NEGOTIATION TRAINING AND INTERPERSONAL DEVELOPMENT: AN EXPLORATORY STUDY OF EARLY ADOLESCENTS IN ARGENTINA

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ABSTRACT

This paper reports findings from an exploratory outcome study of the Program for Young Negotiators training model with early adolescents in Buenos Aires, Argentina. Youth between the ages of 10 and 15 years (135 females, 70 males) were assessed before and after negotiation training, based on two measures of psychosocial attitudes and behavior. On the Five Factor Negotiation Scale (Nakkula & Nikitopoulos, 1999a), an increase in overall negotiation attitudes and behavior was found, with particularly large increases in the domains of conflict-based perspective taking and behavioral approaches to conflict resolution. On the Relationship Questionnaire, Schultz and Selman's (1999) structural developmental measure of psychosocial competence, stronger than expected changes were found in overall competence, with fairly equal changes in the primary domains of interpersonal understanding, interpersonal skills, and the personal meaning of relationships. Finally, students who presented a pretest thought–action gap marked by a high level of interpersonal understanding relative to their level of interpersonal skill increased substantially more in negotiation attitudes and behavior than did students manifesting a gap in the opposite direction. Implications regarding who benefits most from negotiation training are discussed.

It is widely acknowledged that the years between late elementary school and early high school are pivotal to the establishment of skills and attitudes that influence social behavior across a range of interpersonal contexts (Sullivan, 1953; Shure, 1989; Savin-Williams & Berndt, 1990). At the core of this pivotal transition is the developmental growth of abstract or formal operational thought (Inhelder & Piaget, 1958), which carries multiple implications for social cognition and interpersonal functioning (Selman, 1980; Vygotsky, 1979). One of these implications is the nature of thought and action that early adolescents bring to conflict-based interactions with friends, family, and other important

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individuals. Although a host of conflict resolution approaches have been developed for children and adolescents (Bodine & Crawford, 1998; Deutsch, 1973, 1993; Girard & Koch, 1996; Kreidler, 1984), previous research has not carefully addressed the fit between these approaches and the developmental needs and capacities of the target audiences. In this exploratory study, we examine potential benefits of a negotiation training approach for early adolescents, including growth in social competence. We also examine differential outcomes in the enhancement of negotiation attitudes and behaviors, based on differing degrees of *developmental readiness* at the outset of the training.

We initiated this study of the Young Negotiators (Curhan, 1998) approach to problem solving and conflict resolution because of its emphasis on training early adolescents to think and act more complexly across a range of negotiation contexts. The curriculum's emphasis on moving from self-centered approaches toward cooperative and collaborative approaches to problem solving is consistent with the shift in social cognitive functioning during this age period (Selman, 1980; Vygotsky, 1978). In addition, the curricular structure of moving from simple conceptual and strategic tasks to more complex concepts and behavioral strategies over a ten-module, sequentially ordered training approach provides the scaffolding that researchers have found important to the development of advanced social skill acquisition (Fischer, 1980; Vygotsky, 1979; Wertsch, 1985).

Based on the fit between the Young Negotiators curriculum and the developmental needs and capacities of early adolescents, we generated the following research questions and hypotheses to guide our investigation.

1. Will students' scores on a standardized measure of adolescent negotiation improve following their participation in the training? We hypothesized that the negotiation scores would improve because of the fit between the training approach and the developmental needs and capacities of early adolescents.

2. Will students' developmental level of psychosocial competence (the complexity of their ability to respond to interpersonal dilemmas) be higher following their participation in the negotiation training? Again, we hypothesized that the goodness of fit between the training model and the developmental period would lead to improvements in social competence following participation in the training.

3. Is there a relationship between developmental level of psychosocial competence at pretest and change in negotiation scores following participation in the training? Because the program builds sequentially toward the understanding and management of fairly complex negotia-

tion situations, we hypothesized that participants who began training at a higher level of psychosocial competence would master the full range of training more thoroughly, thereby resulting in larger improvements in negotiation scores.

PROGRAM DESCRIPTION

Young Negotiators (Curhan, 1998) is a middle school problem solving and conflict resolution curriculum, based on the principled negotiation model developed by Fisher, Ury, and their colleagues (Fisher, Ury, & Patton, 1991) at the Program on Negotiation at Harvard Law School. According to Fisher, Ury, and Patton (1991), principled negotiation works to resolve conflicts by clarifying underlying *interests,* rather than arguing from the differing stances or *positions* each side might take. Their method further suggests that when negotiating "you look for mutual gains whenever possible, and that where your interests conflict, you should insist that the result be based on some fair standards independent of the will of either side" (p. xviii). In popular parlance, principled negotiation is referred to by the name of Fisher, Ury, and Patton's (1991) best-selling book *Getting to Yes.* The "getting to yes" approach has come to represent a philosophy of negotiation also known as "win-win," or the belief that real success in negotiation occurs when both parties win, rather than one winning at the expense of the other.

The Program for Young Negotiators (PYN) was developed by Curhan (1993, 1998) in an effort to train middle school students in principled negotiation. The overall PYN initiative includes a "win-win" approach to curriculum development, teacher and student training, and community building (Curhan, 1998). This outcome study focuses specifically on student training using the Young Negotiators curriculum. The curriculum uses a structured, case study approach that guides its participants through ten sequentially ordered modules. Each of the modules uses a combination of games, role plays, and class discussions to teach particular negotiation concepts, such as perceptions, empathy, negotiation interests versus positions, and collaboration versus competition. Initial modules introduce less complex concepts and situations, which are built upon by progressively more complex negotiation scenarios and strategies. As noted in the *Young Negotiators Teacher's Manual:* "in the early levels, students learn what negotiation is and why it is important. Then they learn and practice specific negotiation techniques. In the final levels students refine their negotiation skills and apply them to situations from their own lives" (Curhan, 1998, p. xi).

An example of an early negotiation activity is The Arm Game, which emphasizes the concept of *collaboration versus competition*. In this simple exercise, students are paired and asked to clasp hands in a manner that resembles an arm wrestling position, although the words "arm wrestling" are not used. They are then presented the challenge of earning as many points as they can within 60 seconds; each person earns a point when the back of his or her partner's hand touches the table top. The benefits of collaboration versus competition are exemplified upon recognizing that more points can be earned by each partner taking turns having his or her hand touch the table top, rather than working against each other with force. A more advanced module presents a conflict between a boyfriend and girlfriend, which is acted out on a video clip. The purpose of the module is to practice negotiation strategies for dealing with angry people, including those with whom one is particularly close. Incorporating negotiation skills into interpersonal relationships requires practice opportunities rarely available to young people. The composition of negotiation scenarios used in the PYN training approach ranges from interactions with strangers and acquaintances to negotiation of conflict in close, intimate relationships.

Following early development of the Program for Young Negotiators curriculum and training procedures in schools in and around Boston, the PYN expanded through training initiatives in New York City, Los Angeles, and Toronto, among other urban areas. Since the inception of the program during the 1993–94 school year, more than twenty-thousand students have been trained—more than fifteen thousand in the United States and Canada, and approximately five thousand in Argentina and Israel. In addition, approximately six hundred teachers have been trained to teach the PYN approach—five hundred in North America, and one hundred in Israel and Argentina.

As the PYN has been adopted by progressively more teachers and school systems, independent training efforts have been undertaken within some schools, and the approach has been modified to meet the needs of students, as well as teacher presentation styles. Therefore, it would not be appropriate to suggest that all trainers of the Young Negotiators model are part of the Program for Young Negotiators; they are, rather, utilizing the PYN training approach. As such, our research does not report on a training program with the detailed process information that a program evaluation would entail. Our research, both in this article and elsewhere (Nakkula & Nikitopoulos, 1996, 1999b), reports on outcomes from the PYN approach to negotiation training, as it is utilized and adapted for use in various settings. Throughout this report, we refer to the training initiative in Argentina as either the PYN model or the PYN approach.

ARGENTINEAN CONTEXT

The PYN training model's expansion to Argentina marks the first effort to systematically implement and evaluate the approach outside of the United States. According to Argentinean teachers and community leaders involved in bringing the PYN model to their country, negotiation training is particularly important now, as such traditional values as respect, honesty, and fairness are beginning to erode, resulting in mild increases in school conflicts, including violence (Nikitopoulos, 1998). Nonetheless, teachers reported that violence is relatively rare in their schools and added that the PYN approach is important to them as an early response to escalations in conflicts rather than as a remediation of a widespread problem. One community leader added that because Argentina's legal system is not consistently relied upon for resolving conflicts, it is especially important to teach young people the conflict resolution skills they need to prevent them.

A cultural concern in bringing the PYN model to Argentina was that the concepts taught through the curriculum might not translate appropriately. For example, the word "negotiation" refers specifically to business dealings in Spanish, and typically is not used in reference to personal interactions, particularly those that do not have business implications. Such differences in translation initially created a barrier for some educators in Argentina who were not interested in "a program for young businessmen." These educators worked with the PYN staff to develop language that helped clarify the purpose of the training. This served as a first step in making the program accessible to the students and teachers who participated in the 1998 implementation. In addition, the teachers who used the curriculum provided feedback that will allow for ongoing cultural translation as the PYN model is further developed for use in Argentina and related Latino contexts.

METHOD

Participants

Fifteen schools in the Buenos Aires metropolitan area participated in the Young Negotiators training between August and November of Argentina's 1998 school year. Of these schools, eleven were privately funded and used criteria such as test scores and ability to pay tuition to determine student admission. Four were public schools and open to all students. Assignment to the public schools was based on geographical location, rather than academic achievement or financial status.

Students attending the private schools typically came from substantially higher socioeconomic backgrounds than those of the public schools (middle class and higher versus middle class and lower). Although the sample was racially homogeneous, it was ethnically mixed, with varying backgrounds of European descent (for example, Spanish, Italian, German, Scottish, and English). Ethnicity was not used as a variable in this study, however, because our pilot research indicated that the students identified themselves as Argentinean, rather than identifying with their European heritage.

Eleven of the fifteen schools that implemented the PYN training participated in the evaluation study. Nine of them generated usable data at both pretest and posttest; the other two schools administered the instruments only at pretest, resulting in their removal from the analysis. Of the nine schools in our final sample, eight were private and one was public. Two hundred five students (135 females, 70 males) in grades five through nine, ranging in age from 10 to 15 years, completed both assessment measures accurately at both points in time. Because girls outnumbered boys substantially in the sample, gender differences were examined for each level of the analysis.

Given the exploratory nature of this study, it was not possible to obtain a comparison group of students not receiving the PYN training. This sampling deficiency is partially addressed in the Discussion section by comparing findings from the current study with those from other contexts.

Procedure

Pretesting for the training was conducted in June, 1998, with posttesting conducted in November. At both points in time, instruments were administered by the classroom teachers, who were trained by our research team. Students participated in the training between August and the beginning of November (they were on vacation in July).

Measures

Five Factor Negotiation Scale (FFNS). The FFNS is a self-report measure of adolescent negotiation attitudes and behavior, specifically developed by Nakkula and Nikitopoulos (1999a) to study the PYN training model and related approaches to youth negotiation and leadership development. The measure yields an overall negotiation score, with a possible range of 0–100, and five factor scores—Personal Initiative, Collaboration, Communication, Conflict-Based Perspective Taking, and Conflict Resolution Approach—each with a possible range of 0–20. The five factors are theoretically derived, based on essential as-

pects of negotiation beliefs, processes, and outcomes, as determined by our review of the adult, child, and youth negotiation literature (Curhan, 1993; Deutsch, 1993; Fisher, Ury, & Patton, 1991; Selman & Schultz, 1990). Each factor has been empirically supported, with internal consistency coefficients ranging from .50 to .78; coefficient alpha for the entire scale is .76 at pretest and .80 at posttest.

Personal Initiative (PI) assesses students' beliefs in their capacity to assertively lead, express their opinions, create change, and resolve differences. This factor is a combination of self-efficacy, assertiveness, and leadership. It is included in the FFNS because personal initiative is important to enacting negotiation skills and beliefs. Although this factor may not be inherent to negotiation as a theoretical construct, it is essential to the effective *act of negotiation.* The following are sample items from the PI subscale: "If I don't like something, I work to change it." "When I disagree with my friends I feel confident giving my opinion."

For the current study, internal consistency coefficients for PI were .60 at pretest and .66 at posttest. In relationship to the other factors, PI correlated most highly with Communication (.42 at pretest and .48 at posttest, for the current sample) and weakest with Collaboration (.09 at pretest and .17 at posttest). The high correlation with Communication depicts the pivotal role of communication skills in taking the personal initiative to assertively lead and resolve differences. The lower correlation with Collaboration, especially at pretest in the current study, points to a tension in negotiation processes: personal initiative or individual action can be difficult to combine with an interest in collaborating. Integrating personal initiative with collaborative approaches to problem solving and conflict resolution requires practice, and a conceptual framework that presents the two processes as compatible rather than contradictory. The PYN model presents such a conceptual framework from which its practice-based curriculum is derived. Interestingly, Personal Initiative and Collaboration correlated substantially higher at posttest than at pretest in the current study, suggesting that the PYN succeeded to some degree in helping the students integrate these two constructs.

Collaboration (COLL) measures one's beliefs, attitudes, and actions as they relate to working with others rather than independently to solve problems, settle disagreements, and attain goals. This factor is central to conceptions of negotiation for both adults (Fisher, Ury, & Patton, 1991) and youth (Selman & Schultz, 1990). Sample items from this subscale are: "I get the opinions of others when making big decisions." "When something bad happens, it's better not to try to handle the situation alone."

Internal consistency coefficients for COLL were .42 at pretest and .50 at posttest. As discussed above, COLL correlated quite weakly with PI at both pretest and posttest. It correlated most strongly with Conflict-Based Perspective Taking at both points in time: .36 at pretest and .40 at posttest. The moderately high correlations between Collaboration and Conflict-Based Perspective Taking reflect a component common to both factors: the emphasis on *working with others* to solve problems and resolve conflicts.

Communication (COMM) measures the students' self-perceived communication skills and attitudes as they relate to problem solving, expressing feelings, and resolving their own as well as others' conflicts. Like Personal Initiative, Communication is central to the act of negotiation, but whereas changes in PI tend to be marked by changes in the motivation to act, changes in COMM are marked by improvement in skills, or at least by the perception of skill enhancement. Of the five factors, Communication is arguably the one that is most *skill based,* rather than attitude, belief, or motivation based. As a skill, it is an aspect of negotiation that can be explicitly practiced, but improvement in the COMM factor of the FFNS would likely follow improvements in negotiation attitudes, given that the practice of communication skills within a negotiation context is conceptually framed by particular motives, attitudes, and beliefs. Sample items are: "Before I confront (talk to or yell at) a person I am mad at, I think about what I am going to say and why." "I like helping others resolve (work out) arguments by talking to both sides."

As presented above, COMM correlated most highly with PI at both pretest and posttest. It correlated most weakly with Collaboration at both points in time (.12 and .13, respectively). Although the low correlation between Communication and Collaboration was initially surprising, the COMM subscale is weighted toward *assertive communication,* or the ability to stand up for oneself in the midst of conflict. Accordingly, the COMM and PI factors share a common component: assertive initiative. This emphasis on personal assertiveness proves to be fairly difficult for youth to integrate with a belief in collaboration as a means of attaining goals and resolving conflicts. Alpha coefficients for COMM were .45 at pretest and .50 at posttest.

Conflict-Based Perspective Taking (CBPT) links the perspective-taking component of the COLL factor with conflict-based situations. It assesses beliefs about working together rather than individually to resolve conflicts, and measures the extent to which respondents believe that "win-win" outcomes are feasible for resolving conflicts and pre-

serving relationships. CBPT differs from COLL in that the latter emphasizes working together to attain goals, while CBPT emphasizes working together to resolve conflicts, particularly interpersonal conflicts. Sample items are: "When I'm in an argument, I can see the other person's side of the story." "In a disagreement, once I make up my mind, nobody can change it." The latter item is an example of a negatively phrased statement, which must be reversed when scored.

Conflict-Based Perspective Taking correlated most strongly with Collaboration (.36 at pretest and .40 at posttest), and its weakest correlation was with Conflict-Resolution Approach (.22 at pretest and .24 at posttest). Although various pairs of factors correlated more highly than CBPT and COLL, no single factor correlated with each of the others as strongly as CBPT. Thus, of the five factors comprising the FFNS, CBPT most closely captured the theoretical core of the negotiation construct. Alpha coefficients for CBPT were .57 at pretest and .68 at posttest.

Conflict Resolution Approach (CRES) measures respondents' choices for resolving conflicts (physical fighting, arguing, walking away, getting an adult, and talking it out) across six different relational contexts (parents/guardians, teachers, friends, siblings, peers, boyfriends/girlfriends). Whereas the other four factors are measured on a five-option Likert-type scale, CRES asks for the students' top three rank-ordered choices (out of five options) for conflict resolution within each context. However, scoring is standardized (possible range of 0–20) so that this factor is evenly weighted with the others. A sample question is: "How do you usually handle the situation when you disagree with friends?" Response options are: physical fight, argument, walk away, get an adult, talk it out.

CRES correlated most highly with COMM at both pretest and posttest (.23 and .25, respectively). This relationship likely reflects the emphasis on "talking it out" as the best option on the CRES subscale. Alternatively, CRES correlated quite weakly with COLL at both pretest (.20) and posttest (.09). One explanation for the declining relationship between CRES and COLL from pretest to posttest is the mid-level response of "walking away" on the CRES subscale. Although walking away marks an improvement over fighting as a means of conflict resolution, it is nevertheless antithetical to collaboration. Alpha coefficients for CRES were .70 at pretest and .79 at posttest, making this the most internally consistent of the five factors.

Relationship Questionnaire (Rel-Q). The Rel-Q is a measure of psychosocial competence, developed by Schultz and Selman (1999), that assesses the *developmental level of relationship maturity* (defined as

the complexity of social perspective coordination). This assessment is based on the integration of psychosocial experience across three primary domains, which are defined by Schultz and Selman (1999) as: "(1) *interpersonal understanding,* the theoretical knowledge of the nature of relationships, (2) *interpersonal skills,* the intimacy and autonomy strategies needed to make and maintain good relationships, and (3) *personal meaning,* the intensity and quality of the emotional investment an individual is able to make in specific other persons" (p. 5). The measure draws from their extensive research on child and adolescent interpersonal negotiation and social perspective coordination (Selman, 1980; Selman & Schultz, 1990).

The four basic levels of social perspective coordination and related negotiation strategies in Selman and Schultz's model are: Level 0—egocentric perspective taking, marked by impulsive fight-or-flight negotiation strategies; Level 1—unilateral perspective taking, marked by one-way demands and assertions of power, or submission to such demands and assertions; Level 2—reciprocal perspective taking, marked by cooperative exchanges, which can include persuasion (assertive reciprocity) and deference (passive reciprocity); Level 3—mutual, third-person perspective taking, marked by mutually agreed upon constructions and compromises in negotiation. According to this model, movement from Level 0 to Level 3 represents growth in social perspective coordination from virtually no perspective (impulsive thought and action) to the integration of two perspectives, the self's and the other's. As perspective taking becomes more complex, so does the capacity to act on those perspectives or to negotiate from them.

The Rel-Q contains 24 brief interpersonal scenarios, each of which is followed by four options for solving the problems or understanding the issues presented in the scenario. Each option represents one of the four levels of development in the Selman and Schultz framework. Respondents are asked to rate each option as "poor," "okay," "good," or "excellent." Points are allotted for each scenario response based on the match between the respondents' ratings and the developmental level. The total number of points for each scenario yields an *item-rating score.* After respondents rate each option, they are asked to select the best option for solving the problem, which yields a *best-answer score.* These two developmental scores for each scenario, the item-rating score and the best-answer score, theoretically measure similar developmental constructs. Because item-rating scores have been shown to yield stronger reliability coefficients than best-answer scores (Schultz & Selman, 1999), we only report item-rating scores in this study.

The overall score for the Rel-Q represents the developmental level of relationship maturity. It is derived by averaging the item-rating scores from each of the 24 scenarios. In addition, the Rel-Q yields three subscale scores: Interpersonal Understanding, Interpersonal Skills, and Personal Meaning. The overall and subscale scores have been validated in a number of studies.

Investigations using the Rel-Q have shown that the growth of social perspective coordination correlates with age. In Schultz and Selman's (1999) summary of findings across several studies, the item-rating scores of fourth (n = 180), eighth (n = 406), and twelfth graders (n = 140) averaged 1.85, 2.06, and 2.17, respectively, representing the overall developmental level of social perspective coordination (differences in best-answer scores were larger, but somewhat less reliable). Similar increments in development were found for each of the subscales.

There was twice as much growth between the fourth and eighth grades relative to that between the eighth and twelfth grades. This difference in growth trajectories is likely due to the rapid shifts in cognitive developmental capacities that occur in the late elementary and middle school years, when children move from concrete to formal operational thinking (Inhelder & Piaget, 1958).

Further, Schultz and Selman (1999) reported that internal consistency coefficients for the Rel-Q averaged .85 for the overall measure, based on the item-rating scores. Lower coefficients were found for the subscales: .58 for Interpersonal Understanding, .61 for Interpersonal Skills, and .47 for Personal Meaning.

In addition to capturing differences in psychosocial competence across age groups, the Rel-Q has shown that there are differences between male and female children and adolescents, with females consistently scoring higher (Schultz & Selman, 1999). This finding is consistent with research that shows female relationship maturity surpassing that of males from childhood through adolescence (Furman & Buhrmester, 1985; Youniss, 1980).

Relative to other measures of social development, the Rel-Q has demonstrated small to moderate correlations (ranging from r = .20 to r = .42 for the various subscales of the Rel-Q) with the D-Score of the Defining Issues Test (Rest, 1986), which measures moral reasoning. These correlations point to both the convergent and discriminant validity of the Rel-Q. Psychosocial competence contributes to moral reasoning, but addresses relational aspects of development that are distinct from a more purely moral domain.

Finally, the Rel-Q has been found to be negatively correlated with students' self-reported risk-taking behaviors (fights, criminal acts,

weapon use, cigarette smoking, drug use, and delinquency), with correlations ranging from −.31 to −.46 for eighth graders, and −.42 to −.64 for twelfth graders (with the exception of cigarette use, for which there was no significant correlation for twelfth graders).

RESULTS

In response to our first research question, we hypothesized that students' negotiation scores, as measured by the FFNS, would significantly improve following their participation in the PYN training model. To test this hypothesis, we conducted t tests to compare mean scores at pretest and posttest on overall negotiation (Negotiation) and each of its five component factors. As Table 1 indicates, we found a 4.8 percent improvement in the Negotiation score ($t = 5.84$, $p < .0001$). The largest factor score improvements were found for Conflict-Based Perspective Taking ($t = 6.14$, $p < .0001$), which increased by 10.3 percent, and Conflict Resolution Approach ($t = 4.49$, $p < .0001$), which increased by 6.2 percent. Smaller improvements were found for Communication ($t = 2.23$, $p < .05$) and Collaboration ($t = 2.39$, $p < .05$), which increased by 3.2 percent and 3.0 percent, respectively. Personal Initiative showed only a 1.2 percent increase, which was not statistically significant. Although girls improved marginally more than boys on overall negotiation and on the majority of component factors, none of the gender differences were statistically significant.

In response to our second research question, we hypothesized that students' developmental level of psychosocial competence, as measured by the Rel-Q, would be significantly higher following their participation in the PYN training. Again, t tests were conducted to assess changes in mean scores from pretest to posttest (see Table 1). The overall developmental level of psychosocial competence (Psychosocial Competence) improved from 2.11 at pretest to 2.16 at posttest ($t = 5.94$, $p < .0001$), with each of the three domains improving similarly: Personal Meaning changed from 1.95 to 2.01 ($t = 4.51$, $p < .0001$), Interpersonal Skills changed from 2.28 to 2.34 ($t = 4.63$, $p < .0001$), and Interpersonal Understanding changed from 2.06 to 2.10 ($t = 2.59$, $p < .01$). For overall developmental level of psychosocial competence and across each of the domains, boys and girls improved similarly, with no significant differences in changes in scores.

In response to our third research question, we hypothesized that students who began negotiation training at a higher developmental level of psychosocial competence would benefit more from the training

Table 1. Means (and Standard Errors) for Negotiation and Psychosocial Competence ($N = 205$)

	Pretest	Posttest	Change	Percent Change	t
Negotiation	65.15 (.58)	68.27 (.59)	3.12 (.53)	4.8	5.84 ****
PI	12.58 (.19)	12.74 (.18)	.15 (.16)	1.2	.92
COMM	12.36 (.17)	12.75 (.17)	.39 (.17)	3.2	2.23 *
COLL	13.87 (.18)	14.27 (.18)	.41 (.17)	3.0	2.39 *
CBPT	13.01 (.19)	14.36 (.20)	1.34 (.22)	10.3	6.14 ****
CRES	13.33 (.18)	14.16 (.20)	.83 (.19)	6.2	4.49 ****
Psychosocial Competence	2.11 (.01)	2.16 (.01)	.05 (.01)	2.5	5.94 ****
IU	2.06 (.01)	2.10 (.01)	.04 (.01)	1.9	2.59 **
IS	2.28 (.01)	2.34 (.01)	.06 (.01)	2.6	4.63 ****
PM	1.95 (.01)	2.01 (.01)	.06 (.01)	3.2	4.51 ****

* $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

PI = Personal Initiative, COMM = Communication, COLL = Collaboration, CBPT = Conflict-Based Perspective Taking, CRES = Conflict Resolution Approach, IU = Interpersonal Understanding, IS = Interpersonal Skills, PM = Personal Meaning

as determined by changes in negotiation scores. To test this hypothesis, we conducted Pearson correlational analyses between pretest scores on the Rel-Q and changes in scores on the FFNS. We found a small positive correlation between Psychosocial Competence and Negotiation change ($r = .14$, $p < .05$), with the majority of this finding due to the relationship between Personal Meaning and Negotiation change ($r = .20$, $p < .01$). When examining the relationship between Psychosocial Competence at pretest and changes in scores on the negotiation factors, the strongest correlations were found for Conflict-Based Perspective Taking ($r = .17$, $p < .05$) and for Conflict Resolution Approach ($r = .16$, $p < .05$). Finally, when examining the relationships among the psychosocial competence domain scores at pretest and change in overall negotiation and its component factors, we found positive correlations between Personal Meaning and Negotiation change (as noted above), Personal Initiative ($r = .21$, $p < .01$), and Conflict-Based Perspective Taking ($r = .17$, $p < .05$).

Neither Interpersonal Understanding nor Interpersonal Skills at pretest correlated significantly with Negotiation change, but interestingly the findings for these interpersonal domains were nearly mirror images of each other (see Table 2). That is, Interpersonal Understanding at pretest was positively correlated with Negotiation change ($r = .09$, *ns*) at approximately the same degree of magnitude as Interpersonal Skills was negatively correlated with Negotiation change ($r = -.09$, *ns*). Although these correlational findings were small, we speculated that their cumulative effect might be somewhat more important than their individual effects in predicting Negotiation change following participation in the negotiation training.

Our first step in testing this speculation was to conduct two hierarchical regression models, the first with Interpersonal Understanding and Interpersonal Skills as predictors of Negotiation change, and the second with these two main effects and the interaction between them as predictors. Neither model yielded significant results. Our second step was to divide the pretest scores for both Interpersonal Understanding and Interpersonal Skills into quartiles and then examine the means for Negotiation change within each quartile. An interesting pattern emerged using this procedure. For Interpersonal Understanding, we found that mean Negotiation change scores were substantially higher in the top quartile than in the bottom quartile, while the opposite was true for Interpersonal Skills: Negotiation change was much larger in the bottom quartile than in the top. Negotiation change was approximately the same within the middle quartiles for both of the interpersonal domains. This pattern explains why the correlations be-

Table 2. Correlations Between Psychosocial Competence at Pretest and Change in Negotiation and Its Component Factors ($N = 205$)

	PI	COLL	COMM	CBPT	CRES	NEG
IU	.07	-.02	.04	.08	.07	.09
IS	-.07	-.25***	-.02	.05	.00	-.09
PM	.21**	.10	.00	.17*	.09	.20**
PC	.11	-.06	.01	.17*	.16*	.14*

* $p < .05$, ** $p < .01$, *** $p < .001$

IU = Interpersonal Understanding, IS = Interpersonal Skills,

PM = Personal Meaning, PC = Psychosocial Competence

tween the interpersonal domains and Negotiation change were fairly small: the relationship between the domain scores and Negotiation change was not linear; rather, the relationship appeared to exist at the extreme ends of the interpersonal domains and Negotiation change, with little relationship in the middle.

To further explore these relationships, we created *thought–action gap* variables by constructing sixteen categories of scores for Interpersonal Understanding (thought) and Interpersonal Skills (action). Categories for the extremes of high and low thought were as follows: high thought with low action, moderately low action, moderately high action, and high action; and low thought with high action, moderately high action, moderately low action, and low action. Middle categories using moderately high and moderately low thought combined with each level of action were created similarly. After creating the sixteen thought–action categories, we collapsed six into two primary thought–action gaps. A *high thought–low action gap* was created by collapsing the three categories that matched high thought with a lower

level of action: low action, moderately low action, and moderately high action. A *low thought–high action gap* was created by doing the inverse, collapsing the three categories that matched low thought with a higher level of action. These two thought–action gaps present very different profiles of students: those who conceptualize interpersonal situations with more complexity than the vast majority of their peers, but act on their understanding at a lower level of maturity, versus those who conceptualize interpersonal situations with less complexity than the vast majority of their peers, yet act more maturely than their level of understanding would predict.

Creation of the two thought–action gaps resulted in fairly even numbers of students for each category: 33 for the high thought–low action gap and 30 for the low thought–high action gap. Comparisons of mean Negotiation change scores for the two thought–action gap categories showed dramatic differences ($t = -2.27, p < .05$), with a mean Negotiation change of 6.7 percent for the high thought–low action gap category versus less than 1 percent mean change for the low thought–high action gap category. On average, then, the 33 students who began their PYN training with a psychosocial competence profile marked by high thought–low action changed substantially more in their Negotiation scores than did students in the remainder of the sample. Students who began their PYN training with a psychosocial competence profile marked by low thought–high action changed very little in Negotiation scores after completing the program.

DISCUSSION

This study of 205 Argentinean early adolescents who completed negotiation training, based on the Young Negotiators (Curhan, 1998) curriculum, found that Negotiation scores improved substantially from pretest to posttest. The 4.8 percent improvement on the measure of overall negotiation far exceeded changes we have found with the same measure in studies of the Young Negotiators curriculum when taught in other contexts (Nakkula & Nikitopoulos, 1999b). One explanation for the current finding is that the teachers who taught the curriculum in Argentina expressed a strong interest in being trained in the model and using it with their students. In many settings in which we have examined the benefits of the Young Negotiators approach, teachers were required or encouraged to teach the curriculum by a school administrator; their participation was not completely voluntary, nor were they necessarily convinced that the training would be of value to their

students. In addition, many of the Argentinean teachers and school administrators who sought out the Young Negotiators model for their schools stated that its focus on problem solving and perspective taking was consistent with the core mission of their schools. This perceived training model–school mission fit may have allowed the training to be conducted under fairly optimal teaching conditions.

In addition to changes in self-reported negotiation attitudes and behavior, participants in the study showed increases in their developmental level of psychosocial competence that exceeded the degree of developmental growth that would be expected over a five-month period. This study used the structural developmental approach to psychosocial competence developed by Selman and his colleagues over the past twenty years (Selman, 1980; Selman & Schultz, 1990; Schultz & Selman, 1999). This approach posits that the transition from late elementary school to middle and high school is marked by changes in perspective taking, collaboration, and interpersonal negotiation skills. The hallmark of this transition is the progression from primarily self-centered perspective taking and negotiation skills to greater reciprocity and concern for others.

Selman and Schultz have proposed a four-level developmental framework. Level 0 represents little to no capacity for perspective taking and thoughtful negotiation, Level 1 represents the ability to master one perspective (typically one's own), Level 2 represents the ability to balance two perspectives side-by-side, and Level 3 represents the ability to maturely coordinate two or more perspectives and negotiation strategies. According to Schultz and Selman (1999), the average increase in developmental level for children and adolescents between the fourth and twelfth grades is .25 to .30 every four years, which is equivalent to about .075 each year. The developmental level change of .05 found in the current study over a five-month interval projects to a yearly change of more than .10. It is quite possible, of course, that the growth conceivably promoted by the negotiation training is temporary and will eventually level off or even decline. A longitudinal study with a comparable control group is an important next step toward better understanding this finding.

Perhaps the most interesting aspect of the current findings is the differential outcome we found for two subgroups of students who manifested markedly different developmental profiles at pretest. We created interpersonal thought–action gap profiles in which students who scored in the top quartile of Interpersonal Understanding (thought) and lower quartiles of Interpersonal Skills (action) constituted the high thought–low action category, whereas students who scored in the lowest quartile for thought and higher quartiles for action constituted the

low thought–high action category. Students in the high thought–low action category showed substantial change (6.7 percent), on average, in negotiation attitudes and behaviors from pretest to posttest, while students in the opposite category averaged virtually no change at all.

This differential outcome suggests that the Young Negotiators curriculum was most beneficial to students who began with a superior capacity to conceptualize interpersonal situations, but who were not exhibiting commensurate interpersonal skills. On the other hand, those students who began the program with less conceptual capacity than the majority of their peers, while simultaneously indicating an ability to exercise interpersonal skills beyond that which would have been expected based on their conceptual capacity, showed little to no gain in negotiation attitudes and behavior from pretest to posttest. If this finding can be replicated in further studies, it would suggest that approaches like Young Negotiators might benefit various types of students differently. Students manifesting a thought–action gap in which their intellectual capacities exceed their ability to act in accordance with their thinking may benefit inordinately by an approach that emphasizes action-based strategies, which is precisely the approach taken in the Young Negotiators curriculum. Students manifesting thought–action gaps in the opposite direction, where maturity of action exceeds that which would be expected based on the complexity of their social cognition, might benefit more from an approach that emphasizes perspective-taking expansion rather than action strategies, or an approach in which action strategies are critically analyzed for deeper comprehension.

Although the Young Negotiators curriculum offers both perspective-taking and action-strategy exercises, students seem to gravitate more toward the interactive role plays than they do the reflective discussions. Based on these findings, teachers should think carefully about balancing the curricular activities so that all students have a similar chance for optimal benefit. In addition, much of the benefit from the negotiation training model may stem from between-session classroom influences. That is, teachers who incorporate the negotiation approach into their everyday instruction are likely to reinforce the messages presented through the formal training modules. This point is of critical importance, given that it seems unlikely that ten training sessions alone would lead to sustained growth in psychosocial development. In this sense, the Program for Young Negotiators training model need not be considered a stand-alone curriculum, but, rather, the focal point of a more comprehensive approach to life-skills planning and conflict resolution.

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