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## Disrupting Intergenerational Continuity in Harsh and Abusive Parenting: The Importance of a Nurturing Relationship With a Romantic Partner

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## ABSTRACT

**Purpose:** Harsh, abusive, and rejecting behavior by parents toward their children is associated with increased risk for many developmental problems for youth. Earlier research also shows that children raised by harsh parents are more likely to treat their own children harshly. The present study evaluated nurturing and supportive behaviors of spouses or cohabiting romantic partners hypothesized to strengthen co-parent relationships and help break this intergenerational cycle of harsh parenting.

**Methods:** Data come from the Family Transitions Project, a 22-year, 3-generation study of a cohort of over 500 early adolescents (G2) grown to adulthood. During adolescence, observers rated G1 (parent of G2) harsh parenting to G2. Several years later, observers rated G2 harsh parenting toward their oldest child (G3). In addition, G2's romantic partner (spouse or cohabiting partner) was rated by observers on a range of behaviors expected to affect G2 harsh parenting.

**Results:** Romantic partner warmth and positive communication with G2 were associated with less G2 harsh parenting toward G3 (a compensatory or main effect) and when these partner behaviors were high, there was no evidence of intergenerational continuity from G1 to G2 harsh parenting (a moderating or protective effect). G1 harsh parenting slightly decreased the likelihood that G2 would select a supportive spouse or romantic partner (evidence of cumulative continuity).

**Conclusions:** Romantic partner warmth and positive communication appear to disrupt continuity in harsh and abusive parenting. As appropriate, preventive interventions designed to reduce risk for child maltreatment should include a focus on spousal or partner behaviors in their educational or treatment programs.

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#### IMPLICATIONS AND CONTRIBUTION

This report shows that nurturing behaviors by a romantic partner reduce the likelihood that a parent raised in a harsh manner will use this same parenting style with children. Thus, the findings identify an important social mechanism that holds promise for helping to break the intergeneraof tional cycle child maltreatment.

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Because of the potential importance of early experience for the enactment of later parenting roles, several studies have examined the degree to which parenting behavior in one generation (G1) predicts parenting in the second generation (G2) [1–3]. Interest in the study of intergenerational continuity in hostile, harsh, rejecting, abusive, or aggressive parenting primarily derives from convincing empirical evidence that harsh behaviors by parents toward their children are associated with a range of developmental problems including aggressive, antisocial, or delinquent behaviors [4–7]. Indeed, a recent comprehensive review has

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shown that maltreatment of children involving physical and/or emotional abuse leads to a range of mental disorders and problem behaviors, suggesting that verbal and physical abuse have similar long-term, adverse developmental consequences [7]. In fact, there is evidence that parental harshness in one generation leads to similar childrearing behaviors in the next, at least in part, because of the general aggressiveness or antisocial behavior that G1 harsh parenting intensifies for G2 early in development [8,9].

Also important, more recent studies have overcome many of the methodological limitations of earlier research on intergenerational continuity of parenting behaviors, such as the use of retrospective reports and reliance on a single informant to measure all study variables [1-3]. Retrospective reports, of course, are prone to memory errors and to distortions based on current life circumstances or personal dispositions. Reliance on the self-report of a single individual creates method variance problems that may inflate the magnitude of the estimated relationship between G1 and G2 harsh or abusive parenting, thus suggesting greater intergenerational continuity in child maltreatment than may actually exist. These methodological improvements in research design have led to the conclusion that there is a somewhat modest but robust association between the style of G1 and G2 parenting. This finding is robust in the sense that it is well-replicated across several well-designed studies [1].

The major limitation in this line of research, however, is the failure to identify individual characteristics or social processes that might disrupt this cycle of child maltreatment [1]. The primary purpose of the present study is to identify social dimensions of co-parenting relationships that hold promise for reducing intergenerational continuity in harsh parenting. Consistent with the noted findings that physical and verbal abuse or hostility by parents have similar negative impacts on the developing child [7], in this study we are concerned with verbal and physical dimensions of child maltreatment. In developing the present analyses, we were guided by insights from earlier research and theory concerned with interparental influence, resilience to stressful life experiences, and the importance of social support for promoting individual health and well-being.

## *Main effects of co-parent behavior on G2 harsh parenting* (*Hypothesis #1*)

In terms of the literature on social stress, harsh parenting can be thought of as a chronic strain that has a potentially negative impact on a child through exposure over a several-year period of time [7,10,11]. Research on resilience to stress indicates that the dynamics of social relationships can sometimes reduce the negative impact of life's stresses and strains by directly decreasing the level of a negative developmental outcome, sometimes called a "compensatory effect" [11,12]. In the present case, evidence of compensation would occur if a co-parent's behavior were negatively related to the harsh parenting of a partner net of the effects of the harsh parenting the partner received as a child, a statistical main effect. For the current study, we propose that if one parent has experienced a history of harsh parenting, he or she will be less likely to repeat these behaviors with their own child if they have a spouse or cohabiting romantic partner who treats them with respect, care, concern, and affection; thus exposing them to a more nurturing relationship than they experienced with their parents when growing up. Our markers of these types of behaviors include partner warmth and partner positive communication. There are two primary bases for this proposition.

First, there is a long history of research on the positive effects of social support as a counterweight to the negative influence of stressful events and conditions [10,13]. The research shows that living in a supportive environment reduces problems related to both physical and mental health. Thus, we would expect that the presence of a supportive co-parent would directly reduce the tendency of a partner with a history of maltreatment to behave in an angry, hostile, or antisocial fashion toward a child. Second, in earlier reports we have found that two parents in the same family will tend to influence each other's childrearing behaviors [14,15]. In this process, when one parent has experienced a history of harsh parenting, she or he is less likely to use similar behaviors with their own children if their spouse models warm and supportive behaviors toward children [14]. In the present analyses, we extend this idea by proposing that supportive behaviors in general by a co-parent will affect the partner with a history of being treated harshly as a child by increasing the likelihood that the partner will emulate these behaviors in interactions with other family members, including children.

Thus, our first *compensatory or main effect hypothesis* will be supported if G2 partner's warmth and positive communication toward G2 are negatively related (a statistical main effect) to G2's harsh behaviors toward the G3 child, net of the influence of G1 harsh parenting on G2 harsh parenting. We note that this and the following hypothesis are consistent with the Centers for Disease Control and Prevention's promotion of safe, stable, and nurturing relationships in families that are expected to help prevent child maltreatment [16]. In general, these types of supportive social relationships have been shown to reduce the negative influence of social stresses and strains on physical and psychological health [10].

# Moderating effects of co-parent behavior on G2 harsh parenting (Hypothesis #2)

In addition to compensatory or main effects, qualities of social relationships have also been identified that produce moderating, protective, or buffering effects [10-12]. In this situation, the source of resilience statistically interacts with the source of stress or strain in a fashion that reduces the impact of the stressor on the outcome variable of interest. In this study, we proposed that warmth and positive communication by a spouse or partner will statistically interact with G1 harsh parenting in a fashion that blunts its effect on G2 harsh parenting toward the G3 child. This second hypothesis will be supported if these partner behaviors reduce continuity in G1 to G2 harsh parenting, a *moderating or protective* effect. This hypothesis is consistent with a long history of research on the protective effects of social support against the adverse consequences of negative life experiences, such as maltreatment by a parent [10,13].

#### Social selection or cumulative continuity (Hypothesis #3)

Finally, earlier research indicates that social history partially determines the kinds of social relationships that individuals develop in their lives through a process of social selection or what Caspi and his colleagues have called "cumulative continuity" [17,18]. Cumulative continuity occurs when a person's interactional style leads to association with others with similar dispositions. For example, children raised by harsh parents will be more likely to be angry, irritable, or aggressive and they will tend to enter into social or romantic relationships with others who demonstrate similar kinds of behaviors. These types of people would be above average in hostility and below average in

warmth and support. Thus, we hypothesize that a history of harsh parenting will be negatively related to entering into a relationship with a warm and supportive spouse or partner. We expect, however, that the magnitude of this association will be relatively modest for this third, *cumulative continuity* hypothesis.

#### Control variables

Because socioeconomic status (SES) is correlated with many aspects of family relationships [17], we included SES as a control variable in the analyses. In addition, a long history of behavioral research has shown significant gender differences in the development of children and in responses of parents to boys and girls [19,20]. For that reason we controlled for G2 and G3 gender in the analyses. Finally, some (15%) of the co-parents in this study were in a cohabiting rather than a marital relationship. Because the interactional dynamics of cohabiting relationships tend to be somewhat different than those for marital relationships [21], we also controlled for marital status in the analyses.

#### Methods

#### Participants

Data for the present study were drawn from the Family Transitions Project (FTP), an ongoing, longitudinal study of 558 target youth (51% female) and their families. The FTP cohort involves participants from two earlier studies of rural families [22]. FTP interviews were first conducted with members of this cohort of adolescents (G2) and their parents (G1) in 1994, when they were in twelfth grade. G2 participants were interviewed again in 1995 and in alternating years after that, with an average retention rate of almost 90% through 2005 when they averaged 29 years of age. Of the original 558 families, 107 adolescents came from single-mother families and the remainder of these youth lived with both their biological parents. Participants lived in rural counties in north central Iowa, and thus were all European-Americans from primarily lower-middle and middleclass families. Additional information about the initial recruitment and the families involved is available in Conger and Conger [22]. Especially important for this report, these participants grew up during a severe economic downturn in the rural economy and are considered at moderate-to-high risk for the behavioral and emotional problems associated with such experiences.

Beginning in 1997, the oldest biological child (G3) of the G2 target was recruited for study. To be eligible for participation the child had to be at least 18 months of age and the G2 target parent must have been in regular contact with the G3 child. The current study focuses on the 290 G2 targets (120 males, 170 females) who had a G3 child eligible for participation by 2005. The current analyses used data from the G2 targets' adolescent years (i.e., 1994), prior to their becoming parents, as well as data from the annual assessments of each G3 child. A total of 90% of the G2 target parents with eligible children agreed to participate. The G2 targets averaged 25.6 years of age at the first assessment during which G3 entered the study, which is the focus of the present analyses. Average per capita income (total income divided by family size) for G2 families was \$17,500 and G2 participants averaged almost 15 years of education. Almost 81% of the G2 targets were living with the other biological parent of the G3 child at the first G3 assessment. Most of these were marital relationships (85%) with a small proportion of cohabiting

relationships (15%). Because G2 partners did not enter the study until adulthood, we do not have information about the quality of parenting they received as children. The average age of the G3 children at first assessment was 2.31 years. There were 157 G3 boys and 133 G3 girls.

## Procedures

G2 targets and their G1 parent(s) were recruited from public and private schools in rural areas of Iowa during G2's adolescent years. Letters explaining the project were sent to eligible families, who were then contacted by telephone and asked to participate. Seventy-eight percent of the two-parent families and over 90% of the single-parent families agreed to be interviewed. For the 1994 assessment employed in the current study, professional interviewers made home visits to each family for approximately 2 hours on two occasions. During the visits, each family member completed a set of questionnaires covering an array of topics related to work, finances, school, family life, mental and physical health status, and social relationships. In addition, G1 and G2 participated in a structured interaction task, which was videotaped and later coded by trained observers. The task consisted of the family members (mother, father, and the target adolescent) discussing and trying to resolve issues and disagreements they had cited as most problematic for their family in a questionnaire they had completed earlier in the visit. Because over 25% of the targets were part of single-mother families, the current analyses use data from the mother-target interactions.

Beginning as early as 1997, the G2 target and G3 child were visited at home once each year by trained interviewers. Data were collected from G2 targets and their G3 children, as well as from the romantic partners (married or cohabiting) of the G2 targets (when they had one), following procedures similar to those described for G2's family of origin. The G2 target and participating partner (when applicable) completed a series of questionnaires on parenting beliefs and behaviors, the characteristics of the G3 child, social relationships, economic circumstances, as well as mental and physical health status.

During the first assessment, the G2 target and G3 child engaged in a videotaped interaction task called the *puzzle task*, which lasted 5 minutes. In the puzzle completion task, G2 and G3 were presented with a puzzle that was too difficult for children to complete alone. G2 parents were instructed that the child should complete the puzzle alone; however, the parent could provide assistance if absolutely necessary. Puzzles varied by age group so that the puzzle slightly exceeded the child's skill level. This interaction task created a stressful environment for both parent and child, and the resulting behaviors indicated how well the parent handled the stress and how adaptive the child was to an environmental challenge. We expected that this task would produce a stressful situation likely to exacerbate harsh parenting for G2s if they engaged in such behaviors. In addition, G2 targets participated in a 25-minute video discussion task with their romantic partners during which they discussed the pleasant and unpleasant events in their lives, how they handle conflicts, and plans for the future. Trained observers coded the quality of the behaviors between participants using the Iowa Family Interaction Rating Scales [23]. Observers received 2 months of training and had to code preselected tasks with 90% accuracy to code family interactions. Observers attended weekly training sessions to ensure continuing reliability. Each interaction task (G2 with G3, G2's partner with G2) was coded by an independent observer selected at random from the pool of trained observers. Moreover, 20% of all tasks were rated by two randomly chosen coders in order to estimate inter-observer reliabilities.

## Measures

G1 harsh parenting. During the first wave of data collection for the FTP, the final year of high school, trained observers rated the G1 mother on a 9-point scale from low to high on the degree to which she showed hostility (angry or rejecting behavior), angry coercion (demanding, stubborn, coercive), physical attacks (hitting, pushing, pinching, etc.), and antisocial behavior (selfcentered, immature, insensitive) toward the G2 target during adolescence. Note that this measure includes evidence of both emotional and physical maltreatment, consistent with a recent meta-analysis indicating that both forms of parental behavior have adverse consequences for child development [7]. Our earlier research also has demonstrated that these measures of G1 harsh parenting predict G2 emotional problems and antisocial behavior, consistent with findings regarding other measures of child maltreatment [6,7,22]. Internal consistency reliability was acceptable across the four scales ( $\alpha = .91$ ), and the average intraclass correlation between observers across the four scales was .79 (ranging from .74 to .84). The four rating scales were used as multiple indicators for a latent construct of G1 harsh parenting (factor loadings ranged from .44 to .97).

*G2 harsh parenting.* The same rating scales used for G1 were also used for G2. Trained observers rated G2 targets on a 9-point scale from low to high on the degree to which they showed hostility (angry or rejecting behavior), angry coercion (demanding, stubborn, coercive), physical attacks (hitting, pushing, pinching, etc.), and antisocial behavior (self-centered, immature, insensitive) toward the G3 child. Internal consistency reliability was acceptable across the four scales ( $\alpha = .96$ ), and the average intraclass correlation between observers across the four scales was .77 (ranging from .71 to .82). The four rating scales were used as multiple indicators for a latent construct (factor loadings ranged from .77 to .98).

Warmth and support by G2's partner toward G2. G2's spouse or cohabiting romantic partner was rated on 9-point scales involving two different dimensions of supportive behaviors toward G2. The first measure was concerned with demonstrations of warmth and affection toward G2 and involved four scales assessing positive affect (warmth/support, endearment, escalate warmth, reciprocate warmth). The four rating scales were used as multiple indicators for a latent construct concerned with warmth and support (factor loadings ranged from .83 to .96). Internal consistency reliability was acceptable for the warmth construct ( $\alpha = .88$ ) and the average intraclass correlation between observers across the four rating scales was .72 (ranging from .59 to .82).

Positive communication by G2's partner toward G2. The second measure involved positive communication by G2's romantic partner to G2 based on four rating scales (communication, listener responsiveness, assertiveness, prosocial behavior). This measure assessed the degree to which the partner communicated clearly and positively with G2, respected and listened to G2's point of view, and indicated a willingness to cooperate with G2 about issues of importance to him or her. The four rating

scales were used as multiple indicators for a latent construct (factor loadings ranged from .83 to .94). Internal consistency reliability was acceptable ( $\alpha = .83$ ) and the average intraclass correlation between observers across the four scales was .64 (ranging from .62 to .67).

*Control variables.* We include both per-capita income and education as separate measures of SES in the current study. G2 educational attainment was assessed using the G2 target's self-report of years of schooling completed at the time of G3's first assessment. G2 per-capita income was assessed using G2 target's self report of per capita income at G3's first assessment, which we then divided by 1,000. Gender for G2 and G3 was measured by a dichotomous variable for each (0 = male, 1 = female) and marital status was coded 0 = married and 1 = cohabiting.

#### Analyses

Study hypotheses were evaluated using structural equation models (SEMs). We first assessed the measurement model and considered equivalence across G2 gender, G3 gender, and marital status assessing model fit using the standard chi-square index of statistical fit that is routinely provided under maximum likelihood estimation of parameters. We also used two indexes of practical model fit, the root mean square error of approximation (RMSEA) [24] and the Tucker- Lewis index (TLI) [25]. The RMSEA is an absolute index of fit. RMSEA values under .06 indicate close fit to the data [26]. For the TLI, fit index values should be greater than .90, and preferably greater than .95, to consider the fit of a model to data to be acceptable [26]. We then tested each study hypothesis involving both main effects and statistical interactions. As estimates of the overall chi-square are not available using numerical integration to estimate statistical interactions [27], we instead compared the fit of nested models with and without the interaction term using the Akaike Information Criterion (AIC) [28] and Bayesian Information Criterion (BIC) [29]. We used Mplus Version 6 [27] for the analyses using full information maximum likelihood estimation, first focusing on the measurement model, then turning to the structural paths to test study hypotheses.

#### Results

### The measurement model

The first step in testing the measurement model was to determine whether the four latent constructs proposed for the analyses (G1 harshness; G2 harshness; G2 Partner Warmth; G2 Partner Positive Communication) provided the best fit with the data. As indicated earlier, the factor loadings for these constructs were positive and the confirmatory analysis (CFA) also showed that each of them was statistically significant (p < .05). The CFA also showed that the four factor solution provided a good fit with the data (RMSEA = .043). Moreover, combining partner warmth and communication into a single construct indicative of partner support provided a significantly worse and unacceptable fit with the data (RMSEA = .116). Thus, we continued to use these two measures as separate dimensions of partner support iveness.

The next step in the tests of measures involved establishing measurement invariance across G2 and G3 males and females, in order to test whether the latent factors could be considered equivalent across these groups. For example, is G2 harshness toward a G3 girl equivalent to the same measure for a G3 boy? Again, we fit a four-factor model using G1 harshness, G2 harshness, G2 partner warmth, and G2 partner positive communication. A series of analyses demonstrated strong factorial invariance across gender for all variables [30]. In addition, in the model tests described below we evaluated gender differences in findings for G2 and G3 and for marital status. There were no significant differences by gender or marital status; therefore, we report the results for the combined G2 sample. The final measurement model with the combined sample showed acceptable fit with the data:  $\chi^2 = 84.06$ , df = 55, p = .007, TLI = .981, RMSEA = .043.

## Correlations

Correlations among the latent factors are presented in Table 1. For example, the association between G1 harsh parenting and later G2 harsh parenting was .30. G2 romantic partner's warmth and positive communication were both negatively related to G1 harsh parenting, as well as to G2 harsh parenting. Also important, despite the fact that the CFA supports our proposal that warmth and positive communication are separate latent constructs, they are highly correlated (r = .62). Correlations of this magnitude among predictor variables increase the standard errors of parameter estimates in regression equations thus reducing the likelihood of finding significant associations when they exist [31]. A reasonable way to handle this situation is to combine highly related predictors into single constructs, but we have seen from the CFA that warmth and positive communication should remain separate. The second way to deal with high correlations between predictor variables is to estimate their effects in separate models. We have chosen to follow the latter strategy in these analyses.

## Model testing

Figure 1 provides the findings related to G2 partner warmth to G2. In a first step in the analyses we controlled for SES (income and education), G2 gender, G3 gender, and marital status. Because the findings remained the same with and without these control variables in the analyses, for simplicity we present the results without the controls. Consistent with hypothesis 1, warmth demonstrated by a spouse or cohabiting partner was negatively related to G2 harsh parenting ( $\beta = -.27$ , SE = .06, p <.05). Nevertheless, there was still significant evidence of G1 to G2 continuity in harsh parenting ( $\beta$  = .22, SE = .07, p < .05). The findings were also consistent with hypothesis 2 in that warmth moderated the association between G1 and G2 harsh parenting  $(\beta = -.26, SE = .06, p < .05)$ . Finally, there was modest evidence of social selection or cumulative continuity (hypothesis 3) as demonstrated by the significant association between G1 harsh parenting and partner warmth ( $\beta = -.23$ , SE = .09, p < .05).

#### Table 1

Correlations among variables used in analyses

Variable	1	2	3	4
1. G1 harsh parenting	-			
2. G2 harsh parenting	.30	-		
3. Warmth from romantic partner	12	26	-	
4. Positive communication from romantic partner	20	30	.62	-

NOTE: All correlations statistically significant (p < .05).



**Figure 1.** Standardized coefficients and standard errors from model for G2 romantic partner's warmth and support; AIC = 10,324.6, BIC = 10,446.8; \*p < .05.

Figure 2 provides simple slopes depicting the interaction effect between partner warmth and G1 harsh parenting. The upper part of the figure shows that, when partners were 1 standard deviation above the mean or more on warmth, the association between G1 and G2 harsh parenting was not statistically significant ( $\beta = -.04$ ) and was substantially smaller than the zero order coefficient of .30 (Table 1). However, when partners were low in warmth, the association between G1 and G2 harsh parenting was intensified and substantially larger than the zero order coefficient ( $\beta = .48$ , SE = .02, p < .05). These results provide further evidence consistent with study hypothesis #2.

Figure 3 provides the results for spouse or cohabiting partner positive communication to G2. Again, the findings were the same with or without the control variables; thus, for simplicity we omit the control variables in Figure 3. The findings parallel those for warmth as illustrated in Figure 1. Consistent with hypothesis 1, positive communication was negatively related to G2 harsh parenting. Consistent with hypothesis 2, positive communication moderated the association between G1 and G2 harsh parenting, and there was also evidence of a social selection effect (hypothesis 3). The results also indicate that there continued to be a direct association between G1 and G2 harsh parenting.



**Figure 2.** Simple slopes of the intergenerational continuity in harsh parenting at low and high levels of warmth and support by G2's romantic partner.



**Figure 3.** Standardized coefficients and standard errors from model for G2 romantic partner's positive communication; AIC = 10,266.6, BIC = 10,386.7; \*p < .05.

Finally, Figure 4 illustrates the interaction effect as was done in Figure 2 for warmth. Again, the results show that when G2's romantic partner demonstrated care and concern through positive communication, there was no significant relationship between G1 and G2 harsh parenting. When the partner was below the mean on positive communication, however, intergenerational continuity in harsh parenting was intensified ( $\beta = .38$ , SE = .02, p < .05).

## Discussion

Well-designed studies conducted prospectively over time and across generations have demonstrated intergenerational continuity in harsh, hostile, and abusive parenting [1]. The importance of these findings is underscored by the fact that these types of parenting behaviors exacerbate adjustment problems for children and adolescents [4–6]. Included among these problems are antisocial tendencies that may play out in later aggressive or abusive behaviors toward the next generation of children. Despite the established importance of continuity in the maltreatment or abuse of successive generations of children, almost nothing is known about specific mechanisms that might disrupt this toxic cycle of parenting practices.



**Figure 4.** Simple slopes of the intergenerational continuity in harsh parenting at low and high levels of positive communication by G2's romantic partner.

To address this important deficit in earlier research, in the current report we hypothesized that the care, concern, and affection of a spouse or cohabiting romantic partner might provide a mechanism for reducing continuity in harsh parenting. We used two different measures as indicators of these types of behaviors, observed partner warmth and partner positive communication. We hypothesized that these forms of social support would protect against continuity in harsh and abusive parenting in two different ways. First, we proposed that when partners demonstrate care and concern, these actions will provide a model that a second generation parent will likely emulate at least to some degree. When this happens, even parents who experienced harsh parenting in their family of origin should be more likely to treat other family members, including their children, in a nurturing fashion. Second, we expected that positive behaviors by a romantic partner would act as a source of social support in general, support that typically reduces the link between other social experiences and the demonstration of negative affect [10,13]. Finally, we expected that G2 parents who had experienced harsh parenting as youth would be less likely to select nurturing partners; however, when they did, we predicted that the noted beneficial effects would occur.

Based on actual observations of parenting and partner behaviors in two generations of families, we found significant support for our study hypotheses. First, warmth and positive communication by a partner reduced the likelihood that the coparent would engage in harsh parenting even when (s)he had a history of being treated harshly as a child or adolescent. Moreover, nurturing behaviors by a romantic partner completely disrupted intergenerational continuity in harsh parenting. To our knowledge this is the first study to demonstrate at least one social mechanism that can break the intergenerational cycle of child maltreatment. Also encouraging, although harsh parenting in the first generation predicted the selection of a less nurturing spouse or partner, this association was far from perfect indicating that many G2 parents will enter into supportive relationships despite an early history of being treated in a harsh or abusive manner by their parents.

In addition to their theoretical and empirical significance, these results suggest that prevention or intervention programs interested in breaking the cycle of maltreatment need to examine co-parent as well as parent-child relationships. Most parenting programs, for example, have a singular focus on one parent's behavior, typically the mother's. These findings suggest that, when a romantic partner is present, promoting the partner's positive contributions to the parenting environment may have great benefits. The results also suggest that safe, stable, nurturing relationships go beyond the direct relationships involving children and extend to the indirect relationships in children's lives, such as the presence of a nurturing interparental relationship. As such, the fostering of care and concern among multiple family members and encouraging safe, stable, and nurturing relationships between parents may also play significant roles in reducing intergenerational continuity in harsh parenting.

Of course, these results have limitations, including reliance on a mostly European-American sample of rural adolescents followed to adulthood. They will need to be replicated in more diverse populations to increase confidence in their generalizability. In addition, a whole range of individual characteristics might serve the same protective function as spouse support. For example, highly neurotic or emotionally unstable parents might well emulate the worst qualities of the parenting they experienced as a child whereas agreeable and conscientious parents may draw on the best experiences they had as children. Also important might be beliefs that develop that reject the harsh parenting style present in the family of origin. Other aspects of family dynamics may also be important for disrupting intergenerational continuity in maltreatment, such as the allocation of parenting responsibilities and the dispositional qualities of the child. These other possibilities need to be examined in future research. Despite these limitations, however, the present findings provide very promising evidence regarding an important social mechanism for reducing the risk of an intergenerational legacy of harsh, abusive, or aggressive parenting.

## References

- Conger RD, Belsky J, Capaldi DM. The intergenerational transmission of parenting: Closing comments for the special section. Dev Psychol 2009;45: 1276–83.
- [2] Putallaz M, Costanzo PR, Grimes CL, Sherman DM. Intergenerational continuities and their influences on children's social development. Soc Dev 1998;7:389–427.
- [3] Van IJzendoorn MH. Intergenerational transmission of parenting: A review of studies in nonclinical populations. Dev Rev 1992;12:76–99.
- [4] Conger RD, Neppl T, Kim KJ, Scaramella L. Angry and aggressive behavior across three generations: A prospective, longitudinal study of parents and children. J Abnorm Child Psychol 2003;31:143–60.
- [5] Hops H, Davis B, Leve C, Sheeber L. Cross-generational transmission of aggressive parent behavior: A prospective, mediational examination. J Abnormal Child Psychol 2003;31:161–9.
- [6] Dogan SJ, Conger RD, Kim KJ, Masyn KE. Cognitive and parenting pathways in the transmission of antisocial behavior from parents to adolescents. Child Dev 2007;78:335-49.
- [7] Norman RE, Byambaa M, De R, et al. The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. PLOS Med 2012;9:1–31.
- [8] Caspi A, Elder GH. Emergent family patterns: The intergenerational construction of problem behavior and relations. In: Hinde R, Stevenson-Hinde J, eds. Relationships within families: Mutual influences. Oxford, UK: Clarendon Press; 1988 p. 218–40.
- [9] Neppl TK, Conger RD, Scaramella LV, Ontai LL. Intergenerational continuity in parenting behavior: Mediating pathways and child effects. Dev Psychol 2009;45:1241-56.
- [10] Turner RJ. Understanding health disparities: The promise of the stress process model. In: Avison WR, Aneshensel CS, Schieman S, Wheaton B, eds. Advances in the Conceptualization of the Stress Process: Essays in Honor of Leonard I. Pearlin. New York: Springer; 2010 p. 3–21.

- [11] Masten AS. Ordinary magic: Resilience processes in development. Am Psychol 2001;56:227–38.
- [12] Luthar SS, Cicchetti D, Becker B. The construct of resilience: A critical evaluation and guidelines for future work. Child Dev 2000;71:543–62.
- [13] Conger RD, Rueter MA, Elder Jr GH. Couple resilience to economic pressure. J Pers Soc Psychol 1999;76:54–71.
- [14] Conger RD, Schofield TJ, Neppl TK. Intergenerational continuity and discontinuity in harsh parenting. Paren Sci Pract 2012;12:222–31.
- [15] Schofield TJ, Conger RD, Martin MJ, et al. Reciprocity in parenting of adolescents within the context of marital negativity. Dev Psychol 2009;45: 1708–22.
- [16] Centers for Disease Control. Strategic direction for child maltreatment prevention. Preventing child maltreatment through the promotion of safe, stable, and nurturing relationships between children and caregivers. Available at: http://www.cdc.gov/violenceprevention/pdf/CM\_Strategic\_ Direction-Long-a.pdf.
- [17] Conger RD, Donnellan MB. An interactionist perspective on the socioeconomic context of human development. Annu Rev Psychol 2007;58: 175–99.
- [18] Caspi A, Bem DJ, Elder GH. Continuities and consequences of interactional styles across the life course. J Pers 1989;57:375–406.
- [19] Cummings EM, Davies PT, Campbell SB. Developmental psychopathology and family process: Theory, research and clinical implications. New York: Guilford; 2000.
- [20] Sroufe LA, Egeland B, Carlson EA, Collins WA. The development of the person: The Minnesota study of risk and adaptation from birth to adulthood. New York: Guilford; 2005.
- [21] Cohan CL. The cohabitation conundrum. In: Fine MA, Fincham FD, eds. Handbook of Family Theories: A Content-based Approach. New York: Routledge; 2013:105–22.
- [22] Conger RD, Conger KJ. Resilience in Midwestern families: Selected findings from the first decade of a prospective, longitudinal study. J Marriage Fam 2002;64:361–73.
- [23] Melby JN, Conger RD. The Iowa family interaction rating scales: Instrument summary. In: Kerig P, Lindahl K, eds. Family Observational Coding Systems: Resources for Systematic Research. Mahwah, NJ: Lawrence Erlbaum; 2001.
- [24] Browne MW, Cudeck R. Alternative ways of assessing model fit. In: Bollen KA, Long JS, eds. Testing Structural Equation Models. Newbury Park, CA: Sage; 1993 p. 136–62.
- [25] Tucker LR, Lewis C. A reliability coefficient for maximum likelihood factor analysis. Psychometrika 1973;38:1–10.
- [26] Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Struct Equ Modeling 1999;6:1–55.
- [27] Muthen LK, Muthen BO. Mplus User's Guide. 4th ed. Los Angeles, CA: Muthén & Muthén; 2006.
- [28] Akaike H. A new look at the statistical model identification. IEEE Trans Automatic Control 1974;19:716–23.
- [29] Schwarz G. Estimating the dimension of a model. Ann Stat 1978;6:461–4.
  [30] Meredith W. Measurement invariance, factor analysis and factorial invariance. Psychometrika 1993;58:525–43.
- [31] Cohen J, Cohen P, West SG, Aiken LS. Applied multiple regression/ correlation analysis for the behavioral sciences. Mahwah, NJ: Erlbaum; 2003.