

Inter-parent Aggression as a Precursor to Disengagement Coping in Emerging Adulthood: The Buffering Role of Friendship Competence

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Abstract

Using multi-informant data drawn from a prospective study involving 184 youth, mother-perpetrated and father-perpetrated partner aggression during early adolescence (the age of 13) was examined as a predictor of five types of disengagement coping strategies in emerging adulthood (the age of 21): behavioral disengagement, mental disengagement, denial, substance use, and restraint. The ability to develop close friendships, or friendship competence, was examined as a moderator of these links. Results suggest that inter-parent aggression in early adolescence can predict reliance on disengagement coping 8 years later, but that friendship competence can buffer against the reliance on disengagement coping. Moreover, close friendship competence was not directly related to partner aggression by mothers or fathers, suggesting that friendship competence develops along an independent developmental track and thus may truly serve as a buffer for young adults with a history of exposure to inter-parent aggression.

Keywords: disengagement coping; inter-parent aggression; friendships

Introduction

Adverse events are inevitable over the life-span, and the acquisition and mastery of skills to cope with adversity is essential for positive adaptation and well-being. Not all coping strategies are equally effective for regulating emotional and behavioral responses to stressful stimuli (Carver, Scheier, & Weintraub, 1989; John & Gross, 2004), and the coping processes individuals use have been linked to the quality of one's relationships, psychological well-being, and physical health (Gross, 1998; Ravindran, Griffiths, Waddell, & Anisman, 1995; Steiner, Erickson, Hernandez, & Pavelski, 2002). Research examining factors that contribute to the development of coping is important for identifying and intervening with those who are at risk for coping in ways

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that lead to further stress and poor health outcomes. It has long been suggested that family climate affects coping styles (Shulman, Seiffge-Krenke, & Samet, 1987) and that the emotional climate that children experience daily is affected by marital relations of parents (Morris, Silk, Steinberg, Myers, & Robinson, 2007). Inter-parent aggression has been linked to a number of problematic behavioral and social outcomes among youth, and youth's coping strategies are often theorized to mediate and/or moderate these links (Downs, Capshew, & Rindels, 2006; Shelton & Harold, 2007). Yet, direct associations between inter-parent aggression and maladaptive coping strategies remain poorly understood, and more importantly, very little research has examined factors which might protect against the development of maladaptive coping among youth exposed to inter-parent aggression.

Does Exposure to Inter-parent Aggression Relate to Disengagement Coping?

Although the effectiveness of any coping strategy can be dependent upon the unique nature of a stressor, mentally and behaviorally disengaging from the stressful situation or denying and avoiding its existence is typically considered a dysfunctional or maladaptive form of coping because there is no attempt to ameliorate or eliminate the stressor (Carver et al., 1989). In essence, attempts to disengage from or avoid a problem denote a failure to cope, and these coping strategies have been associated with a wide range of psychological health problems and negative outcomes (Aldao & Nolen-Hoeksema, 2010; Carver et al., 1989; Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). Five different types of disengagement coping include (1) mental disengagement, such as attempting to ignore or distract from a stressor; (2) behavioral disengagement, such as giving up efforts to solve the problem; (3) denying a problem exists; (4) using drugs and alcohol to think about the problem less; and (5) consciously restraining oneself from taking action too quickly (Carver et al., 1989).

Notably, although many researchers average together different types of 'maladaptive' coping strategies, not all of these strategies appear to be consistently associated with negative health outcomes, particularly in situations that are beyond an individual's control. In particular, techniques used to mentally distract from or temporarily avoid stress (e.g., mental disengagement, restraint) have been less consistently associated with psychological maladjustment than giving up on, repressing, or denying stressful events, and at times appear to be adaptive forms of coping (Carver et al., 1993; Sandler, Tein, & West, 1994). Nonetheless, becoming dependent or reliant on any avoidant or disengagement strategies might lead individuals to maladaptively disengage from all problems, even problems within their control. Those who become reliant on avoiding or disengaging from their problems are thus failing to solve or ameliorate the stressor.

Exposure to inter-parent aggression is theorized to create a dependence on disengagement coping strategies well into adulthood (Crockenberg, Leerkes, & Lekka, 2007; Fosco, DeBoard, & Grych, 2007). According to the risky families model (Repetti, Taylor, & Seeman, 2002), exposure to aggression within the home can create deficits in emotionally processing and biologically responding to stressful events, and these deficits continue to affect psychological and physical health over the life course. When parents act aggressively toward one another, youth are placed within a vulnerable position in which they face a diverse set of strong negative reactions, for example, anger, fear, and sadness, with very little or no ability to stop

the hostility from occurring (DeBoard-Lucas & Grych, 2011; Fosco et al., 2007). Being continually exposed to conflict is thought to sensitize youth to stress, leading to heightened emotional arousal and high perceptions of threat during stressful situations (Repetti et al., 2002). Relatedly, exposure to inter-parent conflict has also been linked to sleeping problems (El-Sheikh & Kelly, 2011), possibly as a result of the physiological responses to the conflict, and sleep deficiencies may take a toll on the cognitive abilities needed to process and regulate emotions. The greater cognitive load brought on by stressful environments might lead to the reliance on disengagement coping strategies that are not very cognitively demanding (Matthews & Wells, 1996).

In addition, many youth desire and even directly attempt to intervene in their parent's arguments (Adamson & Thompson, 1998; DeBoard-Lucas & Grych, 2011; Goldblatt, 2003), and the lack of control over inter-parental conflict may lead to the employment of involuntary and automatic disengagement coping responses, which can be subconscious and thus out of youths' control (Compas et al., 2001; Rodrigues & Kitzmann, 2007). Feelings of exasperation and defeat resulting from repeated failed attempts to intervene might also condition youth to withdraw from or try to avoid parental conflict (Altshuler & Ruble, 1989; Fosco et al., 2007; Frydenberg, 2008), and these disengagement strategies might generalize to other stressful situations. Indeed, based on research conducted with undergraduate students, family conflict has been associated with significantly higher levels of cognitive avoidance (Michael, Torres, & Seemann, 2007), involuntary disengagement (emotional numbing, involuntary avoidance, cognitive interference, and inaction), and a combined score of three types of disengagement (i.e., avoidance, denial, and wishful thinking; Rodrigues & Kitzmann, 2007).

To date, significant gaps exist in the literature examining associations between inter-parent aggression and maladaptive coping. For example, the extant literature has tended to be based on small sample sizes and/or qualitative data (DeBoard-Lucas & Grych, 2011; Goldblatt, 2003; Michael et al., 2007), and youth are often recruited from specific populations such as those whose parents are receiving services at domestic violence shelters (e.g., DeBoard-Lucas & Grych, 2011). As such, the generalizability of the results to the general population is unknown. Moreover, the majority of research has focused on coping in childhood and adolescence (Adamson & Thompson, 1998; DeBoard-Lucas & Grych, 2011; Goldblatt, 2003; Shelton & Harold, 2007). However, if inter-parent aggression creates emotional and physiological vulnerabilities that increase youths' reliance on disengagement and avoidance coping strategies, then youth from high-conflict families will likely be at increased risk for maladaptive coping over the life course. The current study is the first we know of to utilize longitudinal data collected among a community-based sample to examine whether inter-parent aggression in early adolescence is a precursor to the development and reliance on disengagement coping strategies in adulthood.

Can Friendship Competence Buffer the Associations between Inter-parent Conflict and Disengagement Coping?

Developmental research and theory suggest that teens begin to depend less on their parents and receive more support from their peers as they mature, with friends gaining more influence than parents in certain domains (Bokhorst, Sumter, & Westenberg,

2010; Steinberg & Silverberg, 1986). Close friendships might begin to buffer against disengagement coping because supportive peers can help compensate for vulnerabilities and stresses that derive from negative family environments (Wasserstein & La Greca, 1996). Although we know of no research examining potential buffering effects of close friendship experiences on the link between inter-parent aggression in adolescence and disengagement coping strategies in early adulthood, close friendship support has been shown to moderate the negative effect of marital discord on behavior problems in childhood (Wasserstein & La Greca, 1996). Friendship quality has also been shown to buffer against a number of teen adjustment problems when broader peer acceptance is problematic (Waldrip, Malcolm, & Jensen-Campbell, 2008) and to buffer associations between low parent support and internalizing symptoms (Rodgers & Rose, 2002).

The buffering effect of close friendships against negative behavioral or emotional difficulties is theorized to occur because those who have social support are generally less affected by stressors. Research has shown that increased number of stressful life events predicts increased use of coping strategies (Sandler et al., 1994). For those exposed to high levels of inter-parent aggression, the coping strategies that increase during times of high stress would likely be the disengagement and avoidance strategies they have become accustomed to relying upon. However, neuroscientific work by Coan, Schafer, and Davidson (2006) demonstrates that the brain perceives stressors as less threatening in the presence of social support. Additionally, friendships are known to provide individuals with opportunities to solicit feedback, advice, and support in managing stress (House, 1981). Thus, any problematic situations that arise for individuals with close friendships would be perceived and experienced as less stressful, protecting against the need for increased reliance on disengagement or avoidance coping strategies.

Does Friendship Competence Matter More for Women than Men?

Girls exhibit a stronger need for affiliation, placing greater importance on interpersonal relationships than do boys (Cyranowski, Frank, Young, & Shear, 2000; Furman & Buhrmester, 1992; Rosenberg & Simmons, 1975), and female friendships are characterized by higher levels of self disclosure, attachment, and emotional support compared with male friendships (Buhrmester & Furman, 1987; Ma & Huebner, 2008; Maccoby, 1990). Moreover, after controlling for attachment to parents, peer attachment appears to be associated with life satisfaction among females but not males (Ma & Huebner, 2008). Given the importance females place on peer relationships, women may be more likely than men to reap the benefits of social support as a protective factor against perceived threat of stressors (Coan et al., 2006). Thus, close friendship competence might be a stronger buffer against reliance on disengagement coping for women than men.

Present Study and Hypotheses

We examined associations between inter-parental psychological aggression (i.e., psychological aggression of parents toward one another) in early adolescence (the age of 13) and reliance on avoidance and disengagement coping strategies in emerging adulthood (the age of 21). Firstly, a significant positive association was hypothesized between inter-parent conflict and adolescents' future reliance on avoidance and

disengagement coping strategies. Secondly, we hypothesized that close friendship competence would serve as a buffer against the development of avoidance and disengagement coping strategies such that early adolescent inter-parent psychological aggression would only predict higher levels of avoidance and disengagement coping among those who had difficulties establishing close friendships, that is, those low in close friendship competence. In contrast, the association between inter-parent psychological aggression and avoidance and disengagement coping was hypothesized to be non-significant among those who were highly competent at developing close friendships. Lastly, we hypothesized that close friendship competence would act as a significantly stronger buffer against disengagement coping for girls compared with boys.

Method

Participants

This report is drawn from a multi-year longitudinal investigation of development and functioning among 184 (53% female) adolescents. Adolescents were originally recruited around the age of 13 [age: $M = 13.79$, standard deviation (SD) = .70] from the seventh and eighth grades of a public middle school drawing from suburban and urban populations in the southeastern USA. The sample was racially/ethnically and socio-economically diverse: 107 adolescents (58%) identified themselves as Caucasian, 53 (29%) as African-American, 15 (8%) as of mixed race/ethnicity, and 9 (5%) as being from other minority groups. Adolescents' parents reported a median family income in the \$40 000–\$59 999 range. In emerging adulthood, participants were about 21 years old ($M = 21.66$, $SD = .96$). The full sample ($N = 184$) was invited to participate in the follow-up interview and 89.1% participated.

Procedure

Students were recruited via an initial mailing to all parents of seventh- and eighth-grade students. Follow-up contact efforts were made at school lunches. Adolescents who indicated that they were interested in the study were contacted by telephone. Of all students eligible for participation, 63% agreed to participate. At the first assessment (the age of 13), adolescents' parents were also invited to participate in the study. At each assessment, adolescents and their parents provided informed assent or consent. Research assistants explained to adolescents that their responses were confidential and their parents would not be informed of any of the answers they provided. Parents were also ensured that their responses were confidential. All data were protected by a Federal Certificate of Confidentiality issued by the US Department of Health and Human Services, which protects information from subpoena by federal, state, and local courts. Adolescents and parents were paid for their participation.

Measures

Inter-parent Psychological Aggression (The Age of 13). Participants' parents completed the psychological aggression subscale of the conflict tactics scale (CTS; Straus, 1990), an assessment of how often (1: never, 4: many times) each partner ever

perpetrated and/or received six psychologically aggressive acts during the relationship. Sample items include ‘Your partner insulted or swore at you’ and ‘Your partner threw, smashed, hit, or kicked something’. Data were available from mothers and fathers for 93 participants, from mothers only for 36 participants, and from fathers only for seven participants. To create inventory scores assessing the greatest extent to which psychological aggression occurred, we calculated the max scores across mother and father reports on each item assessing mother’s perpetration of violence and father’s perpetration of violence. Max item scores were then averaged and assigned a weight of 6 (adapted from Straus, 1988). Scores were reliable for both mothers’ psychological aggression (Cronbach’s $\alpha = .81$) and fathers’ psychological aggression (Cronbach’s $\alpha = .79$).

Close Friendship Competence (The Age of 21). Adolescents self-reported on their level of competence in close friendships using the friendship competence subscale of the Harter self-perception profile for adolescents (Harter, 1988). This measure includes five items asking teens to choose between two contrasting descriptors (e.g., ‘Some people are able to make really close friends, but, some people find it hard to make really close friends’). Teens then rate the extent to which their choice is sort of true or really true about themselves. Item responses were coded on a 4-point scale and summed, with higher scores indicating higher levels of self-rated close friendship competence. The friendship competence subscale scores showed good internal reliability (Cronbach’s $\alpha = .88$).

Coping Strategies (The Age of 21). Disengagement and avoidance coping strategies were assessed using the COPE (Carver et al., 1989), a theoretically driven measure of individual differences in preferred coping styles. The COPE assesses how often (1: not a lot, 4: a lot) participants usually engage in various coping strategies when faced with a stressful event, therefore assessing a general reliance on each strategy across stressful situations. Five COPE subscales measuring types of avoidance or disengagement coping were used in the current analyses. The denial subscale assessed individuals’ attempts to block out negative experiences, for example, ‘I refuse to believe that is has happened’ and ‘I say to myself “this isn’t real”’. The behavioral disengagement subscale measured individuals’ proclivity to stop trying to deal with a negative experience, such as ‘I admit to myself that I can’t deal with it, and quit trying’. The mental disengagement subscale assessed individuals’ efforts to distract themselves from difficult experiences, for example, ‘I turn to work or other substitute activities to take my mind off things’. The substance use subscale assessed the use of drugs and alcohol, for example, ‘I drink alcohol or take drugs in order to think about it less’. Lastly, the restraint subscale assessed the tendency to delay dealing with the problem or avoid acting too quickly, for example, ‘I hold off doing anything about it until the situation permits’. Each subscale was comprised of four items, and scores were calculated by taking the sum. The COPE has been used extensively in the literature and has generally been shown to be valid and reliable (Carver et al., 1989; Cook & Heppner, 1997; Phelps & Jarvis, 1994). Internal consistencies herein were adequate for denial ($\alpha = .77$), behavioral disengagement ($\alpha = .72$), and substance use ($\alpha = .95$), but low for mental disengagement ($\alpha = .47$) and restraint ($\alpha = .44$). Noteworthy, low α s are often found for short scales, particularly those that inventory somewhat incompatible activities (e.g., sleeping vs. going to the movies to mentally disengage).

Results

Missing Data

Participants who were missing data on inter-parent aggression (e.g., because their mothers and/or fathers did not have romantic partners or because a parent did not participate) lived in lower socioeconomic households than those with parental data, $t(179) = -5.64$, $M = 4.80$, $SD = 1.87$ vs. $M = 6.55$, $SD = 1.79$. There were no gender differences between those with missing parental data and those with parental data. In addition, *T*-tests and chi-square analyses revealed no significant differences in gender, family income, mothers' psychological aggression, or fathers' psychological aggression between those who did vs. did not participate at the age of 21. To handle missing data, all regression analyses were conducted in Mplus using full information maximum likelihood (FIML; Muthen & Muthen, 2010). FIML is well recognized as an effective method for analyzing longitudinal datasets with multiple patterns of missing data and has been demonstrated to provide less biased parameter estimates than other commonly used techniques, particularly when data are missing at random or can be explained by other variables in the model (e.g., income; Arbuckle, 1996; Enders, 2001; Little & Rubin, 1987; Raykov, 2005). FIML procedures allow for the use of all available data from each participant, and therefore we retained the full sample of $N = 184$ for primary analyses.

Descriptive Analyses

Means, standard deviations, and correlations for all variables are presented in Table 1. Compared with lower income families, mothers from higher income families were significantly more likely to perpetrate psychological aggression toward partners. There was no significant difference in the mean level of fathers' vs. mothers' psychological aggression. There was a strong correlation between father-perpetrated aggression and mother-perpetrated aggression, documenting bidirectional violence within relationships. Likely due to this high correlation, and the large number of predictor variables if mother and father aggression were examined within the same model, preliminary analyses revealed that it was not possible to distinguish unique associations between mother- vs. father-perpetrated aggression on the coping outcomes. Yet, despite the correlation between mother- and father-perpetrated aggressions, when the two were analyzed in separate models, different patterns of results emerged. Given the very little work examining both mother- and father-perpetrated aggression, we were hesitant to simply bury differing results by analyzing a combined score of parental aggression. We therefore examined mothers' and fathers' aggression in separate models.

Even though all of the coping strategies examined represent ways of avoiding or disengaging from the stressor, the correlations between the different strategies were not very high, particularly given that they share self-report method variance. The highest correlation was between denial and behavioral disengagement, suggesting that giving up trying to solve stressors and denying their existence were moderately related. Given the somewhat small correlations in addition to past research showing that not all disengagement strategies are equally associated with maladjustment (Sandler et al., 1994), each strategy was examined as a separate outcome.

Table 1. Descriptive Statistics and Correlations among Study Variables

	<i>r</i>								
	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Gender									
2. Family income	6.10 (1.96)	-.11							
3. Fathers' aggression toward partners (the age of 13)	12.90 (3.69)	-.07	.15						
4. Mothers' aggression toward partners (the age of 13)	12.95 (3.72)	-.04	.19*	.75***					
5. Close friendship competence (the age of 21)	16.99 (3.55)	.07	.15	.16	.12				
6. Mental disengagement (the age of 21)	5.52 (2.32)	.15	.11	.19*	.23*	-.01			
7. Behavioral disengagement (the age of 21)	2.12 (2.16)	-.12	-.01	.01	.10	-.21*	.32***		
8. Denial (the age of 21)	2.03 (2.38)	.00	-.14	.00	.13	-.04	.35***	.54***	
9. Substance use (the age of 21)	1.97 (2.93)	-.27***	.21**	.13	.26**	-.10	.13	.22**	.26**
10. Restraint (the age of 21)	5.38 (2.27)	.02	-.03	.02	.14	.07	.33***	.24**	.37***

Notes: Gender coded as male = 1, female = 2. Fathers'/mothers' psychological aggression was calculated using the max score across father/mother and partner reports. Coping behaviors and close friendship competence were calculated based on youth reports.
p* < .05, *p* < .01, ****p* < .001

Primary Analyses

A series of hierarchical regression analyses examined whether early adolescent mother and father psychological aggression emerged as precursors to reliance on disengagement coping in emerging adulthood and whether the perceived ability to establish close friendships buffered against this association. Interaction terms were calculated as the product of centered variables. All models controlled for gender and early adolescent family income.

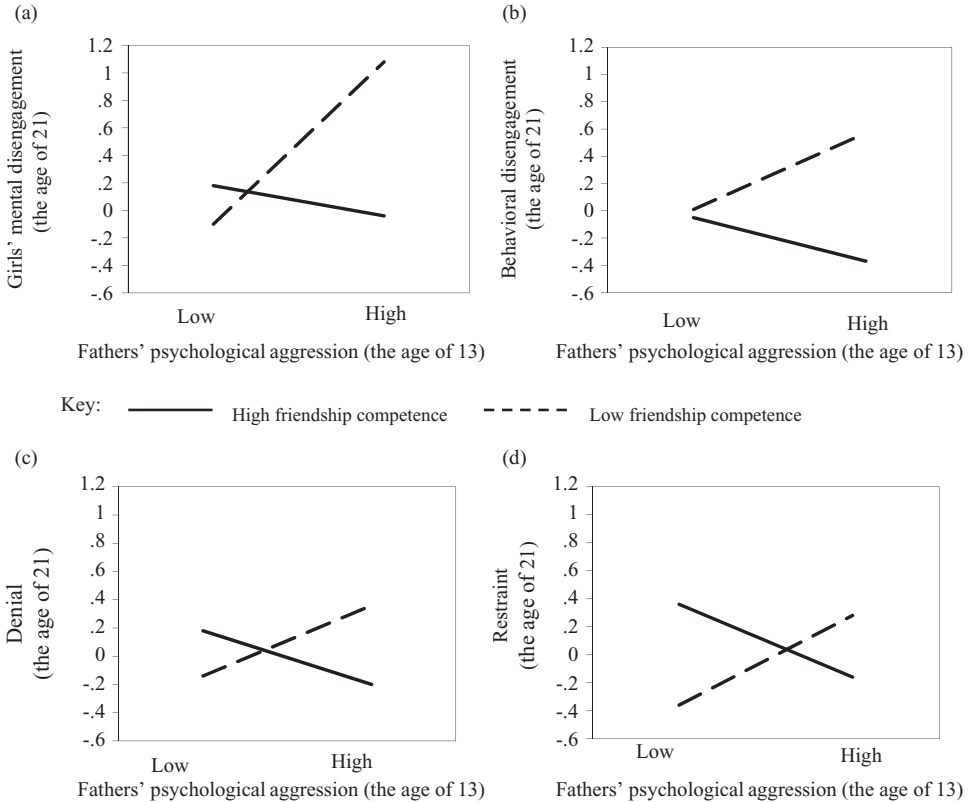
Father Psychological Aggression toward Partner. Table 2 summarizes results examining father aggression, close friendship competence, and the interaction of the two as predictors of each coping strategy. As shown in step 2, after controlling for gender and income, fathers' aggression toward partners in early adolescence significantly predicted higher levels of adolescents' later reliance on mental disengagement in emerging adulthood but was not a significant predictor of behavioral disengagement, denial, substance use, or restraint. Step 3 revealed that after accounting for demographic factors and paternal aggression, close friendship competence did not add to the prediction of mental disengagement, denial, substance use, or restraint. It did, however, add to the prediction of behavioral disengagement. The better youth felt at establishing close friendships, the less likely they were to use behavioral disengagement. Next, step 4 revealed a consistent pattern of significant hypothesized interactions between fathers' psychological aggression toward partners and close friendship competence on participants' reliance on four of the five coping strategies in emerging adulthood: mental disengagement, behavioral disengagement, denial, and restraint (i.e., all except for substance use). Results examining three-way interactions between gender, fathers' aggression, and close friendship competence revealed a significant interaction only for mental disengagement, $B = -.23$, $p = .18$. Follow-up analyses revealed that close friendship competence was a protective factor against mental disengagement for women, $B = -.35$, $p = .003$, and not men, $B = .13$, $p = .39$.

Figure 1a–d illustrate the significant interactions; all variables are presented in standardized form and low and high refer to values -1 *SD* and 1 *SD* from the mean. The slopes were tested using simple slope analyses (Aiken & West, 1991). Figure 1a illustrates the results for mental disengagement among women, showing that early adolescent exposure to fathers' psychological aggression toward partners was significantly related to greater reliance on mental disengagement, but only for women who were low in close friendship competence, $b = .58$, $t = 3.02$, $p = .003$, not for those who were high in close friendship competence, $b = -.13$, $t = .88$, $p = .38$. Next, Figure 1b shows that fathers' psychological aggression in early adolescence was only a significant precursor to increased behavioral disengagement coping for men and women low in close friendship competence, $b = .29$, $t = 2.07$, $p = .04$, but the association was non-significant for those high in close friendship competence, $b = -.17$, $t = -1.41$, $p = .16$. Similarly illustrated in Figure 1c, the association between fathers' psychological aggression in early adolescence and denial in emerging adulthood was positive and marginally significant for those low in close friendship competence, $b = .26$, $t = 1.85$, $p = .07$, but non-significant for those high in close friendship competence, $b = -.20$, $t = -1.56$, $p = .12$. Lastly, illustrated in Figure 1d, higher levels of fathers' psychological aggression significantly predicted higher restraint coping among those low in close friendship competence, $b = .34$, $t = 2.33$, $p = .02$, but predicted less restraint coping for those high in close friendship competence, $b = -.26$, $t = -1.99$, $p = .05$, suggesting

Table 2. Interactions between Fathers' Psychological Aggression toward Partners and Friendship Competence on Coping

	Mental disengagement				Behavioral disengagement				Denial				Substance use				Restrain				
	β entry	β final	ΔR^2	R^2	β entry	β final	ΔR^2	R^2	β entry	β final	ΔR^2	R^2	β entry	β final	ΔR^2	R^2	β entry	β final	ΔR^2	R^2	
Step 1				.04				.01				.02				.11*					.00
Gender	.17*	.21**			-.12	-.06			-.02	.03			-.25***	-.24***			.02	.06			
Family income	.13	.08			-.02	-.02			-.15	-.17*			.18*	.20**			-.03	-.09			
Step 2			.04*	.08			.00	.01		.00	.00	.02			.01	.12*					.00
Fathers' aggression (the age of 13)	.19*	.21*			-.01	.06			.01	.03			.09	.11			.03	.04			
Step 3			.00	.08			.05**	.06		.00	.00	.02			.02	.14**					.01
Friendship competence (the age of 21)	-.07	-.09			-.22**	-.25**			-.03	-.06			-.14	-.13			.07	.04			
Step 4			.03*	.11*			.04*	.10*		.05*	.07				.00	.14**					.07***
Fathers' aggression × friendship competence	-.18*	-.18*			-.22*	-.22*			-.22*	-.22*			.04	.04			-.29***	-.29**			

Notes: Gender coded as male = 1, female = 2. Fathers' psychological aggression was calculated using the max score across father and partner reports. Coping behaviors and close friendship competence were calculated based on youth reports.
* $p \leq .05$, ** $p < .01$.



Figures 1. (a–d) Interaction between Fathers' Psychological Aggression toward Partners (The Age of 13) and Close Friendship Competence (The Age of 21) on Coping (The Age of 21).

friendship competence is most protective for those who experienced the highest levels of abuse. Notably, although the interaction of paternal abuse and close friendship competence was significant for restraint and denial, the larger models within which the interaction was embedded (including demographic factors, and so on) were not.

Mother Psychological Aggression toward Partner. After controlling for gender and income, denial coping was not significantly associated with mothers' psychological aggression, friendship competence, or the interaction of the two, all $ps > .05$. Results examining mental disengagement, behavioral disengagement, substance use, and restraint are presented in Table 3. First, after controlling for gender and income, step 2 revealed that mothers' psychological aggression toward partners in early adolescence significantly predicted increased mental disengagement and substance use in emerging adulthood, but was not associated with behavioral disengagement or restraint. In step 3, after accounting for demographic factors and mothers' aggression, close friendship competence was significantly associated with lower levels of behavioral disengagement and substance use within emerging adulthood, but not mental disengagement or restraint. Step 4 revealed a significant interaction between mothers' psychological aggression and close friendship competence for only two of the five coping strategies

Table 3. Interactions between Mothers' Psychological Abuse toward Partners and Friendship Competence on Coping

	Mental disengagement				Behavioral disengagement				Substance use				Restraint			
	β entry	β final	ΔR^2	R^2	β entry	β final	ΔR^2	R^2	β entry	β final	ΔR^2	R^2	β entry	β final	ΔR^2	R^2
Step 1				.04				.01				.11*				.00
Gender	.17*	.20**			-.12	-.08			-.25***	-.23			.02	.04		
Family income	.13	.06			-.02	-.02			.18*	.17*			-.03	-.10		
Step 2			.05***	.09*			.01	.02			.04**	.15**			.02	.02
Mothers' aggression (the age of 13)	.23**	.24**			.08	.11			.21**	.24**			.15	.15		
Step 3			.01	.10*			.05**	.07			.02*	.17**			.01	.03
Friendship competence (the age of 21)	-.08	-.11			-.22**	-.25**			-.16*	-.15			.06	.01		
Step 4			.02*	.12*			.02	.09*			.01	.18**			.05*	.08
Mothers' aggression \times friendship competence	-.18*	-.18*			-.15	-.15			.06	.06			-.23*	-.23*		

Notes: Gender coded as male = 1, female = 2. Mothers' psychological aggression was calculated using the max score across mother and partner reports. Coping behaviors and close friendship competence were calculated based on youth reports.
* $p \leq .05$, ** $p < .01$.

examined: mental disengagement and restraint. As with fathers' psychological aggression, a significant three-way interaction emerged between gender, mothers' aggression, and close friendship competence for mental disengagement, $B = -.23, p = .013$, but not for any other types of disengagement coping. Follow-up analyses revealed that close friendship competence was a protective factor against mental disengagement for women, $B = -.34, p = .003$, and not men, $B = .11, p = .47$.

The two interactions that emerged between mothers' psychological aggression and close friendship competence on mental disengagement (among women) and restraint followed the same pattern as results for fathers' psychological aggression (see Figure 1a and d). Mothers' aggression predicted increased reliance on mental disengagement among women for those who were low in close friendship competence, $b = .63, t = 3.38, p = .001$, but not for those high in close friendship competence, $b = -.12, t = -.74, p = .56$. Lastly, mothers' psychological aggression significantly predicted restraint coping among men and women low in close friendship competence, $b = .40, t = 2.87, p = .005$, but not those high in close friendship competence, $b = -.11, t = -.78, p = .44$.

Discussion

The ability to cope effectively with life stressors is central to physical and mental well-being (Folkman, Lazarus, Gruen, & DeLongis, 1986; Frydenberg, 2008; Steiner et al., 2002). This study examined whether exposure to inter-parent aggression during early adolescence might foster the development and long-term reliance on typically maladaptive disengagement coping strategies. In addition, the ability to develop close friendships was examined as a moderator of long-term links between inter-parent aggression and disengagement coping to test the theory that close friendships might buffer against or reduce the need to rely on disengagement coping strategies.

Overall, results provide evidence in support of the hypothesis that inter-parent psychological aggression at the age of 13 can predict disengagement coping strategies 8 years later, in early adulthood. However, this pattern emerged primarily for participants who were low in close friendship competence. Specifically, there was a significant association between fathers' perpetration of psychological abuse toward partners and mental disengagement (for girls), behavioral disengagement, denial, and restraint coping among participants who felt incompetent at developing close friendships in emerging adulthood. In addition, mothers' psychological abuse toward partners was associated with mental disengagement (for girls) and restraint coping among those low in close friendship competence. Although the current analysis did not examine why inter-parent aggression predicted future coping styles, results are in line with theories positing that inter-parent aggression teaches youth to rely long term on the disengagement or avoidant coping strategies they likely employed to cope with inter-parent aggression (Fosco et al., 2007). In addition, in accordance with the risky families model (Repetti et al., 2002), witnessing inter-parent violence might have created vulnerabilities in youths' ability to process and regulate emotions, increasing their likelihood of experiencing high levels of stress in taxing or difficult situations. The practice with avoidance or disengagement coping combined with high perceived stress might leave those who experience inter-parent conflict with a sense of helplessness, feeling that there is no way to intervene or that stressors are best 'solved' by avoiding or disengaging from them.

However, with only a few exceptions, neither fathers' nor mothers' aggression toward their partners significantly predicted reliance on disengagement coping among participants who felt competent at developing close friendships. The findings extend upon past work suggesting a concurrent buffering role of close friendships against the behavioral consequences of marital discord among children (Wasserstein & La Greca, 1996). Findings are also in line with research showing that just the mere perception of social support can reduce or buffer against the adverse impacts of stress (Cohen & Wills, 1985; House, 1981), and neuroscientific research showing that the brain evaluates situations as less stressful in the presence of social support (Coan et al., 2006). For those who felt competent at developing close friendships, even the most stressful situations might have felt less threatening than for those without close friendships, thus decreasing their need to disengage from problematic situations. Notably, close friendship competence was not directly related to fathers' or mothers' aggression toward partners, suggesting that friendship competence develops along an independent developmental track and thus may truly serve a buffering role for young adults with a history of exposure to parental aggression.

Close friendship competence did not buffer against associations between inter-parent aggression and only one type of coping—using substances to avoid the stressor. Mothers' abuse toward partners predicted greater substance use regardless of close friendship competence, which might in part be explained by the fact that people tend to use substances with friends (Urberg, Degirmencioglu, & Pilgrim, 1997). The only other exceptions where friendship competence did not moderate significant associations between inter-parent aggression and coping were the links between mental disengagement and mothers' and fathers' aggression specifically among men. Close friendship competence did significantly protect against reliance on mental disengagement for women, in line with our hypothesis that close friendships will be more protective for women because females seem to place greater importance on interpersonal relationships than do males (Cyranski et al., 2000; Furman & Buhrmester, 1992; Rosenberg & Simmons, 1975). No other significant gender differences emerged, however, suggesting that for the most part both men and women benefited from close friendships.

Moreover, although the disengagement forms of coping examined herein are theoretically related, they were only modestly inter-correlated. Denial and behavioral disengagement types of coping were most strongly associated and have been more consistently linked to maladjustment compared with mental disengagement and restraint (e.g., Carver et al., 1993; Sandler et al., 1994), suggesting that they might be tapping into a similar 'maladaptive' coping construct. Interestingly, when close friendship competence was low, partner aggression by fathers, but not mothers, emerged as a significant predictor of denial and behavioral disengagement. Our results suggest that future research is needed to determine whether there is something unique about witnessing fathers' aggression that is associated with not accepting or completely giving up on stressful situations, in addition to simply avoiding it for the time being (i.e., mentally disengagement) or until something can be done about it (i.e., restraint). Encouragingly, results revealed that close friendship competence buffered against significant associations between both mother and father perpetrated aggression and reliance on multiple forms of disengagement or avoidant coping, including mental disengagement (for girls), restraint, behavioral disengagement, and denial.

A few limitations warrant attention in future research. Firstly, longitudinal correlational data are sufficient to disconfirm causal hypotheses but not to confirm them.

Youth who are exposed to inter-parent conflict might also experience other negative events that could account for the demonstrated associations between inter-parent conflict and coping. Secondly, we examined whether current friendship competence protected against reliance on disengagement coping because those who feel competent at developing friendships in adolescence might not feel competent in adulthood. However, examining concurrent associations prevented us from testing whether low close friendship competence predicted disengagement coping or vice versa. Thirdly, although inter-parent aggression was assessed directly by parents, the high correlation between mothers' and fathers' aggression prevented us from examining unique effects of one parent's aggression after controlling for the other parent's aggression, and whether aggression by mothers vs. fathers was a *stronger* predictor of different disengagement strategies. Relatedly, analyzing mothers' and fathers' aggression separately might have inflated a type 1 error, leading us to find that the different patterns of results for mother vs. father aggression were significant when they were really due to chance. Fourth, coping strategies were assessed using only self-report data, which might be biased because individuals want their interviewer to have a favorable impression of their ability to cope (i.e., the social desirability effect), or because individuals might hold biased impressions of their coping competencies (Compas et al., 2001). Lastly, the current study identified close friendships as a potential buffer against the associations between inter-parent conflict and coping, but future research is needed to identify why.

Despite these limitations, this study contributes to and expands upon past literature in a variety of ways. To our knowledge, this is the first study to demonstrate that early experiences within the family and peer contexts interact to predict coping in emerging adulthood. Much of existing literature has focused mainly on coping in early developmental periods (Adamson & Thompson, 1998; DeBoard-Lucas & Grych, 2011; Gullone, Hughes, King, & Tonge, 2010). In addition, this study is based on prospective data from a sample of adolescents recruited from a community sample. Because parent conflict tends to be reciprocal (Follingstad & Edmundson, 2010), this study is based on psychological aggression perpetrated by and toward participants' mothers and fathers. Fathers are often overlooked in studies of the effects of marital aggression on childhood development (El-Sheikh, Cummings, Kouros, Elmore-Staton, & Buckhalt, 2008), but our results are based on both father and mother reports of parent conflict.

In sum, the findings suggest that perceived competence in the ability to develop close friendships might buffer against the long-term associations between inter-parent aggression and a general reliance on a variety of avoidant and disengagement coping strategies. If research continues to delineate a buffering role of close friendships, intervention efforts aimed at youth who experience inter-parental aggression might benefit from a focus on inter-personal skills and other personal resources, which might instill greater competence in developing healthy peer relationships.

References

- Adamson, J. L., & Thompson, R. A. (1998). Coping with interparental verbal conflict by children exposed to spouse abuse and children from nonviolent homes. *Journal of Family Violence, 13*, 213–232.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, London: Sage.
- Aldao, A., & Nolen-Hoeksema, S. (2010). Specificity of cognitive emotional regulation strategies: A transdiagnostic examination. *Behavioral Research and Therapy, 48*, 217–237.

- Altshuler, J. L., & Ruble, D. N. (1989). Developmental changes in children's awareness of strategies for coping with uncontrollable stress. *Child Development, 60*, 1337–1349.
- Arbuckle, J. L. (1996). Full information estimation in the presence of missing data. In G. A. Marcoulides, & R. E. Schumaker (Eds.), *Advanced structural equation modeling: Issues and techniques* (pp. 243–277). Mahwah, NJ: Erlbaum.
- Bokhorst, C., Sumter, S., & Westenberg, P. (2010). Social support from parents, friends, classmates, and teachers in children and adolescents aged 9 to 18 years: Who is perceived as most supportive? *Social Development, 19*, 417–426.
- Buhrmester, E., & Furman, W. (1987). The development of companionship and intimacy. *Child Development, 58*, 1101–1113.
- Carver, C. C., Pozo, C., Harris, S. D., Noriega, V., Scheier, M. F., Robinson, D. S., et al. (1993). How coping mediates the effect of optimism on distress: A study of women with early stage breast cancer. *Journal of Personality and Social Psychology, 65*, 375–390.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267–283.
- Coan, J., Schafer, H. S., & Davidson, R. J. (2006). Lending a hand: Social regulation of the neural response to threat. *Psychological Science, 17*, 1–8.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310–357.
- Compas, B., Connor-Smith, J., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*, 87–127.
- Cook, S. W., & Heppner, P. P. (1997). A psychometric study of three coping measures. *Educational and Psychological Measurement, 57*, 906–923.
- Crockenberg, S., Leerkes, E., & Lekka, S. (2007). Pathways from marital aggression to infant emotion regulation: The development of withdrawal in infancy. *Infant Behavior and Development, 30*, 97–113.
- Cyranowski, J. M., Frank, E., Young, E., & Shear, M. K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression: A theoretical model. *Archives of General Psychiatry, 57*, 21–27.
- DeBoard-Lucas, R. L., & Grych, J. H. (2011). Children's perceptions of intimate partner violence: Causes, consequences, and coping. *Journal of Family Violence, 26*, 343–354.
- Downs, W. R., Capshew, T., & Rindels, B. (2006). Relationships between adult women's mental health problems and their childhood experiences of parental violence and psychological aggression. *Journal of Family Violence, 21*, 439–447.
- El-Sheikh, M., Cummings, E. M., Kouros, C. D., Elmore-Staton, L., & Buckhalt, J. (2008). Marital psychological and physical aggression and children's mental and physical health: Direct, mediated, and moderated effects. *Journal of Consulting and Clinical Psychology, 76*, 138–148.
- El-Sheikh, M., & Kelly, R. (2011). Sleep in children: Links with marital conflict and child development. In M. Sheikh (Ed.), *Sleep and development: Familial and socio-cultural considerations* (pp. 3–28). New York: Oxford University Press.
- Enders, C. K. (2001). The performance of the full information maximum likelihood estimator in multiple regression models with missing data. *Educational and Psychological Measurement, 61*, 713–740.
- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology, 50*, 571–579.
- Follingstad, D. R., & Edmundson, M. (2010). Is psychological abuse reciprocal in intimate relationships? Data from a national sample of American adults. *Journal of Family Violence, 25*, 495–508.
- Fosco, G. M., DeBoard, R. L., & Grych, J. H. (2007). Making sense of family violence: Implications of children's appraisals of interparental aggression for their short- and long-term functioning. *European Psychologist, 12*, 6–16.
- Frydenberg, E. (2008). *Adolescent coping: Advances in theory, practice, and research*. New York: Routledge.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63*, 103–115.

- Goldblatt, H. (2003). Strategies of coping among adolescents experiencing inter-parental violence. *Journal of Interpersonal Violence, 18*, 532–553.
- Gross, J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*, 271–299.
- Gullone, E., Hughes, E. K., King, N. J., & Tonge, B. (2010). The normative development of emotion regulation strategy use in children and adolescents: A 2-year follow-up study. *Journal of Child Psychology and Psychiatry, 51*, 567–574.
- Harter, S. (1988). *Manual for the self-perception profile for adolescents*. Denver, CO: Colorado: University of Denver.
- House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley Publishing Company.
- John, O., & Gross, J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality, 72*, 1301–1334.
- Little, R. J. A., & Rubin, D. B. (1987). *Statistical analysis with missing data*. New York: John Wiley & Sons, Inc.
- Ma, C. Q., & Huebner, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools, 45*, 177–190.
- Maccoby, E. E. (1990). Gender and relationships: A developmental account. *The American Psychologist, 45*, 513–520.
- Matthews, G., & Wells, A. (1996). Attentional processes, dysfunctional coping, and clinical intervention. In M. Zeidner, & N. S. Endler (Eds.), *Handbook of coping: Theory, research, applications* (pp. 573–602). New York: Wiley.
- Michael, K., Torres, A., & Seemann, E. (2007). Adolescents' health habits, coping styles, and self-concept are predicted by exposure to interparental conflict. *Journal of Divorce & Remarriage, 48*, 155–174.
- Morris, A., Silk, J., Steinberg, L., Myers, S., & Robinson, L. (2007). The role of the family context in the development of children's emotion regulation. *Social Development, 16*, 361–388.
- Muthen, B., & Muthen, L. (2010). *Mplus user's guide* (6th ed.). Los Angeles, CA: Muthen & Muthen.
- Phelps, S. B., & Jarvis, P. A. (1994). Coping in adolescence: Empirical evidence for a theoretically based approach in assessing coping. *Journal of Youth and Adolescence, 23*, 359–371.
- Ravindran, A. R., Griffiths, J., Waddell, J., & Anisman, H. (1995). Stressful life events and coping styles in relation to dysthymia and major depressive disorder: Variations associated with alleviation of symptoms following pharmacotherapy. *Progress in Neuro-Psychopharmacology & Biological Psychiatry, 19*, 637–653.
- Raykov, T. (2005). Analysis of longitudinal studies with missing data using covariance structure modeling with full-information maximum likelihood. *Structural Equation Modeling: A Multidisciplinary Journal, 12*, 493–505.
- Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin, 128*, 330–366.
- Rodgers, K. B., & Rose, H. A. (2002). Risk and resiliency factors among adolescents who experience marital transitions. *Journal of Marriage and Family, 64*, 1024–1037.
- Rodrigues, L. N., & Kitzmann, K. M. (2007). Coping as a mediator between interpersonal conflict and adolescents' romantic attachment. *Journal of Social and Personal Relationships, 24*, 423–439.
- Rosenberg, F. R., & Simmons, R. G. (1975). Sex differences in the self-concept during adolescence. *Sex Roles, 1*, 147–160.
- Sandler, I. N., Tein, J., & West, S. G. (1994). Coping, stress, and psychological symptoms of children of divorce: A cross-sectional and longitudinal study. *Child Development, 65*, 1744–1763.
- Shelton, K. H., & Harold, G. T. (2007). Marital conflict and children's adjustment: The mediating and moderating role of children's coping strategies. *Social Development, 16*, 497–512.
- Shulman, S., Seiffge-Krenke, I., & Samet, N. (1987). Adolescent coping style as a function of perceived family climate. *Journal of Adolescent Research, 2*, 367–381.
- Steinberg, L., & Silverberg, S. (1986). The vicissitudes of autonomy in early adolescence. *Child Development, 57*, 841–851.

- Steiner, H., Erickson, S. J., Hernandez, N. L., & Pavelski, R. (2002). Coping styles as correlates of health in high school students. *Psychiatry and Child Development, 30*, 326–335.
- Straus, M. A. (1988). *Measuring psychological and physical abuse of children with the conflict tactics scale*. Family Research Lab, New Hampshire University, Durham (ERIC Document Reproduction Service No. ED 297 028).
- Straus, M. A. (1990). *The Conflict Tactics Scales and its critics: An evaluation of new data on validity and reliability. Physical violence in American families: Risk factors and adaptations to violence in 8145 families*. New Brunswick, NJ: Transaction Books.
- Urberg, K. A., Degirmencioglu, S. M., & Pilgrim, C. (1997). Close friend and group influence on adolescent cigarette smoking and alcohol use. *Developmental Psychology, 33*, 834–844.
- Waldrip, A., Malcolm, K., & Jensen-Campbell, L. (2008). With a little help from your friends: The importance of high-quality friendships on early adolescent adjustment. *Social Development, 17*, 832–852.
- Wasserstein, S., & La Greca, A. (1996). Can peer support buffer against behavioral consequences of parental discord? *Journal of Clinical Child Psychology, 25*, 177–182.

Acknowledgments

This study and its write-up were supported by grants from the National Institute of Child Health and Human Development and the National Institute of Mental Health (9R01 HD058305-11A1 & R01-MH58066).