

Earlier marital conflict and later adolescents' delinquency and aggression based on personality types: A longitudinal study

## **Bachelor Thesis**

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### **Abstract**

This study examined the moderating role of personality types on the association between earlier marital conflict and later adolescent aggression and delinquency. Five years of longitudinal data of 310 Dutch middle-school adolescents ( $M_{age}=13.22$ ) were collected from the Conflict and Management of Relationship study (CONAMORE). Adolescents completed questionnaires about aggression, delinquency and personality, mothers about conflicts with their partners. The association was tested using a multiple regression. Gender was a control variable. Results show that personality has a moderating effect on the association. Under-controlled adolescents show more delinquency than over-controllers and resilient after being exposed to marital conflict, whilst over-controlled adolescents show more aggression than under-controllers and resilient. Although these results are preliminary, it may be that some adolescents are more vulnerable for marital conflict than others. A practical implication of this study is to start an intervention programme for parents to minimize their marital conflicts.

### **Introduction**

Marital conflict is seen as a major predictor for adolescent externalizing behaviour, even when parents are not involving the adolescent in their fight (Bowen, 1966; Cui, Donnellan, & Conger, 2007; Cummings, Goeke-Morey, & Graham, 2002; Davies & Cummings, 1994; Cummings, Goeke-Morey, & Papp, 2004; Grych & Fincham, 1990). Marital conflict is a broad concept. Two commonly used terms to describe marital conflict are overt and covert conflict style (Grych & Fincham, 1990). Overt conflict style consists of externalizing behaviour, such as verbal expression and violence, whilst covert conflict style is defined as hidden aggression and anger (Buehler & Gerard 2002; Krishnakumar & Buehler, 2000). When parents adopt an overt conflict style, more ineffective parenting is expected than when they adopt a covert conflict style, especially when parents use harsh punishment or when they lack acceptance of their child (Buehler & Gerard 2002; Grych & Fincham, 1990; Krishnakumar & Buehler, 2000). When parents frequently are aggressive during their marital conflicts, or are using a destructive conflict style, adolescents showed more aggression towards other adolescents and delinquency in general. More frequent marital conflict is also associated with higher levels of externalizing behaviour in adolescents (Grant, Compas, Thurm, McMahon, & Gipson, 2004; Kim, Hetherington, & Reiss, 1999; Tschann et al., 2009).

Marital conflict shows negative effects in family functioning. For example, parents may show little support to their offspring when they are fighting (Krishnakumar & Buehler, 2000). However, not all adolescents are equally affected by marital conflict. Some

adolescents show more symptoms of externalizing problem behaviour when parents are involved in marital conflict than others. Although research on protective and risk factors on this relation has been growing, little is known about how personality is related to marital conflict (Cummings and Davies, 2002). This is remarkable, since adolescents with different personality characteristics may perceive conflict different than others.

Family systems theory claims that a family contains several subsystems, which are constantly interacting with each other. This suggests that parental behaviours can be either protective, as risk factors (Bowen, 1966; Minuchin, 1985). For example, when alliances in the family are interrupted by marital conflict, there may be more ineffective parenting and less autonomy support towards the child (Kitzmann, 2000). In addition, harsh discipline, less parental acceptance and less parental attachment behaviour can be the result of marital conflict, which has shown to be a risk factor on the development of the offspring (Akse, Hale III, Engels, Raaijmakers, & Meeus, 2004; Krishnakumar & Buehler, 2000). Poorly solved marital conflicts and child-related topics in conflicts by parents are also predictors of child maladjustment (Fincham, Grych & Osborne, 1994).

Several theories are adapted to explain why marital conflict may lead to adolescent delinquency and aggression (Cui et al., 2007; Cummings et al., 2004). First, *exposure hypothesis* claims that exposure to conflict stimulates aggression and delinquency (Cummings et al., 2004; Feldman, Masalha, & Derdikman-Eiron, 2010). This hypothesis is based on social-cognitive learning theory, in which is stated the adolescent will copy the parental behaviour (Bandura, 1977). Both fathers as mothers' expressions to conflict are founded to have an effect on the adolescent aggressive behaviour (Cummings et al., 2004). A second commonly used theory to explain is *coercion theory* by Patterson (1982). This theory says when parents and child are in interaction, coercive behaviour such as hostility and nagging grow. This behaviour has effects on parenting in general (Kim et al., 1999).

Adolescents with vulnerable personality types may be experiencing more maladjustment when exposed to parental dysfunction than adolescents with non-vulnerable personality types (O'Connor & Dvorak, 2001). Three personality types were derived from Block and Block's (1980) two personality traits, i.e. ego-resilient and ego-control. Later studies suggested three personality types based on the personality theory from Block and Block (1980), i.e. resilient, under-controlled and over-controlled (Asendorpf, Borke, Ostendorf, & van Aken, 2001; Caspi, 1998). Ego-control refers to the degree in emotional and motivational impulse control, whereas ego-resiliency is the environmental adaption. Resilient adolescents show high levels of ego-resiliency, so they are considered to adjust well on their

changing environments. Over-controllers show little ego-resiliency and high levels of ego-control, resulting in more introversion and internalizing behaviour. In contrast to over-controllers, under-controllers show low levels of both ego-resiliency as ego-control, which mostly result in lack of impulse control and more oppositional behaviour (Asendorpf et al., 2001; Caspi, 1998; Klimstra, Hale III, Raaijmakers, Branje, & Meeus, 2010; Meeus, Van de Schoot, Klimsta, & Branje, 2011; Van Leeuwen, De Fruyt, & Mervielde, 2004). These three personality types can be derived from the Big Five personality dimensions, but a person can only be one of three personality types instead of having a combination of the personality types (Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996). Resilients score high on all the Big Five dimensions, over-controllers scored lower than average on Extraversion and Neuroticism and under-controllers scored low on Conscientiousness and Agreeableness (Klimstra et al., 2010).

Finally, prior research shows gender differences in externalizing behaviour: In general, boys show more externalizing behaviour than girls (e.g. Block, 1983; Crick & Grotpeter, 1995). Research shows few gender differences concerning the impact of marital conflict, but research in this field is rare. There are indications that boys might react to marital conflict with more externalizing behaviour whilst girls react more with internalizing behaviour (Cummings & Davies, 2002; Davies & Lindsay, 2001). Further, boys may be less vulnerable for those family risk factors in adolescence than girls (Davies & Windle, 1997), possibly because girls show a greater amount of empathy than boys (Brody, 1996).

### **Current study**

In the current study, a person-centred approach is chosen to formulate several hypotheses (Mervielde & Asendorpf, 2000). First, it is expected that there is an overall positive relationship between marital conflict and both adolescent aggression and delinquency. Second, adolescent under-controllers are expected to show more aggression and delinquency behaviour than over-controllers and resilient adolescents when exposed to marital conflict earlier in adolescence, but over-controllers are expected to show more externalizing behaviour than resilients.

## **Method**

### **Participants**

Participants came from five waves of the CONflict And Management Of Relationships (CONAMORE) longitudinal study. In this longitudinal study participated 1329 Dutch adolescents, of which 637 were boys (48.5%) and 676 girls (51.5%). The study examines adolescents' relationships with their parents, their peers and the adolescents'

emotional states (Meeus et al. 2002). Adolescents came from twelve high schools in the surroundings of the city of Utrecht.

For the present study, five waves of data-analysis were taken into account. This included 310 participants, a subsample called the family sample. All participants of the CONAMORE study were asked to also participate in the family study, which included home-visits. Of the invited families, 491 decided to participate in the family study. However, 90 families did not fit the requirements of being a two-parent family, so they were excluded. Finally, due to financial reasons, 327 families contributed in the family sample. In this study, data from 310 participants was available. In this study participated 158 (50.9%) girls and 152 (49.1%) boys. Age differed from age 11 to 15, with a mean age of 13.22.

### **Procedure**

Before the data collection started, students as well as their parents received a letter with information on the study. Less than 1% decided not to participate in the study. All participants signed the written informed consent form. Interviewers from the research team visited the school and participants filled out the questionnaires after school hours. There were both verbal and written instructions given by interviewers. Anonymity of the participants was warranted. Participants received monetary compensations after completing the questionnaires.

### **Measures**

**Marital conflicts.** Marital conflict was measured in frequency in the second wave of the CONAMORE study. Mothers completed The Interpersonal Conflict Questionnaire (Laursen, 1993). This questionnaire consists of 16 items with events that were rated on a 5-point Likert scale with answers ranging from never (1) to very often (5). Mothers rated how often they had conflicts about a specific topic with their partner during the past week. Examples of topics were: Money issues, substance use and work-related items. Cronbach's alpha was .87.

**Personality.** The personality of the adolescents was annually measured with a shortened Dutch version of the Quick Big Five Questionnaire by Goldberg (1992; Gerris et al., 1998). This questionnaire consists of 30 items to examine the five personality dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience. Adolescents rated their personality traits on a 7-point Likert scale, ranging from totally untrue (1) to absolutely true (7). Cronbach's alpha ranged from .76 to .88 over the five waves. Also internal consistencies were high with alphas of .70 for Extraversion, .84 for Agreeableness, .90 for Conscientiousness, .84 for Neuroticism and .85 for Openness for Experience (Meeus et al. 2002). As mentioned in the introduction, Block & Block (1980) developed an

instrument to measure personality type (i.e. over-controllers, under-controllers and resilient). Klimstra and colleagues (2010) scored the Big Five in the CONAMORE study into the three personality types. Dummy variables were used for encoding personality types. Two dummies derived: Over-controllers and Under-controllers. In the Over-controllers dummy variable, over-controllers were coded one and under-controllers and resilient zero. In the Under-controllers dummy, under-controllers were coded one and over-controllers and resilient zero.

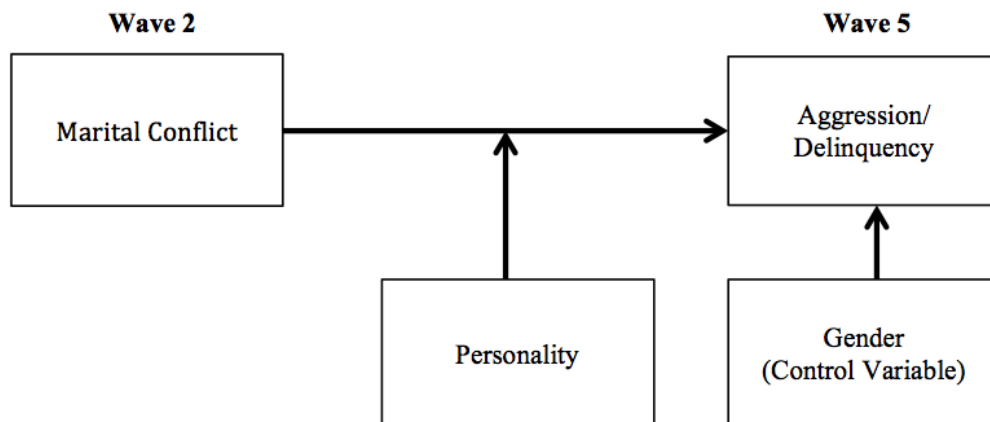
**Aggression.** Total aggression was measured by Aggression Scales based on research from Björkqvist, Lagerspetz, & Österman (1992). Adolescents were asked how they react when being angry with someone. They had to answer 23 items on a 4-point Likert scale ranging from never (1) to very often (4). Items included: Scolding, forgetting/ignoring the situation, using physical violence and taking revenge on the other person. Cronbach's alpha was .78.

**Delinquency.** Delinquency was measured using 16 items from a test developed by Baerveldt, Rossen and Vermande (2003). Adolescents were asked whether and how often they showed one of each type of delinquent behaviour in the past twelve months. Examples of behaviour were: Stole a bicycle, owned a weapon, shoplifting and using soft and/or hard drugs. Answers were given on a 4-point Likert scale ranging from never (1), once (2), two-three times (3) and four or more times (4). Cronbach's alpha was .83.

**Gender.** Gender was asked during the first wave. The coding was done using a zero/one-coding scheme, where zero was for boys and one for girls.

### **Data analysis**

In order to test our hypotheses, multiple regression analyses were performed using IBM SPSS Statistics version 22.0. Two basic models were tested, one with the dependent variable aggression and one with the dependent variable delinquency. The independent variables were marital conflict, personality and gender as a control variable. First, the relationship between the covariate gender and the dependent variable was measured. The dependent variable differs between the models with aggression and delinquency. Second, marital conflict was added. The third step was to add personality in this model. Last, interaction effects between marital conflict and personality types were added (see Figure 1).



**Figure 1.** This model presents the relationship between marital conflict and adolescent aggression and delinquency moderated by personality type.

## Results

### Descriptive statistics

In this study participated 105 over-controllers (33.2%), 68 under-controllers (21.5%) and 143 resilient (45.3%). Descriptive tests were conducted over the variables aggression ( $M = 1.56$ ,  $SD = 0.25$ ), delinquency ( $M = 1.13$ ,  $SD = 0.26$ ) and marital conflict ( $M = 1.61$ ,  $SD = 0.47$ ).

### Marital conflict and later adolescent aggression

A multiple regression analysis was conducted to analyse the relation between marital conflict and later adolescent aggression, moderated by personality type (see Table 2). First, gender was taken into account in the model (1a). A significant relationship was found ( $\beta = -.24$ ,  $t = -4.28$ ,  $p < .001$ ). Girls showed less aggression in comparison with boys. In the second step, marital conflict was added (model 1b). A significant relationship was found: More marital conflict led to more later adolescent aggression ( $\beta = .02$ ,  $t = 0.75$ ,  $p = .041$ ). In the third model (1c) adolescent personality did not significant effect on adolescent aggression. The fourth model (1d) tested whether there was an interaction effect between personality and marital conflict on later adolescent aggression. There was a significant interaction effect found between personality type and marital conflict ( $\beta = .55$ ,  $t = 2.54$ ,  $p = .012$ ). This shows that over-controlled adolescent show more aggression than under-controllers and resilient,

and when in combination with marital conflict, so as a moderator, they show more aggression later in adolescence (see Figure 3).

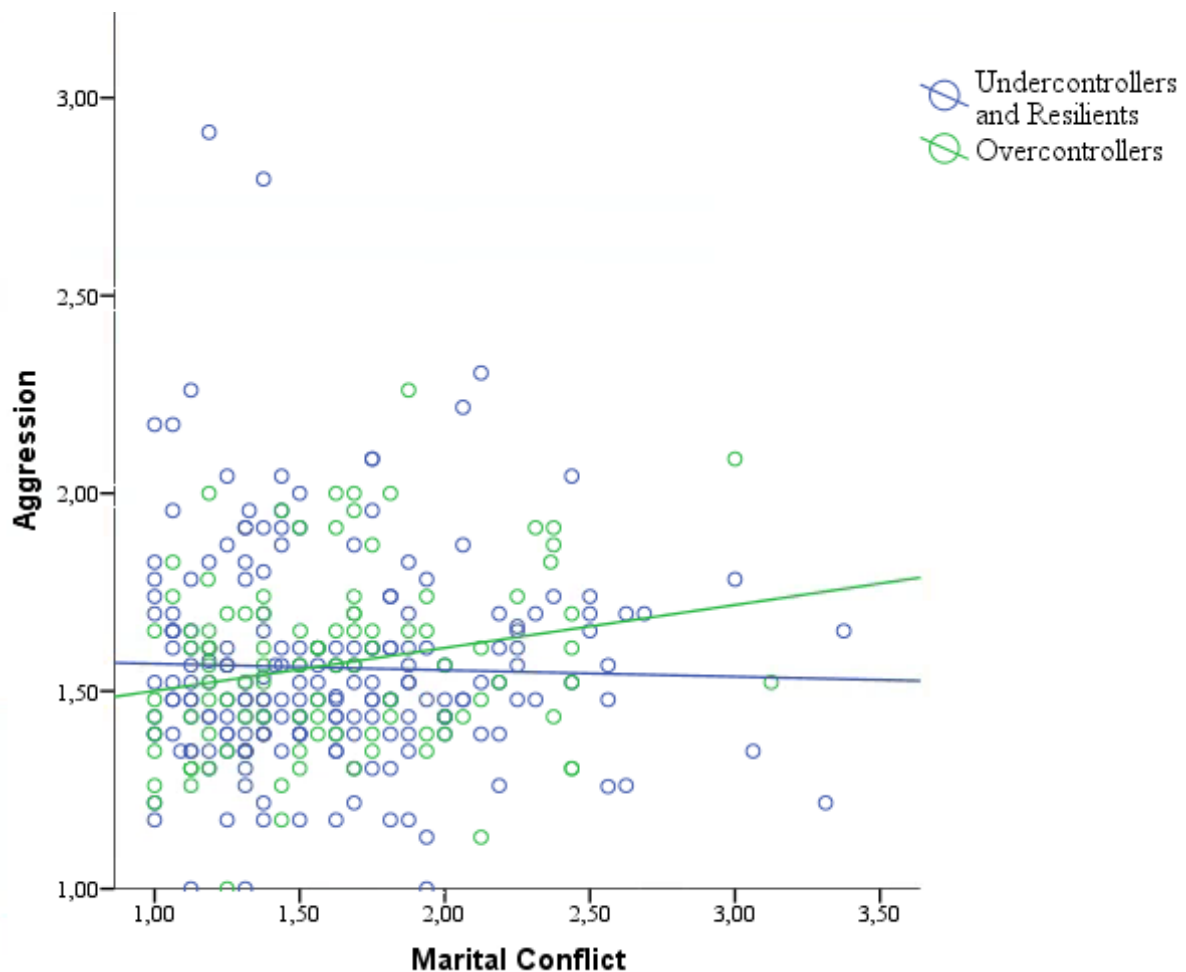
**Table 2**

*Results of the Multiple Regression Analysis for Adolescent Aggression*

Variables	<i>B</i>	$\beta$	<i>t</i>	<i>p</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$
Model 1a					.056	.056
Gender	-0.12	-0.24	-4.28	.000		
Model 1b					.058	.002
Gender	-0.12	-0.24	-4.27	.000		
Marital Conflict	0.02	0.04	0.75	.041		
Model 1c					.061	.003
Gender	-0.12	-0.24	-4.21	.000		
Marital Conflict	0.02	0.04	0.73	.464		
Over-controllers	0.03	0.06	0.94	.350		
Under-controllers	0.01	0.01	0.14	.892		
Model 1d					.081	.020
Gender	-0.12	-0.24	-4.23	.000		
Marital Conflict	-0.06	-0.10	-1.30	.195		
Over-controllers	-0.25	-0.46	-2.18	.030		
Under-controllers	-0.17	-0.28	-1.30	.195		
O-M Interaction	0.18	0.55	2.54	.012		
U-M Interaction	0.11	0.31	1.39	.165		

*Note:* O-M Interaction is the interaction effect between variables Over-controllers and Marital Conflict. U-M Interaction is the interaction effect between variables Under-controllers and marital conflict.





**Figure 3.** This graph presents the interaction effect between Over-controllers and Undercontrollers and Resilients and marital conflict on adolescent aggression.

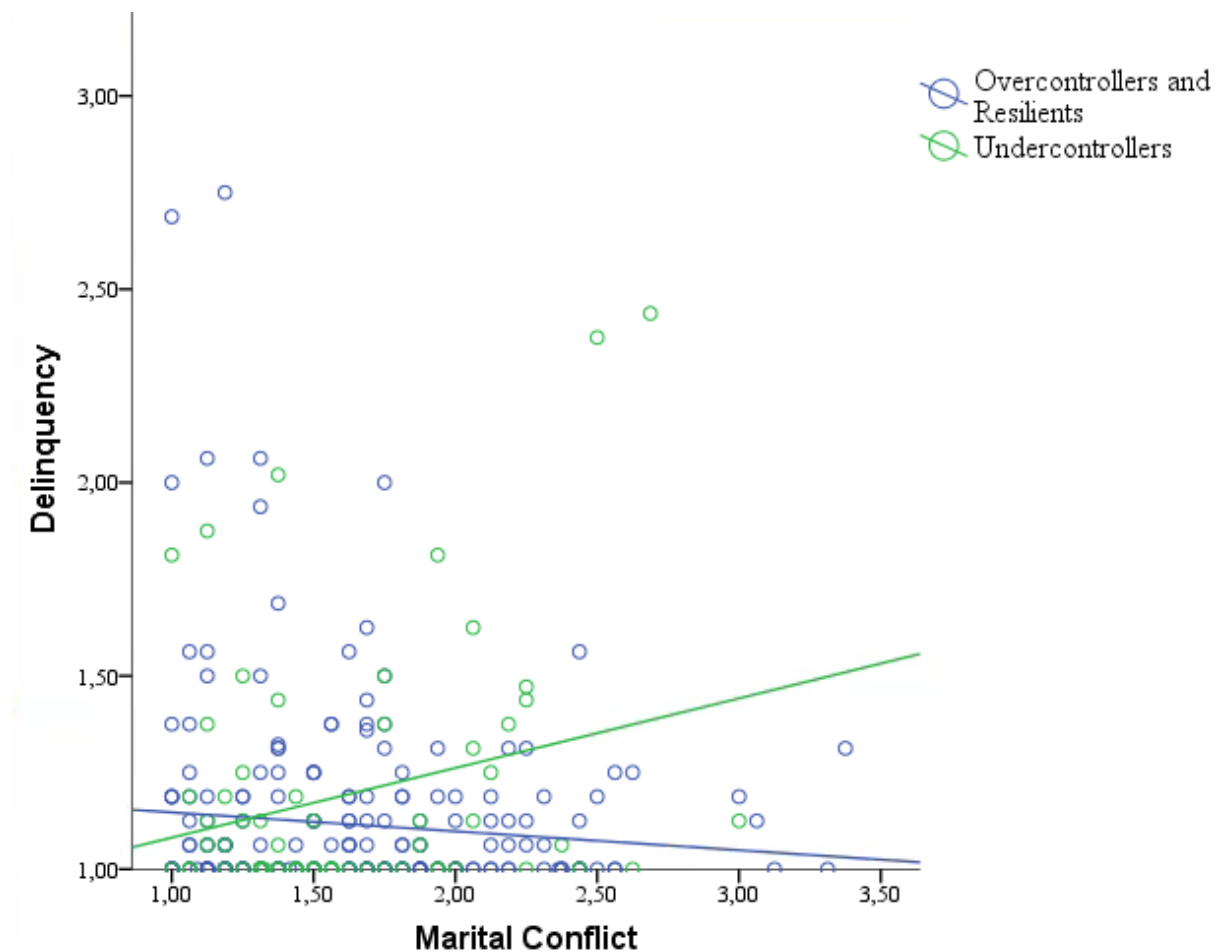
### Marital conflict and later adolescent delinquency

Next, a multiple regression analysis was conducted to analyse the association between marital conflict and later adolescent delinquency, moderated by personality type (see Table 3). In the first model (2a) the control variable gender was taken into account. A significant effect was found ( $\beta = -.29, t = -5.37, p < .001$ ). This means girls in this sample showed less delinquent behaviour than boys. In the second model (2b), the variable marital conflict was added. Marital conflict was not a significant factor ( $\beta = .00, t = -0.007, p = .944$ ). In the third model (2c) adolescent personality did not have a significant effect on adolescent delinquency. In the fourth model (2d) interaction effects between personality and marital conflict on later adolescent delinquency were added. The interaction effect between marital conflict and under-controllers is significant ( $\beta = .54, t = 2.50, p = .013$ ). This means under-controlled adolescents show more delinquent behaviour than over-controllers and resilient when exposed to marital conflict (see Figure 4).

**Table 3***Results of the Multiple Regression Analysis for Adolescent Delinquency*

Variables	<i>B</i>	$\beta$	<i>t</i>	<i>p</i>	$R^2$	$\Delta R^2$
Model 2a					.086	.083
Gender	-0.15	-0.29	-5.37	.000		
Model 2b					.086	.000
Gender	-0.15	-0.29	-4.87	.000		
Marital Conflict	0.00	0.00	-0.07	.944		
Model 2c					.091	.005
Gender	-0.15	-0.28	-4.87	.000		
Marital Conflict	0.00	0.00	-0.07	.946		
Over-controllers	0.03	-0.06	-1.02	.309		
Under-controllers	0.02	0.03	0.41	.682		
Model 2d					.110	.020
Gender	-0.14	-0.26	-4.65	.000		
Marital Conflict	-0.05	-0.88	-1.11	.266		
Over-controllers	-0.06	-0.11	-0.53	.600		
Under-controllers	-0.31	-0.48	-2.28	.023		
O-M Interaction	0.02	0.05	0.25	.805		
U-M Interaction	0.20	0.54	2.50	.013		

*Note:* O-M Interaction is the interaction effect between variables Over-controllers and Marital Conflict. U-M Interaction is the interaction effect between variables Under-Controllers and Marital Conflict.



**Figure 4.** This graph presents the interaction effect between Under-controllers and Over-controllers and Resilients and marital conflict on adolescent delinquency.

### Discussion

The aim of this study is to examine the association between early adolescent exposure to marital conflict later adolescent externalizing behaviour and its interaction with adolescent personality type. Our findings show adolescent personality types may effect the relation between marital conflict and externalizing behaviour. As expected, under-controlled adolescents show significantly more delinquency after a period of marital conflict than over-controlled and resilient adolescents. However, unexpectedly, over-controlled adolescents show significantly more aggression after being exposed to marital conflict than under-controlled and resilient adolescents.

More delinquency is found in under-controlled adolescents after being exposed to marital conflict. This finding is in line with previous research that shows that under-controlled adolescents show more externalizing behaviour than over-controlled and resilient adolescents,

since they show more oppositional behaviour than adolescents with other personality types (Asendorpf et al., 2001; Caspi, 1998; Klimstra, et al., 2010; Meeus, et al., 2011; Van Leeuwen, et al., 2004). Earlier research shows that, in general, under-controllers show more delinquency than resilient and over-controllers (Yu, Branje, Keijsers, & Meeus, 2014). This study shows that marital conflict can be a contributing factor in this association. Several reasons can be found to explain why under-controlled adolescents show more delinquency after being exposed to marital conflict. First, marital conflict may lead towards more aggression when more risk factors are involved (Buehler & Gerard, 2002) and having a vulnerable personality (e.g. under-controlled personality type) is seen as a predictor for later adolescent maladjustment (O'Connor & Dovak, 2001). A second explanation for this finding is under-controllers tend to cope with their problems by turning their feelings about the conflict into more externalizing behaviour than over-controllers and resilient (Dubas, Gerris, Janssens, & Vermulst, 2002). Lastly, a self-fulfilling prophecy theory can explain the behaviour of under-controllers (Bargh, Chen, & Burrows, 1996). Under-controllers are often labelled as more impulsive and unruly (Caspi & Silva, 1995), so it is possible, according to self-fulfilling prophecies, they behave themselves the way others expect them to behave after being exposed to marital conflict.

A second finding is that over-controllers showed more aggression after being exposed to marital conflict than under-controlled and resilient adolescents. This finding was surprising since it was not consistent with our hypothesis and previous research. As previous research indicates, over-controllers show more introversion and internalizing behaviour (Asendorpf et al., 2001; Caspi, 1998; Klimstra et al., 2010; Meeus et al., 2011; Van Leeuwen et al, 2004). Also, previous studies showed that over-controllers are less vulnerable to develop aggression (Asendorpf & van Aken, 1999; Dubas et al., 2002; Robins et al., 1996). A possible explanation for this finding is that, according to Bandura's social learning theory (1977), over-controllers imitate aggressive behaviour. This is a plausible explanation, since over-controllers are show higher levels of conformity to others than under-controllers and resilient (Asendorpf et al., 2001; Cohen & Prinstein, 2006; Prinstein, Boergers, & Spirito, 2001). However, research about imitated externalizing behaviour by over-controllers is rare, that is why further research is necessary. Another explanation is that earlier studies have found both under-controlled as over-controlled adolescents show more conflict (i.e. more externalizing behaviour) both in the household as in other settings (Caspi, 2000; Newman, Caspi, Moffitt, & Silva, 1997). Our study is in line with this finding, besides that under-controllers do not

show more aggressive behaviour than over-controllers in our study. Further research is recommended, since our findings are not in line with previous research.

### **Limitations**

This study has a few limitations. The first limitation of this study is that the data is based on self-reports. Adolescent reported their own perception of their externalizing behaviour and mothers on their own marital conflict. It is possible they answered the questions in a socially desirable manner. Having multiple informants on the same topic could have given a more reliable view on the association between marital conflict and later adolescent externalizing behaviour. For example, it would have been more reliable when fathers also filled in the questionnaire on marital conflict. Future research should include multiple informants. A second limitation is that some adolescents in our sample may already suffer from high levels of externalizing behaviour. This could affect the degree of marital conflict, since aggression or delinquent behaviour from the adolescent may also influence the parent-adolescent relationship (Bates, Schermerhorn, & Petersen, 2012; Ganiban et al., 2009). Besides that, it is also possible these adolescents who already show externalizing behaviour were less vulnerable to marital conflicts (Davies & Windle, 2001). For future research we would recommend to conduct a developmental study, in which earlier externalizing behaviour is taken into account. A third limitation is that our study did not focus on conflict styles in parents. For future research it is recommended to find out which conflict style could have more effects on adolescent externalizing behaviour.

### **Conclusion and Practical Implications**

In conclusion, this study indicates that adolescents with vulnerable personality types (i.e. under-controlled and over-controlled) show more externalizing behaviour than resilient personality type after being exposed to marital conflict. Under-controllers showed more delinquency after being exposed to marital conflict than over-controllers and resilients, whilst over-controllers showed more aggression than under-controllers and resilients after being exposed to marital conflict. Although these results are preliminary, it may thus be that some adolescents are more vulnerable for marital conflict than others. The practical implication of these findings is that it is important to monitor marital conflict situations from the start, since it may have later effects on adolescents. Hereby it is important to make parents aware that their conflict behaviour is a risk factor for the development of externalizing behaviour of their offspring. It would be recommended to start with intervention programmes for parents to minimize their marital conflicts.

### References

- Akse, J., Hale III, W. W., Engels, R. C., Raaijmakers, Q. A., & Meeus, W. H. (2004). Personality, perceived parental rejection and problem behaviour in adolescence. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 980-988. doi:10.1007/s00127-004-0834-5
- Asendorpf, J. B., Borkenau, P., Ostendorf, F., & van Aken, M. A. G. (2001). Carving personality description at its joints: Confirmation of three replicable personality prototypes for both children and adults. *European Journal of Personality*, *15*, 169–198. doi:10.1002/per.408.abs
- Asendorpf, J. B., & van Aken, M. A. (1999). Resilient, overcontrolled, and undercontrolled personality prototypes in childhood: Replicability, predictive power, and the trait-type issue. *Journal of Personality and Social Psychology*, *77*, 815-832 doi: 10.1037/0022-3514.77.4.815
- Baerveldt, C., Rossem van, R., & Vermande, M. (2003). Pupils' delinquency and their social networks: A test of some network assumptions of the ability and inability models of delinquency. *The Netherlands Journal of Social Sciences*, *39*, 107-125.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology*, *71*, 230-244. doi:10.1037/0022-3514.71.2.230
- Bates, J. E., Schermerhorn, A. C., & Petersen, I. T. (2012). Temperament and parenting in developmental perspective. In M. Zentner & R. L. Shiner (Eds.), *Handbook of Temperament* (pp. 425–441). New York: Guilford.
- Björkqvist, K., Lagerspetz, K. M. J., & Österman, K. (1992). *Direct and indirect aggression scales (DIAS)*. Vasa, Finland: Abo Academi University, Department of Social Sciences.
- Block, J. H. (1983). Differential premises arising from differential socialization of the sexes: Some conjectures. *Child Development*, *54*, 1335-1354. doi:10.2307/1129799
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behaviour. In W. A. Collins (Ed.), *Development of cognition, affect, and social relations* (pp. 39–101). Hillsdale, NJ: Erlbaum.

- Bowen, M. (1966). The use of family theory in clinical practice. *Comprehensive Psychiatry*, 7, 345-374. doi:10.1016/S0010-440X(66)80065-2
- Brody, L. R. (1996). Gender, emotional expression, and parent-child boundaries. In R. D. Kavanaugh, B. Zinmierberg et al. (Eds.), *Emotion: Interdisciplinary perspectives* (pp. 139-170). Hillsdale, NJ: Erlbaum.
- Buehler, C., & Gerard, J. M. (2002). Marital conflict, ineffective parenting, and children's and adolescents' maladjustment. *Journal of Marriage and Family*, 64, 78-92. doi:10.1111/j.1741-3737.2002.00078.x
- Caspi, A. (1998). Personality development across the life course. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 311–388). New York: Wiley.
- Caspi, A. (2000). The child is father of the man: Personality continuities from childhood to adulthood. *Journal of Personality and Social Psychology*, 78, 158–172. doi:10.1037/0022-3514.78.1.158
- Caspi, A., & Silva, P. A. (1995). Temperamental qualities at age three predict personality traits in young adulthood: Longitudinal evidence from a birth cohort. *Child Development*, 66, 486-498. doi:10.2307/1131592
- Cohen, G. L., & Prinstein, M. J. (2006). Peer contagion of aggression and health risk behaviour among adolescent males: An experimental investigation of effects on public conduct and private attitudes. *Child Development*, 77, 967–983. doi:10.1111/j.1467-8624.2006.00913.x
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social psychological adjustment. *Child Development*, 66, 710-722. doi:10.2307/1131945
- Cui, M., Donnellan, M. B., Conger, R. D. (2007). Reciprocal influences between parents' marital problems and adolescent internalizing and externalizing behaviour. *Developmental Psychology*, 43, 1544-1552. doi:10.1037/0012-1649.43.6.1544
- Cummings, E. M., & Davies, P. T. (2002). Effects of marital conflict on children: Recent advances and emerging themes in process-oriented research. *Journal of Child Psychology and Psychiatry*, 43, 31-63. doi:10.1111/1469-7610.00003
- Cummings, E. M., Goeke-Morey, M. C., & Graham, M. A. (2002). Interparental relations as a dimension of parenting. In J. G. Borkowski, S. L. Ramey, & M. Bristol-Power (Eds.), *Parenting and the child's world: Influences on academic, intellectual, and socio-emotional development* (pp. 251–263). Mahwah, NJ: Erlbaum.

- Cummings, E. M., Goeke-Morey, M. C., & Papp, L. M. (2004). Everyday marital conflict and child aggression. *Journal of Abnormal Child Psychology*, *32*, 191-202.  
doi:10.1023/B:JACP.0000019770.13216.be
- Davies, P. T., & Cummings, E. M. (1994). Marital conflict and child adjustment: An emotional security hypothesis. *Psychological Bulletin*, *116*, 387-411.  
doi:10.1037/0033-2909.116.3.387
- Davies, P. T., & Lindsay, L. L. (2001). Does gender moderate the effects of marital conflict on children? In J. H. Grych & F. D. Fincham (Eds.), *Interpersonal conflict and child development* (pp. 64 - 97). Cambridge: Cambridge University Press.
- Davies, P. T., & Windle, M. (1997). Gender-specific pathways between maternal depressive symptoms, family discord, and adolescent adjustment. *Developmental Psychology*, *33*, 657-668. doi:10.1037/0012-1649.33.4.657
- Davies, P. T., & Windle, M. (2001). Interparental discord and adolescent adjustment trajectories: The potentiating and protective role of intrapersonal attributes. *Child Development*, *72*, 1163-1178. doi:10.1111/1467-8624.00340
- Dubas, J. S., Gerris, J. R., Janssens, J. M., & Vermulst, A. A. (2002). Personality types of adolescents: Concurrent correlates, antecedents, and type X parenting interactions. *Journal of Adolescence*, *25*, 79-92. doi:10.1006/jado.2001.0450
- Feldman, R., Masalha, S., & Derdikman-Eiron, R. (2010). Conflict resolution in the parent-child, marital, and peer contexts and children's aggression in the peer group: A process-oriented cultural perspective. *Developmental Psychology*, *46*, 310-325.  
doi:10.1037/a0018286
- Fincham, F. D., Grych, J. H., & Osborne, L. N. (1994). Does marital conflict cause child maladjustment? Directions and challenges for longitudinal research. *Journal of Family Psychology*, *8*, 128-140. doi:10.1037/0893-3200.8.2.128
- Ganiban, J. M., Ulbricht, J. A., Spotts, E. L., Lichtenstein, P., Reiss, D., Hansson, K., & Neiderhiser, J. M. (2009). Understanding the role of personality in explaining associations between marital quality and parenting. *Journal of Family Psychology*, *23*, 646-660. doi:10.1037/a0016091
- Gerris, J. R. M., Houtmans, M. J. M., Kwaaitaal-Roosen, E. M. G., Schipper, J. C., Vermulst, A. A., & Janssens, J. M. A. M. (1998). *Parents, adolescents, and young adults in Dutch families: A longitudinal study*. Nijmegen, The Netherlands: University of Nijmegen, Institute of Family Studies.



- Goldberg, L. R. (1992). The development of markers for the Big-Five structure. *Psychological Assessment, 4*, 26-42. doi:10.1037/1040-3590.4.1.26
- Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., & Gipson, P. Y. (2004). Stressors and child and adolescent psychopathology: Measurement issues and prospective effects. *Journal of Clinical Child and Adolescent Psychology, 33*, 412-425. doi:10.1207/s15374424jccp3302\_23
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin, 108*, 267-290. doi:10.1037/0033-2909.108.2.267
- Kim, J. E., Hetherington, E. M., & Reiss, D. (1999). Associations among family relationships, antisocial peers, and adolescents' externalizing behaviours: Gender and family type differences. *Child Development, 70*, 1209-1230. doi:10.1111/1467-8624.00088
- Kitzmann, K. M. (2000). Effects of marital conflict on subsequent triadic family interactions and parenting. *Developmental Psychology, 36*, 3-13. doi:10.1037/0012-1649.36.1.3
- Klimstra, T. A., Hale III, W. W., Raaijmakers, Q. A. W., Branje, S. J. T., & Meeus, W. H. J. (2010). A developmental typology of adolescent personality. *European Journal of Personality, 24*, 309-323. doi:10.1002/per.744
- Krishnakumar, A., & Buehler, C. (2000). Interparental conflict and parenting behaviours: A meta-analytic review. *Family Relations, 49*, 25-44. doi:10.1111/j.1741-3729.2000.00025.x
- Laursen, B. (1993). The perceived impact of conflict on adolescent relationships. *Merrill Palmer Quarterly, 39*, 535-550.
- Meeus, W., Akse, J., Branje, S., ter Bogt, T., Engels, R., Finkenauer, R., et al. (2002) [CONAMORE: CONflict And Management Of Relationships]. *Unpublished raw data*
- Meeus, W., Van de Schoot, R., Klimstra, T., & Branje, S. (2011). Personality types in adolescence: Change and stability and links with adjustment and relationships: a five-wave longitudinal study. *Developmental Psychology, 47*, 1181-1195. doi:10.1037/a0023816
- Mervielde, I., & Asendorpf, J. B. (2000). Variable-centered and person-centered approaches to childhood personality. In S. Hampson (Ed.), *Advances in personality psychology*. 37-76. London: Routledge.
- Minuchin, P. (1985). Families and individual development: Provocations from the field of family therapy. *Child Development, 56*, 289-302. doi:10.2307/1129720

- Newman, D. L., Caspi, A., Moffitt, T. E., & Silva, P. A. (1997). Antecedents of adult interpersonal functioning: Effect of individual difference in age 3 temperament. *Developmental Psychology, 33*, 206–217. doi:10.1037/0012-1649.33.2.206
- O'Connor, B. P., & Dvorak, T. (2001). Conditional associations between parental behaviour and adolescent problems: A search for personality-environment interactions. *Journal of research in Personality, 35*, 1-26. doi:10.1006/jrpe.2000.2295
- Patterson, G. R. (1982). *Coercive family process*. Eugene, OR: Castalia.
- Prinstein, M. J., Boergers, J., & Spirito, A. (2001). Adolescents' and their friends' health-risk behavior: Factors that alter or add to peer influence. *Journal of Pediatric Psychology, 26*, 287–298. doi:10.1093/jpepsy/26.5.287
- Robins, R. W., John, O. P., Caspi, A., Moffitt, T. E., & Stouthamer-Loeber, M. (1996). Resilient, over-controlled, and under-controlled boys: Three replicable personality types. *Journal of Personality and Social psychology, 70*, 157-171. doi:10.1037//0022-3514.70.1.157
- Tschann, J. M., Pasch, L. A., Flores, E., Marin, B. V., Baisch, E. M., & Wibbelsman, C. J. (2009). Nonviolent aspects of interparental conflict and dating violence among adolescents. *Journal of Family Issues, 30*, 295-319. doi:10.1177/0192513X08325010
- Van Leeuwen, K., de Fruyt, F., & Mervielde, I. (2004). A longitudinal study of the utility of the resilient, over-controlled, and under-controlled personality types as predictors of children's and adolescents' problem behaviour. *International Journal of Behavioural Development, 28*, 210-220. doi:10.1080/01650250344000424
- Yu, R., Branje, S. J. T., Keijsers, L., & Meeus, W. H. J. (2014). Personality types and development of adolescents' conflict with peers. *European Journal of Personality, 28*, 156-167. doi:10.1002/per.1913