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PARENTAL EMPATHY, AGGRESSIVE PARENTING AND CHILD ADJUSTMENT IN A HIGH RISK SAMPLE

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PARENTAL EMPATHY, AGGRESSIVE PARENTING AND CHILD ADJUSTMENT IN A HIGH RISK SAMPLE

Dissertation

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Arts and Sciences
at the University of Kentucky

By
Shuang Bi
Lexington, Kentucky

Director: Dr. Peggy Keller, Associate Professor of Psychology
Lexington, Kentucky 2017

ABSTRACT OF DISSERTATION

PARENTAL EMPATHY, AGGRESSIVE PARENTING AND CHILD ADJUSTMENT IN A HIGH RISK SAMPLE

The current study examined the relation between parental empathy, parenting aggression and child maladjustment in a group of parents who perpetrated child abuse and neglect. Twenty parents who were court mandated to receive a parenting intervention program at the Nest Center for Women, Children, and Families participated in this research study. Information about parental dispositional empathy, parent-child specific empathy, parenting aggression and child internalizing and externalizing symptoms were collected through an interview with the parents. Parents in this study reported high levels of dispositional empathy, but exhibited low to moderate levels of empathy in a parent-child relationship rated by coders. Parents also reported low levels of parenting aggression across psychological aggression, corporal punishment and psychological control. Examining the relation between parental empathy and aggressive parenting revealed that parent-child specific empathy, but not dispositional empathy, was negatively associated with parental psychological control. In a subsample of older children in middle childhood and adolescence, parental affective dispositional empathy was negatively associated with child externalizing symptoms. The current study links parental empathy to parental psychological control and emphasizes the importance of examining empathy in a specific relationship in addition to dispositional empathy.

KEYWORDS: parental empathy, psychological control, spanking attitude, child maladjustment

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Date: July 24, 2017

PARENTAL EMPATHY, AGGRESSIVE PARENTING AND CHILD ADJUSTMENT IN A HIGH RISK SAMPLE

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July 24, 2017

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It is still hard to believe that I have completed my Ph.D. at this moment. Life hasn't changed that much since I defended it a week ago. I am stilling sitting in the library, working on manuscript revision and at this moment, formatting the dissertation to submit it to graduate school. I still remembered when I finished my master thesis a couple years ago writing the acknowledgement just seemed such a chore (although I still wrote it after seeing how my academic sister's as an example) probably because it was not a terminal degree; I would still need to stay a couple years to get this degree and I would still be living here. But right now, it feels differently; my life here in Lexington, KY comes to an end and I am moving to a different state and starting a new journey. Wow, I am a doctor now! ("not the real doctor", people outside academia would comment this way when you explain to them you have a Ph. D). It is definitely a long and not so easy journey. I moved across half of the world to pursuit this degree. Before I started everything, I knew it was not going to be easy and I thought I was prepared because I knew why I was doing this. But, the reality was ten times harder than you expected. Even I think I know why I are doing this, I still question myself every now and then, particulate in the hard time. Language was a challenge and still is a challenge, especially when it comes teaching; learning to live by yourself was another big challenge which I did not think about before; switching from the majority in the society to the minority is one more big transition and the list goes on. But here I am; managed all of these and am ready to start all over again. I owe special thanks to the following people to support me through this journey. My dear mentor, Dr. Peggy Keller; she is the kindest and one of the most intelligent person I have ever met. She taught me numerous things from basic statistics

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Chapter 1 Introduction

Empathy training is an important component in a variety of intervention and prevention programs, such as treatment for sexual offenders (Marshall, 1999; McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010), bullying prevention program (Grossman et al., 1997), as well as parenting intervention programs for child abuse and neglect (Bavolek, Kline, McLaughlin, & Publicover, 1979). This is because a lack of empathy is considered the root of aggression (Miller & Eisenberg, 1988). However, thus far research has not clearly demonstrated the relation between empathy and aggression (Vachon, Lynam, & Johnson, 2013). More specifically, the relation between parental empathy and parenting aggression as well as child maladjustment is unclear. Therefore, the current study examines whether different components of empathy are associated with parenting aggression and child maladjustment in a sample of parents who have perpetrated child abuse and neglect.

Although the definition of empathy varies somewhat, it is usually considered to have two components: affective and cognitive (Davies, 1983; Jolliffe & Farrington, 2004; Vachon, et al., 2013; Stern, Borelli, & Smiley, 2014). The affective component, sometimes referred to as "empathetic concern" (Davies, 1983), is a vicarious emotional response involving concern, tenderness, or desire for the well-being of another (Stern et al., 2014). The cognitive component, sometimes referred to as "perspective taking" (Davies, 1983) or "empathic awareness," is the intellectual ability to correctly identify and understand others' emotions (Stern et al., 2014).

Although empathy training is widely used in prevention and intervention programs with the hope of preventing or treating aggressive behaviors, the association

between empathy and aggression is far from clear. A recent meta-analysis found surprisingly weak association between empathy and aggression (Vachon et al., 2013). In order to address this issue, they proposed to expand the definition of empathy (Vachon & Lynam, 2016). Traditionally, low affective empathy refers only to an absence of feeling concern for others ("low resonance") or indifference. However, pathologically low empathy may also include "dissonant" emotions, such as enjoyment of others' misfortunes (Vachon & Lynam, 2016). The failure to make the distinction between low resonance and high dissonance may explain the lack of association between empathy and aggression.

In a parent-child relationship, low empathy is believed to underlie some deficits in parenting, particularly in the field of child abuse and neglect. However, research is mixed with regard to the association between parental empathy and child abuse and neglect. For example, abusive fathers were observed to be less affectively and cognitively empathic towards their children than non-abusive fathers (Francis & Wolfe, 2008). But in another study, parents who are at high risk for child physical abuse exhibited less affective empathy than parents who are at low risk, but no differences in cognitive empathy (Perez-Albeniz & de Paul, 2003). The reverse has also been found: parents who are at high risk for child physical abuse showed less cognitive empathy than the control group, with no differences observed for affective empathy (de Paul, Perez-Albeinz, Guibert, Asla, & Ormaechea, 2008). Therefore, more research is needed on how parental empathy is related to aggressive parenting behaviors.

One possible explanation of the mixed findings could be due to the definition of empathy as described above. In addition, they could be due to using the self-report and

dispositional measure of empathy (Rodriguez, 2013; Stern et al., 2014). Self-reported empathy is impacted by social desirability and personal distortions (McGrath, Cann, & Konopasky, 1998; Rodriguez, 2013; Stern et al., 2014). Further, levels of empathy may vary across contexts (e.g., toward strangers vs. toward family members) rather than being purely dispositional. People who lack empathy towards strangers may not necessarily lack empathy for their children. Therefore, we propose empathy in a specific parent-child relationship will be more relevant to parenting aggression.

Parenting aggression can take on different forms, such as physical aggression, verbal aggression and psychological aggression (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) and one key form of psychological aggression which is understudied is psychological control. Parental psychological control refers to parental behaviors that are intrusive and manipulative, undermining child autonomy, and characterized by guilt induction, love withdrawal, instilling anxiety and verbal constraint (Schaefer, 1965; Barber, 1996; Barber & Harmon, 2002). In guilt induction, parents coerce children into complying with parental demands by making children feel guilty. Love withdrawal occurs when parents make their love and affection contingent on whether the child complies with parental demands or meets expectations. Instilling anxiety refers to frequent reminders of child misbehavior and exaggerating the consequences of misbehavior. Verbal constraint involves parents limiting the ability of children to verbally express themselves or have input into decisions relevant to their lives.

Parental psychological control has been linked to various forms of child maladjustment, including lower self-esteem, internalizing symptoms and externalizing symptoms (Barber, Olsen, & Shagle, 1994; Barber, 1996; Barber, Stolz, Olsen, Collins,

& Burchinal, 2005). For example, parental psychological control predicted adolescent depression and anti-social behaviors even after controlling for parental support and behavioral control (Barber et al, 2005). Greater parental psychological control also significantly predicted lower self-esteem and academic achievement in both European American and African American adolescents (Bean, Bush, McKenry, & Wilson, 2003). Unfortunately, parental psychological control is relatively common (Barber et al., 2005; Grolnick, 2003), making it an important threat to the well-being of children.

Although the adverse effects of parental psychological control on child maladjustment are well-documented, relatively little is known about what contributes to parental psychological control. One exception indicates that parental separation anxiety and maladaptive perfectionism are positively related to parental psychological control (Soenens, Vansteenkiste, Duriez, & Goossens, 2006). In the current study, we hypothesize that parental empathy will also be related to parental psychological control. On the one hand, parents who are high on affectively resonant empathy are more likely to experience emotions congruent with that experienced by their children. Therefore, inducing feelings of guilt, anxiety, and rejection in a child would be likely to result in distress for the parent, and psychological control of children would be reduced in order to avoid this distress. On the other hand, if parents are high on affectively dissonant empathy, they will enjoy the emotional distress of their children, reinforcing their use of psychological control. Additionally, parents who are low on cognitive empathy will have trouble identifying and understanding their children's emotions. Because they may not realize the negative effects of their psychological control of their children, they are likely to continue using psychological control as a parenting strategy. Thus, there is a strong

conceptual rationale for expecting relations between parental empathy and parental psychological control. Nevertheless, there has been no empirical investigation of such associations. The proposed study therefore addresses a critical research need.

The current study aims to examine the relation between parental empathy, parenting aggression and child maladjustment. We will utilize the new conceptualization of dispositional empathy which includes cognitive empathy, affective resonant empathy and affective dissonant empathy (Vachon & Lynam, 2016). In addition to the dispositional measure of parental empathy, we will also measure parental empathy specific to the parent-child relationship. We hypothesize that both dispositional empathy and parent-child specific empathy will be negatively associated with parenting aggression, including parents' use of corporal punishment, psychological aggression and parental psychological control. In addition, we hypothesize parenting aggression will mediates the association between parental empathy and child maladjustment. However, this the current study will not be able to examine this hypothesis due to the current sample size.

Chapter 2 Methods

2.1 Participants

We planned to recruit 162 parents based on a prior power analysis. In reality, 20 parents who received parenting intervention classes from the Nest Center for Women, Children and Families (called the Nest below) participated in the current study. The Nest is local non-profit organization that provides court-mandated parenting interventions for parents who have exhibited child abuse or neglect. Parents participate in the intervention program as part of the process to regain the custody of their children. Participants were recruited in two ways: staff at the Nest shared information about the study with their clients when the clients called in and sent us their contact information if interested; we also went to the orientation session at the Nest before parents started the intervention to recruit participants. Parents needed to meet the following eligibility criteria to participate in the study: 1) have a child between 1.5 years old and 18 years old, 2) be at least 18 years old and 3) have regular contact with their child (on average 1 hour per week or more during visitation). All participants were independent to each other. 85% of participants were mothers; 95% were biological parents. 60% were white, 30% were African-American and 10% were other races. The majority of participants were from lower income families; 70% lived below the poverty line (family annual income < $23,000). 90% had a high school diploma or more education.

2.2 Procedure

Parents came to the Nest at a scheduled time to participate in the study. The study took place in an individual room at the Nest. Consent was obtained at the beginning of

the study. Parents were asked to talk about one child that they had most difficulties with if they had more than one child in the target age range. Parents answered all questionnaires through an interview format conducted by a trained research assistant. Part of the interview was audio recorded for later transcription and coding (see below). This study was approved by the Institutional Review Board. Although the larger study aimed to evaluate changes in study variables after the program compared to before, only two parents completed the program and participated in the second interview and therefore questions related to change are not considered in the present study. The program the Nest used is Nurturing Parenting Program, an established parenting intervention program used across the nation. The Nest taught the class in group format and has 12 sessions. The program contains the following information: children's brain development, developing empathy, understanding our feelings, building self-worth, family morals, values, and rules, understanding discipline, handling anger and handling stress.

2.3 Measures

2.3.1 Dispositional empathy

Parents' dispositional empathy was measured by the Affective and Cognitive Measure of Empathy Scale (ACME; Vachon & Lynam, 2016). The ACME contains three subscales: Cognitive Empathy (12 items; Cronbach's α= .88), Affective Resonance Empathy (12 items; Cronbach's α= .70) and Affective Dissonance Empathy (12 items; Cronbach's α= .75). An example item in each subscale is "I have a hard time reading people's emotions"; "It makes me feel good to help someone in need"; "I think it's fun to push people around once and a while" respectively. All items in each subscale were summed together as a single score with all items in Affective Dissonance Empathy

subscale reversed scored for simplicity of explanation so that higher scores in all subscales represent higher empathy. Each item was rated on a 5 point Likert Scale, from 1 “strongly disagree” to 5 “strongly agree”.

2.3.2 Empathy in the parent-child relationship

Parental empathy specific to the child was measured using the Parent Development Interview (PDI; Aber, Belsky, Slade, & Crnic, 1999; Slade, Aber, Berger, Bresgi, & Kaplan, 2003). The PDI is a semi-structured clinical interview about parents’ perceptions of the child, and works well with parents of infants (Slade, Grienenberger, Bernbach, Levy, & Locker, 2005), toddlers (Golombok, MacCallum, Murray, Lycett, & Jadva, 2006), children (Aber, Slade, Berger, Bresgi, & Kaplan, 1985), and adolescents (Benbassat & Priel, 2012). We only utilized questions on parents’ emotions and how parents react to child negative emotions. An example question is “Does (child’s name) ever feel upset? Tell me about a time in the last week or two when (child’s name) was upset.” All interviews were audio recorded and transcribed verbatim. Then 4 trained coders rated parental empathy in each interview using the Parental Affective and Cognitive Empathy Scale (PACES; Stern, et al., 2014) on a Likert scale from 0 to 6. We coded parental empathy as an overall construct which includes cognitive empathy, affective empathy and empathetic behaviors. One occurrence of empathy, regardless of cognitive empathy, affective empathy or empathetic responding without obvious personal distress and hostility would result in a score of 4. An example 4 score description is “*The best thing about being a mom is just seeing your child’s face light up. You know and they’re happy and you’re able to pay attention to them um and actually be in the moment and put your phone away and be able to be with him and remember those things*”. The

coders reached reliability of Krippendorff's α= .70 using the training material. In our own data, each interview was coded by two coders to ensure accuracy. The percentage of agreement (within one point difference) among coders was 83%. The two coders' scores were averaged as a single score for parent-child empathy for each participant.

2.3.3 Parental aggression

We used the Conflict Tactic Scale-Parent and Child (CTS-PC; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) to measure parental aggression. Only three subscales were used in the study because other subscales contained items that required reporting to the Child Protective Services. The three subscales used in the current study were psychological aggression (4 items; Cronbach's α= .68), neglect (1 item) and corporal punishment (1 item). An example item in each subscale is "Shouted, yelled, or screamed at him/her"; "Were too caught up with your own problems that you were not able to show or tell your child that you loved him/her"; "Spanking him/her on the bottom with your bare hand" respectively. Parents answered how often ("this has never happened", "once", "twice", "3-5 times", "6-10 times", "11-20 times", and "more than 20 times") they engaged in the behavior listed in each item.

Spanking attitudes. We used the Endorsement of Spanking Scale (EOS; Deckard, Lansford, Dodge, Pettit, & Bates, 2003) to measure parents' attitudes about spanking. The EOS contains 5 items; an example item is "Parents should spank their children when the children need it". Parents rated each item on a Likert scale from 1 "strongly disagree" to 5 "strongly agree". The Cronbach's α in our samples was .82.

Parental psychological control. We used three subscales from the Parental Behavioral Inventory (PBI; Schaefer, 1965): hostile control (8 items; Cronbach's α =

.42), control through guilt (8 items; Cronbach's α = .55) and instilling anxiety (8 items; Cronbach's α = .73). An example in each subscale is "I decide what friends my child can go around with"; "I think my child is ungrateful if he/she does not obey me"; I worry about how my child will turn out because I take every bad behavior seriously" respectively. Parents answered "False" 0, "Sort of true" 1, or "True" 2 to each item. We also adapted the psychological control subscale of the Child-Puppet Interview-Parenting Scale (CPIP; Morris, Steinberg, Sessa, Avenevoli, Silk, & Essex, 2002) to measure parental psychological control. The CPIP psychological control subscale contained 13 items (Cronbach's α = .60). An example item is "I don't like to hear what my child has to say." Parents rated on a 5 point Likert scale from 1 "completely disagree" to 5 "completely agree" on each item.

2.3.4 Child maladjustment

We used the Child Behavioral Checklist (CBCL; Achenbach, 1991) to measure child internalizing and externalizing symptoms. Because our sample covers a wide age range of the target children, two different versions of the CBCL were used: a preschool child version (1.5-6 years old) and a school age child version (6-18 years old). The Cronbach's αs of the internalizing subscale are .87 and .82 and for the externalizing subscale are .82 and .96 respectively. We utilized T scores instead of raw scores so that scores would be comparable regardless of child ages.

2.3.5 Other parental functions

Drug use. Because lots of the participants were referred from drug court for child abuse or neglect, we included one item in the questionnaire to ask about the potential

drug use history, “Do any of your child’s relatives have any drug problem?” Parents answered “yes” or “no” to this question.

General stress. We used the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) to measure the general perceived stress level in parents. The PSS contains 4 items (Cronbach’s $\alpha = .63$). A single score was computed to indicate the general stress level by summing all 4 items together. Parents rated on a 5 point Likert scale from 0 “never” to 4 “very often” on each item. An example item is “In the last two weeks, how often have you felt that you were unable to control the important things in your life?”

Chapter 3 Results

3.1 Preliminary analyses

Descriptive statistics are presented in Table 3.1. Parents in our sample demonstrated moderate levels of dispositional cognitive empathy in general. Their dispositional affective empathy, including both affective resonant empathy and affective dissonant empathy (reversed scores) were at the higher end of range, representing higher levels of dispositional empathy. However, parents showed relatively lower levels of empathy towards their children, which includes both cognitive empathy, affective empathy and empathetic responding to child.

Parents in the current study reported very low levels of psychologically aggressive behaviors, neglect and corporal punishment behaviors towards their children. They also endorsed low to moderate levels of positive attitudes towards spanking. Parents also showed lower levels of parental psychological control, which includes hostile control, control through guilt and instilling anxiety. Children in our sample exhibited close to borderline-clinical levels of internalizing problems and below clinical levels of externalizing problems.

3.2 Tests of Hypotheses

Bivariate correlations between all variables of interest are presented in Table 3.2. Simple scatter plots were used to examine potential outliers, but no outliers were identified. Dispositional empathy, including cognitive empathy, affective resonant empathy and affective dissonant empathy, was not significantly correlated with any measure of parenting aggression. However, empathy specific to the parent-child relationship significantly correlated with parental psychological control, $r = -.68$, $p < .01$.

Similarly, parental empathy in the parent-child relationship significantly correlated with parental hostile control, r = -.78, p <.01. None of the parental empathy measures nor any of the parenting aggression measures were significantly correlated with child internalizing symptoms or externalizing symptoms.

3.3 Exploratory analyses

Because the target child's age ranges widely (from 1.5 years old to 18 years old), we decided to run some additional exploratory analyses using a subsample (N=11) of children in middle childhood and adolescence (6 years and older). Correlation coefficients are presented in Table 3.3. Empathy in the parent-child relationship still significantly correlated with parental hostile control, r = -.68, p < .05. In addition, we found that parental affective resonant empathy significantly correlated with child externalizing symptoms, r = -.61, p < .05. Further, parents' spanking attitude and spanking behavior significantly correlated with child internalizing symptoms, r = .73, p < .05 and r = .62, p < .05 respectively. Parents' use of control through guilt and instilling anxiety also significantly correlated with child internalizing symptoms, r = .63, p < .05 and r = .76, p < .01 respectively.

Next we examined if parents' empathy and parenting aggression differed between child genders. Multiple t tests were run to test for gender differences. No significant differences were found for any parental empathy or parenting aggression variable. In addition, because majority of participants were referred from drug court, additional t tests were run to compare parental empathy and parenting aggression between parents who reported potential use of drugs and those who did not. No significant group differences were found. See Table 3.4 for detailed t test results.

Table 3.1

Descriptive statistic

	M	*SD*
Cognitive empathy (12-60)	44.25	8.86
Affective resonant empathy (12-60)	55.15	5.49
Affective dissonant empathy (12-60)	56.85	4.74
Parental empathy (0-6)	2.83	0.66
Spanking attitude (5-25)	10.05	4.35
Psychological aggression (0-28)	0.84	0.95
Child neglect (0-7)	0.15	0.49
Corporal punishment (0-7)	0.45	1.19
Psychological control (13-65)	17.25	4.08
Control through guilt (0-16)	3.35	1.98
Hostile control (0-16)	3.10	2.10
Instilling anxiety (0-16)	3.55	2.67
Internalizing symptoms (29-100)	59.95	10.30
Externalizing symptoms (28-100)	54.20	13.93
General stress (0-16)	7.10	3.08

Table 3.2
Correlations for full sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.Cognitive empathy	-															
2.Affective resonant empathy	.40	-														
3.Affective dissonant empathy	-.08	.26	-													
4.Parental empathy	-.13	.36	.11	-												
5.Spanking attitude	.03	.04	.10	-.19	-											
6.Psychological aggression	.13	-.07	-.14	-.16	.26	-										
7.Neglect	-.20	-.13	.19	-.09	-.00	.11	-									
8.Corporal punishment	.38	.25	-.03	-.25	.57**	.74**	-.12	-								
9.Psychological control	.22	-.05	.05	-.68**	.21	.47*	-.02	.52*	-							
10.Control through guilt	.20	-.02	.40	-.38	.55*	.27	.11	.42	.31	-						
11.Hostile control	.23	-.17	.17	-.78**	-.04	.18	-.07	.23	.82**	.22	-					
12.Instilling anxiety	-.11	-.09	.35	-.27	.40	.21	.14	.32	.40	.44	.41	-				
13.Interalzing symptoms	-.08	.30	.20	.16	.08	.28	.00	.38	.22	.21	.06	.33	-			

Continued

14.Externzling symptoms	-.25	.01	.12	-.34	.02	.33	.34	.35	.23	.26	.15	.24	.48*	-	
15.Child age	-.41	.20	.40	-.04	.33	.05	.15	.13	.03	.33	-.04	.21	.35	.56**	-
16.General stress	-.25	-.22	.03	-.33	.33	.07	.09	.09	.10	.31	.06	.38	-.08	.30	.41	-

Note: *, $p<.05$; **, $p<.01$.

Table 3.3
Correlations for parents with older children (6 years or older)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.Cognitive empathy	-															
2.Affective resonant empathy	.50	-														
3.Affective dissonant empathy	.02	.34	-													
4.Parental empathy	-.07	.36	.31	-												
5.Spanking attitude	.03	.19	.43	-.09	-											
6.Psychological aggression	.35	.21	.08	-.34	.31	-										
7.Neglect	-.17	-.33	.27	-.14	-.09	.11	-									
8.Corporal punishment	.38	.21	.06	-.38	.60	.88**	-.17	-								
9.Psychological control	.54	.25	-.12	-.56	.34	.83**	-.05	.87**	-							
10.Control through guilt	.21	.24	.46	-.32	.85**	.57	.07	.72*	.50	-						
11.Hostile control	.44	-.03	-.09	-.68*	-.12	.56	-.09	.54	.69*	.15	-					
12.Instilling anxiety	.14	-.16	.44	-.12	.64*	.43	.07	.56	.28	.59	.27	-				
13.Interalzing symptoms	-.19	-.01	.54	-.10	.73*	.48	-.05	.62*	.35	.63*	.21	.76**	-			

Continued

14.Externzling symptoms	-.39	-.61*	-.20	-.54	.12	.44	.29	.38	.27	.31	.22	.13	.33	-	
15.Child age	-.53	-.05	.34	-.22	.38	.01	-.13	.13	-.05	.42	-.04	-.01	.52	.49	-
16.General stress	.02	-.42	-.16	-.56	.24	.11	-.09	.19	.08	.40	.24	.38	.18	.43	.22	-

Note: *, $p<.05$; **, $p<.01$.

Table 3.4
Mean comparisons between child sex and family drug use history

Dependent variable				Family drug use history		
	boys	girls	*t*	+	-	*t*
	M (*SD*)	*M* (*SD*)		*M* (*SD*)	*M* (*SD*)	
Parental empathy	2.92 (0.70)	2.60 (0.55)	-0.92	2.77 (0.75)	3.00 (0.35)	0.65
Cognitive empathy	45.21 (8.51)	42.00 (10.08)	-0.73	44.29 (7.34)	44.17 (12.58)	-0.03
Affective resonant empathy	54.43 (6.35)	56.83 (2.32)	1.24	56.43 (6.10)	55.83 (4.17)	0.36
Affective dissonant empathy	57.36 (4.40)	55.67 (5.72)	-0.72	56.43 (4.97)	57.83 (4.40)	0.60
Spanking attitude	9.93 (3.75)	10.33 (5.92)	0.19	9.57 (4.20)	11.17 (4.88)	0.74
Neglect	0.07 (0.27)	0.33 (0.82)	0.77	0.21 (0.58)	0.00 (0.00)	-0.89
Corporal punishment	0.29 (0.61)	0.83 (2.04)	0.65	0.50 (1.40)	0.33 (0.52)	-0.28
Psychological aggression	0.68 (0.82)	1.21 (1.21)	1.15	0.96 (1.08)	0.54 (0.51)	-0.91
Control through guilt	3.21 (1.76)	3.67 (2.58)	0.46	3.07 (2.06)	4.00 (1.79)	0.96
Hostile control	3.14 (2.21)	3.00 (2.00)	-0.14	3.36 (2.34)	2.50 (1.38)	-0.83
Instilling anxiety	3.79 (2.67)	3.00 (2.83)	-0.59	3.36 (2.73)	4.00 (2.68)	0.48

Continued

Psychological control	16.43 (3.69)	19.17 (4.62)	1.41	18.36 (4.38)	14.67 (1.37)	-2.00^{+}

Note: +, p <.1.

Chapter 4 Discussion

The current study examined the associations between dispositional empathy, parent-child specific empathy and parenting aggression. None of the dispositional empathy components were significantly associated with parenting aggression, including parental use of psychological aggression, spanking or parental psychological control. However, empathy toward one's child was negatively correlated with parental psychological control and hostile control. Parents who showed higher levels of empathy towards their children exhibited lower levels of psychologically controlling behaviors. Moreover, we found parental affective resonant empathy significantly correlated with child externalizing symptoms for children in middle childhood and adolescence. Within the same age range, parental psychological control significantly correlated with child internalizing symptoms.

Dispositional empathy in parents was not significantly correlated with any type of parenting aggression. This is somewhat consistent with the previous mixed findings on the association between parental trait empathy and child abuse or neglect (de Paul, et al., 2008; Francis & Wolfe, 2008; Perez-Albeniz & de Paul, 2003). Therefore, the new conceptualization of dispositional empathy does not seem to be fruitful in explaining parenting aggression.

However, we found significant negative correlation between empathy in the parent-child relationship and parental use of psychological control. This is consistent with our hypothesis that parental empathy is incompatible with the use of psychologically controlling behaviors. Parents who are low on affective resonant empathy are indifferent to the negative emotions that children experienced while those who are low on cognitive

empathy may not understand those negative emotions. Therefore less empathetic parents are more likely to exert psychological control when parenting their children. Parental empathy has been linked to other aspect of parenting, such as parental warmth and support (Stern et al., 2014; Soenens, Duriez, Vansteenkiste, & Goossens, 2007). However, parental empathy has not been examined in relation to other parental socialization construct. To our best knowledge, this current study firstly links parental empathy to parental psychological control.

Further we extended the effect of parental empathy to child maladjustment. Although we did not find any significant correlations between parental empathy and child maladjustment in the full sample, parental affective resonant empathy was significantly correlated with child externalizing symptoms in children who are 6 years or older. Parental empathy, as an important parenting aspect, serves the following functions in a parent-child relationship: regulation, organization and connection (Stern, Smiley, & Borelli, 2017). When parents are empathetic towards their children, it helps the children to regulate their own emotions, particularly negative emotions, when they cannot regulate their emotions themselves. Parental empathy also helps children to organize, meaning to make sense of children's own emotions, when children are puzzled by a variety of feelings. In addition, parental empathy helps children to feel that they are not alone in experiencing these emotions and creates a sense of connection. Parental empathy has been linked to child's emotion regulation capacity and child secure attachment to parents (Stern et al., 2014; Stern, Borelli, Gaskin, & Smiley, 2017), which suggests an important mediational pathway between parental empathy and child maladjustment. Therefore it will be fruitful for future research examine this mediational path to further explain the

association between parental empathy and child internalizing and externalizing symptoms.

The significant association between parental psychological control and child internalizing symptoms only in older children may suggest the adverse effect of parental psychological control may not appear until middle childhood and adolescence. Parental psychological control behaviors are manipulate and intrusive on children's thoughts and feelings. Children need to possess somewhat complex cognitive capacity, such as theory of mind (to understand that other people may have different thoughts from themselves) and emotional capacity, such as developing self-conscious emotions like guilt and shame to be able to understand parental psychological control behaviors, therefore to experience any maladjustment resulted from them. Children's theory of mind does not develop until around 4 years old (Wellman, Cross, & Watson, 2001) and self-conscious emotions do not develop until around 2 years old (Muris & Meesters, 2014). This is consistent with previous research that documented the adverse effect of parental psychological control behaviors primarily in middle childhood and adolescence (Barber, et al., 1994; Barber, 1996; Barber,et al., 2005; Soenens & Vansteenkiste, 2010). Future research with larger sample should examine if child age moderates the association between parental psychological control and child maladjustment and the developmental change of the association.

We found surprisingly low levels of parenting aggression, including psychological aggression, child neglect, corporal punishment and psychological control in the current study. We speculate it could be partially due to social desirability because of interacting with a research assistant. In addition, majority of parents did not have

custody of their child and only had limited contact with their child, for example through visitation. Therefore, they did not have enough interaction with their child to exert parenting aggression.

Findings in the current study should be interpreted with the following limitations in mind. First, the current study has a very small sample with low power and null results should be interpreted with caution. By definition, null results are inconclusive in nature. Future research with larger samples is needed. Second, all the significant findings are correlational and do not provide information about the direction or possible causal nature of the associations. We speculate that parental empathy is a precursor of parenting aggression and child maladjustment. However, the reverse can also be true: child internalizing and externalizing behaviors may elicit parenting aggression and cause parents to be less empathetic towards their children (Psychogiou, Daley, Thompson, & Sonuga-Barke, 2008; Rothbaum & Weisz, 1994). Future longitudinal research should address the direction of associations between parental empathy, parenting aggression and child maladjustment.

Third, the parenting aggression measures, particularly the parental psychological control measures, may not be relevant to toddlers and preschool children. Children before developing the relevant capacities such as theory of mind and self-conscious emotions may not understand parental psychological control, a more covert form of parenting aggression therefore may not exhibit any maladjustment due to parental psychological control. Future longitudinal research should examine the developmental trajectories of the association between parental psychological control and child maladjustment. Fourth, the current coding system on parental empathy only obtains an overall empathy score

across cognitive empathy, affective empathy and empathetic responding, although all three types of empathy are considered in the coding procedure. Future research may be able to improve the coding system to yield separate scores based on different types of empathy.

Despite these limitations, the current study showed significant associations between parents' empathy toward their children and the use of parental psychological control in predominantly low income parents who perpetrated child abuse or neglect. In this population, higher parental empathy towards children is related to less use of parental psychological control. Further, parental affective resonant empathy was negatively correlated with child externalizing symptoms in older children who were above 6 years old. Due to the limitation of the sample size, we could not examine the mediation model as planned. Future research with a larger sample size and community sample can examine parental psychological control as a mediating pathways between parental empathy and child maladjustment. Future research should also build on the current study to examine additional mediation and moderation pathways between parental empathy, parental psychological control and child maladjustment. For example, child emotion regulation capacity may be a promising mediator between parental empathy and child maladjustment. Other environmental risk factors, such as parental drug use or high conflict family environment may exacerbate the relation between parental empathy, parenting aggression and child maladjustment.

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