



# Maternal Power Assertive Discipline and Children's Adjustment in High-Risk Families: A Social Domain Theory Approach

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## Abstract

The goal of the present study was to examine associations between maternal use of power assertive parenting across different discipline contexts and children's adjustment in a sample of low-income, racially diverse families. Drawing from social domain perspectives on parenting, we specifically examined discipline in response to child transgressions in conventional, moral, and prudential contexts. In turn, we tested how power assertive discipline within these domains may be differentially linked to children's externalizing and internalizing symptomatology over time. Participants included 201 toddlers and their mothers who were assessed across two waves spaced two years apart. Results indicated that mothers were more likely to endorse power assertive parenting within prudential contexts compared to others. Longitudinal analyses revealed that power assertive discipline in the conventional domain was primarily associated with internalizing symptoms while the moral domain was associated with externalizing symptoms over time. Moreover, domains of caregiving were differentially associated with substantive constructs as opposed to sociodemographic constructs. The results are interpreted within social domain conceptualizations of socialization that underscore how distinct domains may differentially impact children's socio-emotional adjustment.

**Keywords** Discipline · High risk families · Externalizing problems · Internalizing problems · Parenting

## Highlights

- Discipline in the moral domain linked to greater externalizing symptoms.
- Discipline in the conventional domain associated with greater internalizing symptoms.
- Discipline in the prudential domain linked to lower externalizing symptoms.
- Children's difficult temperament was associated with maternal use of power-assertive discipline.

Providing structure and boundaries is critical to socializing children within broader ecological and cultural contexts. As such, parental control of children has been a topic of interest for family researchers for decades (Baumrind, 1996, 2012; Larzelere, et al., 2013). Within these endeavors, empirical research has sought to identify the developmental sequelae associated with different parental discipline practices, with

much research focused on parental use of power assertive discipline techniques early in childhood. Power assertive discipline is conceptualized as parental disciplinary practices that demand unquestioned and immediate obedience and include parental use of corporal punishment, which is the focus of the current research (Straus & Fauchier, 2007). In the context of much empirical study, meta-analytic approaches have attempted to provide conclusions regarding the effects of power assertive discipline on children (Ferguson, 2013; Gershoff & Grogan-Kaylor, 2016; Larzelere & Kuhn, 2005). Although there is some consensus on the detrimental effects of high levels of power-assertive parenting, debate continues regarding the impact of power assertive discipline on child development. Surveying the empirical landscape, it appears that the extant literature examining developmental sequelae of parental power assertive discipline during early

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childhood has made the tacit assumption that children's transgressions are similar in nature. As such, the application of power-assertive discipline has been operationalized as constant across different contexts. However, parental socialization goals and associated motivational intentions may widely differ when faced with different childrearing situations (Kuczynski, 1984). By extension, parental power assertive discipline techniques may have differential implications for children's development.

In particular, recently emerging domain approaches to parenting suggest that broad characterizations of parental socialization behaviors may obscure more than they capture (Grusec & Davidov, 2010; Turiel, E. 2008, Turiel, 2010). In particular, social domain theory proposes that a more nuanced approach to discipline contexts may provide greater clarity in our understanding of the incidence, determinants and sequelae associated with power assertive discipline. To address this, the present study adopted conceptualizations drawn from social domain theory towards examining associations between maternal power-assertive discipline practices during early childhood and implications for children's socioemotional adjustment. From a determinants of parenting perspective (Belsky, 1984), we also sought to identify proximal factors associated with maternal power assertive discipline behaviors across different domains. Finally, the incidence of parental power assertive caregiving may be greater among economically stressed and racially diverse families within the United States (Finkelhor et al., 2019; Whaley, 2000). Moreover, research suggests variability in the developmental sequelae associated with power assertive parenting within higher risk families (Berlin et al., 2009). Therefore, we examined how a social domain approach may inform these processes within a diverse sample of mothers experiencing higher rates of poverty and neighborhood risk.

## Social Domain Theory and Power-Assertive Discipline

Social domain theory (SDT; Killen & Smetana, 2014; Smetana, 1984) proposes that different discipline contexts may be distinct with respect to parental behavior as well as operate as distinct functions for child development (Daddis & Smetana, 2014). Within the social domain approach, parental control is framed as the boundaries between parental authority and children's autonomy. As such, SDT proposes that children's behavioral transgressions fall into one of several broad domains, each with their own function with respect to socialization outcomes. The current paper focuses on three domains in SDT. First, the *moral domain* pertains to evaluations of right and wrong with respect to actions or transgressions that result in psychological or physical harm to the welfare of others. Similar to the moral

domain, the *prudential domain* revolves around issues associated with harm; however, the consequences associated with harmful acts are those that solely affect the actor and no one else. As such, transgressions within the prudential domain are those that are associated with safety and potential harm to the self (Smetana, 2011). Finally, the *social conventional domain* centers on parenting with respect to proscribed social or cultural rules that govern social behavior. As such, the social conventional domain includes actions and transgressions that may violate rules of social order or social norms (e.g., etiquette, role expectations, social conventions). Empirical research has supported the conceptual distinctions of these domains (for reviews, see Smetana, 1995; Turiel, 1983, 1998) as well as how parental styles might be differentiated across these domains (Smetana & Daddis, 2002), particularly as they relate to elements of parental authority and control.

Much of the extant research on parenting and social domain theory has focused on the developmental period of adolescence given the normative changes in autonomy and control during this time period (Smetana et al., 2004). However, social domain theory is a conceptual framework that also pertains to parenting with infants (Dahl & Campos, 2013; Dahl & Chan, 2017) and young children (Ball et al., 2017). The developmental implications revolve around the locus of control and autonomy, with parents assuming greater authority over discipline with younger children in comparison to adolescents (Smetana, 1997). With young children in particular, social domain theory contends that behavioral control across domains is largely governed by parents and as such may provide a critical framework for examining power-assertive parenting in this early developmental period (Smetana, 2017).

Previous empirical work has demonstrated the potential utility of social domain theory conceptualizations of parental discipline for understanding power assertive discipline in children (Chilamkurti & Milner, 1993; Kochanska et al. 2003; Montes et al., 2001). For example, Dahl and Chan (2017) examined mother's in vivo use of power assertion in response to everyday infant transgressions across moral (harm to others), prudential (harm to self), and pragmatic (creating inconvenience) domains. Videotaped observations of in-home interactions revealed differentiation across domains with respect to power assertive discipline. In particular, mothers were more likely to use power assertion in response to moral transgressions, followed by prudential transgressions, and least likely in response to pragmatic transgressions. Furthermore, findings suggested that mothers were more likely to use power assertive discipline when physical danger to the child was greater. These findings suggest that social domain theory may offer a useful conceptual blueprint towards examining whether mothers rely on power assertion differently depending upon the domain

of the transgression. However, the utility of a social domain approach towards a more fine-grained understanding of the impact of power-assertive discipline on young children's socio-emotional adjustment remains unknown.

## Power Assertive Discipline Across Social Domains and Child Adjustment

Empirical research has sought to document the developmental sequelae associated with parental use of power assertive discipline practices. In particular, meta-analytic work by Gershoff and colleagues (2002; 2016) has consistently indicated that the use of physical punishment is associated with adverse child outcomes including increased aggressive and antisocial behaviors and internalizing symptoms. However, other work has been more equivocal in their findings (e.g., Larzelere & Kuhn, 2005; Paolucci & Violato, 2004). For example, in a meta-analytic review of longitudinal studies, Ferguson (2013) reported small but nontrivial effect sizes in the association between corporal punishment and long-term negative outcomes in children including externalizing and internalizing symptoms. As such, Ferguson (2013) suggested that future research should take a more specific approach towards unpacking the effects of power assertive discipline. To this end, we examined whether power assertive parenting in moral, conventional, and prudential domains might be differentially associated with young children's adjustment over time. Little research has examined how domain-specific parenting practices may be linked to child adjustment outcomes. As such, the predictive utility of a social domain approach with respect to developmental outcomes associated with power assertive discipline across social domains in young children is yet untested; however, research within adolescent-parent relationships suggest that this might be an important organizing framework (Rote & Smetana, 2015). For example, Sorkhabi and Midgah (2019) examined domain variations in mothers and fathers' parenting practices in association with adolescent social, emotional and behavioral adjustment. Findings suggested that parental punishment was associated with adolescent adjustment in a domain-specific manner. In particular, parental instrumental punishment and monitoring in the moral domain was associated with adolescent social competence and reduced externalizing and attention problems. In contrast, maternal use of verbal hostility in the conventional domain was associated with higher levels of internalizing among adolescents.

## Socio-Contextual Determinants of Maternal Discipline

Socio-contextual models of family process stress the importance of placing family functioning and parenting

within the larger ecological contexts that may shape and influence family processes and child development (e.g., Bronfenbrenner, 1979; Ogbu, 1981). Socioeconomic differences in the use of power assertive parenting have been demonstrated in the literature, with parents at higher risk showing higher rates of endorsement (Berlin et al., 2009). Moreover, research has demonstrated higher rates of physical punishment in African American mothers in comparison to White and Mexican American mothers in a low-income sample (Berlin et al., 2009). Finally, families are largely embedded within neighborhood contexts, particularly for lower-income families who have less capital for social movement. Research has demonstrated that neighborhood risk is associated with higher rates of physical discipline broadly (Molnar, 2016). However, very little research has specifically examined the determinants and outcomes associated with power assertive discipline across different parenting domains within diverse families facing elevated socio-economic risk. In support of this conceptualization utilized in the current study, Chilamkurti and Milner (1993) reported that higher risk mothers were more likely to use physical discipline in the conventional domain compared to the moral or personal domain. As such, a final aim of the present study was to delineate associations among socio-contextual factors and substantive correlates of maternal use of power assertive parenting across prudential, conventional and moral domains within a sample of mothers experiencing elevated economic risk and impoverishment. In particular, we examined demographic covariates including neighborhood risk, family income, and maternal race and ethnicity in associations with maternal use of power-assertive discipline. Guided by psychological experiences of parenting frameworks, we further tested substantive constructs including maternal perceptions of children's difficult temperament and maternal empathic orientation toward her child.

In summary, we examined the viability of a social domain approach for understanding how power assertive discipline may be differentially associated with children's developmental outcomes. In order to overcome the limitations of cross-sectional designs in prior studies of power-assertive parenting and children's adjustment, the present study utilized a longitudinal design to change in children's adjustment over time. In accordance with functional accounts of SDT conceptualizations of socialization domains, we hypothesized that maternal use of power assertive discipline would be highest when child transgressions were associated with harm to self (prudential) or others (moral) in comparison to those associated with violation of norms (conventional). We further hypothesized that maternal power assertive parenting across the three domains would be differentially linked to children's adjustment over time. In line with specificity assumptions

in SDT, we hypothesized that power-assertive discipline in the moral domain would be primarily associated with children's externalizing behaviors over time. We further hypothesized that power assertive discipline in the conventional domain would be associated with children's internalizing symptoms over time. Given the lack of previous research, we made no a priori hypotheses regarding the prudential domain.

## Method

### Participants

Participants were drawn from a larger longitudinal project designed to examine the impact of family relationships and parenting on young children. Participants in the larger project included 201 families (mother and target preschool child) residing in a moderate-sized metropolitan area in the Northeastern United States. To obtain a demographically diverse sample, mothers and children were recruited through community agencies such as Women, Infants, and Children assistance offices and Temporary Assistance to Needy Families rosters from the Department of Human and Health Services. Median annual income for the family household among the participants in the sample was \$18,300 (US) per year. A substantial portion of mothers (30%) did not complete high school. Most families were receiving public assistance (95%) and were living below the US Federal Poverty line (99.5%). Furthermore, based on the computed Hollingshead Four Factor Index (Hollingshead, 1975), the majority of families (77%) were rated in the two lower social strata (i.e., unskilled or semiskilled workers).

The mean age of children at the first wave of assessment was 26 months ( $SD = 1.69$ ), with nearly half of the sample consisting of girls (44%,  $n = 92$ ). Of the 201 two-year-old children and mothers in the sample, the majority identified as Black or African American (56%), with smaller proportions of family members identifying as White (23%), Latinx or Hispanic (11%), Multiracial (7%), and Other (3%). Mothers also answered questions about their marital status, and 63% reported living with someone, 23% were married, 5% were widowed, and 9% were separated. The cumulative retention rate across the two measurement occasions was 87%. To test for selective attrition, we conducted statistical comparisons between the mother-child dyads that participated through the third measurement occasion and dyads that dropped out during the longitudinal component of the study along the primary, covariate, and demographic variables at the first assessment (e.g., family income, maternal education). No significant differences were identified in the analyses.

## Procedures and Measures

Mothers and their toddlers visited our laboratory three times within a one- to two-week time period, during which mothers completed questionnaires and interviews. Procedures were standardized across participants.

### W1 Maternal Power Assertive Discipline

To assess discipline strategies, mothers completed the Parenting Dimensions Inventory (PDI; Power, 2002; Power et al., 1992). Scores were based on mother's report of likelihood to use power assertive discipline in response to three child behavioral transgression vignettes. First, discipline in the moral domain was assessed in response to the question "After arguing over toys, your child strikes a playmate." To assess discipline in response to conventional transgressions, mothers responded to the following vignette "Your child becomes sassy to you while you discipline him/her." Finally, transgressions in the prudential domain were assessed with the prompt: "You see your child playing at a busy street which you have forbidden him/her to go near for safety reasons." Mothers rated the likelihood of using power assertive discipline on a 4-point scale (0 = very unlikely to do, 3 = very likely to do). The PDI scale has been validated in previous research examining discipline and children's adjustment (e.g., Choe et al., 2013).

### W1 Maternal Child Empathic Orientation

Mothers completed the Empathy scale from the Adult-Adolescent Parenting Inventory (AAPI; Bavolek, 1984) which consists of eight items designed to assess empathy in maternal caregiving in response to the child's needs (e.g., "Parents will spoil their children by picking them up and comforting them when they cry."). The internal consistency for the scale was satisfactory ( $\alpha = 0.82$ ) and the validity of the measure is supported by its associations with related parenting constructs (Bavolek, 1984).

### W1 Maternal Perception of Child Difficult Temperament

Mothers completed three subscales of the Child Behavior Questionnaire (CBQ; Rothbart et al., 2001). The *Anger* subscale captures negative affect dispositions in response to interruption of goals and activities ( $\alpha = 0.76$ ), the *Soothability* scale captures recovery from distress, arousal, and/or excitement activities ( $\alpha = 0.81$ ), and the *Discomfort* scale assesses negative affect related to sensory qualities of stimulation ( $\alpha = 0.65$ ). A factor analysis indicated a single factor solution with loadings ranging from 0.74 to 0.79 and as such, a composite was created by averaging the three subscales.

**Table 1** Means, standard deviations, and correlations between primary variables in the study.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. W1 PA discipline moral	1.63	0.92	–											
2. W1 PA discipline conventional	1.69	1.01	0.67*	–										
3. W1 PA discipline prudential	2.02	1.17	0.53*	0.52*	–									
4. W1 internalizing	2.51	1.79	0.20*	0.10	0.17*	–								
5. W1 externalizing	15.51	8.86	0.13	0.06	0.21*	0.52*	–							
6. W1 empathy	15.97	5.79	0.17*	0.18*	0.05	0.30*	0.10	–						
7. W1 temperament	50.25	8.58	0.05	0.07	0.13	0.47*	0.53*	0.16*	–					
8. W1 neighborhood	0.00	0.90	0.07	0.03	–0.06	0.28*	0.15*	0.19*	0.15*	–				
9. W1 public assistance	7.44	6.44	–0.01	0.03	0.04	–0.18*	0.02	0.06	0.17*	0.24*	–			
10. W1 maternal age	26.32	5.98	–0.03	0.01	0.04	–0.15*	–0.22*	–0.29*	–0.22*	–0.14*	–0.03	–		
11. W2 internalizing	2.39	2.03	0.25*	0.24*	0.20*	0.52*	0.42*	0.26*	0.31*	0.16*	0.15*	–0.09	–	
12. W2 externalizing	13.02	9.26	0.18*	0.10	0.14	0.37*	0.61*	0.07*	0.44*	0.02	0.08	–0.08	0.66*	–

Note. W1 wave 1, W2 wave 2, PA power assertive, \* significant at the  $p < 0.05$  level.

### W1 Neighborhood Risk

Risk scores were created based upon three demographic indicators based upon the zip code for each participant drawn from <http://www.city-data.com/> using the 2000 census data. Indicators included the percentage of renters, population density, and percentage of residents with income below the poverty level within each zip code. Correlations across the three measures ranged from 0.67 to 0.85 and were standardized and averaged to create a composite score.

### W1 and W2 Child Symptomatology

Mothers completed the Child Behavior Checklist at Waves 1 and 2 (CBCL: Achenbach & Rescorla, 2000) to assess children's internalizing and externalizing symptoms. The CBCL is one of the most widely used standardized measures of children's functioning. Mothers reported on five syndrome scales assessing Emotional Reactivity, Withdrawal, Anxious/Depressed behaviors, Attention Problems, and Aggressive Behaviors which were used to calculate an overall score for Internalizing and Externalizing Symptoms. Internal consistency estimates of the CBCL scales in this sample ranged from 0.59 to 0.90 at Wave 1 and 0.65 to 0.91 at Wave 2.

## Results

### Initial Analyses

Table 1 provides the raw means, standard deviations, and correlations among the focal variables in the primary analyses. Inspection of the means for the discipline scores revealed that mothers were more likely to endorse using

power assertive discipline in the prudential domain in comparison to the moral and conventional domains. To test this, a repeated measures ANOVA with a Greenhouse–Geisser correction was run. Results showed that scores differed significantly within subjects [ $F(1.78, 334.61) = 18.29$ ,  $p < 0.001$ ]. Post hoc tests using the Bonferroni correction revealed that mother endorsement in the prudential domain was significantly higher than endorsement in the other two domains ( $p < 0.01$ ). No other contrasts were significant.

### Primary Analyses

Path analyses were conducted within a structural equation modeling framework in order to test our hypothesized model. The path model was performed using Amos software (SPSS Inc., Chicago, 2007). A maximum of 14% of the data was missing due to attrition and data loss across the different measures. To maximize our sample size, we utilized Full Information Maximum Likelihood estimation available in AMOS (e.g., FIML; Enders, 2001), this method is appropriate when data are missing completely at random (e.g., no identifiable pattern exists in the missing data) and can be used even when the amount of missing data is as high as 50% (Schlomer, Bauman & Card, 2010). To evaluate any potential identifiable patterns to missing data, we examined whether there were any significant differences on the demographic and predictor variables in participants who completed versus dropped out of the study. Results indicated there were no significant differences. To further evaluate whether data were missing completely at random (MCAR), we examined the patterns of missingness using Little's MCAR test (Little, 1988). Results showed that the data were MCAR,  $\chi^2 = 218.78$ ,  $df = 225$ ,  $p = 0.60$ . To determine the fit of our model, we utilized three widely used



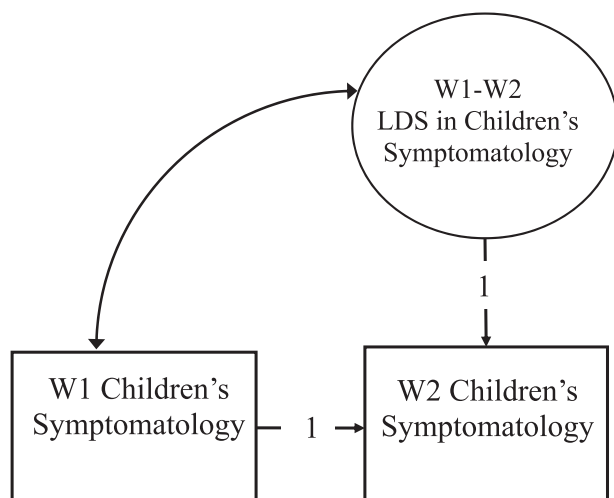
indices. The chi-square test tests the null hypothesis that the overidentified model fits the data as well as the fully saturated model, where there are paths from each variable to the other (Hu & Bentler, 1999). The comparative fit index (CFI; Bentler, 1999) is a goodness of fit measure that compares the tested model to the fit of the independence model; CFI values above 0.90 are considered acceptable fit. Lastly, root-mean-square error of approximation (RMSEA; Steiger & Lind, 1980) is an absolute measure of fit based on the noncentrality parameter; values less than 0.08 are indicative of acceptable fit (MacCaullum et al., 1996).

In the present study, we utilized a latent difference score model (LDS) to parameterize intraindividual changes in children's externalizing and internalizing problems from Wave 1 to 2 (McArdle & Hamagami, 2001). Latent difference scores model a growth parameter indexing average change in level symptomatology over time (i.e., latent  $\Delta$  indices in Fig. 1). LDS models are essentially a change score providing an assessment of interindividual differences in intraindividual change (McArdle, 2009). In the current study, we followed recommendations that nonrandomized studies utilize a nonresidualized latent difference score and such estimate a covariance of the association between initial levels of symptomatology with change (e.g., Castro-Schilo & Grimm, 2018). The latent change scores for children's internalizing and externalizing symptoms were regressed onto maternal power-assertive discipline and substantive covariates. As such, we are modeling how maternal power-assertive discipline is predictive of change over time in children's symptomatology. All three forms of PAP as well as substantive covariates were included in the model as simultaneous predictors of change scores in children's adjustment over time. Inclusion of all three forms of PAP in the same model controls for the shared variance for a

mother to utilize PAP and allows for the examination of the unique predictive variance of each of the three domains on children's adjustment over time. Finally, covariances were specified between each exogenous variable in the model and pathways were consistent with correlation parameters in Table 1.

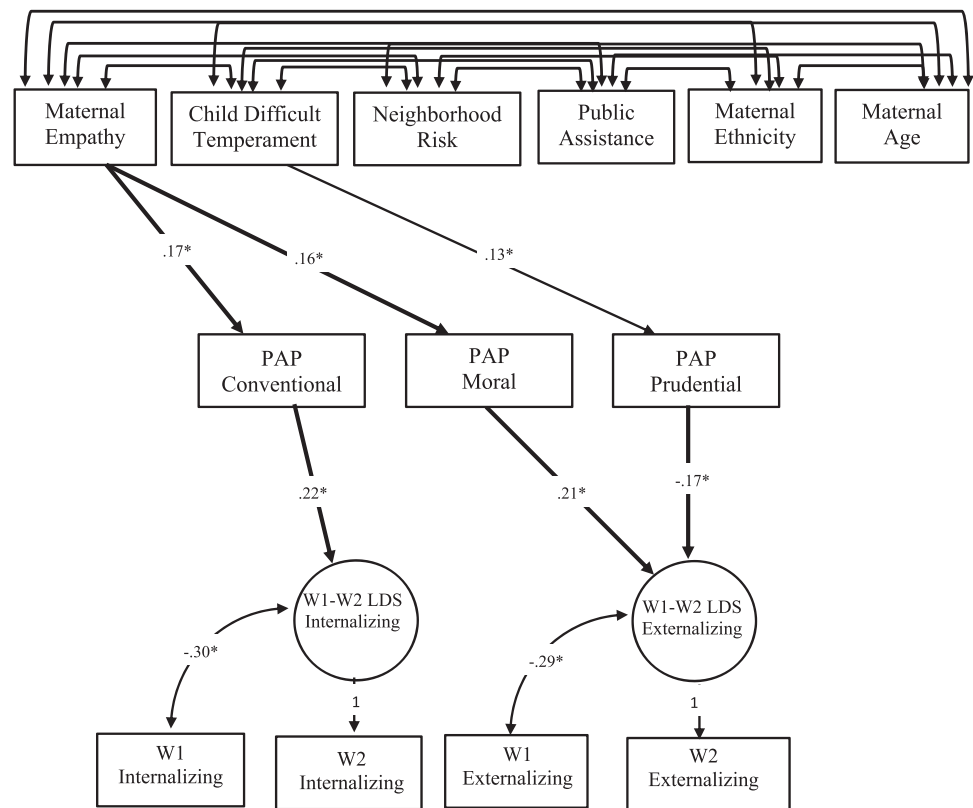
The results of model tests are presented in Fig. 2. The model was run with all pathways estimated simultaneously and model fit was acceptable ( $\chi^2(7) = 20.17$ ,  $p < 0.05$  RMSEA = 0.08, CFI = 0.98). With respect to the influence of covariates and substantive correlates on maternal use of power assertive parenting, model findings demonstrated that maternal age, maternal ethnicity, receipt of public assistance, and the neighborhood risk index were not associated with maternal power assertive parenting in any of the three domains, (absolute value of  $\beta$ 's ranged from 0.00 to 0.10,  $p > 0.05$ ). Therefore, in this higher risk sample, socio-demographic constructs were not associated with maternal parenting. However, model findings suggested that substantive constructs did evidence some differential associations and these pathways are modeled in the figure as solid arrow lines. First, maternal lack of empathetic awareness towards her child was associated with greater use of power assertion in the conventional ( $\beta = 0.17$ ,  $B = 0.03$ ,  $SE = 0.01$ ,  $p < 0.05$ ) and moral ( $\beta = 0.16$ ,  $B = 0.03$ ,  $SE = 0.01$ ,  $p < 0.05$ ) domains. Next, maternal report of children's temperament was marginally associated with power assertion in the prudential domain only ( $\beta = 0.13$ ,  $B = 0.02$ ,  $SE = 0.01$ ,  $p = 0.08$ ).

With respect to the developmental outcomes, our model findings also revealed that maternal power assertive discipline domains were differentially associated with children's adjustment over time. In the figure, these associations are modeled as solid lines from PAP constructs to the LDS constructs for externalizing and internalizing symptoms over time. First, findings suggest that power assertive discipline within the conventional domain predicted increases in internalizing symptoms over time ( $\beta = 0.22$ ,  $B = 0.40$ ,  $SE = 0.17$ ,  $p < 0.05$ ). Analyses also indicated that maternal power assertive parenting in the moral domain was associated with higher levels of externalizing symptoms over time ( $\beta = 0.21$ ,  $B = 1.85$ ,  $SE = 0.80$ ,  $p < 0.05$ ). Finally, power assertive parenting in the prudential domain was associated with decreased externalizing symptoms over time ( $\beta = -0.17$ ,  $B = -1.19$ ,  $SE = 0.55$ ,  $p = 0.08$ ). To test for specificity, we utilized pairwise parameter comparisons available in AMOS's Critical Ratio of Differences command for analysis of equivalence of parameters for power assertive discipline on child adjustment. Pairwise parameter comparisons test whether two parameters are significantly different from one another by calculating the difference between the two estimates divided by the estimated standard error of the difference. The resulting difference statistic is



**Fig. 1** Parameterization of latent difference score model for change in children's internalizing and externalizing symptoms over time.

**Fig. 2** Path model examining associations among substantive and demographic correlates, power assertive parenting and latent difference scores of children's psychological adjustment over time. Parameter estimates for the structural paths are standardized path coefficients. Although structural paths between correlates, maternal PAP constructs, and the LDS latent variable were estimated, for clarity only significant structural paths are included as solid lines. Correlations are denoted with a double-headed arrow but for clarity, estimates are not included. W1 wave 1, W2 wave 2, PAP power assertive parenting, LDS latent difference score,  $*p < 0.05$ .



normally distributed and tested against the z-score distribution ( $CR > 1.96$ ) to determine significance. Comparisons of model parameters revealed that maternal power assertion in the moral domain and prudential domains were significantly stronger predictors of externalizing compared to internalizing symptoms over time (moral  $d = 2.48$ ,  $p < 0.05$ ; prudential  $d = -2.20$ ,  $p < 0.05$ ). Maternal power assertion in the conventional domain was not a significantly stronger predictor of internalizing compared to externalizing symptoms ( $d = 0.37$ ,  $p > 0.15$ ).

## Discussion

The present study simultaneously examined associations between power assertive discipline across three different domains and children's socio-emotional adjustment over time in families experiencing elevated sociodemographic risk. Results generally supported findings in the extant literature regarding the negative implications of maternal use of power-assertive discipline practices for children's development. However, our findings suggest that some refinement of theory and research in this area may be important. In particular, results supported a specificity approach to understanding the developmental implications of power-assertive parenting across domains of caregiving (e.g., Turiel, 2010; Lazalere et al., 2018). In particular,

maternal power assertive discipline in response to children's moral transgressions was primarily associated with greater externalizing behavior over time. In contrast, maternal use of power assertive discipline in response to children's violations of conventional norms were related to children's internalizing symptoms. Finally, power assertion in response to safety violations was associated with lower externalizing over time. Our findings are in line with propositions from social domain theory that underscore the uniqueness of different domains with respect to caregiving practices and children's functioning. The results of the present study indicate that such domain distinctions may have unique implications for the effect of power-assertive discipline on children's socio-emotional development. In addition, our findings revealed that substantive covariates were differentially associated with mother's propensity to use power-assertive discipline practices across domains.

Results from the current study suggest that power assertive parenting in response to children's behavioral transgressions within the conventional domain are associated with increased internalizing symptoms over time. According to social domain theory, the conventional domain revolves around norms and expectations that govern social interactions within social contexts (Turiel, 1998). As such, rules associated with this domain are viewed as more arbitrary or subjective in nature because they are largely driven by individuals and social contexts. Indeed, research

has shown that parents may vary widely in conventional norms and that their application of these norms in everyday life may fluctuate more often. Little research to date has examined the developmental sequelae associated with parental discipline with conventional issues and child adjustment. It may be that young children do not fully understand the rules and regulations regarding conventional conduct and behavior or parents may apply corrective actions in a less consistent manner in comparison to other domains. Moreover, parents may not effectively communicate or structure these goals or do so in maladaptive ways, particularly in higher risk families when contextual stress is high. As such, one of the potential underlying mechanisms associated with this domain may be children's sense of security and safety in the context of a caregiver who may not be seen as predictable. Although not specific to internalizing outcomes, Kim and Kochanska (2015) found that children's negative, adversarial, and rejecting orientation towards their mother mediated the association between power-assertive parenting and children's behavior problems. They proposed that children's direct exposure to adversarial family relationships may lead them to see their parent as untrustworthy and as such may interpret power assertion as being overly hostile and unjust. Power assertive parenting in response to conventional issues may be emotionally distressing and confusing for children because it occurs in the absence of a consistent and clearly understandable socialization message and may eventuate in children's overcontrol of behavior and expression consistent with internalizing symptoms.

In contrast, findings revealed that power assertive parenting in the moral domain was linked to greater externalizing behaviors over time in children. In social domain theory, the moral domain is associated with concepts of justice, fairness, and the welfare of others in comparison to the self (Smetana et al., 2014). Decades of research has demonstrated that children view violations of moral rules as unalterably wrong and generalizable across contexts (Turiel, 2008). Thus, the moral domain is seen as less arbitrary and more proscribed in comparison to the conventional domain. Recent research within the social domain literature suggests that children's greater subjective negative affect in response to moral transgressions may be associated with their own greater use of physical aggression over time (Jambon & Smetana, 2018). Interpreted within the present study, parental use of power assertive discipline in response to children's transgressions in the moral domain may result in greater negative affect and arousal which in turn may eventuate in heightened externalizing behaviors over time. Another potential underlying mechanism may be in line with social learning theory models. In particular, when parent's use power assertion in response to children's behaviors which harm the welfare of

others, children may begin to associate the use of force as a means of obtaining a desired outcome, even when that outcome is to the detriment of others. In particular, parental power assertive discipline may also undermine children's moral internalization of harm and lead to greater aggression. For example, Kerr and colleagues reported that physical discipline was associated with lower levels of children's moral regulation, which in turn predicted greater externalizing behaviors in boys (Kerr et al., 2004). In infancy, research has shown that parental physical discipline may lead to children's moral disengagement, which can lead to aggression, callous-unemotional and externalizing behaviors (Hyde et al., 2010).

Finally, results suggested that maternal discipline in the prudential domain was associated with decreased externalizing behavior over time. In particular, when mothers applied power-assertive discipline in response to transgressions which revolved around the safety and well-being of their child, children exhibited lower externalizing symptoms over time. It is interesting to note that at the bivariate level, maternal power assertion in this domain was significantly associated with higher externalizing behaviors at the first wave of data. Thus, it may be that when children exhibit greater difficulties in controlling and regulating their behavior, mothers may be more likely to use greater power assertion when children misbehave in a manner that increases the likelihood of personal harm and threats to safety. This may be particularly acute in families experiencing elevated threat and danger associated with living in neighborhoods experiencing greater impoverishment and risk. Mothers with children living in environments associated with increased potential for being exposed to greater personal risk, power assertion in response to child transgressions around personal safety may be one way in which mothers can increase the salience of the potential negative consequences to children. One can certainly imagine a parent living on a busy, chaotic street being hypervigilant about children venturing into the road with traffic and using power-assertive discipline as a way to emphasize the risk. Over time, this may result in a reduction in behavioral difficulties in children, particularly for children who are living within higher risk environments. We acknowledge that these results must be replicated and that these interpretations are speculative at this time.

The present study was also focused on unpacking the associations between demographic and substantive correlates of maternal use of power-assertive discipline in the context of heightened socioeconomic risk. Results demonstrated that sociodemographic constructs including maternal age, maternal ethnicity, and receipt of public assistance were not significantly associated with maternal use of power assertive discipline in any of the domains. Furthermore, our composite of neighborhood risk was also not associated



with maternal caregiving. These results were surprising against the backdrop of evidence suggesting that maternal power assertive parenting may be elevated in these contexts (Berlin et al., 2009). However, the sampling design was such that families experiencing higher levels of socio-demographic risk and by extension neighborhood stress were selectively recruited for participation in the study. The resulting restriction in range across these constructs may have limited their predictive associations and in turn also highlight that these sociodemographic variables have limited explanatory power in higher risk samples.

Importantly, several key findings associated with substantive correlates emerged in this sample. In particular, lower maternal empathic orientation toward her child was associated with higher levels of power assertive discipline in both the moral and conventional domains. These findings are consistent with empirical findings linking lower maternal sensitivity and autonomy support toward their child and increased power assertive parenting (Kim & Kochanska, 2015). Moreover, within ethnic minority families, maternal warmth and responsiveness appears to play a role in determining whether harsh discipline is linked with adverse child outcomes (e.g., McLoyd & Smith, 2002). Mothers who have lower empathy may be more likely to experience negative emotions when children are misbehaving in moral and conventional domains by nature of their more proscribed functions, which in turn may be linked to child adjustment outcomes. In support of this, work conducted by Dahl and Campos (2013) found that mothers of young children reported higher levels of anger in comparison to other emotions in response to children's moral transgressions. As such, lower empathetic orientation to their child may be a risk factor in the use of physical discipline when children's transgressions violate cultural, societal and moral norms.

Maternal perceptions of her child as having a difficult temperament were associated with higher endorsement of power assertive discipline in the prudential domain. In the present study, difficult temperament was operationalized as children evidencing higher levels of negative affect and anger orientation as well as difficulty in soothing and recovery from distress. The prudential domain consists of transgressions where the child may suffer personal harm by their actions. As such, it may be that in prudential situations, mothers who perceive their child as having a more reactive temperament may be more likely to use power-assertive control tactics in order to prevent the child from experiencing harm. In line with this, Dahl and Campos (2013) reported that mothers self-reported feelings of fear were particularly associated with children's transgressions in the prudential domain. This may be particularly pronounced in lower socioeconomic contexts which may be associated with increased levels of environmental danger.

Discussion of the limitations of our study is also necessary for a balanced interpretation of the findings. First, given that our constructs were all derived from self-report measures assessed during a laboratory visit, expanding assessments beyond the laboratory context (e.g., observational, home assessments) will be valuable in future efforts to replicate findings. Second, although our sample was racially diverse and impoverished in comparison to many of the samples in previous studies, tests of the generalizability of these findings in other samples are an important direction for future research. Our analysis is restricted to a small developmental window of early toddlerhood. The appearance of externalizing and internalizing behaviors may be more limited in this developmental time span and more definitive conclusions will hinge on testing these pathways with children over longer developmental spans. Finally, empirical evidence in social domain research has shown that the development is due to multiple socialization contexts and not solely as a consequence of parenting. The present study focused on parenting, however this may be only one source of influence on children's development.

Given our focus on examining how a social domain approach to empirical study of power-assertive discipline, we did not examine other forms of parental control such as inductive reasoning, love-withdrawal, reminding, social consequences (e.g., time-outs). We acknowledge that a social domain approach may also be helpful in understanding how other forms of parental discipline may be more or less likely to predict children's adjustment over time and future work examining these questions will be important.

Despite these limitations, the current study is the first known attempt to utilize social domain theory in differentiating the contextual and substantive correlates as well as the developmental outcomes associated with maternal power assertive discipline during the early childhood years. Our findings suggest that a more nuanced approach when examining the impact of power-assertive parenting on children. In particular, considering the *function* of power assertive caregiving with respect to parental goals in the socialization of children as opposed to the general *form* of behavior may provide more precision in understanding developmental outcomes. Importantly, participants in the current study were drawn primarily from families which have been largely underrepresented in the mainstream developmental literature and who were experiencing elevated economic risk and pressure as well. Emerging work examining power assertive discipline practices in ethnic and racially diverse samples has found equivocal results for the impact of physical discipline on child development with some reporting null associations (e.g., O'Gara et al., 2020), and others demonstrating that associations may be moderated by cultural and ecological contexts (e.g., Gabriela

Barajas-Gonzalez et al., 2018; Lapre & Marsee, 2016; Taylor et al., 2011). From a functional perspective, Black or African American and Latinx or Hispanic and socio-economically diverse parents likely have heightened concerns for their children and as such may be more utilize power-assertive practices in order to convey the importance of compliance with respect to the contextual and societal risks facing their children. Taken together, empirical research on power assertive parenting should take careful consideration of the function of caregiving behaviors within cultural values and norms as well as within larger socio-political and ecological contexts when interpreting developmental outcomes associated with these parenting practices. This will be critical towards informing ecologically and culturally relevant conclusions with respect to the influence of parenting on children's development.

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## Compliance with Ethical Standards

**Conflict of Interest** The authors have no conflicts of interest to declare that are relevant to the content of this article. All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or nonfinancial interest in the subject matter or materials discussed in this manuscript. The authors have no financial or proprietary interests in any material discussed in this article.

**Ethics** The study protocol was reviewed and approved by the Institutional Review Board of the University of Rochester. The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

**Consent to Participate** Mothers provided written consent and permission for their child before the families were enrolled in the study.

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