustment

As mentioned, relational aggression has been documented by researchers and educators as being socially and emotionally harmful (Card, Stucky, Sawalani, & Little, 2008; Leff & Waasdorp, 2013; Voulgaridou & Kokkinos, 2015). In fact, research suggests that those who harm others through the manipulation of social standing and peer group reputation often exhibit a host of comorbid challenges ranging from peer relationship difficulties, problem-solving and emotional arousal deficits, mood problems, and strained interpersonal relationships as they become older (e.g., Card et al., 2008; Crick, Ostrov, & Kawabata, 2007). Relational aggression is especially harmful to girls (Crick, 1996; Crick, Grotpeter, & Bigbee, 2002; Mathieson et al., 2011; Murray-Close & Crick, 2007) as it often encompasses a manipulation of the social dynamics that are extremely important in the establishment of girls' peer groups and social hierarchy. Studies have demonstrated that relational aggression occurs quite frequently among urban ethnic minority youth (Leff et al., 2009; Leff, Waasdorp, Paskewich, et al., 2010), and that it can escalate to serious physical aggression and violence (Farrell et al., 2007; Talbott, Celinska, Simpson, & Coe, 2002). Thus, it is extremely important to address relational as well as physical aggression for urban ethnic minority youth.

Relational Aggression and Its Association With Classroom Climate and Teacher-Student Relationships

In addition to the individual impact of aggression on those involved, research has suggested that aggression can also negatively affect a host of broader classroom and school climate factors. For example, when there are high levels of physical aggression in a classroom, students may be more likely to develop their own aggressive behaviors, even several years later (Thomas, Bierman, & the Conduct Problems Prevention Research Group, 2006). Furthermore, higher levels of relational and overt aggression are associated with less positive teacher practices in their classrooms (Leff et al., 2011) and with perceptions that the school environment is dangerous and not conducive to academic learning (e.g., Risser, 2013; Waasdorp, Pas, O' Brennan, & Bradshaw, 2011). This link between aggression and classroom climate is particularly notable given how critical classroom climate and teacher practices can be to students' social and academic success. For example, research has

demonstrated that teacher-student relationships and classroom management practices are associated with classroom climate (see Leff et al., 2011 for a review) as well as students' levels of psycho-social functioning (Wilson, Pianta, & Stuhlman, 2007) and academic achievement (Rolland, 2012). Furthermore, students who have stronger and closer relationships with their teachers often have less behavioral difficulties and higher levels of academic achievement, school satisfaction (Zullig, Huebner, & Patton, 2011), and motivation (Wentzel, Battle, Russell, & Looney, 2010). Teacher communication about their positive feelings for students has been associated with increased rates of students' prosocial behaviors and a more positive classroom teaching context, while conflictual teacher-student relationships have been associated with problematic peer interactions, behavioral difficulties, and lower academic achievement (McCormick & O'Connor, 2015; Rudasill, Niehaus, Buhs, & White, 2013; Runions, 2014). All of this research suggests the importance of relational aggression prevention programs affecting aggressive youth as well as the broader classroom context. Examination of the broad impact of the F2F program is the goal of the current article.

Community and School Context of Urban Ethnic Minority Youth

As discussed, promoting positive behaviors and classroom climate is important for the social and academic development of school-age youth, but it is especially important for urban youth given their social context. For example, urban minority youth and families often experience a range of stressful life experiences that affect their daily functioning and the safety of their schools and communities (e.g., Burke, Hellman, Scott, Weems, & Carrion, 2011; Davis et al., 2014; Jocson & McLoyd, 2015). Many urban minority youth experience high levels of trauma and loss, while having to navigate schools and communities plagued by high levels of community violence and inadequate school supports and resources (e.g., Burke et al., 2011; Jenkins, Wang, & Turner, 2009). Over time, these experiences may be associated with youth reacting impulsively and aggressively toward others, most notably within non-threatening situations occurring at school (e.g., reacting aggressively to an accidental bump in the hallway). Studies have demonstrated that relational aggression occurs quite frequently among urban ethnic minority youth (Leff et al., 2009; Leff, Waasdorp, Paskewich, et al., 2010) and that it can escalate to serious physical confrontations (Farrell et al., 2007; Talbott et al., 2002). Furthermore, research suggests that a positive and supportive teacher-student relationship is more beneficial for aggressive minority youth as compared with aggressive White youth (e.g., Meehan, Hughes, & Cavell, 2003). Despite this research, few aggression prevention programs are designed to be contextually and culturally sensitive for urban youth that also take into account both relational and physical aggression (Leff, Waasdorp, & Crick, 2010). This is an important contribution of the F2F program.

Development and Evaluation of Programs Addressing Relational Aggression

Although there have been hundreds of programs designed to address physical aggression over the past 30 years, it has only been within the past 10 years that there has been a specific focus on the development and evaluation of interventions designed to affect relational

aggression among school-age youth. Several review articles have been published that examine the effectiveness of these initial efforts (e.g., Bradshaw, 2015; Evans, Fraser, & Cotter, 2014; Leff, Waasdorp, & Crick, 2010), helping to identify program best practices as well as gaps in the literature base. Some of the strengths of existing relational aggression programs include (a) the conceptualization of aggression in a broader manner than traditional programs focusing solely on physical aggression (see Leff, Waasdorp, & Crick, 2010, for a review), (b) the focus on attributional re-training strategies similar to interventions that have been successful in reducing overt aggression (Hudley & Graham, 1993; Lochman, 1992), (c) a recognition that relationally aggressive behaviors may be more subtle to identify and therefore require strong assessment protocols for identifying and measuring the impact of programs on relationally aggressive youth (Leff, Waasdorp, & Crick, 2010), and (d) a better understanding of the complexity of relationally aggressive behaviors and that relationally aggressive youth, and especially relationally aggressive girls, may be quite socially influential and popular in the peer group (Waasdorp, Baker, Paskewich, & Leff, 2013), suggesting that they might perceive a benefit from the use of relational aggression (Berger, Batanova, & Cance, 2015; Kornbluh & Neal, 2016; Mayeux, Sandstrom, & Cillessen, 2008; Waasdorp et al., 2013).

Despite these strengths of existing programming for reducing relational aggression, there remain a number of important gaps. First, very few programs have been developed for addressing relational aggression within the urban school context, despite research suggesting that relational aggression occurs frequently and creates challenges within urban schools (Leff et al., 2009; Talbott et al., 2002; Waasdorp, Bagdi, & Bradshaw, 2010). Second, programs have not fully recognized the importance of addressing aggression within the unstructured school contexts, such as in the lunchroom and on the playground during recess, which are school locations where youth are most likely to aggress relationally or physically (Leff, Costigan, & Power, 2004). Third, given the insidious nature of relationally aggressive behaviors and its impact on classroom climate (e.g., Goldstein et al., 2008), intervention support is likely needed for high-risk relational aggressors both at an individual level (e.g., teaching them problem-solving and emotion-regulation skills) and within the important classroom context. Next, few relational aggression programs have demonstrated lasting effects (e.g., through the year following the active intervention), making one question how promising programs can translate into sustainable gains for at-risk relationally aggressive youth. Finally, few indicated aggression-prevention programs have examined the broader impact of their program on the classroom context, which is an oversight given how time- and labor-intensive these programs can be to implement. One recent study that did examine the broad impact of a program (the Great Families Program, a 15-week group and family intervention for sixth-grade aggressive and socially influential youth) yielded mixed findings. Specifically, they reported decreases on teacher reports of physical aggression for non-targeted students within indicated intervention schools as compared with control schools, but no differences were found with regard to school climate, including school norms supporting aggression and school safety (see the Multisite Violence Prevention Project, 2009). The F2F program clearly addresses the limitations of other relational aggression prevention programs.

The F2F Program

Theoretical Foundation and Approach to Program Development

Development of the F2F program began in the 1990s when there were not empirically based programs that had demonstrated success in reducing relationally aggressive behaviors, and particularly with urban ethnic minority relationally aggressive girls (see Leff, Power, Manz, Costigan, & Nabors, 2001). As such, F2F was based on two best-practice aggression-prevention programs that had demonstrated success with urban physically aggressive youth, the Coping Power Program (Lochman, 1992; Lochman & Wells, 2003, 2004) and the Brain Power Program (Hudley & Graham, 1993). Our team used participatory action research to iteratively develop F2F through a careful partnership with urban African American girls and their teachers, parents, and community members to be scientifically grounded and developmentally appropriate and relatable for urban African American third- to fifth-grade girls (see Leff et al., 2007). For instance, program materials and modalities include culturally relevant cartoon-based handouts and homework sheets, videotaped illustrations, and role-plays, which were co-designed by urban students and teachers to maximize urban youth engagement in the program.

The intervention is theoretically grounded, as it combines a social-information processing (SIP) model of aggression (e.g., Dodge & Pettit, 2003) with a developmental-ecological and systems theory of development (Bronfenbrenner, 1986; Sameroff, 1993) and with social learning theory (e.g., Bandura, 1973; Dishion, Capaldi, Spracklen, & Li, 1995). SIP theory posits that aggressive youth have a series of social and emotional processing deficits related to the sequential steps of encoding social cues, interpreting others' intentions, prioritizing social goals, and developing and evaluating potential alternatives for responding in challenging social situations (e.g., Crick & Dodge, 1994b; de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). Therefore, most programs addressing the needs of physically aggressive youth have focused on attributional re-training, with particular emphasis on reducing hostile attributional bias for interpreting others' intentions as being threatening or mean within ambiguous social situations. Given that relationally aggressive behavior has been associated with similar processing deficits such as difficulty interpreting others' intention (Crick, 1995; Crick et al., 2002) and evaluating potential responses to provocation (Crick & Werner, 1998), many programs addressing relational aggression have focused on helping these youth learn stronger social problem-solving strategies, especially related to the hostile attributional bias. F2F follows this research in that attribution retraining is the primary focus of the intervention. Participating girls are taught to identify their physiological reactions when involved in challenging social situations, slow themselves down, examine the social situation objectively, and then generate and evaluate multiple ways for how they could respond positively. Please see Table 1 for a brief description of F2F sessions.

In addition to the SIP theory, F2F also follows a developmental-ecological and systems theory of development (Bronfenbrenner, 1986; Sameroff, 1993) by recognizing that it is not enough to change only relationally aggressive youths' problem-solving abilities, but that these changes must be recognized in their social-cultural context including their peer group and teachers. For instance, F2F acknowledges that relationally aggressive girls often have

social influence and peer reputations for harming others' social relationships, and therefore posits that the promotion of positive leadership roles at the classroom level (as described below in the classroom component of F2F) can help to change their behavior and the perceptions that their peers and teachers have of them. Finally, social learning theory is used in F2F in that many of the teaching modalities rely on modeling, role-playing, and shaping more appropriate behaviors over time (Dishion et al., 1995; Patterson & Capaldi, 1991).

Program Components

The primary component of F2F is a 20-session pull-out group intervention that occurs during the lunch-recess period. The intervention is co-conducted by a master's level research therapist and a classroom teacher or teacher's assistant. The group includes both relationally aggressive girls and prosocial role models (typically at a 3:1 ratio, respectively) who are selected based on an unlimited peer-nomination procedure (see Leff et al., 2009). Specifically, relational aggression z scores were derived from peer nominations by standardizing scores within classroom and then re-standardizing within grade. Girls with relational aggression z scores > 0.50 SD were designated as relationally aggressive for the purposes of the study.¹ Prosocial role models, those who had z scores $> .50$ SD on prosocial behavior and z scores < 0 on both relational and physical aggression, were also randomly selected for participation. After the F2F group participants have completed 10 to 12 small-group sessions, they co-lead 10 classroom sessions for their peers that run simultaneously with the final eight to 10 sessions of the small-group program. The 10-session classroom component of F2F was developed during the formative stages of the F2F group intervention.² As noted previously, the experience of co-leading sessions offers aggressive girls an opportunity to practice their newly developing social skills and change their reputation, and it also met a request of teachers that F2F be delivered in the classroom so that other girls and boys could benefit from the curriculum as well (see Leff et al., 2007).

Empirical Support of F2F for Relationally Aggressive Girls

Recently, a randomized parallel-group study design was conducted comparing the effectiveness of F2F with an attention control condition (called Homework, Study Skills, and Organization, HSO) among relationally aggressive girls from six urban low-income elementary schools (Leff et al., 2015). HSO was designed through CBPR (Community-Based Participatory Research) to be an educational intervention to help students learn better homework habits and stronger study and organizational skills. F2F was compared with a psychoeducational Attention Control Group (HSO) to ensure that relational aggressors in F2F were not improving primarily due to non-specific effects (e.g., time and attention given to them by the therapists; opportunities to interact with peers in a structured setting). There were no classroom sessions for HSO, as this component is a specific, integral component of F2F (to promote the generalization of the skills and strategies learned). ANCOVA were utilized for comparing posttest measurements from the two conditions while adjusting for

¹ 0.50 of a standard deviation was used as a cutoff point based on studies demonstrating that girls receiving standardized ratings at or above this level have significantly more teacher-reported aggression and related difficulties (Leff et al., 2009).

² The classroom component of F2F was developed so that all concepts and materials would be applicable to both girls and boys. For example, a boys' version of the cartoon handouts and homework sheets was developed through a participatory action research framework as described earlier.

pre-test measurements. This clinical trial indicated that F2F has promise for decreasing relational aggression, $F(1, 125) = 4.46, p < .05, d = -.37$, and improving knowledge of problem-solving skills, $F(1, 124) = 18.66, p < .0001, d = .88$, for urban high-risk aggressive girls, with results that are maintained 1 year following treatment. In addition, correlational analyses demonstrated that decreases in relational aggression from pre-test to posttest were positively associated with procedural, $r = .27, p < .05$, and process integrity, $r = .39, p < .001$, and with teacher co-facilitator engagement in the teaching content ($r = .24, p < .05$). Procedural integrity is the extent to which key program components are implemented within a session, and is sometimes alternatively called content integrity (see Gullan, Feinberg, Freedman, Jawad, & Leff, 2009). Process integrity is the extent to which facilitators demonstrate key or crucial process-related variables while conducting the intervention (see Gullan et al., 2009). These include things such as encouraging students to participate, demonstrating enthusiasm, and managing time adequately.

Goals and Hypotheses for the Study

As mentioned, our intentions were for the classroom sessions of F2F to help aggressive girls participating in the F2F small groups practice and solidify their new strategies and support their emerging leadership skills. However, it became apparent that the classroom component may also benefit other students in participating classrooms, and that this would be a fruitful area of new research given that indicated interventions for high-risk youth can be relatively costly to conduct in terms of facilitator and teacher time. As such, the current article examines the broader impact of the F2F relational aggression intervention, particularly on variables such as classmate behaviors, teacher-student relationships, and the broader classroom teaching climate. The current study fills an important gap in the literature base regarding how an indicated aggression-prevention group intervention for urban relationally aggressive girls may have broader effects on teacher-student relationships and classroom levels of relational and physical aggression.

Because F2F was originally designed for girls, we hypothesized that the broader effects of the program would most clearly be seen in girls. Specifically, we hypothesized that girls in F2F classrooms would demonstrate greater increases in prosocial behaviors (higher levels of friendship, being nice to others, and leadership) than girls in HSO classrooms. We also wished to explore whether the same trend might be found for boys. Second, given that F2F focuses on both relational and physical aggression, we hypothesized that all students (girls and boys) receiving F2F classroom sessions would demonstrate lower levels of relational (e.g., starts rumors, excludes others) and physical (e.g., starts fights) aggression post intervention than similar boys and girls who were in HSO classrooms. Finally, given F2F's emphasis on improving friendship-making and anger-management skills, we thought that this may translate into stronger teacher-student relationships for girls and boys in F2F classrooms. Specifically, we hypothesized that students (girls and boys) in F2F classrooms would demonstrate higher levels of teacher closeness and lower levels of teacher conflict than similar students (girls and boys) in HSO classrooms.

Method

Participants

All participants were recruited from one of six elementary schools within a region of an extremely large urban impoverished school district comprised of mostly African American students (>90%) from low-income, single-parent families (>70%; see Leff et al., 2015, for additional details regarding recruitment). All third- through fifth-grade students from 44 classrooms and six elementary schools were given the opportunity to be involved in the screening portion of the study as per our institutional review board (IRB) protocols (both institutional and school district IRBs approved of all aspects of the study). All youth who provided child assent and parent permission ($n = 1,044$; 72.5%) were invited to participate in measures for the program.

Data for the current study come from the 665 youth (46.3% male) whose classrooms were randomized to either F2F or HSO in the clinical trial study. Approximately 36% were third graders (35.9%), 41.2% were fourth graders, and 22.9% were fifth graders. The majority (92.6%) of the youth identified themselves as African American/Caribbean American or bi-racial including African American. The 183 targeted girls who participated in the pull-out/indicated F2F sessions were not included in the sample for the current study.

Measures

Prosocial behaviors.—To assess prosocial behaviors, peer ratings were utilized. Specifically, students were asked to rate each of their classmates on a 5-point scale (1 = *not at all* and 5 = *a whole lot*) on *Friendships* (“How much are you friends with this person?”), *Nice* (“How often does each person do nice things for others, help others, or cheer others up?”), *Leader* (“How much does each person lead peer group activities and games?”), and *Play* (“How much do you like to play with each person?”). Each child received an average peer-rated score with higher scores indicating more of that attribute.

Aggressive and disruptive behaviors.—To assess aggressive behaviors, peer ratings were also used, which asked students to rate each of their classmates with regard to *Rumor spreading* (“How much does each person spread rumors or talk behind others’ backs?”), *Exclusion* (“Leaving others out?”), *Getting Even* (“How much does each person get even with others by leaving them out when they are mad at them?”), *Fighting* (“How much does each person start fights?”), and *Hitting* (“How much does each person hit or push others?”). Each child received an average peer-rated score with higher scores indicating more of that attribute.

Disruptive behaviors were assessed via the IOWA Conner’s Teacher Rating Scale (Pelham, Milich, Murphy, & Murphy, 1989), specifically the Oppositional/Defiant Behaviors subscale (labeled ODD), which is made up of five items (e.g., acts defiant, uncooperative, temper outbursts; $\alpha = .94$). Each item is rated on a scale from 0 = *not at all* to 3 = *very much*.

Student–teacher closeness and conflict.—Teachers completed the Student–Teacher Relationship Scale (STRS; Pianta & Stuhlman, 2004) for each child in his or her classroom to assess Student–Teacher closeness and Student–Teacher conflict. Seven items made up the

Closeness subscale such as “share an affectionate, warm relationship,” “child seeks comfort from me,” and “shares information about self” ($\alpha = .89$). Eight items made up the *Conflict* subscale such as “easily becomes angry at me,” “drains my energy,” and “always seem to be struggling with each other” ($\alpha = .93$). Teachers respond to each item on a five-point scale (1 = *definitely does not apply* to 5 = *definitely applies*), with higher scores indicating higher closeness or higher conflict.

Overview of Analyses

ANCOVA using SPSS was utilized for comparing posttest measurement between the two conditions while adjusting for pre-test measurement. Adjusting for pre-test measurement was done to ensure that posttest differences are a result of the intervention and not related to any pre-test differences between the two groups and to account for any variation in posttest scores that could be due to pre-test variation. Analyses were run separately by gender. All results presented include only those that were not part of the indicated subsample of girls participating in the small-group F2F sessions ($N = 665$).³

Results

Prosocial Behaviors

In classrooms that were randomized to F2F, results indicate that boys demonstrated higher scores post intervention in *Friendships* ($p < .01$, $d = .35$; see Table 2), and ratings of being *Nice* ($p < .05$, $d = .38$) as compared with boys in classrooms randomized to HSO. Similarly, girls in F2F classrooms showed higher scores post intervention in *Friendships* ($p < .01$, $d = .31$) and ratings of being *Nice* ($p < .05$, $d = .28$) as compared with girls in HSO classrooms. There were no significant differences in ratings of leadership.

Aggressive and Disruptive Behaviors

Boys who were in the classrooms randomized to F2F showed lower ratings post intervention of *Rumor Spreading* ($p < .05$, $d = -.51$), *Exclusion* ($p < .05$, $d = -.51$), and *Fighting* ($p = .05$, $d = -.44$) as compared with boys in classrooms randomized to HSO. Furthermore, boys who were in F2F classrooms showed lower oppositional behavior (*ODD*) post intervention ($p < .05$, $d = -.34$) as compared with boys in HSO classrooms (see Table 2). There were no significant differences for girls.

Teacher-Student Relationship

Results indicate that boys in classrooms that were randomized to F2F had improved teacher *Closeness* ($p = .001$, $d = .42$) as compared with boys in classrooms randomized to HSO. Results indicate that girls in F2F classrooms also had improved teacher *Closeness* ($p < .001$, $d = .68$) as compared with girls in HSO classrooms. Boys in F2F classrooms had lower teacher *Conflict* scores post intervention as compared with boys in HSO classrooms ($p < .$

³Sensitivity analyses were run on the full sample ($N = 848$) and one without the identified F2F girls ($n = 665$). The results on the full sample mirrored the analyses on the 665 classroom participants. Additional results for the indicated girls can be seen in a recent study (Leff et al., 2015).

01, $d = -.29$). There were no significant differences for teacher *Conflict* scores for girls (see Table 2 for all estimates and effect sizes).

Discussion

Overall, the findings from the current study suggest that the F2F-indicated intervention for urban relationally aggressive girls appears to have a strong broad impact that goes beyond the primary focus of the program (i.e., improving the social cognition and relationally aggressive behaviors of targeted urban relationally aggressive girls). Specifically, F2F was found to be especially impactful for boys across prosocial behaviors, relational and physical aggression, and teacher relationships (both decreasing teacher conflict and increasing teacher support). In addition, the program had some impact for non-targeted girls in that it increased their prosocial behaviors and closeness in the relationship with their teacher. Thus, F2F appears to have a broader effect on boys and non-targeted girls across multiple outcomes.

Given that indicated interventions are often more time- and labor-intensive than universal prevention efforts, it is important to recognize that indicated interventions such as F2F may have a broader impact than at first realized. This may be because the indicated program promotes and supports prosocial behaviors of the aggressors, which can help change their reputation among peers and teachers and thereby influence the overall classroom climate. This may be the case for F2F in particular, given that the targeted relationally aggressive girls are taught prosocial problem-solving skills and have the opportunity to demonstrate them by co-facilitating classroom sessions. In addition, given recent research (Mayeux, 2014; Puckett, Aikins, & Cillessen, 2008; Waasdorp et al., 2013) demonstrating that relationally aggressive youth are often quite socially influential, it is notable that F2F channels the leadership skills of these at-risk girls in a positive way through having them demonstrate to both peers and teachers their use of more appropriate strategies for handling social conflicts. This may be a powerful element missing from most other aggression prevention programs.

There are a number of possible explanations for why F2F not only has an impact on relationally aggressive girls (Leff et al., 2015) but also a broader impact on non-targeted students' prosocial and aggressive behaviors as well as their relationships with their teachers. It could be that when the indicated girls improve their behaviors through the program, this allows teachers to direct more of their time and energy toward others students, thereby creating more opportunities to develop stronger relationships with other students, and especially with boys within their classrooms. An alternative explanation could be that the modeling of appropriate social skills during classroom sessions by students who have been traditionally viewed as aggressive (yet who are socially influential and popular) may encourage their classmates to act in a more prosocial manner, resulting in broader behavioral change and stronger relationships with teachers. A third possible explanation could be that the classroom sessions, independent of the contributions of the co-facilitation by the relationally aggressive girls, are successful in changing student behavior and promoting more positive student-teacher relationships. However, our previous research argues against this third alternative because our more intensive classroom-based prevention program,

PRAISE (Preventing Relational Aggression in Schools Everyday), has been most successful in decreasing girls' aggressive behaviors, but did *not* as clearly affect boys' functioning (Leff, Waasdorp, Paskewich, et al., 2010). This suggests that the more concentrated focus on the indicated aggressive girls coupled with co-facilitating classroom sessions in F2F has an influence on the broader impact found in the current study, particularly given the positive findings for boys as well as for teacher-student relationships for both genders. Another explanation for the seemingly more positive impact of the program for boys in the classroom could be that we examined all boys, regardless of aggressive status, whereas for girls, we only included non-aggressive girls. A better understanding of why the program seemed to have such a strong impact for boys could be examined in more detail in future studies. In addition, more research is needed to better understand the mechanism of change and to determine which aspects of the program are most effective for boys, and similarly, for non-targeted girls.

There were several limitations in the current study. First, there were a relatively small number of schools in the current study, and thus, results should be replicated with a larger number of schools. By doing this, multilevel methods could also be utilized to examine whether there were school-level effects on outcomes related to the intervention. Future studies could also utilize multilevel methods to examine whether the classroom levels of relational or physical aggression are associated with changes in individual levels of aggression and student-teacher relationships. Second, because the research was conducted within six urban schools serving predominately African American youth, the findings may not be generalizable to non-urban settings or to more diverse urban schools.

Despite these limitations, the F2F program is one of the first studies to examine the broader effects of an indicated school-based intervention, thus filling a critical niche in the literature. Furthermore, F2F demonstrated effectiveness in reducing aggression at the classroom level for non-targeted students, and also for affecting factors that are important to positive teaching climate, such as increased prosocial behaviors and stronger teacher-student relationships. A future direction for this line of research would be to examine the cost-effectiveness of F2F given that it appears to have an impact on targeted aggressive girls (Leff et al., 2015), as well as on non-targeted girls and boys.

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Tracy Evian Waasdorp, PhD, MEd, is a research scientist at The Children's Hospital of Philadelphia. Her research focuses on school-based bullying prevention and intervention, forms of aggression, coping with bullying, and school climate. She has particular expertise in bullying, relational aggression, and other forms of peer victimization. She also has expertise with multilevel modeling, latent variable modeling, and other advanced longitudinal analytic approaches.

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Table 1.**Main Components and Session Outline for F2F.**

Component	Description
Introduction	
Pre-session	Introduction to program for parents/guardians ^a
Session 1	Discussing purpose, structure and expectations for the program
Session 2	Reviewing expectations and introducing detective analogy
Session 3	Identifying different types of friendship-making problems (FMPs)
Session 4	Determining the common school settings in which FMPs tend to occur
Social–cognitive retraining	
Session 5	Understanding and identifying a range of feelings
Session 6	Identifying body's warning signs when experiencing a feeling
Session 7	Understanding body's warning signs and reactions to feelings
Session 8	Developing strategies for coping with anger
Session 9	Practicing coping strategies for anger
Session 10	Interpreting intentions of others with emphasis on accidental intentions
Session 11	Practicing interpreting intentions of others
Session 12	Generating and evaluating alternatives
Session 13	Continuing to evaluate alternatives and choosing a response to enact
Session 14	Reviewing main concepts and strategies with girls and parents ^a
Applying social-cognitive strategies to rumors and peer-entry situations	
Session 15	Determining what a rumor is and the effects of rumors
Session 16	Applying strategies for dealing with rumors
Session 17	Understanding and applying strategies to group-entry situations
Session 18	Developing strategies to enter groups successfully
Session 19	Reviewing all strategies and main components
Session 20	Wrap-up and goodbyes with girls and parents ^a

Note. F2F = friend to friend.

^aWe have three sessions/touchpoints during which parents are encouraged to attend.

Table 2.

Post Intervention Means and Standard Deviations for Boys and Girls.

Outcome variable	Boys (<i>n</i> = 393)					Girls (<i>n</i> = 272)				
	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i> value	<i>d</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i> value	<i>d</i>
Friendships										
HSO	2.76	0.73	8.40	.004	0.35	2.99	0.73	8.94	.003	0.31
F2F	3.00	0.63				3.20	0.60			
Nice										
HSO	2.35	0.66	4.99	.03	0.38	2.79	0.64	5.43	.02	0.28
F2F	2.61	0.71				2.97	0.64			
Leader										
HSO	2.32	0.50	1.81	ns		2.47	0.52	0.18	ns	
F2F	2.38	0.60				2.46	0.61			
Play										
HSO	2.60	0.65	0.90	ns		2.78	0.62	3.42	ns	
F2F	2.70	0.65				2.90	0.63			
Rumor spreading										
HSO	2.53	0.66	5.78	.02	−0.51	2.37	0.63	1.59	ns	
F2F	2.19	0.68				2.14	0.64			
Exclusion										
HSO	2.38	0.54	4.28	.04	−0.51	2.17	0.55	0.13	ns	
F2F	2.11	0.52				2.07	0.54			
Fighting										
HSO	2.59	0.77	3.83	.05	−0.44	2.17	0.69	1.49	ns	
F2F	2.25	0.77				2.01	0.62			
Hitting										
HSO	2.87	0.84	1.04	ns		2.48	0.66	0.85	ns	
F2F	2.64	0.79				2.33	0.68			
ODD										
HSO	10.41	5.25	4.41	.04	−0.34	7.71	3.30	0.18	ns	
F2F	8.74	4.52				7.29	3.61			
Teacher closeness										
HSO	24.01	5.98	11.54	.001	0.42	24.54	7.62	26.38	<.001	0.68
F2F	26.58	6.30				28.97	5.26			
Teacher conflict										
HSO	20.43	9.38	7.29	.007	−0.29	14.56	6.49	2.57	ns	
F2F	17.75	8.91				14.00	7.57			

Note. HSO = homework, study skills, and organization; F2F = friend to friend; ODD = Oppositional/Defiant Behaviors Subscale.