

BRIEF REPORT

Longitudinal Spillover Effects of Conflict Resolution Styles Between Adolescent-Parent Relationships and Adolescent Friendships

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This study longitudinally investigated spillover effects of conflict resolution styles in adolescent-parent relationships and adolescent friendships. Questionnaires about conflict resolution styles with parents and best friends were completed by adolescents from two age cohorts: 559 early adolescents (mean age 13.4) and 327 middle adolescents (mean age 17.7). Path analyses on two waves, with a three-year interval, indicated that in the early-to-middle adolescent group positive problem solving and conflict engagement spilled over from adolescent-parent relationships to adolescent friendships and not from adolescent friendships to adolescent-parent relationships. In the middle-to-late adolescent group, we found bidirectional spillover effects for these two conflict resolution styles. For withdrawal, we found bidirectional spillover effects in both cohorts. This study showed that both parents and friends set the stage for exercising and learning conflict resolution styles and thereby shape adolescents' future conflict behavior.

Keywords: conflict, conflict resolution, spillover, parent-adolescent relationship, adolescent friendships

As conflicts are part of adolescents' everyday life, appropriately managing these conflicts is essential in maintaining constructive relationships. Research showed that adolescents who used higher levels of aggressive or avoidant conflict resolution with their parents reported higher levels of problem behaviors, whereas adolescents who handled conflicts with their parents by compromise reported lower levels of problem behaviors (Rubenstein & Feldman, 1993). Furthermore, adolescents who lack the ability to resolve conflicts constructively with peers are found to be at risk for maladjustment and social rejection (Newcomb, Bukowski, & Pattee, 1993). Hence, utilizing effective conflict resolution styles in relationships with parents and peers is impor-

tant. In the present study, we longitudinally investigated the associations between adolescent conflict resolution with parents and friends. We distinguished three conflict resolution styles that are commonly used in parent-adolescent relationships and friendships (Laursen, 1993): Positive problem solving involves trying to understand the other's position and working out compromises. Two more negative styles are conflict engagement, which involves being verbally abusive or defensive, and withdrawal, which involves avoiding to talk, and becoming distant (Kurdek, 1994).

The family and the peer context are significant relational contexts in which adolescents can exercise and learn conflict resolution styles. Some research suggests that *friendships* provide adolescents with opportunities to learn and improve social skills such as conflict resolution skills (Collins & Steinberg, 2006; Laursen, Finkelstein, & Townsend-Betts, 2001). Yet, most theories emphasize the importance of the *family* as a primary context for learning and practicing effective conflict resolution skills (Parke & Buriel, 2006). For instance, attachment theory (Bowlby, 1969) states that adolescents construct internal working models of relationships based on experiences in the relationships with their parents and that they will use these relationship models to understand and construct their relationships with friends. Social learning theory (Bandura, 1977) emphasizes the role of parents as important socialization agents for their chil-

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dren, and regards the home environment to be the first context in which children attain conflict resolution skills. In line with these theories, we expect conflict resolution in adolescent-parent relationships to spill over to conflict resolution in adolescent friendships.

Conflict characteristics in adolescent-parent relationships and adolescent friendships have been found to be related. For instance, negative interaction with parents has been found to be related to negative interaction with friends over time (e.g. De Goede, Branje, Delsing, & Meeus, 2009). A few studies examined conflict resolution styles in different relations and found that conflict resolution styles in parent-adolescent relationships were related to the same conflict resolution styles in adolescent relationships with siblings and romantic partners (e.g. Reese-Weber, 2000; Reese-Weber & Bartle-Haring, 1998). The current study extends these studies by longitudinally investigating whether adolescents' conflict resolution with their parents spills over to the way they resolve conflicts with their friends and vice versa.

It is likely that spillover effects will vary for adolescents of different ages. Theoretical and empirical research shows that the influence of parents on adolescents declines with age (Collins & Steinberg, 2006). At the same time, friends are becoming increasingly important to adolescents (Brown, 2004). Experiences with friends may therefore gain influence over the course of adolescence. For instance, adolescents' perceptions of relationships with parents were found to generalize to their perceptions of relationships with friends in early-to-middle adolescence, whereas bidirectional associations were found in middle-to-late adolescence (De Goede et al., 2009). Therefore, we investigated spillover effects in two age groups. We hypothesized that spillover effects of adolescents' conflict resolution styles in the early-to-middle adolescent group are stronger from parents to friends than from friends to parents. In the middle-to-late adolescent group, we expected bidirectional spillover effects.

Method

Participants and Procedure

Participants were 559 early adolescents ($M = 13.42$, 54.2% boys) and 327 middle adolescents ($M = 17.67$, 43.1% boys) from the CONAMORE (CONflict And Management Of RELationships; Meeus et al., 2004) longitudinal study. Participants were recruited from various (junior) high schools located in the province of Utrecht, The Netherlands. We used two waves with a three-year interval for this study. The early adolescents were relatively highly educated with approximately one-third of them preparing for occupational or vocational training, and two-thirds preparing for higher education or university at Time 1. Of the middle adolescents, 44% was enrolled in occupational or vocational training and 56% was preparing for higher education or university at Time 1. Most participants in the current study were Dutch (83%). The other 17% of the adolescents indicated that they belonged to ethnic minorities (e.g. Surinamese, Moroccan, or Turkish). The great majority of the adolescents lived with both parents (81%). Other adolescents lived

with their mother (10%) or elsewhere (e.g. with their father or with one biological parent and one stepparent). The educational level of the fathers and mothers could be differentiated as 38% and 47% low-middle, and 62% and 53% high, respectively. We restructured the data in order to prevent interdependence in our data.¹

Measures

Conflict resolution styles. We used a Dutch adaptation of Kurdek's Conflict Resolution Style Inventory (CRSI; Kurdek, 1994; Van Doorn, Branje, & Meeus, 2007) to assess adolescents' conflict resolution styles in conflicts with fathers, mothers, and best friends at both measurement waves. For the questions regarding conflict resolution in friendships, participants were asked to identify their best friend.² Each conflict resolution style was measured by five items that were rated on a 5-point Likert scale ranging from *never* to *always*. Positive problem solving involved making compromises (e.g., "negotiating and trying to find a solution that is mutually acceptable"). A sample item of conflict engagement was: "getting furious and losing my temper." A sample item used to measure withdrawal was: "not listening anymore." Factor analyses on the variables at Time 1 showed the expected three-factor structure with all loadings $> .43$ (with one single exception of .39), both in adolescent-parent relationships and in adolescent friendships. Cronbach's alphas at Time 1 ranged from .77 to .89 for all relationships.

Results

To examine spillover effects of conflict resolution styles from adolescent-parent relationships to adolescent friendships, we performed path analyses with cross-lagged effects by means of structural equation modeling. We tested the path models for each conflict resolution style separately, using a multigroup design with age as group indicator. Conflict resolution in adolescent-parent relationships was measured as a latent construct with adolescents' conflict resolution style with mothers and fathers as indicators. We established factorial invariance by fixing the factor loadings of the scale scores of conflict resolution with fathers to be equal across the two time points. Conflict resolution styles in friendships were represented by an observed variable, which is the scale score on the appropriate conflict resolution style.

We started our analyses with a model in which all parameters were free to vary. Subsequently, we tested whether constraining the path from parents to friends and friends to

¹ When two or more target adolescents selected the same person as their best friend in a particular wave, one of these dyads was randomly selected. Moreover, when two adolescents selected each other as best friend in a particular wave and thus formed a mutual friendship, one of the two adolescents was randomly selected.

² Participants were not restricted to select a same-age, same-school, or same-gender friend. However, it was not possible to select a romantic partner as best friend. At Time 2, adolescents were free to choose another best friend.

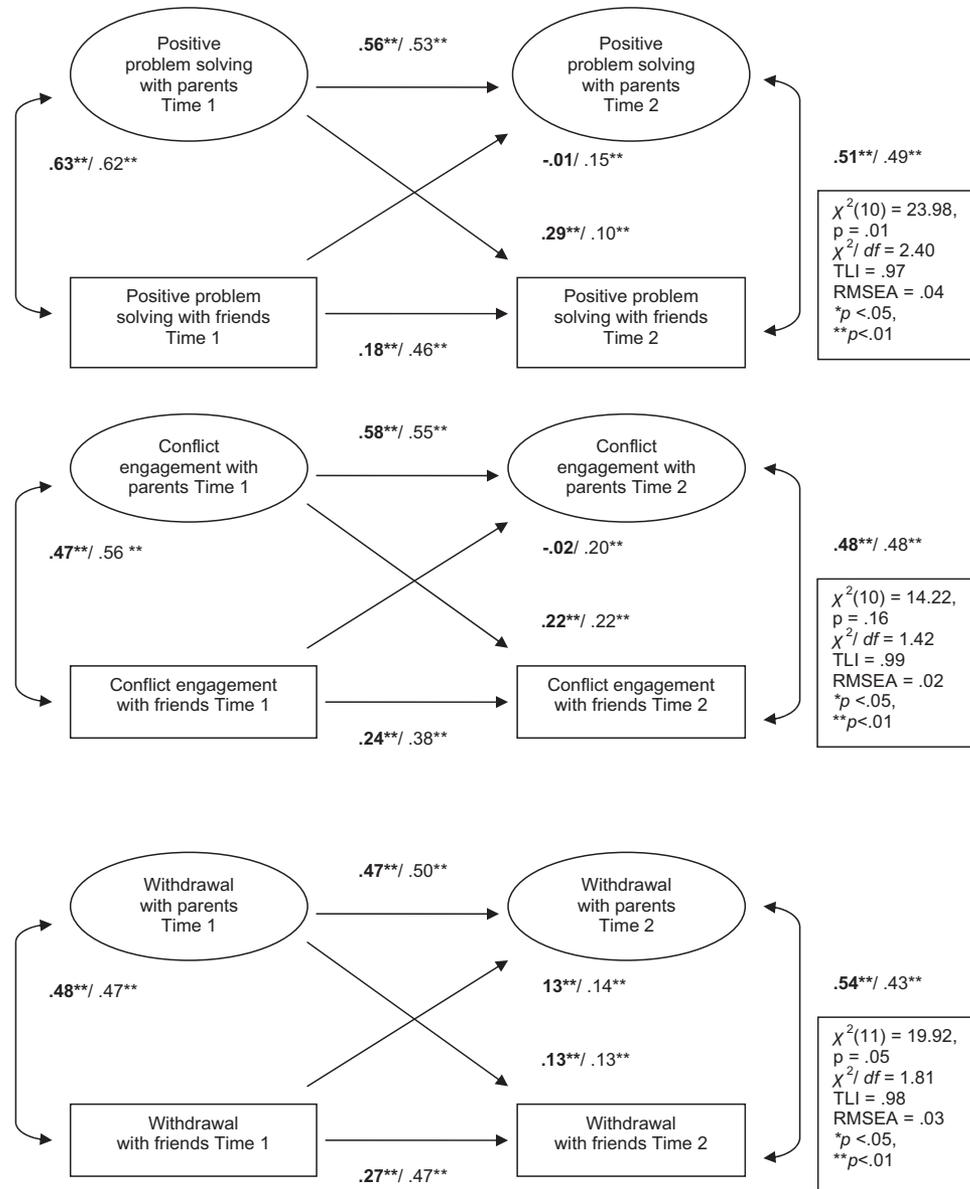


Figure 1. Spillover effects of adolescents' conflict resolution styles. The bold estimates represent the coefficients from the early-to-middle adolescent group. The other estimates represent the coefficients from the middle-to-late adolescent group.

parents in the young cohort to be equal would lead the model to significantly decrease in fit (Model 2). In Model 3, we tested whether both cross-paths in the old cohort could be constrained to be equal. We used the χ^2 -difference test, change in Tucker-Lewis Index (TLI), and change in RMSEA as indicators of a change in fit. With respect to the TLI and the root mean square error approximation (RMSEA), a decrease of .01 on these measures can be regarded as substantial (Chen, 2007). Figure 1 represents the results of the final models.³ The coefficients in the figures are standardized estimates.

For positive problem solving and conflict engagement, constraining the cross-lagged paths in the young cohort to

be equal resulted in a significant decrease in fit: $\Delta\chi^2(1) = 14.53$, $p < .01$, $\Delta TLI = .02$, $\Delta RMSEA = .01$, and $\Delta\chi^2(1) = 9.34$, $p < .01$, $\Delta TLI = .02$, $\Delta RMSEA = .01$, respectively. Constraining these cross-lagged paths to be equal in the old cohort did not result in a significant decrease in fit: $\Delta\chi^2(1) = 1.59$, $p > .05$, $\Delta TLI = .00$, $\Delta RMSEA = .00$, and $\Delta\chi^2(1) = 0.59$, $p > .05$, $\Delta TLI = .00$,

³ Controlling for parental and adolescent education level, sex and ethnicity of adolescent, did not influence the results of our study. For more details on this procedure, please contact the first author.

Δ RMSEA = .00 for positive problem solving and conflict engagement, respectively. Thus, we found support for our hypothesis that spillover of positive problem solving and conflict engagement only occurs from adolescent-parent relationships to adolescent friendships and not from adolescent friendships to adolescent-parent relationships in the early-to-middle adolescent group. In the older cohort, we found support for our hypothesis that there is mutual spillover of positive problem solving and conflict engagement between adolescent-parent relationships and adolescent friendships.

For withdrawal, we found that constraining the cross-lagged paths to be equal in the early-to-middle adolescent group did *not* result in a significant decrease in fit: $\Delta\chi^2(1) = 3.57, p > .05, \Delta$ TLI = .00, Δ RMSEA = .00. Constraining the cross-lagged paths to be equal in the middle-to-late adolescent group did not further result in a significant decrease in fit: $\Delta\chi^2(1) = 0.00, p > .05, \Delta$ TLI = .00, Δ RMSEA = .00. Thus, we not only found bidirectional spillover effects of withdrawal between adolescent-parent relationships and adolescent friendships in the middle-to-late adolescent group, but also in the early-to-middle adolescent group.

Discussion

The purpose of the present study was to investigate spillover effects between the use of conflict resolution styles in adolescent-parent relationships and adolescent friendships. The results clearly show that adolescents' conflict resolution styles with their parents are related to the conflict resolution styles adolescents use with their friends over time. We found this result both for the early-to-middle and middle-to-late adolescent group and for all three conflict resolution styles, implying that the relationship with parents is *and* remains an important source of influence on children. This is in line with both attachment theory (Bowlby, 1969) and social learning theory (Bandura, 1977), which emphasize the important role parent-child interactions play in constructing and maintaining relationships. Moreover, the result of the current study can be explained by the common notion that despite the temporarily increase in parent-adolescent conflict and decrease in perceived parental support from early adolescence on, most parent-adolescent relationships remain close and thereby have the potential to remain influential (Smetana, Campione-Barr, & Metzger, 2006). Thus, as relationships with parents will prolong despite intense conflict (Laursen, 1993), adolescents might try and exercise conflict strategies with their parents and generalize these strategies with their friends.

In middle-to-late adolescence we found longitudinal spillover effects of positive problem solving and conflict engagement from adolescent friendships to adolescent-parent relationships, which is in line with the increasing saliency of friendships during adolescence (Collins & Steinberg, 2006). As adolescent friendships are increasingly characterized by individuality from middle adolescence onwards (Shulman & Knafo, 1997), differences of opinion are allowed and do not necessary lead to friendship dissolution.

When friendships are secure enough, adolescents' experiences and interactions with friends have the potential to generalize to interactions with parents as well.

Surprisingly, we found bidirectional spillover effects of withdrawal also in early adolescence. Withdrawal is a conflict resolution style that is particularly easy to use, and it is a strategy that is not threatening for the continuation of relationships, at least not instantly. Moreover, is not really something you have to learn or something that requires special skills which you have to obtain over time. When this strategy works when facing conflicts with their parents, adolescents might also use this style with friends and vice versa. Hence, this might explain why we found bidirectional spillover effects in both age cohorts.

The current study has important strengths such as the longitudinal design, the examination of mutual spillover effects of conflict resolution styles with parents and friends, and the use of two age groups. Despite these strengths, our study has its limitations as well. First of all, our study is solely based on adolescents' self-reports, which could have resulted in biased answers and shared method variance. Secondly, we can not rule out the possibility that our results may be due to cohort differences. Also, whereas adolescents reported on the same parents at the two measurements, adolescents were free to choose another best friend at the second measurement. This introduces bias in our study. Finally, the spillover effects we found were modest and the longitudinal design does not allow for causal interpretation. Therefore, careful interpretation is warranted. Future research might include sex of parent and adolescent in the analyses and may also distinguish between same-sex friends and opposite-sex friends.

All in all, managing conflicts is an important skill that can be exercised and learned in different relational contexts. In our study, we showed that both parents and friends set the stage for exercising and learning conflict resolution styles and thereby shape adolescents' future conflict behavior. In early adolescence, conflict resolution styles in parent-adolescent relationships function as a keystone for interactions outside the family. As friendships are characterized by more room for individuality from middle adolescence on and are thus less threatened by conflict, conflict resolution styles acquired in friendships also have the potential to spill over to parent-adolescent relationships. When problems in conflict management arise, we suggest looking at the broader system of relationships as the use of conflict resolution styles appeared to be interrelated in different contexts.

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