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family conflict and resilience
in parenting self-efficacy
among high-risk mothers

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ABSTRACT

Mothers with a history of institutional care in adolescence are often involved in high conflict partner relationships, which may undermine relationships with children and confidence in oneself as a parent. Not all mothers think of themselves as bad parents under these circumstances. We turned to psychological resources as an explanation, focusing on mothers' trait self-control. The negative association between family conflict and parenting self-efficacy was tested for moderation by self-control among 104 mothers with a history of institutionalization for behavioral problems and delinquency during adolescence. We found a negative association between current family conflict and parenting self-efficacy among mothers with low self-control, and no significant association among mothers with high self-control. This study draws attention to the needs of high-risk mothers in their parenting role and demonstrates that self-control is a potential resource for mothers to balance the load presented by conflict in their family. The findings suggest new avenues for intervention.

A life history with severe adolescent psychosocial problems leading to court-mandated secure residential care is not a favorable basis for starting a family and becoming a mother. Parenting difficulties may result from a developmental pathway leading from early disruptions in caregiving relationships (e.g., Quinton, Rutter, & Liddle, 1984), child behavior problems, a history of youth care services, and chronic antisocial and oppositional behavior during adolescence (Harder, 2011). Also, precocious sexuality in young adulthood and maladaptive mate choices can result in the perpetuation of negative family functioning for the next generation (Quinton et al., 1984; Rothenberg, Hussong, & Chassin, 2015; Thornberry, Freeman-Gallant, Lizotte, Krohn, & Smith, 2003). In adulthood, mothers with this high-risk developmental background are at greater risk for experiencing conflict and violence in their current family (e.g., Jaffee, Belsky, Harrington, Caspi, & Moffit, 2006), which may tax the psychological resources that mothers need for providing their children adequate care (e.g., Saltaris et al., 2004). Nevertheless, despite adverse backgrounds and circumstances, some high-risk mothers may still show positive outcomes (e.g., Serbin & Karp, 2003). As a potential source of this resilience, this study looks at self-control. Glowacz and Born (2015) proposed self-control as a protective personality trait and demonstrated that adolescents institutionalized for delinquency with higher self-control adapted better to life in the institution and had a better prognosis at the end of treatment. This study therefore focused on resilience in perceived efficacy as a parent as a result of high self-control, specifically in the context of conflict and violence in the current families of mothers institutionalized in adolescence.

Conceptual Model

Belsky's (1984) process model of the determinants of parenting has been used over the years to conceptualize how risk and protective factors may affect high-risk mothers' parenting self-efficacy. Belsky identified three domains of determinants: parental psychological resources, child characteristics, and contextual sources of stress and support. Also, Belsky stated that psychological resources of the parent are effective in buffering the parent-child relationship from contextual sources of stress. In the many years since the formulation of this model, theories of specific psychological resources have been developed, enabling further refinement and specification of Belsky's propositions. Pertinent to the population of mothers who have been institutionalized as adolescents because of psychosocial problems, Glowacz and Born (2015) demonstrated that self-control of institutionalized adolescents with severe behavior problems can function as an intra-personal psychological protective resource against environmental risk. Therefore, it was hypothesized that family conflict would be negatively associated with parenting self-efficacy, but only for mothers with low self-control. High self-control was expected to buffer against (i.e., act as a moderator) the negative link between family conflict and parenting self-efficacy.

This conceptualization is in line with ecological frameworks for distal and proximal risk and resilience factors in the development of children (e.g., Bronfenbrenner, 1977; Cicchetti & Lynch, 1993). Many studies using an ecological framework focus on child outcomes, however, there is a need for more insight into resilience of high-risk parents (Luthar, Sawyer, & Brown, 2006). This study conceptualized family conflict as a distal risk factor for low parenting self-efficacy, which was considered more proximal to actual functioning as a parent.

Family Conflict and Parenting Self-Efficacy

Parenting self-efficacy, defined as parents' confidence in their abilities as a parent, is widely recognized as being associated with positive parenting and child outcomes in normal and stressful parenting situations (Jones & Prinz, 2005). Parenting self-efficacy was found to mediate the relation between high parenting stress and low supportive parenting (Jackson & Huang, 2000) as well as between low household income and toddler problem behavior (Morawska & Sanders, 2007). Moreover, Teti, O'Connell, and Reiner (1996) stated that parenting self-efficacy serves as gateway from parent, child, and contextual factors to parenting behavior in a wide array of at-risk family settings. Importantly, parenting behaviors, such as maternal warmth, nurturance, and involvement play a crucial role in breaking the cycle of intergenerational psychosocial risk in samples of mothers with a history of aggressive and antisocial behavior (Serbin & Karp, 2003).

Mothers with a history of behavior problems and residential care have been found to have more interpersonal problems in their adult lives, ranging from unstable romantic relationships and more inter-adult conflict to physical violence between partners (Ehrensaft et al., 2003; Jaffee et al., 2006; Oudekerk & Reppucci, 2009; Pajer, 1998). When they become mothers, these women may be more predisposed to be involved in violent family functioning (e.g., Jaffee et al., 2006). Family conflict has been defined by Rothenberg and colleagues (2015) as "the experiencing of physical or verbal aggression, criticism, anger, or arguments within the overall family climate" (p. 1). The current study excluded conflicts between children, similar to Jaffee's (2005) definition of family violence as more severe forms of family conflict including intimate partner violence (inter-adult) and child maltreatment (parent-child relationship). Heightened sibling conflict may be more normative compared to other elevated forms of conflict (Dunn & McGuire, 1991), thus, the exclusion of conflict among children would result in a focus on individual differences of less normative forms of family conflict.

Lower (e.g., marital discord; Amato & Sobolewski, 2001) as well as higher (e.g., physical violence; Casanueva, Martin, Runyan, Barth, & Bradley, 2008) conflict family environments

are thought to impact parenting abilities, but little is known about the effects of family conflict on parenting self-efficacy. Saltaris and colleagues (2004) demonstrated a pathway of intergenerational risk of mothers' childhood aggression to children's IQ scores via, among other factors, higher parenting stress. Parenting stress includes among other concepts maternal feelings of competence, which is akin to parenting self-efficacy (Adibin, 1992; Jones & Prinz, 2005). Thus, mothers with a history of conduct problems may be at higher risk for having more negative perceptions of themselves as a parent. In addition, Sevigny and Loutzenhiser (2010) found that lower relationship functioning was linked to lower parenting self-efficacy in a low-risk sample. Also, many studies (for an exception see Huth-Bocks & Hughes, 2008) have demonstrated that intimate partner violence victimization is positively linked to maternal parenting stress (Baker, Perilla, & Norris, 2001; Owen, Thompson, Kaslow, 2006; Renner, 2009; Renner & Boel-Studt, 2013; Wilson, Lamis, Winn, & Kaslow, 2014). Specifically for parent-child conflict, Raver and Leadbeater (1999) have found that at-risk mothers with more environmental risks had lower parenting self-efficacy if they experienced more conflict with their child. Mothers with a history of institutionalization experienced more problems across domains, such as poverty, job instability, and violent neighborhoods, as well as challenging behavior from their child (Serbin & Karp, 2003). This suggests an elevated risk of parent-child conflict for mothers with a history of antisocial behavior which then negatively impacts their parenting self-efficacy. Also, Owen and colleagues (2006) and Wilson and colleagues (2014) found an association between a more dysfunctional parent-child relationship and higher parenting stress among victims of intimate partner violence. In sum, conflict and violence in current adult families of mothers with a history of institutionalization in adolescence were hypothesized to be associated with mothers' perceived efficacy as a parent.

Trait Self-Control as a Protective Factor

In spite of adversity and relationship conflict and aggression, some mothers may succeed in maintaining positive expectations for being a good parent. Recent studies point to trait self-control as an important resource for upholding the motivation and ability to be a good parent under challenging circumstances (e.g., Buyukcan-Tetik, Finkenauer, Siersema, Vander Heyden, & Krabbendam, 2015; Deater-Deckard, Chen, Wang, & Bell, 2012). Self-control is the capacity to alter or override maladaptive responses (behavior, thoughts, emotions, impulses) and to shape responses in accordance with individual or social standards (Baumeister, Heatherton, & Tice, 1994). Also, self-control enables people to exert control to engage in desirable responses and behavior and inhibit undesirable ones (Baumeister et al., 1994). As compared to people with low trait self-control, people with high trait self-control show less substance abuse, psychopathology, physical illness, eating disorders, physical and verbal

aggression (Tangney, Baumeister, & Boone, 2004), greater inhibition of negative emotional responses (Kieras, Tobin, Graziano, & Rothbart, 2005), and greater accommodation in close relationships (Finkel & Campbell, 2001).

Specifically for high-risk mothers, an early study by Quinton and Rutter (1988) showed that some women fared better after a residential group home than other women by experiencing success in areas such as sports and music. Rutter (2012) explained this difference by better planning abilities, which can be considered associated with self-control (Snihotta, Scholz, & Schwarzer, 2004). In addition, individual differences in self-control among institutionalized delinquent adolescents can be observed (Born et al., 1997; Jackson, Born, & Jacob, 1997). Adolescents with higher self-control were less aggressive, showed more interest in others, were better adjusted to life in the institution, and had a more positive prognosis at the end of their institutionalization. Based on these findings, Glowacz and Born (2015) stated that, given the fact that resilience is a consequence of intra-personal factors, the personality trait self-control is a protective factor (i.e., moderating; Fergusson & Horwood, 2003) against environmental risk factors. Arguably, higher self-control of high-risk adolescent girls may serve as a protective factor against poor mate choice in adulthood (Rutter & Quinton, 1984), and, thus, against higher levels of family conflict. However, the formation of maladaptive relationships of high-risk mothers in adulthood is multiply determined, suggesting that other factors play a role as well (e.g., social learning models as a result of witnessing inter-parental violence in childhood; O'Leary, 1988). Thus, self-control among high-risk mothers may continue to have beneficial effects even if it did not prevent the formation of dysfunctional family relationships.

The link between trait self-control and parenting self-efficacy has, to our knowledge, not yet been tested. However, evidence suggests that trait self-control may especially serve as a protective factor for parenting self-efficacy in the presence of family conflict, aggression, and violence. For example, successfully achieving a goal and experiencing control motivate people not only to set more challenging goals, but these mastery experiences also enable people to actually achieve more and be more successful (Bandura & Locke, 2003). Self-control promotes such mastery experiences and provides people with a sense of control over their behavior (Fujita, 2011). It may thereby promote the core belief that one has the power to produce desired effects, including in parenting situations, even in the presence of adversity. Furthermore, self-control enables people to inhibit destructive impulses and respond constructively to negative behavior of the partner for the better of the relationship (Finkel & Campbell, 2001; Vohs, Finkenauer, & Baumeister, 2011). Self-control may thus play a

crucial role in preventing a spillover from conflict in the home to the parent-child relationship, in that it allows mothers to inhibit destructive impulses to negative behavior of the child, and respond constructively to challenging child behavior and temperament (Deater-Deckard, Sewell, Petrill, & Thompson, 2009). Finally, research shows that maternal self-control is conducive to sensitive, constructive, and responsive caregiving (Deater-Deckard et al., 2012) and trustworthy parenting (Buyukcan-Tetik et al., 2015), even in challenging child-rearing situations (Deater-Deckard et al., 2009).

The Current Study

The rationale for this study was to gain insight into resilience among high-risk mothers (Luthar et al., 2006) with a specific focus on resilience in parenting self-efficacy (Raver & Leadbeater, 1999). Individual differences in trait self-control of women with a history of severe behavior problems were hypothesized to explain resilience for those mothers who became as adults involved in conflict within their own families. Higher self-control may allow mothers with a high-risk background to retain high parenting self-efficacy, even if they face conflict and aggression in their own relationships. Family conflict was expected to be negatively associated with parenting self-efficacy for mothers with low self-control, whereas a weak association was expected for mothers who perceived their self-control to be high.

METHOD

Sample

The original sample for this study 17Up consisted of 270 institutionalized adolescents, who were discharged from a judicial treatment institution for juveniles in the Netherlands between 1992 and 1998. Placement had been indicated because the combination of socio-emotional risks and problems (often including delinquency) could not be adequately improved due to problems and risks within their families and neighborhoods. Between the end of 2010 and the beginning of 2012, women were followed up using interviews and questionnaires. From the original sample 20 women could not be contacted, due to death ($n = 8$), emigration ($n = 10$), and two individuals could not be reached because the treatment institution denied any contact. Among those who could be contacted ($n = 250$) 117 women refused to cooperate, which is comparable to studies in similar populations (e.g., Seed, Juarez, & Alnatour, 2009). Participating women, compared to women who refused participation, did not differ significantly in terms of characteristics extracted from treatment files of the Juvenile Justice Institution or criminal histories. We tested for differences between the two groups on a set of characteristics,

such as level of IQ ($t = -0.75, p = 0.45$), neuroticism ($t = -1.28, p = 0.20$), conscience formation ($t = 0.33, p = 0.74$), presence or absence of psychopathy (e.g., ADHD and depression; $\chi^2 = 0.09, p = 0.77$), and the number of previous offenses ($t = 0.61, p = 0.54$). The current sample comprised the subset of mothers ($n = 104$). They were on average 15.4 years old ($SD = 1.3$) when entering the institution and 16.5 ($SD = 1.3$) when they left. The average duration of their stay was 1.1 years ($SD = 0.7$). At the time of the interview mothers were on average 32.9 years old ($SD = 2.5$). The average age of their oldest child was 11.6 ($SD = 4.2$).

Procedure

The Dutch Ministry of Justice approved the re-contacting of participants and data collection for this study, which was conducted by the Netherlands Institute for the Study of Crime and Law Enforcement (NSCR in Dutch). The former Juvenile Justice Institution, where all subjects had been placed, tracked people and approached them by a letter that explained the study. The study was registered at the Dutch Data Protection Authority (CBP) and was approved by the Dutch Ethical Committee for Legal and Criminological Research (CERCO). If someone agreed to participate, an interview was scheduled. Interviews were conducted in a private area, often at the homes of the subjects. The study was again explained to the subject, after which all participants signed an informed consent stating that their participation was voluntary and that they understood the method and purpose of the study. The interviews consisted of three parts. First, participants filled in sociodemographic and background information using a laptop. Second, the interviewer and participant together filled in a Life Event Calendar using paper and pencil. Third, the interviewer turned the laptop screen to the participant to fill in a large set of questionnaires, partly on sensitive topics. Following the 17Up interview protocol (Van der Geest, Bijleveld, & Verbruggen, 2013), interviews took place in a quiet environment. If a relative or acquaintance would enter the room, the interview would be paused for a moment. The data collection was supervised by the main researchers (V.R. van der Geest and C.C.J.H. Bijleveld). Interviewers were trained and regularly exchanged their experiences to learn from each other under supervision of the project leader. Interviewers learned how to cope with issues that could arise during the interviews (e.g. participants being under the influence of substances, or re-experiencing painful experiences that may have been elicited by the interview). After each interview, participants received a contact information list of local health care and community care services. The interviews lasted approximately 90 minutes of which three self-administered questionnaires were used in the current analyses. Participants were given €25 vouchers for their participation.

Measures

Demographic information. Date of birth of the participant, age of admission to the juvenile justice institution, and length of their stay, were extracted from the treatment files prior to the interviews. Additionally, various questions were used to collect sociodemographic information about the participants, such as “Do you have any children?”, which was used to distinguish mothers from other women. Other questions were, for example, “Are your parents still alive?” and “Are you currently in a relationship?” From this background information, maternal age, age of the first child, and age of the mother at birth of first child were tested as possible covariates.

Parenting self-efficacy. Parenting self-efficacy was measured with a slightly adapted shortened Dutch translation of the Parenting Sense of Competence scale (PSOC; Johnston & Mash, 1989). From the original 17 items, three items that were most predictive of larger decreases in parenting self-efficacy during a parenting task (based on data from Cassé, Oosterman, & Schuengel, 2015) were selected to limit the burden of filling in many questionnaires. The items were: “I feel confident in my role as a parent”, “Being a parent is manageable and any problems are easily solved”, and “I honestly believe I have all the skills necessary to be a good mother to my child.” The three items were answered on a 5-point Likert scale ranging from *not at all like me* (1) to *completely like me* (5). Higher sum scores reflected higher parenting self-efficacy. Cronbach’s alpha of the original 17-item measure was .79. Internal consistency of the current shortened measure was good ($\alpha = .81$).

Family conflict. Family conflict and hostility was measured with three items (Dahlberg, Toal, Swahn, & Behrens, 2005) Originally, items could be scored on a 4-point Likert scale, ranging from *often* (1) to *never* (4). For this study, to increase ease of administration by using a consistent response format, items could be answered on a 5-point Likert scale (an extra option of *continuously* (0) was added). The least severe item was: “Not including children’s fight with each other, how often has there been quarrelling or arguing in your household.” The medium severe item was: “Not including children’s fights with each other, do household members lose their tempers or blow up for no good reason?” The most severe item was: “Not including children’s fight with each other, how often have there been physical fights in the household, like people hitting, shoving, throwing objects at each other, threatened with a weapon and so forth.” To cover a wide enough span of time for assessing chronic exposure, the items were assessed over the past year. The items were reverse coded, so that higher sum scores reflected more severe family conflict. Cronbach’s alpha of the original measure was not available. Internal consistency of the measure was good ($\alpha = .82$).

Self-control. Self-control was measured with a Dutch translation of the Grasmick scale (Grasmick, Tittle, Bursik, & Arneklev, 1993), which consisted of 6 subscales (i.e., impulsivity, simple tasks, risk seeking, physical activities, self-centered and temper) and 24 items (e.g., “I often act on the spur of the moment without stopping to think”, “When I’m really angry, other people better stay away from me”). Originally, items are answered on a 4-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (4). For this study items could be answered on a 5-point Likert scale (an extra option of *neutral* (3) was added) for an easier administration of the different questionnaires using different response options. Items were recoded so that a higher score reflected higher self-control. Cronbach’s alpha of the original measure was .81. Internal consistency of the current measure was good ($\alpha = .87$).

The questionnaires were translated by the 3rd and 4th author of the current study. A back-translation of the questionnaire from Dutch to English by a bilingual department member showed minimal differences with the original versions.

Data Analytic Strategy

We used Little’s MCAR test (Little & Rubin, 1987) to determine if data were missing completely at random (MCAR) versus missing at random (MAR) and missing not at random (MNAR). Testing for interaction effects between factors can be used to examine whether self-control moderated (i.e., was associated with) the direction or strength of the association between family conflict (i.e., independent) and parenting self-efficacy (i.e., dependent; Holmbeck, 1997). To examine the predicted moderation effect, the interaction-effect was entered in the hierarchical regression after the centered independent and moderator variable (Aiken & West, 1991). For simple slope analysis, high levels of the moderator were calculated by subtracting one standard deviation from the centered moderator and low levels of the moderator were calculated by adding one standard deviation. A new interaction-effect for low and high levels of the moderator was computed. The hierarchical regression analyses were again conducted, first, using high levels of the moderator and, second, using low levels of the moderator. Compared to the split-file method, simple slope analysis is preferred as there is no loss of power due to a smaller amount of participants in the analyses. Multivariate outliers with a Mahalanobis distance larger than 15 (1 to 5 outliers across the imputation sets) were eliminated from further analyses (Field, 2009), resulting in 2.6 outliers in the pooled results ($n = 101.4$).

RESULTS

Missing Data and Preliminary Analyses

Missing data were considered MCAR based on Little's MCAR test ($\chi^2 = 1.61$ $df = 2$, $p = .45$) and missings were handled using multiple imputation. To examine whether background variables should be controlled for in the analyses, correlations between maternal age, age of the first child, age of the mother at birth of first child and model variables were examined. None of these variables were found to be associated with the model variables. Table 1 provides the descriptive statistics and associations among variables used in the regression analyses. All three variables were moderately to strongly associated with each other. There was a negative association between family conflict and parenting self-efficacy, a negative association between family conflict and self-control, and a positive association between self-control and parenting self-efficacy. There was no significant difference in self-control for mothers placed in the juvenile justice institution for delinquent behavior ($M = 83.34$, $SD = 15.26$) versus non-delinquent psychosocial problems ($M = 82.58$, $SD = 8.66$; $t(73.35) = -.28$, $p = .78$).

Table 1. Descriptive statistics of and associations among study variables

	1	2	3
1. Parenting self-efficacy	-	-.44***	.44***
2. Family Conflict		-	-.61***
3. Self-control			-
M	11.79	6.17	83.08
SD	2.70	2.6	13.32
Observed range	3 – 15	3 – 15	38 – 110
Range of instrument	3 – 15	3 – 15	24 – 120

*** $p < .001$.

Level of Family Conflict

The mean level of family conflict in this sample was 6.17 ($SD = 2.6$) with the lowest score being 3 and the highest 15 (see Table 1). More severe manifestations occurred less often. The least severe item (i.e., quarrelling or arguing) had an average of 2.71 ($SD = 1.05$) and 55% of the mothers selected sometimes, often, or continuously. The medium severe item (i.e., household members losing their tempers or blowing up for no good reason) had a somewhat lower average of 2.01 ($SD = 1.14$) and only 33% selected sometimes, often, or continuously.

Finally, there was an even lower average for the highest level of conflict (i.e., physical fights in the household, threatening with a weapon and so forth; $M = 1.38$, $SD = .89$) and only 12% selected sometimes, often, or continuously. Only 7% of the participants reported not experiencing any conflict or hostility, and most mothers reported at least some conflict and hostility (Mode = 5). Also, 49% of the mothers scored the average of 6 or higher.

Family Conflict and Self-Control Impacting Parenting Self-Efficacy

Centered variables of family conflict and self-control were entered at Step 1. The interaction-effect of family conflict and self-control was entered at Step 2. Table 2 shows the steps in the hierarchical regression analysis excluding multivariate outliers. A pooled amount of explained variance across the imputed sets is not available in SPSS, therefore the semi-partial variance (PR^2) of the variables is reported on. Table 2 indicates that the interaction-effect uniquely explained 6% of the variance in parenting self-efficacy. Results suggest that for different levels of self-control there was a different effect of family conflict on parenting self-efficacy. The interaction-effect is illustrated in Figure 1, based on high and low levels of self-control.

Table 2. Hierarchical moderation analysis on parenting self-efficacy

Step/Variable	B	SE B	PR ²
Step 1			
Family Conflict	-.25	.15	.03
Self-Control	.05	.03	.04
Step 2			
Family Conflict	-.08	.15	.003
Self-Control	.05	.03	.04
Family Conflict X Self-Control	.06	.03	.06*

* $p < .05$.

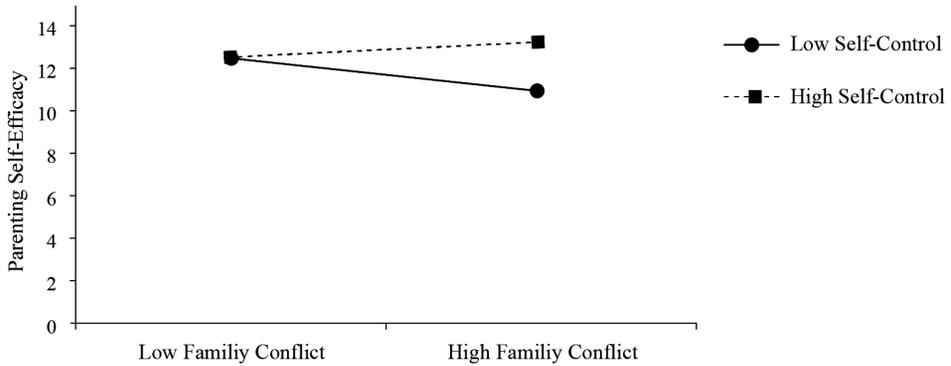


Figure 1. Interaction-effect of family conflict and self-control on parenting self-efficacy.

To further investigate the moderating role of self-control in the link between family conflict and parenting self-efficacy, two simple slope analyses were conducted with high and low levels of self-control. In the analysis with low levels of the self-control, the presence of a significant effect of family conflict on parenting self-efficacy and the absence of a negative effect in the analysis with high levels of self-control, would indicate a buffering effect of self-control for mothers with high self-control. Table 3 shows that for low levels of self-control, family conflict uniquely explained 6% of the variance in parenting self-efficacy whereas for high levels of self-control there was no significant effect of family conflict.

Histograms and P-P plots (Field, 2009) appeared normal and Cook's distance had a maximum of 0.67 in one of the imputation models, indicating that there were no individual cases dominating the model. The difference in effect size between the regression models examining

Table 3. Hierarchical moderation analyses on parenting self-efficacy for high and low levels of self-control

Step/Variable	B	SE B	PR ²
High Self-control			
Family Conflict	.21	.22	.00
High Self-Control	.05	.03	.04
Family Conflict X High Self-Control	.02	.01	.06*
Low Self-control			
Family Conflict	-.36	.16	.06*
Low Self-Control	.05	.03	.04
Family Conflict X Low Self-Control	.02	.01	.06*

the interaction-effect of low self-control and family conflict on parenting self-efficacy with ($PR^2 = 0.08$) and without ($PR^2 = 0.06$) multivariate outliers was 2%. In sum, the model that was generalizable to populations similar to the sample in this study explained 6% of unique variance in parenting self-efficacy.

DISCUSSION

Consistent with our hypothesis, self-control emerged as a protective psychological resource among mothers who can be regarded as vulnerable due to a history of behavior problems and residential care and their current psychosocial problems associated with such a history (Quinton, Rutter, & Liddle, 1984). Family conflict was associated with low perceptions of women's qualities as parents if their self-control was low. If their self-control was high, their perception of their parenting quality was unaffected by the extent of conflict in their families, even if their self-control had not prevented them entering into high-conflict relationships.

Findings add to the current knowledge about the beneficial effects of self-control in samples with a history of antisocial behavior (Born et al., 1997; Jackson et al., 1997) as well as in low-risk samples (De Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012; Tangney et al., 2004) and extend these to the parenting domain. Consistent with studies demonstrating the ability of some mothers to compensate for conflict and violence at home (e.g., Manning, Davies, & Cicchetti, 2014), this study points towards self-control as a resource that may determine which mothers may or may not achieve such resilience. Higher self-control may provide mothers with the motivation and capacities necessary to regulate their own emotional and behavioral responses during arguments with and provocation by another person (Finkel & Campbell, 2001). Those with greater self-control are likely to have greater behavioral flexibility and a larger reservoir of behavioral and cognitive strategies in social situations and relationships (Baumeister et al., 1994; De Ridder et al. 2012), including their relationship with their children. They may also experience more control and mastery over their behavior (Bandura & Locke, 2003), which may help them to maintain the conviction that they are providing their children with high quality parenting despite being a parent in an environment of conflict and hostility. Also, individuals high in self-control are more successful in anticipating challenges and difficulties and are able to take measures to circumvent these challenges (Fujita, 2011). More research is needed to understand how trait self-control may make parenting self-efficacy of high-risk mothers more resilient in the face of difficulties.

The current study identified an important protective psychological resource in the resilience of mothers in a difficult-to-reach sample. Arguably, mediation models, which can explain the sequential relation between three or more variables (Holmbeck, 1997), may provide additional insight into the association between family conflict, self-control, parenting self-efficacy. First, mothers that are victims of conflict and hostility may experience depletion of self-control in the relationship domain, which causes a spill-over into the parenting domain. Second, mothers with low self-control may more easily get caught up in family conflict, which in turn may decrease their parenting self-efficacy. However, these roles may not be so distinct, because victims of violence often themselves use violence as well (O'Leary & Smith Slep, 2012), and mothers with a history of residential care for behavior problems may be perpetrators as well as victims of violence (Jaffee et al., 2006). Thus, mothers with a history of residential care may experience more family conflict in general regardless of whether they are more often the victim or the aggressor. This suggests that trait self-control in particular may act as a moderator (Born et al., 1997; Dvorak & Simons, 2009; Gailliot, Schmeichel, & Maner, 2007; Jackson et al., 1997), not a mediator, for the effect of interpersonal problems on parenting cognitions. Then, although they may still experience self-control depletion in the face of interpersonal problems, women with higher trait self-control have more resources and energy to invest in parenting despite exposure to and involvement in family conflict. More research is needed to shed light on the moderating and mediating mechanisms underlying the protective function of self-control for parenting self-efficacy in high-risk families.

Limitations and Directions for Future Research

The study is limited in three ways. First, the study analyses were cross-sectional and therefore give insight into associations across variables at one time point. Ecological frameworks are based on the idea that there is interaction and transaction of risk and protective factors from different levels of context over time (e.g., Bronfenbrenner, 1977; Cicchetti & Lynch, 1993). For example, a recent large-scale survey by Smith Slep, Foran, and Heyman (2014) demonstrated that distal factors (e.g., community cohesion) impacted partner violence via individual factors (e.g., individual functioning and relationship satisfaction), suggesting that resilience results from an interplay in resources from all ecological levels. Also, a bidirectional effect has been found between maladaptive parenting and challenging child behaviors as part of disorders such as conduct disorder and oppositional defiant disorder (Burke, Pardini, & Loeber, 2008). Longitudinal studies examining the developmental paths of risk and protective factors from different levels of context over time are necessary to test the possible directions of associations. Second, the interaction-effect uniquely explained 6% of the variance in parenting self-efficacy, therefore, more variance may be explained by unmeasured factors. Parenting

self-efficacy is associated with many factors from different ecological levels, such as social support, marital relationship factors, child temperament, and maternal mental health (Jones & Prinz, 2005). In addition to family conflict and self-control, these factors could impact high-risk parents' feelings of efficaciousness as well and should be investigated. Third, this study used a narrowed version of Rothenberg and colleagues' (2015) definition of family conflict. In doing so, the current study did not differentiate between conflict, hostility, and violence between mothers and other adults (either spouses or other relatives) and between mothers and children, which leaves open questions on the relative contribution of these different types of family conflict on mothers' parenting self-efficacy. Future research may benefit from differentiating between mothers who are victims, perpetrators, or victim/perpetrators of a continuum of family conflict between relatives, spouses, and parents and children to understand when self-control mediates or moderates the effect of family conflict on parenting self-efficacy.

Practical Implications

The current study points towards the beneficial effects of high self-control for resilience in parenting in the face of difficulties at home. Mothers with a history of conduct problems who have not received proper treatment in childhood or early adolescence may benefit from self-control interventions for two reasons. First, trait self-control has been successfully enhanced in low-risk populations (Baumeister, Gailliot, DeWalt, & Oaten, 2006). Second, Piquero, Jennings, and Farrington (2010) state that delinquent women may have a somewhat higher self-control to begin with and are more sensitive to self-control intervention than men. Given the fact that the current sample consisted mostly of women with a history of behavior problems, not solely delinquents, self-control intervention for this and adjacent samples could have positive effects in the parenting domain later in life (Deater-Deckard et al., 2012).

Interventions aimed at enhancing self-control in young girls with conduct problems may be especially fruitful. A meta-analysis demonstrated that high-risk children and adolescents not only increased in self-control after early intervention, but also decreased in delinquent behavior (Piquero et al., 2010). Given the wide range of domains in which self-control plays an important role (Tangney et al., 2004), early intervention targeting self-control may create long lasting positive effects in the parenting domain as well. Targeting a broader range of executive functions in girls with conduct problems, but also stimulating social, emotional, and physical development, may have an even more extensive effect (Diamond & Lee, 2011).

This intrapersonal approach to increasing resilience among mothers with a history of behavior problems may be especially suitable for mothers experiencing lower levels of violence, such

as conflict and hostility. For households experiencing violence, merely increasing self-control may not suffice. These even more stressful situations would call for interventions that keep in mind the direct physical safety of people involved in the conflict and especially children. Interventions aimed at enhancing self-control of mothers experiencing mostly conflict and hostility at home could, in line with our results, foster parenting cognitions in turn positively impacting their parenting behavior and subsequently their children.

Conclusion

Findings from the current study suggest that individual differences in trait self-control of mothers with a history of behavior problems including admission to a juvenile justice institution may explain risk and resilience in mothers exposed to family conflict. Trait self-control was found to act as a protective factor for the negative association between family conflict and parenting self-efficacy. This variable-focused approach (Masten, 2001) was important to identify self-control of high-risk samples as a possible underlying mechanisms that could be targeted in interventions (Baumeister et al., 2006; Piquero et al., 2010). The current study fits well with risk and resilience research from an ecological framework (e.g., Belsky, 1984), as it provides insight into intra-personal resilience of mothers who face inter-personal risk which is crucial given the pivotal role of high-risk parents in the intergenerational transmission of psychosocial risk (e.g., Serbin & Karp, 2003).