

Sixth Graders' Conflict Resolution in Role Plays with a Peer, Parent, and Teacher

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Abstract:

This study used conflict resolution role play vignettes and self-report surveys of 450 New York City 6th graders to examine associations between adolescents' conflict resolution efficacy and social skills. Vignettes covered 3 social contexts, conflict with a peer (disagreement over activities), with a parent (raise in allowance), and with a teacher (low grade on report). Effective and ineffective strategies for resolving these conflicts were coded from the videotaped interactions. Adolescents were more often effective in resolving conflict with peers than with parents ($\chi^2(1) = 7.10, p < .01$). Strong communication skills cut across interpersonal context as associated with effective resolution. Assertiveness and absence of aggression were associated with effective conflict resolution in vignettes with peers. Assertiveness was also associated with effective conflict resolution in vignettes with parents, however nervousness was unexpectedly found to facilitate conflict resolution in vignettes with parents. Only skills observed within a particular context were associated with effective resolution in that context; self-report skills and cross-context observed skills were not associated with efficacy. Implications for implementation and evaluation of social skills curricula and conflict resolution process are discussed.

Keywords: adolescent | conflict resolution | negotiation | social skill | interpersonal context

Article:

Teenagers engage in an expanding variety of interpersonal contacts with increasing independence from the familial context. One aspect of this developing social realm is confronting conflict. Conflict situations are a useful social scenario for assessing the development of adolescent social abilities as they represent a common type of social exchange, yet one that challenges a teenager's capacities (Leadbeater *et al.*, 1989). That is, conflict situations can be particularly demanding because they require using multiple social skills simultaneously when the adolescent is personally invested in a social interaction. Use of effective conflict resolution strategies reflects an adolescent's social skill capacity and the extent

to which they can integrate these skills in a typical but trying situation. The present investigation uses an innovative design to consider the role of method, context, and social skills in adolescent conflict resolution.

A possible source of external variance in adolescent conflict resolution is measurement. Considering the intricate and complex pathways constituting the resolution process, it is reasonable to assume that a variety of assessments may be necessary for tapping into the assorted abilities and behaviors that contribute to effective outcomes (Bierman and Montminy, 1993). Research acknowledges the specific need to incorporate diverse methodology as well as tasks that “tax” individual capability (Englund *et al.*, 2000; Leadbeater *et al.*, 1989; Masten *et al.*, 1995; Waters and Sroufe, 1983). To date, 3 primary methods tap adolescent conflict resolution strategy: self-report measures, observed interactions, and role play vignettes.

Self-report measures of conflict resolution usually take the form of hypothetical social conflict scenarios. Adolescents read or are read a brief description of a specific conflict interaction followed by a multiple choice items or a structured interview questioning interpretation of the exchange, potential responses, solutions, and outcomes (Dodge and Frame, 1982; Dodge *et al.*, 1985). The hypothetical nature of this format limits the extent to which an adolescent can generate responses based on authentic reactions. Still, this method of measuring adolescent conflict resolution has yielded data on factors such as conflict frequency, problem type and resolution strategies. Among adolescent samples, findings show that aggressive, prosocial and withdrawal strategies vary by age and gender (Chung and Asher, 1996; Jory *et al.*, 1996; Laursen, 1993; Lindeman *et al.*, 1997; Sancilio *et al.*, 1989). Other research using hypothetical social conflict scenarios demonstrates that the type and frequency of conflict resolution strategies vary by interpersonal context (Jensen-Campbell *et al.*, 1996). Leadbeater *et al.* (1989) found that negotiation skills were associated with social problem solving skill. Studies using self-report “conflict recall” in diaries, interviews, or open-ended questionnaires as a means of tapping into adolescent conflict experience have also been used to assess features of conflict resolution (Jensen-Campbell and Graziano, 2000; Jensen-Campbell *et al.*, 1996; Laursen, 1993; Laursen and Koplas, 1995; Leyva and Furth, 1986; Montemayor and Hanson, 1985; Murphy and Eisenberg, 1996).

Direct observation of adolescent conflict resolution is a less common method for measuring the process. Selman and Schultz (1989) rely on naturalistic observation of 2 dyads of children (ages 6 and 9 years, respectively) to inform a detailed case study of conflict and interpersonal negotiation strategies. Other researchers use observation of designated problem-solving or conflict-generating tasks between children to assess the process. Using these types of observational methods to assess conflict resolution is a window into real life behavior, but limited in the extent to which extraneous variables may be controlled or behaviors of interest captured (Foster *et al.*, 1993).

Role plays are characterized by designated interpersonal vignettes in which the participant is assigned a role and instructed to respond to a series of structured prompts (Foster *et al.*, 1993). Role-playing of conflict situations is used infrequently in social conflict research in spite of the fact that it has proven an effective means for assessing social interaction. For instance, using a role-played peer conflict-negotiation task with pre- and early-adolescents, Rudolph and colleagues (1995) determined that low negotiation skill and more oppositional behavior were linked with adolescent's negative perceptions of mother and family, but unassociated with perception of self or peers. The role play measure allows researchers to pinpoint pertinent behaviors such as persistence in problem-solving, assertiveness, positive conflict management, conflict exacerbation, affect, dyadic collaboration and friction, and emotions exhibited at varying points during the interaction. Other research has relied on role-played peer conflict-negotiation tasks to examine the treatment effects of conflict-resolution training on adolescents (Dudley *et al.*, 1996). Training was associated with compromise-oriented negotiation strategies and win-win outcomes. The role play's controlled yet realistic format allowed investigators to assess the nature of conflict outcomes.

Role play tasks allow investigators to target or manipulate specific interactions that elude naturalistic observation while preserving a "real life" component that is lacking in self-report measures. Despite general confounds such as participant role play ability (de Armas and Brigham, 1986) and instructional demand characteristics (Frisch and Higgins, 1986), the benefits of this approach can outweigh the limitations when used in appropriate circumstances. The role play scenario is tailored to the precise type and interpersonal context of interest while allowing for optimal recording of data (Foster *et al.*, 1993). Measurement derived from role plays is based on coding schemes developed to tap relevant constructs. Though under-used in adolescent conflict research, role play measures are suited to offer a rich source of data.

With this in mind, the first goal of the present study included developing and coding role play vignettes for different interpersonal contexts. The present investigation takes advantage of the role play's multiple benefits by creating scenarios and measures specific to adolescent experience of social conflict. Realistic conflict situations with a peer, parent, and teacher allow the adolescent to engage in normative interactions. Coding schemes were developed to assess key behaviors in these scenarios, including resolution strategies and social skills. The resulting data is a unique contribution to research on adolescent social conflict.

In addition to incorporating innovative measures, the present study design is structured such that conflict resolution may be examined across multiple interpersonal contexts. Since, among youth, evidence of consistency across competency contexts is called into question, this design provides a warranted but unexplored opportunity to test the role of context in conflict (Luthar and Burack, 2000; Luthar and D'Avanzo, 1999). Specifically, this study questions the extent to which the process of conflict resolution varies across context.

Though the adolescent social realm includes a host of relationships, 2 interpersonal domains dominate the literature: adolescent–parent and adolescent-peer dyads (Youniss and Smollar, 1989). Conflict between teenagers and their parents is considered normative (Brooks-Gunn and Zahaykevich, 1989). Among adolescents, conflict (barring the extreme) with parents is considered an adaptive function serving to prod emerging teens out of the “nest” and into the world (Steinberg, 1990). Adolescent conflict with parents can also be considered a means of exploring and generating social rules and boundaries (Smetana *et al.*, 1991). While parent–child research on conflict is rooted in the development of autonomy, most of the study of peer conflict among children stems from interest in minimizing aggression.

Aggression may be an aspect of conflict (in so much as it appears as a resolution strategy), but it is fundamentally different from conflict, *per se* (Shantz, 1987). Because of interest in ascertaining what results in aggressive behavior among youth, a fair amount of attention is given to the outcome of conflict among adolescent peers. At the same time, prior studies have shown that aggressive solutions are only one of several solutions that youth may use in conflict situations; withdrawal or working things out are other options.

While parent and peer contexts dominate the field of adolescent conflict research, the role of those outside the family and immediate peer group must not be given short shrift. Other relationships in the literature worthy of note include teachers, employers, and other adult authority figures (e.g. police officer, coach, activity/school supervisor). To date there is a scarcity of findings for these specific contexts (for related research, see Smetana and Bitz, 1996). At least one study found that adolescents’ more often used negotiation in personal versus work contexts (Selman *et al.*, 1986), and negotiation approaches varied across interpersonal contexts.

Research examining conflict resolution across interpersonal contexts reveals that socially-desirable responses are more likely to be generated in a peer context than in an adult authority context (Laursen and Collins, 1994; Leyva and Furth, 1986; Selman *et al.*, 1986; Selman and Schultz, 1986). Jensen and colleagues (Jensen-Campbell *et al.*, 1996), however, found that adolescents applied negotiation (effective strategy) and power assertion (ineffective strategy) more often with parents and siblings than with peers. While this study showed that use of ineffective conflict resolution strategies did not vary by social context, Montemayor and Hanson (1985) previously determined that withdrawal, an ineffective strategy, was the most common approach to conflict resolution with family members. Mixed findings make it difficult to tease apart the association between efficacy and context.

In an effort to elucidate factors that may contribute to the variations in effective conflict resolution, the current study design compares interpersonal contexts. Based on the supporting literature and the expectation that early adolescents may invest more in maintaining positive peer relations than adult relations, we hypothesize that adolescents will demonstrate more effective conflict resolution ability and better social skills with age-mates compared to adults.

Furthermore, we expect that adolescents will demonstrate more effective conflict resolution with parents than with teachers.

The third goal of this study expands on the above hypothesis by examining the association between social skills and effective conflict resolution. From a theoretical perspective, social skills are a logical starting point in beginning to pinpoint factors driving adolescent social conflict outcomes. Social skills are the underlying abilities that contribute to competence (Cavell, 1990). The present investigation developed coding schemes to assess specific adolescent behaviors exhibited in conflict scenarios, including communication, assertiveness, aggression, and nervousness. These are critical behaviors in social situations (Schoenrock *et al.*, 1999). They reflect the ability to express oneself in a mutual exchange of information, the ability to stand up for oneself without violating another's boundaries, and the ability to optimally moderate one's internal state. Hypothetically, mastery of these skills should lead to successful social development. Specifically, adolescent communication skills are associated with perceived social and academic competence, frequency of family conflict, intensity of family conflict, and quality of interpersonal relationships (Allen *et al.*, 1989; Fabes and Eisenberg, 1992; Smetana and Gaines, 1999; Smetana *et al.*, 1991). Assertiveness is associated with adolescent risk-taking behavior and the ability to resist pressure to use drugs as measured in hypothetical situations (Caplan *et al.*, 1992; Wills *et al.*, 1989). The ability to regulate one's emotions is linked to a teenager's academic achievement and quality of relationship to peers (Wentzel, 1991), as well as emotional closeness to parents (Conger and Ge, 1999). The nature and importance of these particular skills make them the behaviors of interest in the present investigation. We seek to understand how they operate as underlying mechanisms contributing to effective outcomes.

This study uses observed and self-report measures of these key social skills to determine their association with conflict resolution competence within videotaped role play interactions. Effectiveness was assessed by how well adolescents resolved the conflicts in the role plays (high ability reflected by offering compromise-based suggestions or through negotiation). Social skills (communication, assertiveness, anxiety regulation, and absence of aggression) were assessed both through self-report and through direct observation. Via this multi-method design, comparison of observed and self-report social skills is expected to show that adolescents overestimate their abilities in self-reports. This may be, in part, attributed to the fact that conflict situations can be particularly exacting as they require using problem-solving skills, communication skills, assertive skills and emotional regulation skills concurrently. Use and combination of these skills may vary depending on context. It is hypothesized that adolescent communication will be positively associated with effective conflict resolution with peers, parents, and teachers; adolescent anxiety regulation will be positively associated with effective conflict resolution with peers, parents, and teachers; adolescent assertiveness will be positively associated with effective conflict resolution with parents and teachers; and finally, adolescent aggression will be negatively associated with effective conflict resolution in peers, but unassociated with effective conflict resolution with parents and teachers.

The study fills several important gaps in the literature. First, it incorporates new measurement strategies for conflict resolution within the population. Second, it includes multiple measures within each component. Third, it examines conflict resolution across 3 separate contexts: peer conflict, parent conflict and teacher conflict. Finally, it tests for factors that may be driving variations in conflict resolution. To recap, in addition to exploring hypothesized variations in measurement, the association between social skills and conflict resolution efficacy across context are understood according to the following research hypotheses: (a) adolescent social skills will be higher on self-report measures than on observed measures, (b) adolescents will demonstrate more effective conflict resolution with age-mates than with parents or teachers, (c) adolescent communication will be positively associated with effective conflict resolution with peers, parents, and teachers (d) adolescent assertiveness will be positively associated with effective conflict resolution with parents and teachers, (e) adolescent anxiety regulation will be positively associated with effective conflict resolution with peers, parents, and teachers, and (f) adolescent aggression will be negatively associated with effective conflict resolution in peers, but unassociated to effective conflict resolution with parents and teachers.

METHOD

Design

The current investigation is a sub-study of a randomized clinical trial designed to evaluate a school-based drug abuse and violence prevention program. A total of 42 New York City middle schools participated in the full study. The intensive nature of the supplemental data collection made it necessary to recruit only the smallest schools (<150 6th grade students) for this purpose of which, the majority were parochial. Twenty-four schools were asked to participate in additional data collection activities and 17 (71%) agreed to participate. Fourteen of the 17 schools (82%) participating in supplemental data collection activities were parochial. Of the 682 6th grade students within the 17 schools recruited for the study, 67.2% were available at the time of data collection (18.9% were unavailable due to negative consents; 13.9% were unavailable for other reasons). A sample of 450 adolescents seen at the pre-test assessment completed measures of social competency including, videotaped role play interactions along with survey measures used in the full study.

Participants

The sample includes 450 New York City middle school children (mean age=11.64 years, SD = .44 years, range = 10.90 to 13.10 years). Boys comprise half of the sample ($n = 223$; 49.6%) and racial subgroups include Black (50.3%), Latino (25.2%), White (18.0%), Asian (4.0%), Biracial (0.9%), Middle Eastern or Indian (0.7%) and other (0.9%). For the purposes of this study, race categories are collapsed into Black, Latino, White, and other; with the latter category comprising 6.5% of the sample. Nearly two-thirds of the children (65.0%) reported living in 2-parent homes,

about a quarter (25.0%) in single-parent homes, and the remaining children were living in other household configurations.

Family structure and school type are confounded with race. Almost half of the sample's Black adolescents (45.2%) live in non-nuclear (other than 2-parent) families, while 31.0% of other adolescents, 24.8% of Latino adolescents, and 19.5% of White adolescents live in nonnuclear families. Approximately half of the adolescents who are Black (54.5%) attend parochial school, while 98.8% of White adolescents, 93.1% of other adolescents, and 71.4% of Latino adolescents attend parochial school.

Procedures

Parental consent was obtained through passive consent procedure that explained the nature of the study and provided the opportunity for parents to object to their child's participation. The primary consent form, made available to the full clinical trial sample, provided a comprehensive description of the investigation and the self-report surveys. Families from the subsample of 17 schools received a secondary passive consent form that detailed the videotaped role play task as one of the supplemental data collection activities. Both consent forms were distributed to students within the schools, as well as mailed to parents at the student's home address. Parental objection to the primary consent form precluded student participation in all data collection activities. Students in the subsample whose parent's objected to the secondary consent form only, participated exclusively in the primary task of completing the self-report survey.

The self-report survey was divided into 2 parts and was presented during regularly scheduled 40-min class periods on 2 separate days of data collection. The inventories were administered by an ethnically diverse team of 3 to 5 data collectors who adhered to a standardized protocol similar to ones used in previous research on drug use and problem behaviors (see Botvin *et al.*, 1994). Use of identification codes (not names) and explicit instruction on the confidential nature of responses maintained the quality of the self-report data by addressing potential concern for privacy.

A third and final day of data collection occurred in the subsample of schools completing the social competency assessment tasks used in the present investigation. Videotaped role play scenarios were conducted in designated spaces within the schools that provided privacy. Data collectors were undergraduate and M.A. degree students from local universities. Data collection teams of 3 people were multi-ethnic (primarily African-American and Latino) and predominantly female; at least one male data collector was sent to each school. Training in role play data collection protocol was administered for a total of 6 h over 2 days. In order to participate as a role play confederate, data collectors had to administer the role play prompts in a credible and effective manner upon completion of training.

At the beginning of the school day, data collectors read a standardized description of data collection procedures to the entire class. Participants were escorted from the classroom

individually to complete data collection tasks. Prior to engaging in tasks, each student was read a specific description of the data collection activities. Each student then completed videotaped role play interactions and a structured interview.

Prior to the role play task, a data collector read relevant instructions to each student individually. Students were informed that they were to act out, as they would in real life, what they would do in the described scenarios and that they would hear separate instructions prior to each scenario. The role plays used in this study were conflict negotiation situations with a peer, a parent, and a teacher. Each scenario and the confederate script are presented in Table I. To summarize, in the peer role play, students were instructed to negotiate a conflict over which activity to do that day; the parent role play asked students to negotiate their allowance; and the teacher role play asked students to negotiate a grade that was received unfairly. In the parent role play, students were first asked whom they ask about allowance. Based on their response, a confederate of the appropriate sex was designated to act as that person. In all other situations, the confederate was the same gender as the adolescent. In each of these role plays, the student was required to initiate the dialogue and the confederate responded with scripted responses. Confederate instructions were to follow the designated prompts unless an adolescent offered a suggestion for a compromise-based solution. If this occurred, the confederate was to counter-offer the adolescent’s initial suggestion with an unreasonable alternative. If the adolescent continued to seek compromise, the confederate was to enter into negotiation for the resolution of the conflict and accept the adolescent’s subsequent proposal. As the adolescent could generate any number of unique suggestions or compromises, a scripted response for confederates would not have been appropriate.

Examples of adolescents’ ineffective conflict resolution in these scenarios include: peer “We always do what you want to do,” parent “Everyone else gets more than I do,” and teacher “Can you just change it this one time.” Examples of effective conflict resolution in these scenarios include: peer “Let’s go to the park and then the movies;” parent “If I do more chores will you raise my allowance?;” and teacher “Can I take a retest to improve my grade?” The interactions were videotaped for coding purposes.

Table I. Descriptions of Role Play Vignettes

<p>Role play task: Peer</p>	<p>Instruction: “Pretend that we’re friends and we’re hanging out together. You want to go to the movies and I want to go to the park. I want you to start the conversation.”</p> <p>Prompt: “I don’t want to do that.”</p> <p>Prompt: “We always do what you want to do.”</p> <p>Prompt: “If we don’t go to the park, then I’m</p>
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	going home.”
Role play task: Parent	<p>Instruction: “You never seem to have enough money and you decide to ask for a larger allowance. You get \$ 7.50 a week now, and you think you should get at least \$ 10.00 a week. I’ll play your and let’s act out the situation. Now you begin.”</p> <p>Prompt: “Ten dollars is too much money for a child your age.”</p> <p>Prompt: “What do you need more money for? I give you everything you need.”</p> <p>Prompt: “It’s just too much money.”</p>
Role play task: Teacher	<p>Instruction: “Pretend I am your teacher and I have just given you a lower grade on your report than you feel you deserve. Now you begin.”</p> <p>Prompt: “It’s not open for discussion.”</p> <p>Prompt: “The grades are already recorded.”</p> <p>Prompt: “You’ll have a chance to do better on the next report.”</p> <p>Prompt: “I make it a policy not to change grades.”</p>

Materials

Observational measures (i.e. the videotaped role play vignettes) and a self-report survey were used for the purpose of this study. The videotaped role plays of social conflict negotiation tasks were developed for the purpose of this study. Similar methods have been used in previous research (Rudolph *et al.*, 1995).

Demographics

Demographic variables were obtained from the self-report survey. Adolescents were asked to indicate their date of birth and gender, as well as select their race and household composition from a list of options. Specifically, for race, adolescents were asked to select a category that “best” described them and given the following choices: Latino/Hispanic; Black/African American; Asian; American Indian; White; other (option to write in response). As indicated, race

categories are collapsed into Black, Latino, White, and other; with the latter category comprising 6.5% of the sample.

Adolescents were asked to select a response category to reflect whom they lived with “most of the time” and given the following choices: both my mother and my father; only my mother; my mother and my stepfather; only my father; my stepmother and father; some of the time in my mother’s home and some in my father’s; other relatives (aunt, uncle, grandparents, etc.); guardian or foster parent who is not a relative; or no parents or guardian (live alone or with friends). The overwhelming majority of adolescents were living in a 2-parent (with both parents or with 1 parent and a stepparent) or single-parent (with only their mother or only their father) home and the remainder were categorized as “other.” For regression analysis, data were collapsed into 2-parent (1) and other (0) household configurations.

The current sample includes participants aged 11–13 ($\pm .10$) years. Eight age outliers were deleted from the sample because they were substantially older or younger than typical 6th grade students; these participants did not differ on other demographic factors.

Conflict Resolution

Three measures of conflict resolution competence were obtained from the videotaped role plays of conflict negotiation scenarios (peer, parent, and teacher vignettes). The respective codes represent whether the participant resolved the situation in socially effective or socially ineffective manner. A role play coding scheme was developed for this project by group review of target constructs and establishment of reliability within the group (Graber *et al.*, 2001). A “gold standard” coder was designated within the rigorously trained team of 7–8 data coders. Coders reviewed videotaped interactions and scored student resolution (a categorical score), communication, nervousness, assertiveness, passiveness, and aggression (all latter behavior categories are scaled scores) according to the coding scheme. A scoring category was also coded to reflect overall confederate ability. Coder reliability was assessed using interrater agreement which was calculated as the proportion of exact matches with gold standard scores on categorical scores and within one point matches with gold standard score on scaled scores (Borbely *et al.*, 2001). Twenty percent of all vignettes were checked against the gold standard for agreement and coders had to maintain at least 85% agreement. Kappa statistics are also reported for each scale; values ranged from .61 to .95. Note that κ 's of .61–.80 indicate substantial agreement, and .81–1.0 indicate almost perfect agreement (Landis and Koch, 1977).

In the videotaped role plays the possible response options for resolution were: Gave In, Gave Ineffective Reasons or Requests, Gave Effective Reasons or Requests, Offered a Compromise, Negotiated a Solution or Offered Multiple Unique Compromises, Confederate-led Compromise, Confederate-led Negotiation. See Table II for frequency of response categories. The interrater agreement, the percent of exact matches between coder and gold standard scores, for resolution was 86% ($\kappa = .82$), 88% ($\kappa = .81$), and 87% ($\kappa = .70$) for the peer, parent, and teacher vignettes,

respectively. Socially effective responses were defined as demonstrating the ability to offer one or more unique suggestions for compromise or to negotiate a solution to the conflict (with or without confederate help). Specifically, Offered a Compromise, Negotiated a Solution or Offered Multiple Unique Compromises, and Confederate-led Negotiation were coded as effective social performance. According to this definition, 39.8% of adolescents demonstrated effective social performance in the peer vignette, 31.5% in the parent vignette and 11.8% in the teacher vignette.

Observed Social Skills

To assess the degree to which a participant exhibits skill in communication, the coding scheme for videotaped role plays considers the following behaviors: active listening skills; clear and concise verbal content; asking questions; acknowledging other person's point of view; showing respect; paraphrasing; and staying in control of emotions (Graber *et al.*, 2001). Higher scores on the 5-point scaled score indicate more skill in verbal communication in the social interaction. Interrater agreement (in this case as with the other observed social skills scales, the percent of within one point matches between coder and gold standard scores) for this code was 99% ($\kappa = .94$), 99% ($\kappa = .92$), and 98% ($\kappa = .90$) for the peer, parent, and teacher vignettes, respectively (Borbely *et al.*, 2001).

To assess the degree to which a participant exhibits nervousness, the coding scheme for the videotaped role plays considers the following behaviors: excessive smiling; giggling; playing with one's hair or face; fidgeting; rocking back and forth; rigid posture; and verbal statements of doubt and insecurity (Graber *et al.*, 2001). Higher scores on the 5-point scaled score indicate higher levels of nervousness and less effective social skill. Interrater agreement for this code was 97% ($\kappa = .61$), 96% ($\kappa = .75$), and 98% ($\kappa = .88$) for the peer, parent, and teacher vignettes, respectively (Borbely *et al.*, 2001).

To assess the degree to which a participant exhibits assertiveness, the coding scheme for videotaped role plays considers the following behaviors: firm, authoritative voice; speaking clearly and deliberately; a rate of speech that conveys a sense of confidence; direct eye contact; a serious or confident facial expression; and body posture that is oriented toward the confederate and is at an appropriate distance (Graber *et al.*, 2001). Higher scores on the 5-point scaled score indicate greater assertiveness in the social interaction. Interrater agreement for this code was 97% ($\kappa = .73$), 96% ($\kappa = .84$), and 96% ($\kappa = .80$) for the peer, parent, and teacher vignettes, respectively (Borbely *et al.*, 2001).

Table II. Frequency of Response Types in Role Play Task: Peer, Parent, and Teacher

Response type	Peer		Parent		Teacher	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gave in	38	8.5	10	2.2	38	8.5
Gave ineffective reasons/requests	43	9.7	192	43.1	188	42.2
Gave effective reasons/requests	99	22.2	41	9.2	101	22.6

Confederate led to suggestion	3	.70	26	5.8	8	1.8
Offered suggestion	67	15.1	39	8.8	25	5.6
Confederate led to negotiation	3	.70	20	4.5	0	0
Negotiated/offered multiple unique suggestions	107	24.0	81	18.2	25	5.6
Effective responses	177	39.8	140	31.5	50	11.2

To assess the degree to which a participant exhibits aggression, the coding scheme for the videotaped role plays considers the following behaviors: hostile eye contact (e.g. glaring); hostile facial expressions; hostile tone or level of voice; defensive or confrontational posture or body language; physical contact initiated by the adolescent; hostile physical movements (Graber *et al.*, 2001). Higher scores on the 5-point scaled score indicate higher levels of aggression. Interrater agreement for this code was 100% ($\kappa = .78$), 98% ($\kappa = .76$), and 99% ($\kappa = .95$) for the peer, parent, and teacher vignettes, respectively (Borbely *et al.*, 2001).

Self-Report Social Skills

Self-reported social skills were measured by scales developed or adapted to evaluate the LST curriculum (Scheier and Botvin, 1998; Scheier *et al.*, 1999).

The Communication Self-Report scale (CSR) is a composite of 4 items ($\alpha = .75$; Epstein *et al.*, 1997). To assess skill in social communication, items question “When I want people to understand me I: make sure what I say matches my tone of voice, how I stand, and the expression on my face” and “When I want people to understand me I: talk in a way that is clear and specific.” Response options use a 5-point Likert scale ranging from (1) “Never” to (5) “Always.” Items were averaged such that higher scores indicating greater skill in communication.

The Anxiety Reduction Self-Report scale (ARSR) is a composite of 5 items ($\alpha = .81$; Epstein *et al.*, 1997). To assess skill in reducing anxiety, items include “When I feel anxious, I imagine myself in a quiet, peaceful place” and “When I feel anxious, I relax all the muscles in my body, starting with my feet and legs.” Response options use a 5-point Likert scale ranging from (1) “Never” to (5) “Always.” The individual items were averaged such that higher scores indicate greater skill in reducing anxiety.

The Assertiveness Self-Report scale (ASR) is a composite of 9 items ($\alpha = .69$; Gambrill and Richey, 1975). To assess skill in self-assertion, items include “How likely would you be to do the following: say ‘no’ when someone asks you to do something you don’t want to do” and “How likely would you be to do the following: ask directions if you don’t know where you are.” Response options use a 5-point Likert scale ranging from (1) “Definitely Would” to (5) “Definitely Would Not.” Items were reverse coded and averaged so that higher scores indicate greater skill in assertiveness.

RESULTS

Role of Method in Adolescent Conflict Resolution

Table III shows the means and standard deviations for the observed and self-reported social skills examined in the present investigation. Overall, adolescents had high self-ratings of their social skills. In contrast, assessments of skills in specific scenarios provide a different picture. Of assertiveness measures, for example, adolescents' self-reported assertiveness yielded a mean of 4.08 whereas observed assertiveness yielded means ranging from 2.67 to 2.95; both on 5-point scales (see Table III).

Observed variables are significantly intercorrelated with each other in expected directions, as are self-report measures (see Table IV). Observed social skills were not, for the most part, significantly correlated to their self-reported counterparts. Notable exceptions were: observed nervousness with teacher ($r(428) = -.13, p < .01$) and peer ($r(431) = -.10, p < .05$) were negatively correlated with self-report communication; observed assertiveness with peer was positively correlated with self-report communication ($r(430) = .11, p < .05$) and self-report assertiveness ($r(436) = .13, p < .05$). Finally and counter to expectations, as age increased, observed communication with parent and self-report communication decreased in skill ($r(445; 439, \text{respectively}) = -.11, p < .05$, for both). Although significant, the magnitude of these correlations suggests that the associations are weak. In general, results indicate that among adolescents self-reported measures of social skills do not map onto observed ability.

Role of Context in Adolescent Conflict Resolution

Chi-squared analyses were run to examine the rates of efficacy in conflict resolution by demographic variables and by role play scenario. Rates of effective conflict resolution did not differ by any background variable in any of the 3 vignettes. As expected, adolescents are more often effective in resolving conflict with peers than with parents ($\chi^2(1) = 7.10, p < .01$). Effective conflict resolution did not significantly vary between peers and teachers.

Table III. Mean Level of Social Skills

	Peer	Parent	Teacher
Observed social skills scales (range 1–5)			
Communication	3.16 (.71)	3.08 (.61)	2.98 (.68)
Nervous	1.62 (.66)	1.86 (.81)	1.71 (.76)
Assertive	2.95 (.83)	2.72 (.79)	2.67 (.82)
Aggression	1.08 (.33)	1.09 (.36)	1.14 (.52)
Self-report social skills scales (range 1–5)			
Communication (CSR)	3.83 (.93)		
Anxiety reduction (ARSR)	3.18 (1.07)		
Assertive (ASR) ^a	4.08 (.68)		

Note. $n = 433\text{--}447$. ^aReverse scored, higher score indicates greater competence.

*a*Reverse scored, higher score indicates greater competence. * $p < .05$; ** $p < .01$.

One-way analysis of variance tests were run to test for significant differences in observed social skills between role play scenarios. Adolescents demonstrate significantly higher levels of communication with peers compared to parents ($F(4, 441) = 3.43, p < .01$) and teachers ($F(4, 444) = 4.07, p < .001$). Adolescents demonstrate significantly higher levels of assertiveness with peers compared to parents ($F(4, 440) = 25.29, p < .001$) and teachers ($F(4, 442) = 15.06, p < .001$). Furthermore, adolescents were significantly better able to manage anxiety when interacting with a peer rather than a parent ($F(3, 440) = 38.59, p < .001$) or teacher ($F(4, 442) = 34.93, p < .001$) and significantly more skilled at inhibiting aggression with a peer compared to a teacher ($F(3, 444) = 37.32, p < .001$).

Role of Social Skills in Adolescent Conflict Resolution

A series of logistic regressions were used to test the association between observed and self-report social skills and the ability to effectively resolve 3 social conflict tasks. Individual regression models were constructed in order to test the unique contribution of demographic variables, observed skills within peer context, observed skills within parent context, observed skills within teacher context and self-report skills to competent outcome. Each individual model included a control block of demographic variables. Associations from significant models were reported in terms of their associated odds ratio ($\exp\beta$).

Efficacy in the role play conflict resolution task did not differ according to any of the following demographic factors: age, gender, race, household composition or public versus parochial school. As shown in Table V, higher levels of observed communication in respective contexts was associated with effective conflict resolution with peers ($\exp\beta = 2.03$), parents ($\exp\beta = 2.85$), and teachers ($\exp\beta = 2.21$). Observed assertiveness increased the likelihood of an effective conflict resolution with a parent ($\exp\beta = 1.54$) and a peer ($\exp\beta = 1.51$), but was not associated with competence in conflict resolution with a teacher. The amount of nervousness demonstrated within a given context is an indicator of anxiety regulation skill. Counter to expectations, higher levels of observed nervousness, indicating less skilled anxiety regulation, was associated with an adolescent effectively resolving conflict with a parent, but was not associated with resolution ability in the other 2 vignettes. Finally, lower levels of observed aggression made effective conflict resolution more likely in the peer vignette ($\exp\beta = .21$), but was not associated with resolution ability in the other interpersonal contexts.

Self-report social skills were not associated with adolescent resolution in any of the 3 social conflict tasks. Additional models were tested to determine whether observed social skills were associated with effective conflict resolution across vignettes (e.g. were skills observed in the peer vignette associated with efficacy in the parent or teacher vignettes, etc.). Observed skills were not associated across context.

DISCUSSION

The present investigation yields a variety of insights into adolescent conflict resolution. First, the current study provides novel insight into the use of role play measures for assessing adolescent social abilities. Methodological variations are reviewed in terms of interpretability and program evaluation implications. Next, social skills and conflict resolution are discussed in terms of cross-context similarities and differences. Finally, implications for the development and evaluation of prevention programs are presented.

The present study uses methodology that focuses on hypothetical situations; the challenges of the task are presumed to be tapping cognitive-behavioral skills under pressure (on the spot) and under specific circumstances. In contrast, studies of observed parent–adolescent discussions focus on process and tap into a history of emotional and interactional constructs that exist in the relationship. The present investigation hones in on skills and context rather than quality of relationships. In this case, role play vignettes were created based on typical adolescent interpersonal challenges. To capture the varied social network of a teenager, 3 distinct vignettes were included in the design. In implementing this innovative design, the roles of measurement, social skills and interpersonal context in the process of effective conflict resolution become apparent.

Present findings demonstrate variability in conflict resolution across self-report and role play measurement. Comparison of self-report and observed social skills measures indicates that young adolescents have an inflated view of their capabilities. Specifically, adolescents perceive themselves as possessing a skill more readily than they apply that skill. Nervousness is an exception to this finding as adolescents report moderate skill level in anxiety reduction and demonstrate little nervousness. This suggests that adolescents may have realistic perceptions of their anxiety management skills. Of course, it should be noted that in the development of the coding scheme some nervousness was commonly exhibited in the role play tasks. Thus, higher levels of nervousness on the observational scoring system indicate nervousness that interfered with the adolescents' ability to perform the task. Overall, the lack of notable correlations between observed and self-reported skills confirms that self-report measures reflect adolescent perception more than they capture capability. The fact that self-report skills were not associated with observed competence supports this assertion.

These findings are important in several respects. First, there are meaningful differences between social skill measures that have implications for understanding conflict resolution. As demonstrated by the present study, self-report measures of social skills do not correspond with observed social skills and are not informative methods for clarifying the association between demonstrated social skills conflict resolution skills. The current study incorporates measures that allow for comparison of role play and self-report measures. The absence of other measures (e.g. direct observation or written response to hypothetical tasks) limits commentary on other types of adolescent conflict measures.

The present study determined that skills measured by a role play task were only associated with the conflict resolution observed in that particular task. Skills observed in one social context were not associated with conflict resolution in any other social context. By incorporating observed measures of competent conflict resolution in 3 social contexts, it is clear that measures tapping the process culminating in the respective outcomes must be intrinsic to the task.

It is also clear that it is context-specific skills driving effective conflict resolution and not the demographic attributes. Preliminary and regression analyses demonstrate no differences according to adolescent age, gender, race, family structure, or school type. The ability to engage in competent conflict resolution with peers, parents, and teachers is primarily related to particular social skills in this case. In adolescent samples, findings show that use of social skills differ by the type of relationship an adolescent has with a peer (e.g. best friend versus classmate, Degirmencioglu *et al.*, 1998) and, more specifically, that resolution of conflicts varies by relationship and context (Laursen and Collins, 1994). In addition to demonstrating social skill variability across context, the focus of the literature supports the idea that appropriate interaction with peers and adults is a common societal expectation for adolescents. For early adolescents, salient interactions include those with friends, parents and teachers. The present findings support previous research demonstrating that adolescents engage in higher levels of skilled behavior when interacting with age-mates versus adults (Leyva and Furth, 1986; Selman *et al.*, 1986). This may be because adolescents' feel there is more at stake when resolving everyday problems with a friend than with adults.

Laursen and colleagues (Laursen, 1996; Laursen *et al.*, 2001; Laursen *et al.*, 1996) theorize that power differentials in the adolescent-peer versus the adolescent-parent interaction account, in part, for more advanced conflict resolution ability in peer contexts. This explanation posits that the shared power in adolescent-peer relationships promotes mutually acceptable outcomes compared to the power hierarchy in adolescent-parent dyads. Alternatively, it may be that adolescents perceive friendships as less stable than connections with constant figures such as parents or teachers (Degirmencioglu *et al.*, 1998; Laursen *et al.*, 2001) and thus are more engaged in preserving peer relationships when faced with disagreement.

In terms of specific skills that are linked with effective conflict resolution, our results are notable in that while certain skills may be universally important, others are situation-dependent. The value of strong communication skills cuts across context in determining competent outcomes with age-mates and authority figures. Beyond this, however, the skills that underlie conflict resolution competence vary depending on the nature of the relationship. As shown in Table V, successful peer interaction is associated with high-level communication and assertiveness and low-level aggression with age-mates. This converges with findings in the literature that link effective communication to social competence. While previous research shows that popular children rarely engage in behavior that interferes with the actions or goals of others, the present findings directly link absence of aggression to competence in adolescent conflict situations. Furthermore, it is the ability to be assertive in this context that underlies competence in peer

conflict situations. This finding is particularly important considering the provocative nature of the peer role play task. In this context, it is the ability to refrain from aggressive behavior and to engage in assertive behavior that contributes to an adolescent's use of compromise or negotiation in an effort to settle a conflict of interests with a friend.

Like in the peer context, demonstrating higher levels of communication within specific adult-child interactions is associated with use of effective conflict resolution strategies. Particular to parent-child interactions, higher levels of assertiveness increase the likelihood of competent conflict resolution. In addition, and contrary to expectations, exhibiting higher levels of nervousness, an indication of less skilled anxiety management, with a parent makes it more likely that an adolescent will demonstrate competent conflict resolution with that parent. Nervous behaviors exhibited by young adolescents may facilitate conflict resolution with parental figures. Perhaps, when young adolescents develop and tentatively apply new skills, such as assertive behavior, they do so anxiously. Alternatively, it may be the nature of the role play task that explains the association between adolescent anxiety and resolution competence with parent. The parent role play task requires the adolescent to come up with reasons why s/he deserves a raise in allowance. This scenario may be novel or challenging for a young adolescent hence, increased nervous behavior is associated with the ability to generate effective responses.

The present study informs prevention program theory in several respects. In terms of program evaluation, the present study suggests that use of self-report social skill assessment may limit the interpretability of findings. Evaluation studies would benefit from multiple measures to insure thorough understanding of program outcomes. In terms of program design, the current study indicates that communication skills are critical in effective conflict resolution ability across a variety of social contexts. Implementing programs designed to enhance communication competency during the transition into adolescence may benefit youth by building skills useful for navigating challenges and potential pitfalls of new and varied social contexts that are experienced at this time.

In addition, targeting specific skill development may benefit youth experiencing conflict in a particular social context. Thus, practicing skills in multiple contexts would also appear to be beneficial to youth so that they can see how to apply skills to unique situations. Contextual differences also have implications for the prevention of broader risks such as aggression and delinquency. That adolescents demonstrate effective peer negotiations with ease bodes well for other challenging contexts such as confronting peers about engagement in delinquent activities or substance use. Additional research is needed to determine whether this early adolescent ability is useful for refusal of such behaviors.

The current study has several limitations. First, the present investigation does not include a measure of socioeconomic status. The current sample includes schools offering services to low-income students, however differences by socio-economic status cannot be assessed. Second, the current study assesses a sample of urban and predominantly minority adolescents and results

may not be generalizable to other populations. Third, the current study is limited to adolescents in the 6th grade. The possibility that this period of adolescence may be narrow for assessing the nuances of social abilities must be considered. Fourth, findings must be considered within the context of self-report and role play measures. Responses may be limited in the extent which they reflect behaviors exhibited in real life interactions. Finally, the use of self-report social skills as predictors of observed conflict resolution ability in the absence of self-report conflict resolution ability limits the assessment of methodological variation and may have been part of the reason that self-report social skills and conflict resolution ability were not associated in this study.

In sum, the results of this study suggest that the process of effective conflict resolution is influenced by the context in which it is measured. Different skills drive socially competent adolescent behavior in conflict situations depending on the nature of the interaction. This finding has direct implications for the implementation and evaluation of curricula designed to enhance social skills. Future research should examine how the associations between social skills and conflict resolution develop over time. Moreover, such studies need to incorporate a more critical examination of methodological differences in the measurement of conflict resolution and its related components in order to explain more fully the development of adolescent social competence.

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