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To cite this article: Elise Boersma-van Dam, Bill Hale, Hans Koot, Wim Meeus & Susan Branje (2019) Adolescents' and Best Friend's Depressive Symptoms and Conflict Management: Intraindividual and Interpersonal Processes Over Time, Journal of Clinical Child & Adolescent Psychology, 48:2, 203-217, DOI: [10.1080/15374416.2016.1253017](https://doi.org/10.1080/15374416.2016.1253017)

To link to this article: <https://doi.org/10.1080/15374416.2016.1253017>



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Published online: 12 Dec 2016.



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# Adolescents' and Best Friend's Depressive Symptoms and Conflict Management: Intraindividual and Interpersonal Processes Over Time

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This 6-year longitudinal study examined the relation between 3 conflict management styles (i.e., problem solving, conflict engagement, and compliance) and depressive symptoms in adolescent–best friend relationships. Participants were 479 Dutch adolescents and their best friend who reported annually on depressive symptoms and conflict management styles toward each other. Bidirectional effects between conflict management styles and depressive symptoms were studied both within adolescents (intraindividual) and between adolescent best friends (interpersonal). A positive interpersonal effect of depressive symptoms of one dyad member on depressive symptoms of the other member was found. Similarly, higher positive problem solving and conflict engagement of one dyad member predicted respectively higher problem solving and conflict engagement of the other dyad member. Adolescents who reported more depressive symptoms reported more conflict engagement and compliance over time. In addition, for boys, higher levels of depressive symptoms of one dyad member were related to more problem solving by the other member over time. The current study contributed to the literature by showing that depressive symptoms and conflict management are related constructs in adolescents and that both intrapersonal and interpersonal processes contribute to this relation.

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Adolescence is a critical developmental period, characterized by significant interpersonal transitions (Hankin & Abramson, 2001). One of these transitions involves a significant increase in contact with friends instead of family, as peers become the primary context of social interaction and development of adolescents (Rudolph & Hammen, 1999). In friendships, as in any interpersonal relationship, conflicts can arise, and dealing effectively with conflicts is important to maintain positive relationships (Reese-Weber, 2000). Adolescence is also the period of increases in depressive symptoms (e.g.,

Cole et al., 2002), and several studies have linked problems in adolescents' interpersonal relationships to the development of depressive symptoms (Allen et al., 2006; Branje, van Doorn, van der Valk, & Meeus, 2009; Nolan, Flynn, & Garber, 2003). However, specific links between conflict management with friends and depressive symptoms have not been studied extensively. Furthermore, it is not clear how friends influence each other's use of specific conflict management styles. Therefore, the present study investigated longitudinally how adolescents' depressive symptoms are bidirectionally related to their own conflict management styles toward their best friend (intraindividual effects) and how adolescents' depressive symptoms and conflict management are bidirectionally related to their friend's depressive symptoms and conflict management (interpersonal effects).

As friends become important interpersonal resources during adolescence (Laursen & Pursell, 2008), adolescents are increasingly motivated to avoid harming their friendships. The ability of adolescents to manage interpersonal conflicts is an important skill in maintaining friendships. According to the dual concern model, a person's choice for a conflict management style depends on one's level of concern for oneself versus one's level of concern toward one's friend (Pruitt & Carnevale, 1993). *Positive problem solving* occurs when an adolescent shows high concern for both oneself and one's friend and is characterized by negotiation and compromise. When someone has high concern for others combined with low concern for oneself, one accommodates to the ideas of the other through *compliance*. Finally, *conflict engagement* is a combination of high concern for oneself and a low concern for others, which results in a controlling strategy, characterized by hostility and coercive behavior (Kurdek, 1994). The current study investigated these three conflict management styles and their bidirectional relation to depressive symptoms of adolescents.

Whether one is inclined to use certain conflict management styles has been found to be related to depressive symptoms (e.g., Branje et al., 2009). Whereas understanding and sharing another's emotions by adopting the perspective of the other person during a conflict may prevent destructive conflicts and facilitate constructive acts (Laursen, Finkelstein, & Betts, 2001), depressive individuals tend to be more self-focused than others and show less empathic concern (Schreiter, Pijnenborg, & Aanhel Rot, 2013). As a consequence, adolescents who display more depressive symptoms may be less inclined to use positive problem solving, due to a self-focus that impairs their empathy (see also De Wied, Branje, & Meeus, 2007). The scarce literature on this subject shows that for adolescent romantic relationships, and in children's friendships, higher levels of depressive symptoms predicted more negative conflict management, such as conflict engagement and compliance (Ha, Overbeek, Cillessen, & Engels, 2012; Rinaldi & Heath, 2006) and less positive problem solving over time (Ha et al., 2012; Vujeva & Furman, 2011). The current study aimed to replicate these effects of depressive symptoms on conflict management for

adolescent–best friend relationships and investigated bidirectional effects, allowing conflict management to also affect depressive symptoms.

In the light of these possible bidirectional relations, the literature also provides some clues for an effect of conflict management styles on depressive symptoms. Whereas hostile and rejecting relationships between adolescents and their friends predicted adolescent depressive symptoms (Nolan et al., 2003), a healthy expression of conflicts has been found to have many beneficial effects, such as improving self-expression, helping adolescents to balance competing intrapersonal needs, and buffering against the development of depressive symptoms (Adams & Laursen, 2007; Dunn, 2004). However, hardly any research studied adolescents' conflict management toward friends as a predictor of depressive symptoms. What has been found is that showing anger and hostility toward a best friend predicted future depressive symptoms in adolescents (Allen et al., 2006). But for problem solving in romantic relationships, no predictive relation to depressive symptom development was found (Vujeva & Furman, 2011). The current study added to the literature by studying these intraindividual bidirectional effects between conflict management styles and depressive symptoms of adolescents and best friends in a longitudinal design.

Next to these intraindividual processes (the link between adolescents' depressive symptoms and their own behavior in conflicts), interpersonal influences may also play a role in adolescents' conflict management and depressive symptoms. The adolescent's reaction to conflicts with a good friend may also be influenced by one's friend's reactions to conflicts. These interpersonal influences can be studied in the actor–partner interdependence model (APIM; Kenny, 1996), which is based on the idea that in interpersonal relationships, a person's emotion, cognition, or behavior is affected not only by intraindividual processes but also by the emotion, cognition, or behavior of the interactional partner (Kelley et al., 2003). Previous research has found support for these interpersonal influence processes in depression (Stevens & Prinstein, 2005). Affiliating with depressed friends can increase depressive feelings in adolescents (Prinstein, 2007; Stevens & Prinstein, 2005; Van Zalk, Kerr, Branje, Stattin, & Meeus, 2010b). This transmission of depressive feelings has been labeled depression contagion (e.g., Prinstein, 2007). Likewise, conflict management styles may also be “contagious,” and friends may learn from one another's conflict management, for example, through social learning or imitation processes (Bandura, 1986). However, hardly any research exists with regard to mutual influences of conflict management styles in adolescents. Whereas one study found that conflict management skills of romantic partners were significantly correlated to each other (Bucx & Seiffge-Krenke, 2010), another study found no relation between conflict management styles of romantic partners (Ha et al., 2012). However, so far no research has been conducted that relates conflict management styles of adolescents with that of friends, nor have these links been investigated longitudinally.

Applying the interdependence theory to the specific conflict management styles, it is expected that when a friend uses more positive problem solving and shows understanding and consideration to the adolescents needs, the adolescent may try to do the same to increase feelings of closeness and preserve the relationship (Laursen et al., 2001; Prinstein, Cheah, & Guyer, 2005). When a friend uses more conflict engagement, the adolescent may feel attacked by the other person and responds by defending one's own position. Compliance, on the other hand, may not be mimicked. Although beyond the scope of this study, it may be that compliance acts as a reinforcement of a friend's dominant behavior (Chango, McElhaney, & Allen, 2009). The present study investigated how adolescents' and best friend's conflict management styles are related over time and tried to confirm the reported contagion effects for depressive symptoms.

The present study went one step further and investigated interpersonal effects between conflict management and depressive symptoms. Considering the aforementioned theories, it would make sense that an adolescent's use of a certain conflict management style may affect one's friend's depressive symptoms, and the adolescent's depressive symptoms may affect one's friend's conflict management. One of the first to notice such a depressogenic interpersonal process was Coyne (1976), who found that depressed individuals often display negative interpersonal behavior, such as a lack of cooperation and irritability, which may induce rejection in their interaction partner and aggravate the depressive symptoms. In other words, higher levels of depressive symptoms in adolescents may lead to more negative and less positive conflict management behavior. These negative conflict management behaviors may in turn increase depressive symptoms in their friend. So it appears that a vicious circle may be present, in which depressed adolescents have maladaptive interactions with friends, which in turn may lead to persistence of depressive symptoms in both oneself and others (Davila, Hammen, Burge, & Paley, 1995). Possible effects of adolescents' depressive symptoms on friends' conflict management styles have been studied only by Ha and colleagues (2012), although in romantic relationships. In this study, boys showed more positive problem solving in response to girls' higher depressive symptoms. As both romantic relationships and friendships are highly valued voluntary relationships and in both relationship types, negotiation (part of positive problem solving) is the most frequently used conflict management style (Laursen et al., 2001), these findings may also apply to friendships. Another study showed that when friends gave in to adolescents' wishes or withdrew from a conflict, adolescents became less depressed over time. But when friends used hostile strategies, this was linked to increases in depression of adolescents over time (Chango et al., 2009). The present study aimed to unravel these interpersonal effects in adolescents and their friends using a longitudinal dyadic design.

In summary, the present study investigated whether adolescents' and their best friend's depressive symptoms and conflict management are bidirectionally related over time. Specifically, it was hypothesized that with regard to intrapersonal processes, more depressive symptoms are bidirectionally related to higher use of compliance and conflict engagement and lower use of positive problem solving over time. With regard to interpersonal effects, it was expected that adolescents' and best friend's depressive symptoms, problem solving, and conflict engagement show a "contagion" effect over time. Finally, interpersonal effects of best friend's conflict management on adolescent depressive symptoms (and vice versa) were explored.

## METHODS

### Participants

Participants in this study were 497 Dutch adolescents enrolled in the longitudinal Research on Adolescent Development And Relationships project, which focuses on the development of relationships and behavioral problems. The current study used the annual data from six measurement waves. Of the 497 adolescents who originally participated, 18 were excluded because they had no best friend participating in the study. Therefore the final sample consisted of 479 Dutch adolescents (269 boys; 56.2%) and their best friends. At the time of the first measurement wave, when adolescents attended the 1st year of secondary education, the mean age of the adolescents was 13.03 years ( $SD = 0.47$ ) and ranged between 11 and 15 years. With regard to socioeconomic status (SES), 10.2% of the adolescents came from families classified as low SES (i.e., both parents were unemployed or held an elementary job; Statistics-Netherlands, 1993). Family SES was medium or high for the other 89.8%, with at least one of the parent's jobs classified as medium level. In each wave, target adolescents were asked to identify their best friend, who was then asked to participate in the research. This resulted in adolescents with stable friendships ( $N = 232$ ), for whom one and the same best friend participated in the study, and adolescents with unstable friendships, who had two different best friends ( $N = 145$ ) or more than two different best friends ( $N = 102$ ) during the studied period. For every target adolescent, hypothetically five changes in best friend could have occurred (a different friend in every wave). In our sample ( $N = 479$ ), this means 2,395 possible changes of best friend. An inspection of the data showed that the best friend changed in only 407 instances (17.0%). As adolescents were free to invite a boy or a girl friend (who was not a romantic partner) to participate, the sample was composed of same-sex dyads ( $N = 431$ ), in which the gender

of both dyad members was identical throughout the study, and mixed-sex dyads ( $N = 48$ ), in which dyad members differed in gender in at least one wave. In each measurement wave the number of mixed-sex dyads was quite low ( $N = 16$  in Wave 1,  $N = 11$  in Wave 2,  $N = 13$  in Wave 3,  $N = 17$  in Wave 4,  $N = 22$  in Wave 5,  $N = 28$  in Wave 6). As these numbers were too small to include gender composition as a potential moderator in the final analyses, preliminary effects of gender composition on the study variables were explored here. Repeated measures analyses showed no significant effect of gender composition on adolescents' and best friend's compliance, problem solving, or conflict engagement over time. However, the analyses did show that target adolescents with at least one mixed-sex friendship in the study period showed significantly more depressive symptoms than target adolescents in same-sex dyads,  $F(1, 285) = 8.51, p < .01, \eta^2 = .03$ .

The attrition over the six waves was low. Only 10.9% ( $N = 52$ ) of the 479 adolescents no longer participated in the sixth wave. At the start of the study, these dropouts did not differ significantly from the total sample in adolescents' sex,  $\chi^2(1) = 3.37, p = .08$ , Cramer's  $V = .08$ ; in best friend's sex,  $\chi^2(1) = 2.63, p = .13$ , Cramer's  $V = .08$ ; in adolescents' and best friend's age,  $F(2, 446) = 1.48, p = .23, \eta^2 = .01$ ; or on conflict management styles or depressive symptoms,  $F(8, 426) = 0.54, p = .83, \eta^2 = .01$ . However, a small but significant difference in SES was found,  $\chi^2(1) = 5.22, p = .03$ , Cramer's  $V = .11$ , with dropouts having a lower SES than non-dropouts.

A maximum of 23.2% of the cases were missing for each variable; the average percentage of missing values per variable was 12.7% across the six waves. An analysis of missing data patterns, Little's Missing Completely At Random test, produced a normed chi-square ( $\chi^2/df$ ) of 1.09. This small value shows that the fit was acceptable and indicated that it is likely the data were missing at random. Therefore, it was possible to impute missing items (Bollen, 1989). Consequently, respondents with missing values were included in all model estimations in Mplus, using Full Information Maximum Likelihood (Muthén & Muthén, 1998–2010). Incidental missing item values were estimated in SPSS, using Expectation Maximization.

## Procedure

The target adolescents were recruited from randomly selected schools in the western and central parts of the Netherlands. Adolescents were asked to invite their best friend to participate in the study. All adolescents and their parents received a description of the study per mail and provided written informed consent to participate. During annual home visits, adolescents and their best friends completed various self-report questionnaires

under supervision of trained research assistants. In each wave, adolescents and best friends received €15 as reward for completing the questionnaires of that wave. Confidentiality was ensured. The study was approved by the ethical-medical committee of University Medical Centre Utrecht.

## Measures

### *Conflict Management Style*

To assess conflict management with best friends, Kurdek's Conflict Resolution Style Inventory (CRSI; Kurdek, 1994) was used. The CRSI measures one's general tendency to use each of four conflict management styles: positive problem solving, conflict engagement, withdrawal, and compliance. Because withdrawal was not measured in all of the six waves, this study included only the other three styles. Each of the three styles was measured with five items. Adolescents rated on a 5-point Likert scale, ranging from *never* to *always*, how often they generally had used a specific conflict management behavior in conflicts with their best friend. Sample items for each style were as follows: for positive problem solving, "Trying to find solutions that are acceptable for both of us"; for conflict engagement, "Letting myself go, and saying things I do not really mean"; and for compliance, "Not defending my opinion." For each style, mean scores were calculated. The CRSI has good internal consistency and stability and shows moderate convergent, concurrent, and predictive validity (Kurdek, 1994). In the current study, Cronbach's alphas for conflict management style of target adolescents ranged from .85 to .91 for positive problem solving, .76 to .85 for conflict engagement, and .65 to .82 for compliance across the six measurement waves (with four out of six alphas  $> .70$ ). For best friends, the Cronbach's alphas ranged from .79 to .88 for problem solving, .73 to .78 for conflict engagement, and .64 to .78 for compliance (with four out of six alphas  $> .70$ ).

### *Depressive Symptoms*

Adolescents' depressive symptoms were assessed with the Reynolds Adolescent Depression Scale (2nd ed.; Reynolds, 2000). Adolescents completed 23 items, and the items were measured on a 4-point scale ranging from *almost never* to *most of the time*. Example items are "I feel sad" and "I am worried." Items were summed to compute a mean score, with higher scores indicating higher levels of depressive symptoms. Good psychometric properties, such as internal consistency, test-retest reliability, and validity have been established (Myers & Winters, 2002; Osman, Gutierrez, Bagge, Fang, & Emmerich, 2010). Across the six measurement waves, Cronbach's alphas of depressive symptoms ranged from .93 to .95 for target adolescents and from .91 to .93 for best friends.



## Strategy of Analyses

Because both depressive symptoms and conflict management are influenced by interpersonal factors, the present study used an interpersonal approach to investigate the relations between these two constructs. Therefore, the principles of the APIM (Kenny, 1996) were used, a model that is designed to measure interdependence within interpersonal relationships. The APIM consists of two central components, namely, actor effects and partner effects. An actor effect is an intraindividual effect that shows how much a person's current behavior is predicted by his own past behavior or characteristics. Actor effects can be measured accurately only by controlling for partner effects. Partner effects measure how much a person is influenced by another person's (i.e., the partner's) characteristics or behavior (interpersonal effects; Cook & Kenny, 2005). In the analysis of dyadic data, a distinction is made between dyads with distinguishable members and dyads with indistinguishable members. Distinguishable members (e.g., husbands and wives) can often be differentiated by a dichotomous variable (e.g., gender), whereas indistinguishable dyad members cannot (e.g., twins; Olsen & Kenny, 2006). For distinguishable dyads, no equality constraints between parameters are assumed in structural equation modeling, but for indistinguishable dyads it is assumed that paths representing identical effects can be constrained to be equal (e.g., the effect from the target adolescent's depression to best friend's compliance and the effect of best friend's depression on the target adolescent's compliance might be assumed to be equal). Friends could be seen as indistinguishable, as there is no variable that distinguishes the two members (Kashy, Donnellan, Burt, & McGue, 2008). Also, there is no specific reason why the relation between depressive symptoms and conflict management should differ between target adolescents and best friends. However, in this study the target adolescent did not change over the course of the study, but the best friend could. In addition, no information was available on the reciprocity of the friendship, so it was not clear

whether the best friend saw the adolescent as his best friend too. Therefore, the current study tested distinguishability statistically by comparing models in which stability paths (i.e., regression paths connecting the six measurement points of a measure over time), cross-lagged paths (intra- and interindividual effects), and correlated changes (the degree to which changes in the level of one variable were related to changes in the level of another variable within and across individuals) were fixed to be equal between the two friends to models in which these constraints were released (see Figure 1 for a graphical display of the paths).

Using the software Mplus Version 7 (Muthén & Muthén, 1998–2010), cross-lagged path models were estimated to test for mutual influences between adolescents and best friends (interpersonal effects) and for intraindividual bidirectional effects (see Figure 1). Three separate models were estimated for conflict engagement, positive problem solving, and compliance. Combining all three conflict management styles in one model was problematic, because the sample size was too small for the large number of parameters that would have to be estimated, leading to unreliable estimates. Robust Maximum Likelihood Estimation was used to take into account the non-normal distribution of the depressive symptoms and some of the conflict management data (Enders & Bandalos, 2001), a method that adjusts the model fit statistics and standard errors to take into account the non-normal distribution. The fit of the models was assessed using the comparative fit index and the root mean square error of approximation. The model fit was considered to be good if the comparative fit index was 0.95 or higher and the root mean square error of approximation was .06 or lower (Hu & Bentler, 1999). Model fit of nested models (i.e., a model that can be constructed from the previous model by releasing or constraining paths) was compared using adjusted chi-square difference tests (Satorra & Bentler, 2001). If constraining parameters did not lead to a significantly worse model fit (i.e.,  $p > .05$ ), the constrained model was accepted over the free model.

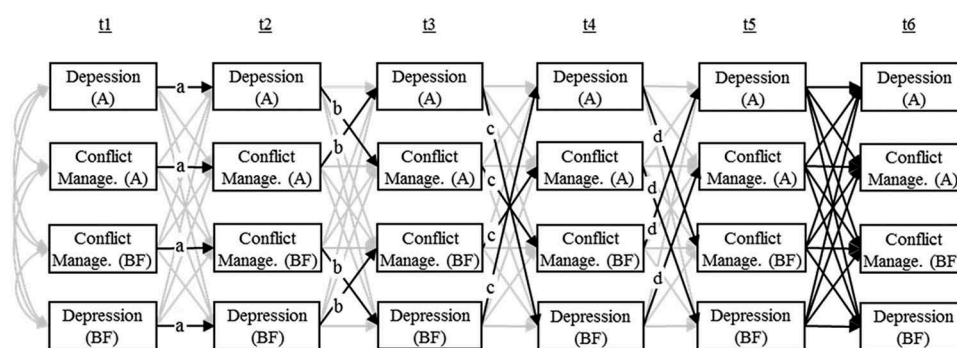


FIGURE 1 Path model highlighting the most important paths investigated in this study with (a) 1-year stability paths, (b) intraindividual cross-paths, and (c, d) interpersonal cross-paths. Note: All paths were investigated between all subsequent waves. Although not displayed for reasons of clarity, this model included associations between all variables within a wave and 2-year stability paths for all variables. A = target adolescent; Manage. = management; BF = best friend.

TABLE 1  
Within Wave Correlations of the Study Variables in Wave 1–6

	Wave 1		Wave 2		Wave 3		Wave 4		Wave 5		Wave 6	
	1	2	1	2	1	2	1	2	1	2	1	2
1 Depression (A)	.10*		.16**		.25**		.32**		.22**		.25**	
2 Depression (BF)	-.03	.01	-.02	-.04	.09	.07	-.02	.09	-.01	.07	-.10	.06
Problem Solving (A)	-.06	-.01	.09	-.01	.19**	.05	.11*	.05	.09	.05	-.02	.05
Problem Solving (BF)	.25**	.07	.27**	-.00	.17**	.10*	.26**	.10*	.25**	.11*	.17**	.04
Conflict Engagement (A)	-.03	.29**	.01	.22**	.12*	.23**	.09	.24**	.00	.20**	.15**	.27**
Conflict Engagement (BF)	.11*	.04	.25**	-.07	.11*	.08	.38**	.05	.37**	.12**	.33**	.05
Compliance (A)	.00	.17**	.11*	.16**	.08	.25**	.10*	.40**	.10	.28**	.11*	.35**
Compliance (BF)												

Note: Correlations between adolescents' and best friend's conflict management always concern the same style (e.g., problem solving). CM = conflict management style; BF = best friend; A = target adolescent.

\* $p = .05$ . \*\* $p = .01$ .

TABLE 2  
Model Fit Statistics

	Problem Solving			Conflict Engagement			Compliance		
	$\chi^2(df)$	RMSEA	CFI	$\chi^2(df)$	RMSEA	CFI	$\chi^2(df)$	RMSEA	CFI
1. 1-Year Stability	448.62 (160)	0.06	0.91	452.42 (160)	0.06	0.91	432.94 (160)	0.06	0.91
2. Model 1 + 2-Year Stability	204.99 (144)	0.03	0.98	226.48 (144)	0.04	0.97	193.68 (144)	0.03	0.98
3. Model 2 + Time Constraints	299.51 (240)	0.02	0.98	340.10 (244)	0.03	0.97	315.44 (244)	0.03	0.98
4. Model 3 + Dyad Constraints	316.12 (252)	0.02	0.98	349.04 (255)	0.03	0.97	321.49 (255)	0.02	0.98
5. Model 4 + Friendship Stability Groups	1031.82 (800)	0.04	0.94	1071.11 (799)	0.05	0.93	1021.94 (803)	0.04	0.94

Note: RMSEA = root mean square error of approximation; CFI = comparative fit index.

## RESULTS

Table 1 provides an overview of all observed within-wave bivariate correlations between the conflict management styles and depressive symptoms of adolescents and best friends.

A stepwise method was followed to construct the best fitting model for the three conflict management styles (see Table 2). First, a model was constructed that included all 1-year stability paths, all cross-lagged paths, and all within-wave correlations for the six measurement points. For all three conflict management styles this resulted in models with only moderately acceptable fit. Therefore, in a second step all 2-year stability paths were added, which significantly improved the model fit for problem solving,  $\Delta\chi^2_{SB}(16) = 191.69, p < .001$ ; compliance,  $\Delta\chi^2_{SB}(16) = 193.56, p < .001$ ; and conflict engagement,  $\Delta\chi^2_{SB}(16) = 175.49, p < .001$ .

Next, time-invariance was tested consecutively for stability paths, intraindividual effects, interpersonal effects; and correlated change by constraining identical paths to be equal to each other over time. For problem solving, constraining stability paths,  $\Delta\chi^2_{SB}(28) = 22.05, p = .78$ ; intraindividual effects,  $\Delta\chi^2_{SB}(16) = 21.35, p = .17$ ; and interpersonal effects,  $\Delta\chi^2_{SB}(32) = 38.22, p = .21$ , did not lead to a significantly worse model fit. However, constraining the correlated change over time did significantly worsen the model fit,  $\Delta\chi^2_{SB}(24) = 43.34, p = .01$ . Further analyses showed that a model with all correlated changes constrained over time except the constraint on the correlated change between problem solving of the adolescent and of his best friend did not significantly worsen the model fit,  $\Delta\chi^2_{SB}(20) = 16.05, p = .71$ . For conflict engagement, constraining stability paths,  $\Delta\chi^2_{SB}(28) = 26.49, p = .55$ ; intraindividual effects,  $\Delta\chi^2_{SB}(16) = 23.10, p = .11$ ; interpersonal effects,  $\Delta\chi^2_{SB}(32) = 35.50, p = .31$ ; and correlated change,  $\Delta\chi^2_{SB}(24) = 34.14, p = .08$ , did not lead to a significantly worse model fit. Also, for compliance, constraining stability paths,  $\Delta\chi^2_{SB}(28) = 36.46, p = .13$ ; intraindividual effects,  $\Delta\chi^2_{SB}(16) = 19.36, p = .25$ ; interpersonal effects,  $\Delta\chi^2_{SB}(32) = 35.35, p = .31$ ; and correlated change,  $\Delta\chi^2_{SB}(24) = 30.49, p = .17$ , did not lead to a significantly worse model fit.

Next, it was tested whether identical paths were equal for the two members of the dyad, because it would make sense that the influence the adolescent has on his or her best friend is identical to the influence of the best friend on the adolescent. All identical paths were constrained one by one and compared to a model in which all paths were freely estimated. If the 1-year stability paths could not be constrained, then the 2-year (and subsequent) stability paths for that variable were also not constrained between the dyad members. The results showed that in all three models, constraining 1-year stability paths for depressive symptoms led to a significant worse model fit:  $\Delta\chi^2_{SB}(1) = 4.92, p = .03$ , for problem solving;  $\Delta\chi^2_{SB}(1) = 4.55, p = .03$ , for conflict engagement; and  $\Delta\chi^2_{SB}(1) = 5.04, p = .03$ , for compliance. For problem solving, all other paths could be constrained, leading to a model that fitted the data well. With regard to conflict engagement, constraining intraindividual effects of depressive symptoms on one's conflict engagement,  $\Delta\chi^2_{SB}(1) = 6.15, p = .01$ , led to a significantly worse model fit. All other paths could be constrained, leading to a model that fitted the data well. Finally, for compliance, constraining 2-year stability paths for compliance,  $\Delta\chi^2_{SB}(1) = 4.20, p = .04$ , significantly worsened the model fit, and therefore these paths were not constrained. All other paths could be constrained, leading to a model that fitted the data well (see Table 2). As problems with constraining paths between target adolescents and best friends could be because in some of the dyads the best friend was not the same person over time, a final step was taken.

Therefore, to investigate the effect of friendship stability on the parameters, in a final step, multigroup analyses were used to compare parameters between three groups of dyads: adolescents with one best friend, adolescents with two different best friends, and adolescents with more than two different best friends participating over the course of the study. A model in which all paths were estimated freely in the three groups was compared to models in which a stability path or cross-lagged path was constrained to be equal in the three groups. All stability paths and cross-lagged paths were tested one by one. The results of these analyses are presented next, together with the results of each model. The final models for each conflict management style consisted of



TABLE 3  
Cross-Lagged Path Analyses of Depressive Symptoms and Problem Solving

	Intraindividual Effects							
	Target Adolescent				Best Friend			
	B	SE	$\beta$ Min	$\beta$ Max	B	SE	$\beta$ Min	B Max
Correlations								
Depression ↔ Problem Solving Wave 1	-0.18	0.32	-0.02	-0.02	-0.18	0.32	-0.02	-0.02
Depression ↔ Problem Solving Wave 2-6	0.12	0.10	0.01	0.03	0.12	0.10	0.01	0.02
Stability Paths								
1-Year Stability Depression 1 Friend	0.55**	0.02	0.51	0.58	0.55**	0.02	0.50	0.58
2 Friends	0.55**	0.02	0.46	0.57	0.55**	0.02	0.50	0.61
>2 Friends	0.55**	0.02	0.52	0.56	0.34**	0.06	0.32	0.35
1-Year Stability Problem Solving	0.41**	0.02	0.37	0.44	0.41**	0.02	0.36	0.46
2-Year Stability Depression 1 Friend	0.25**	0.02	0.24	0.26	0.25**	0.02	0.22	0.25
2 Friends	0.25**	0.02	0.21	0.25	0.02	0.05	0.01	0.02
> 2 Friends	0.25**	0.02	0.23	0.25	0.16**	0.05	0.15	0.17
2-Year Stability Problem Solving 1 Friend	0.24**	0.02	0.21	0.25	0.24**	0.02	0.21	0.24
2 Friends	0.24**	0.02	0.22	0.24	0.07	0.05	0.07	0.08
> 2 Friends	0.24**	0.02	0.22	0.25	0.01	0.05	0.01	0.01
Cross-Lagged Effects								
Depression → Problem Solving	-0.00	0.00	-0.02	-0.02	-0.00	0.00	-0.02	-0.02
Problem Solving → Depression	0.13	0.15	0.01	0.01	0.13	0.15	0.01	0.01
Interpersonal Effects								
	Target Adolescent ↔/→ Best Friend				Best Friend ↔/→ Target Adolescent			
	B	SE	$\beta$ Min	$\beta$ Max	B	SE	$\beta$ Min	$\beta$ Max
Correlations Wave 1								
Depression ↔ Problem Solving	-0.24	0.34	-0.03	-0.02	-0.24	0.34	-0.03	-0.02
Depression ↔ Depression	15.65**	6.06	0.13	0.16				
Problem Solving ↔ Problem Solving	0.09*	0.04	0.11	0.13				
Correlated Change Wave 2-6								
Depression ↔ Problem Solving	0.25*	0.10	0.03	0.05	0.25*	0.10	0.03	0.05
Depression ↔ Depression	5.07**	1.62	0.05	0.11				
Problem Solving ↔ Problem Solving <sup>a</sup>	-0.05/0.17**	0.03/0.04	-0.10	0.29				
Cross-Lagged Effects								
Depression → Depression 1 Friend	0.07**	0.02	0.07	0.08	0.07**	0.02	0.07	0.07
2 Friends	0.07**	0.02	0.06	0.08	0.07**	0.02	0.07	0.08
> 2 Friends	0.07**	0.02	0.08	0.10	-0.09*	0.04	-0.07	-0.06
Problem Solving → Problem Solving	0.05**	0.01	0.04	0.06	0.05**	0.01	-0.02	0.05
Depression → Problem Solving	0.00**	0.00	0.03	0.04	0.00**	0.00	0.03	0.45
Problem Solving → Depression	0.01	0.14	0.00	0.00	0.01	0.14	0.00	0.00

Note:  $\beta$  min/max indicate the range in  $\beta$  values over time and across friendship stability groups. ↔ = concurrent association; → = temporal association.

<sup>a</sup>The correlated change could not be constrained over time, hence a range of Bs is given.

\* $p < .05$ . \*\* $p < .01$ .

some paths that were equal in all three groups and some paths that were estimated separately in each group. These final models showed an acceptable fit to the data (see Table 2). In addition to an investigation of the effects of friendship stability, this study investigated the effect of target adolescents' gender on all cross-lagged paths in a separate multigroup analysis. Gender differences were found for only one parameter in the model for problem solving (see upcoming results regarding problem solving).

The parameter estimates of the three models are shown in Tables 3 to 5. As depressive symptoms were included in all

three models, the results that concern only depressive symptoms were presented first, followed by the unique results of the three models. In general, depressive symptoms were shown to be quite stable during a 1-year period, but stability was significantly lower for best friends who changed more than twice. Also, 2-year stability of depressive symptoms in the group of two different best friends was no longer significant, whereas the least stable group did show significant 2-year stability of depressive symptoms. Also, the three models showed a significant interpersonal effect of adolescent's depressive symptoms on best friend's depressive symptoms,

TABLE 4  
Cross-Lagged Path Analyses of Depressive Symptoms and Conflict Engagement

	<i>Intraindividual Effects</i>							
	<i>Target Adolescent</i>				<i>Best Friend</i>			
	<i>B</i>	<i>SE</i>	<i>β Min</i>	<i>β Max</i>	<i>B</i>	<i>SE</i>	<i>β Min</i>	<i>β Max</i>
<i>Correlations</i>								
Depression ↔ Conflict Eng. Wave 1	1.57**	0.23	0.22	0.31	1.57**	0.23	0.27	0.30
Depression ↔ Conflict Eng. Wave 2–6	0.50**	0.06	0.10	0.21	0.50*	0.06	0.10	0.18
<i>Stability Paths</i>								
1-Year Stability Depression 1 Friend	0.55**	0.02	0.51	0.57	0.55**	0.02	0.49	0.57
2 Friends	0.55**	0.02	0.46	0.57	0.55**	0.02	0.49	0.60
> 2 Friends	0.55**	0.02	0.53	0.56	0.34**	0.06	0.32	0.36
1-Year Stability Conflict Eng. 1 Friend	0.40**	0.02	0.38	0.45	0.40**	0.02	0.38	0.44
2 Friends	0.40**	0.02	0.30	0.52	0.28**	0.05	0.26	0.32
> 2 Friends	0.40**	0.02	0.40	0.44	0.19**	0.05	0.15	0.27
2-Year Stability Depression 1 Friend	0.25**	0.02	0.24	0.25	0.25**	0.02	0.22	0.25
2 Friends	0.25**	0.02	0.21	0.24	0.02	0.05	0.02	0.02
> 2 Friends	0.25**	0.02	0.23	0.24	0.15**	0.05	0.14	0.16
2-Year Stability Conflict Eng. 1 Friend	0.19**	0.03	0.18	0.23	0.19**	0.03	0.18	0.20
2 Friends	0.19**	0.03	0.14	0.24	0.14**	0.04	0.14	0.15
> 2 Friends	0.19**	0.03	0.19	0.21	0.05	0.06	0.03	0.07
<i>Cross-Lagged Effects</i>								
Depression → Conflict Eng. 1 Friend	0.00**	0.00	0.09	0.11	0.00**	0.00	0.09	0.10
2 Friends	0.00**	0.00	0.09	0.12	–0.00	0.00	–0.02	–0.01
> 2 Friends	0.00**	0.00	0.09	0.11	0.00	0.00	0.02	0.04
Conflict Engagement → Depression	0.58*	0.30	0.02	0.03	0.58*	0.30	0.02	0.03
<i>Interpersonal Effects</i>								
	<i>Target Adolescent ↔/→ Best Friend</i>				<i>Best Friend ↔/→ Target Adolescent</i>			
	<i>B</i>	<i>SE</i>	<i>β Min</i>	<i>β Max</i>	<i>B</i>	<i>SE</i>	<i>β Min</i>	<i>β Max</i>
<i>Correlations Wave 1</i>								
Depression ↔ Conflict Eng.	0.11	0.23	0.02	0.02	0.11	0.23	0.02	0.02
Depression ↔ Depression	15.75**	6.12	0.12	0.15				
Conflict Eng. ↔ Conflict Eng.	0.08**	0.02	0.26	0.31				
<i>Correlated Change Wave 2–6</i>								
Depression ↔ Conflict Eng.	0.09	0.06	0.02	0.03	0.09	0.06	0.02	0.03
Depression ↔ Depression	5.33**	1.62	0.06	0.11				
Conflict Eng. ↔ Conflict Eng.	0.02**	0.01	0.07	0.12				
<i>Cross-Lagged Effects</i>								
Depression → Depression 1 Friend	0.08**	0.02	0.07	0.08	0.08**	0.02	0.07	0.07
2 Friends	0.08**	0.02	0.06	0.08	0.08**	0.02	0.07	0.08
> 2 Friends	0.08**	0.02	0.09	0.10	–0.08	0.04	–0.07	–0.05
Conflict Eng. → Conflict Eng.	0.08**	0.02	0.06	0.12	0.08**	0.02	–0.01	0.10
Depression → Conflict Eng.	–0.001	0.001	–0.02	–0.01	–0.001	0.001	–0.02	–0.01
Conflict Eng. → Depression 1 Friend	–0.47	0.29	–0.03	–0.02	–0.47	0.29	–0.02	–0.02
2 Friends	–0.47	0.29	–0.02	–0.02	–0.47	0.29	–0.03	–0.02
> 2 Friends	1.38	0.79	0.06	0.08	–0.47	0.29	–0.02	–0.02

Note:  $\beta$  min/max indicate the range in  $\beta$  values over time and/or across friendship stability groups.  $\leftrightarrow$  = concurrent association; Eng. = engagement;  $\rightarrow$  = temporal association.

\* $p < .05$ . \*\* $p < .01$ .

and vice versa, but only for dyads with one or two best friends participating in the study. That is, in more stable friendships the more depressive symptoms that either one of the two friends showed, the more depressive symptoms the other interactional partner showed 1 year later. In one of the models (i.e., the model with problem solving), a significant

negative effect of best friend's depressive symptoms on the adolescent's depressive symptoms was found in the least stable group. That is, in the least stable dyads, higher depressive symptoms in best friends predicted lower depressive symptoms in target adolescents over time.

TABLE 5  
Cross-Lagged Path Analyses of Depressive Symptoms and Compliance

	Intraindividual Effects							
	Target Adolescent				Best Friend			
	<i>B</i>	<i>SE</i>	<i>B Min</i>	<i>β Max</i>	<i>B</i>	<i>SE</i>	<i>β Min</i>	<i>β Max</i>
Correlations								
Depression ↔ Compliance Wave 1	0.94**	0.25	0.13	0.15	0.94**	0.25	0.14	0.20
Depression ↔ Compliance Wave 2–6	0.79**	0.08	0.15	0.28	0.79**	0.08	0.13	0.23
Stability Paths								
1-Year Stability Depression 1 Friend	0.55**	0.02	0.51	0.57	0.55**	0.02	0.50	0.57
2 Friends	0.55**	0.02	0.47	0.55	0.55**	0.02	0.50	0.61
> 2 Friends	0.55**	0.02	0.51	0.57	0.33**	0.06	0.32	0.34
1-Year Stability Compliance 1 Friend	0.34**	0.02	0.33	0.38	0.34**	0.02	0.33	0.38
2 Friends	0.34**	0.02	0.28	0.40	0.34**	0.02	0.32	0.39
> 2 Friends	0.34**	0.02	0.32	0.36	0.17**	0.04	0.16	0.19
2-Year Stability Depression 1 Friend	0.24**	0.02	0.23	0.25	0.24**	0.02	0.21	0.25
2 Friends	0.24**	0.02	0.21	0.24	0.00	0.04	0.00	0.00
> 2 Friends	0.24**	0.02	0.23	0.24	0.15**	0.05	0.15	0.16
2-Year Stability Compliance 1 Friend	0.22**	0.02	0.22	0.24	0.22**	0.02	0.21	0.25
2 Friends	0.22**	0.02	0.20	0.25	0.22**	0.02	0.19	0.25
> 2 Friends	0.22**	0.02	0.19	0.24	-0.04	0.04	-0.04	-0.04
Cross-Lagged Effects								
Depression → Compliance	0.01**	0.00	0.11	0.15	0.01**	0.00	0.10	0.13
Compliance → Depression	0.36	0.26	0.02	0.02	0.36	0.26	0.02	0.02
Interpersonal Effects								
	Target Adolescent ↔/→ Best Friend				Best Friend ↔/→ Target Adolescent			
	<i>B</i>	<i>SE</i>	<i>β Min</i>	<i>β Max</i>	<i>B</i>	<i>SE</i>	<i>β Min</i>	<i>β Max</i>
Correlations Wave 1								
Depression ↔ Compliance	0.16	0.24	0.02	0.03	0.16	0.24	0.02	0.03
Depression ↔ Depression	15.95**	6.05	0.13	0.16				
Compliance ↔ Compliance	0.04	0.02	0.09	0.10				
Correlated Change Wave 2–6								
Depression ↔ Compliance	0.05	0.07	0.01	0.02	0.05	0.07	0.01	0.02
Depression ↔ Depression	5.04**	1.63	0.06	0.11				
Compliance ↔ Compliance	0.01	0.01	0.02	0.04				
Cross-Lagged Effects								
Depression → Depression 1 Friend	0.08**	0.02	0.07	0.08	0.08**	0.02	0.07	0.07
2 Friends	0.08**	0.02	0.06	0.08	0.08**	0.02	0.07	0.08
> 2 Friends	0.08**	0.02	0.08	0.10	-0.08	0.04	-0.07	-0.06
Compliance → Compliance	0.02	0.02	0.01	0.02	0.02	0.02	0.01	0.10
Depression → Compliances	0.00	0.00	0.01	0.02	0.00	0.00	0.01	0.35
Compliance → Depression	-0.06	0.23	-0.00	-0.00	-0.06	0.23	-0.00	-0.00

Note:  $\beta$  min/max indicate the range in  $\beta$  values over time and across friendship stability groups.  $\leftrightarrow$  = concurrent association;  $\rightarrow$  = temporal association. \* $p < .05$ . \*\* $p < .01$ .

Table 3 shows the results of the analyses with regard to problem solving. Problem solving of both adolescents and best friends was moderately stable over a 1-year period, but for best friends in the less stable dyads, no significant 2-year stability was established. No significant intraindividual effects were found, but two additional significant interpersonal effects were found. First, a significant interpersonal effect was found for problem solving. That is, higher use of problem solving by one of the interactional partners predicted higher scores on problem solving in the other interactional

partner concurrently and 1 year later. Second, higher depressive symptoms of one dyad member predicted higher use of problem solving of the other member over time. Multiple group analyses showed a significant difference between boys and girls ( $p < .05$ ) for this effect. That is, in the group of target adolescent boys, the more depressive symptoms one interactional partner showed, the more problem solving the other partner used 1 year later ( $b = 0.004$ ,  $SE = 0.002$ ,  $p = .03$ ,  $\beta = 0.04$ ). This effect was not significant for target adolescent girls ( $b = -0.001$ ,  $SE = 0.001$ ,  $p = .62$ ,  $\beta = -0.01$ ).

More in general, it was found that over time, target girls showed higher levels of problem solving than target boys,  $F(1, 322) = 6.64, p = .01, \eta^2 = .02$ .

Table 4 shows the results of the cross-lagged panel model for conflict engagement. Multigroup analyses showed that 1-year stability of conflict engagement was significantly higher in stable dyads, and for best friends in the least stable group, no significant 2-year stability was established. A number of interpersonal and intraindividual effects were found. First, for the target adolescents and for best friends in stable friendships, a positive intraindividual effect of depressive symptoms on conflict engagement was found. That is, higher levels of depressive symptoms were related to higher conflict engagement in the next year. For best friends who changed during the study, this effect was not found. Also, the intraindividual effect of conflict engagement on depressive symptoms was significant, indicating that the more conflict engagement adolescents showed, the higher their depressive symptoms 1 year later. With regard to interpersonal effects, higher conflict engagement by one of the interactional partners was concurrently and over time related to higher conflict engagement for the other partner. Although the effect of target adolescents' conflict engagement on best friend's depressive symptoms could not be constrained between the group of least stable dyads and the two more stable groups, no significant effect emerged in any of the groups.

Finally, the results for compliance (see Table 5) showed moderate 1-year stability of compliance for adolescents and best friends. With regard to 2-year stability, target adolescents showed moderate stability, but best friends who changed multiple times showed no significant 2-year stability. With regard to the cross-lagged effects, a significant intraindividual effect of depressive symptoms on one's own compliance was found. That is, showing more depressive symptoms was concurrently and over time related to showing higher compliance 1 year later. No additional significant interpersonal effects were found.<sup>1</sup>

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<sup>1</sup> To examine whether the results are specific for depressive symptoms or also apply to other forms of internalizing behavior, we ran the final models of the three conflict management styles again (models without multiple group analyses), with anxiety symptoms instead of depressive symptoms. Indeed, comparable results were obtained. That is, within individuals, higher anxiety was related to showing more conflict engagement and more compliance over time. Also, higher anxiety symptoms in one dyad partner predicted significantly higher anxiety symptoms in the other dyad partner over time. These results were also found for the models with depressive symptoms. In contrast to the models with depressive symptoms, the interpersonal effect of higher anxiety in one dyad member predicting higher problem solving of the other dyad member over time was not significant ( $p = .09$ ). So, in general, it seems that the results for anxiety and depressive symptoms are similar, although specific results may differ. More detailed results can be obtained by contacting the corresponding author.

## DISCUSSION

The current study demonstrated that both intraindividual (i.e., adolescents' behavior/feelings predicts their own future behavior/feelings) and interpersonal (i.e., friends' behavior/feelings predicts adolescents' behavior/feelings, and vice versa) effects play a role in the bidirectional relations between conflict management styles and depressive symptoms in adolescent friendships. Having more depressive symptoms was related to adolescents' own higher conflict engagement and higher compliance but was not related to the use of problem solving. Also, showing more conflict engagement was related to showing more depressive symptoms over time. With regard to interpersonal effects, as expected, more depressive symptoms and higher use of problem solving or conflict engagement by adolescents were related to respectively more depressive symptoms and higher use of problem solving or conflict engagement by their best friend 1 year later. Finally, only for boys, showing more depressive symptoms was related to higher problem solving by one's friend over time.

The current study contributed to the literature by showing that depressive symptoms and conflict management are related constructs in adolescents and that both individual and interpersonal processes contribute to this relation. With regard to intraindividual effects, our results are in line with previous studies on adolescent romantic relationships or children (Ha et al., 2012; Rinaldi & Heath, 2006; Vujeva & Furman, 2011), showing that individuals with more depressive symptoms showed more negative conflict management styles. The current study expanded these findings to adolescent friendships. Adolescents with more depressive symptoms may fear conflict more, because of difficulties with emotion expression (Davila, 2008), and therefore give in easily and comply with their friend (Ha et al., 2012). In addition, compared to adolescents with relatively low depressive symptoms, adolescents with relatively high depressive symptoms are more self-focused, show less empathic concern with others (Schreiter et al., 2013), and are more likely to use emotion regulation strategies that include an excessive focus on negative content of a relationship (Cole-Detke & Kobak, 1996). These characteristics may cause them to engage excessively in conflicts if they do arise.

Another intraindividual relation that was found concerned a bidirectional relation between more depressive symptoms and more conflict engagement. It is possible that empathy plays a role in this process, as previous research found that depressive individuals are more self-focused and show less empathy (Schreiter et al., 2013). In turn, low empathy is related to higher conflict engagement (De Wied et al., 2007). Further research should investigate the relation between conflict engagement, depression, and the possible role of empathy in these relations.

Finally, the current study found that within individuals, depressive symptoms were not related to (less) positive problem solving, whereas research in romantic relationships did find these links (Ha et al., 2012; Vujeva & Furman, 2011). However, compared to developing friendships, developing romantic relationships is a relatively new and stressful social task for adolescents (Nieder & Seiffge-Krenke, 2001). So it may be that adolescents with more depressive symptoms have more difficulties with applying social skills to romantic relationships but less so in friendships (especially when the best friend also tries to resolve a conflict with positive problem solving).

The results concerning interpersonal effects were in line with prospective studies showing support for depression contagion; that is, levels of depressive symptoms in adolescents and friends were positively related over time (e.g., Prinstein, 2007; Stevens & Prinstein, 2005; Van Zalk et al., 2010b). This contagion may take place because of maladaptive interactions that depressed adolescents may have (Coyne, 1976). Furthermore, corumination between depressive friends (including mutual encouragement to talk about problems, speculation about problems, and dwelling on negative affect) could be an explanation (Rose, 2002). Corumination reinforces negative thoughts and feelings in friends, which increases depressive symptoms. Of interest, in one of the models, a significant negative effect of best friend's depressive symptoms on target adolescent's depressive symptoms was found for the most unstable dyads. This finding fits into the theory by Coyne (1976), who stated that depressive symptoms lead to rejection by others, as this result concerned the group of dyads in which the best friend changed multiple times. Dissolution of the friendship or assigning less value to the friendship with a more depressed adolescent may consequently have relieved the target adolescents' depressive symptoms. However, as this effect was only just significant in one of the three models, caution regarding conclusions is in place.

With regard to the interpersonal effects of conflict engagement and problem solving of adolescents and best friends, it might be that friends mimic each other's behaviors to increase feelings of belongingness and closeness to each other (Prinstein et al., 2005). For compliance, no interpersonal effect between adolescents and best friends was found. Compliance may be a signal for the other adolescent that he or she has "won," giving the adolescent more power and allowing him or her to feel dominant (Chango et al., 2009). Consequently, it could be that showing compliance does not elicit compliance in one's friend but instead serves as a reinforcer for their friend to use self-focused conflict management, such as conflict engagement. Future research should examine these speculative interrelations between conflict management styles.

In addition, the current study showed that adolescent boys responded supportively to their friends' higher level of depressive symptoms by using more problem solving.

This finding supported and expanded the results of Ha and colleagues (2012), who found an interpersonal effect of girls' depressive symptoms on boys' problem solving in romantic relationships. Combining these results, it seems that boys in particular have a tendency to respond with more problem solving in response to higher depressive symptoms of a close friend, whereas girls do not. However, it could be that this effect was not found for girls, because in general girls already showed higher levels of problem solving over time than target boys.

Conversely, no interpersonal effects were found that related compliance or conflict engagement of one friend to depressive symptoms of the other friend over time. These results seem to contradict results of Chango and colleagues (2009), but results are difficult to compare, because in that study observational measures of conflict management were used and the relations were found only for adolescents with a preoccupied attachment style. Preoccupied adolescents are particularly sensitive to and overwhelmed or confused by intense interpersonal interaction, such as conflicts. Therefore, it would be interesting for future research to investigate the moderating effect of a preoccupied attachment style on the relation between conflict management style and depressive symptoms to see if similar results are found when using Kurdek's (1994) conceptualization of conflict management in a multiwave questionnaire study.

### Strengths and Limitations

An important strength of this study is the multi-informant longitudinal design. The study followed target adolescents over 6 years and thereby gave important insights in the directionality of effects between adolescents' and best friend's conflict management and depressive symptoms. Self-reports from both adolescents and their best friend were used, giving a unique insight in how friends mutually affect each other over time.

A number of limitations should also be considered. First, these results are not necessarily generalizable to clinically depressed adolescents, as the results came from a general population sample. Also, generalization to other ethnic groups should be done with caution, as the current sample consisted of Dutch adolescents. Second, although this study was longitudinal, no definite conclusions can be made with regard to causation. The cross-lagged path models that were used in this study indicate only temporal associations. Third, despite the multi-informant data, the current study used only self-report measures. Although self-report is a commonly used tool to measure depressive symptoms, it may not be the most suitable way to measure conflict management, because it measures behavior toward others. The perception of someone's behavior might influence one's own behavior and feelings more than one's (actual) self-reported behavior (Kandel, 1996). Therefore best friend's report of adolescents' conflict management can be used in future studies



to replicate these findings. Another option is to use a more unobtrusive assessment of conflict management, such as observations of a lab discussion of a dilemma or conflict between adolescents and best friends (e.g., Chango et al., 2009; see also Laursen et al., 2001). Fourth, selection effects could be present. Adolescents may have selected friends who showed similar levels of depressive symptoms and/or conflict management styles rather than or next to influencing each other on these variables (e.g., Van Zalk, Kerr, Branje, Stattin, & Meeus, 2010a). In the present study, multigroup analyses on friendship stability gave some indication of the relative importance of influence and selection effects. That is, significant interpersonal effects over time for stable dyads indicate mutual influence processes over time. But significant interpersonal effects for the two groups with changing best friends reflected both influence and selection processes, as at each time point these groups consisted of both old and new best friends. Relations over time between behavior of the adolescent and a “new” best friend can be interpreted as initial resemblance (correlations). Related to this point, it was found that in the groups of changing dyads the stability of conflict management and depressive symptoms of best friends was lower than in the nonchanging dyads in most instances, which may also have affected the intraindividual and interpersonal effects in these groups. To avoid this problem, future studies should use only stable dyads, or instead could focus more on deselection effects on depressive symptoms and conflict resolution in friends. A final limitation of the study is that the found relations between depressive symptoms and conflict management styles may not be solely attributed to characteristics that are unique for depression but may also be explained by factors that are common to both depressive symptoms and other internalizing problems such as anxiety symptoms. Adolescents’ depressive symptoms are strongly related to their anxiety symptoms (Axelson & Birmaher, 2001), and indeed additional models showed that depressive symptoms and anxiety symptoms are to a large extent comparably related to conflict management styles. However, it remains important not to lose sight of the specifics of depressive symptoms, as adolescence is the period specifically characterized by increasing rates of depressive symptoms (Cole et al., 2002), whereas anxiety disorders more often tend to have onsets in childhood, and different anxiety disorder symptoms tend to have different developmental patterns and specific correlates (Nelemans et al., 2014).

### Conclusion and Implications

In conclusion, this study found support for a reciprocal effects model of adolescents and their best friends with regard to depressive symptoms and conflict management styles. Although this study investigated the bidirectional links between depressive symptoms and conflict management, the results supported mostly effects of depressive symptoms on conflict

management and not effects from conflict management on depressive symptoms. Only for the intraindividual relation between one’s conflict engagement and one’s depressive symptoms, a bidirectional relations was found. However, despite the longitudinal design, this study cannot establish causality.

The current study emphasized the importance of including friends in examining depressive symptoms and conflict management in adolescents and suggested that depressive symptoms can have detrimental effects on the way adolescents deal with conflictual situations over time. The results may also have possible implications for the treatment of adolescents’ depressive symptoms. As found in this study, friends may have significant long-term influence on an adolescent’s depressive symptoms. Therefore, the present study encourages health professionals to continue to investigate interactions of adolescents with more depressive symptoms and their friends and try to break depressogenic patterns. In addition, practitioners should pay attention to the conflict management styles of adolescents with more depressive symptoms in order to improve their conflict management skills and help them avoid negative social interactions.

### FUNDING

Funding was provided by the Nederlandse Organisatie voor Wetenschappelijk Onderzoek (024.001.003,GB-MAGW 480-03-005,GB-MAGW 480-08-006) and Stichting Achmea Slachtoffer en Samenleving.

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