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TESTING THE ROLE OF SUPPORTING POSITIVE BEHAVIORS BETWEEN CHILD-CENTERED PARENTING AND PROSOCIALITY

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ABSTRACT

This study explored the influence of child-centered parenting attitudes on children's prosocial behavior. Furthermore, the role of supporting positive behaviors, a positive parenting strategy, was investigated as a possible explanation of the link in the hypothesized association. Specifically, the current study examined the following questions: (1) To what extent are child-centered mothering attitudes associated with prosocial behavior? (2) Does supporting children's positive behaviors explain this association? The research utilized secondary, cross-sectional data capturing the parenting attitudes and maternal reports of child behavior from 255 mothers of children ages 3-5 years old. Analyses were performed using the bootstrap method to examine the direct and indirect association between child-centered attitudes, supporting positive behaviors, and prosocial behavior. Results indicated a non-significant direct association between child-centered parenting attitudes and children's prosocial behavior, in addition to a non-significant indirect association that works through supporting positive behaviors. However, there was a significant association found between parents' support of positive behaviors and their participation in prosocial behavior. Interpretations of findings, suggestions for future research and practice are discussed.

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CHAPTER 1

INTRODUCTION

Intensive parenting attitudes are a set of ideals that parents may hold and use to inform their childrearing practices. Sharon Hays described intensive mothering (IM) as an ideology which maintains it is the mother's responsibility to constantly nurture their children, at any emotional or economic cost, with influence from experts such as pediatricians, child psychologists, and psychiatrists (Hays, 1996; Verniers et al., 2022). IM is characterized by the idea that parenting should be fulfilling yet challenging, child-centered, stimulating, and the primary responsibility of the mother. While the concept of "intensive mothering" has been defined in different ways, one conceptualization developed by Rizzo and colleagues (2012) is especially relevant to the current study. This description depicts IM as five distinct, but interworking facets: fulfilling, challenging, stimulating, essentialist, and child-centered. Fulfilling refers to the satisfaction mothers feel from parenting, while challenging accounts for the difficulties and stress commonly endured by mothers who endorse these ideals (Forbes et al., 2020; Rizzo et al., 2012). This may be, in part, due to the belief that mothers are integral in all parenting demands, also known as maternal essentialism. IM is also characterized by the drive to constantly create a cognitively stimulating environment for children, which has been shown to be beneficial for early development (Grantham-McGregor et al., 2007; Todd & Wolpin, 2003; Xiong et al., 2020). In fact, through a parenting intervention, it was found that with a more stimulating environment, children's cognitive and language development significantly improved (Miller et al., 2023). Child-centered parenting has also demonstrated efficacy in promoting development. By definition, child-centered

parenting is placing the child in the center of day-to-day life, where the child receives the majority of the social, emotional, and economic resources (Ashton-James et al., 2013). From a developmental perspective, child-centered attitudes could be conceptualized as optimal, given parents with these attitudes theoretically place children's needs as central. For example, child-centeredness was shown to be positively associated with cognitive development (Bettler, 2001). Specifically, Bettler's (2001) study followed a cohort of 309 3-year-old children and their parents over a year-long period. It was found that children whose parents held child-centered goals for development (i.e., being more sensitive to the child's emotions, sensitive to the child's needs) performed better and improved on cognitive assessments over time. In fact, the mean improvement score for children of child-centered parents nearly doubled that of the control group. Through these findings, it can be inferred that the child-centeredness facet of IM may hold potential to further child development in certain domains.

Despite these purported benefits that the tenets of IM may confer for children, it is also important to acknowledge the challenging and demanding nature of this hyper-parenting paradigm. Indeed, mothers who tended to endorse IM ideals were more likely to report increased rates of stress, depression, and lowered life satisfaction (Rizzo et al., 2012). In fact, Rizzo and colleagues emphasized that these negative impacts did not result from parenting as a whole, but specifically from the intensive attitudes that characterize IM. Various other studies describe the guilt and shame associated with the pressures imposed by IM (Johnston & Swanson, 2006; Sutherland, 2010; Tummala-Narra, 2009). In addition to the evidence that suggests IM beliefs could impose harm on mothers, other research has also explored the ways in which these

hyper-parenting beliefs could explain negative child outcomes. For instance, McGregor (under review) found that IM attitudes were associated with higher levels of maternal stress, which in turn, was associated with higher reports of dysfunctions in executive functioning in 3–5-year-old children. Still, while this research documented negative consequences of IM attitudes for mothers and their children, other aspects of the IM paradigm, such as centering children in day-to-day life, appear to be supported as "positive parenting" given their association with positive child outcomes (Liberto, 2016; Saldinger et al., 2004; Smith et al., 2010). From this perspective, it could be argued that IM attitudes, and more specifically, child-centered attitudes, could generate positive parenting practices that support the social-emotional development of children. Thus, the purpose of the current study was to examine the potential association between child-centered parenting attitudes and children's prosocial behaviors, and to examine if this association is explained by mothers' engagement in an aspect of positive parenting practices.

CHAPTER 2

REVIEW OF THE LITERATURE

Child-Centered Parenting

As previously described, child-centered parenting is when parents structure daily life around the development and well-being of the child, so that they receive the majority of familial resources (i.e., economic, emotional, social) (Ashton-James et al., 2013). Though the literature is sparse on child-centered parenting attitudes, the present study aimed to bridge this gap by examining the potential associations between child-centered attitudes, positive parenting practices, and children's social-emotional developmental outcomes. In fact, there is evidence that child-centered attitudes in other environments outside of the parenting context are supportive of children's growth and development. For instance, Hur et al. (2015) found that teachers' child-centered attitudes directly influenced child behavioral self-regulation. Moreover, a child-led teaching style fostered social-emotional growth in children, prompting a shift in self-image in which these children perceived themselves to be stronger and more competent (Maynard et al., 2012). Even in a familial setting, child-centered parenting yields promising results for child behaviors. In a cohort of children who experienced the death of a parent, children who received more child-centered parenting exhibited significantly lower levels of negative emotional symptoms (Saldinger et al., 2004). Indeed, it appears that child-centered parenting attitudes are associated with many aspects of children's social-emotional wellbeing and behaviors. In terms of behavior, child-centered parenting appeared to be a protective factor against aggressive behavior in 8-year-old children, and prosociality was bolstered (Kokko & Pulkkinen, 2000). Additionally, mothers who exhibited high levels of

positive parenting and child-centered attitudes saw the most optimal social and cognitive developmental outcomes in their children in comparison to the less child-centered mothers (Smith et al., 2010). In this study, child-centered attitudes were defined similarly to what can be found in the IM literature. Specifically, Smith and colleagues (2010) conceptualized child-centeredness as how a parent prioritizes the needs of their child and how responsive they are to the child's issues and emotions. Although slightly different from the attitudes of child-centeredness in IM, this study still speaks to the benefits of intentional, child-first parenting.

Supporting Positive Behaviors

Positive parenting is an approach to parenting that focuses on fostering child development and mutual respect between the parent and child through setting clear boundaries, emphasizing positive behavior, taking time to listen, collaboration, and productive disciplinary strategies (Daphne, 2009; McEachern, 2012). While child-centered attitudes could fall under the umbrella of "positive parenting", it is important to note that, historically, positive parenting does not necessarily place children central in everyday routines. Instead, positive parenting emphasizes parental support, boundary setting, reasonable disciplinary strategies, and proactive parenting (Daphne, 2009; McEachern, 2012). This approach to parenting has been shown to promote positive behavior in children. In fact, a longitudinal study assessing the efficacy of positive parenting as an intervention for severe behavioral issues in young children revealed significant impacts on behavior both in the short and long-term, which seemed to continually improve over time (De Graaf et al., 2008). Additionally, positive parenting strategies have displayed protective effects for children experiencing adverse

circumstances. Specifically, positive parenting reduced cortisol reactivity and buffered stress in children of families experiencing poverty (Brown et al., 2021). In reference to prosocial behavior, positive parenting was shown to influence children toward prosocial behavior in a study across eight different countries (Pastorelli et al., 2016). Mothers' support of children's positive behaviors is one strategy of positive parenting (McEachern et al., 2012), and thus, was the focus of this study.

Supporting children's positive behavior is a strategy used by parents to increase "good" behaviors and decrease undesirable ones. Studies that have investigated the efficacy of supporting positive behavior have seen notable results. For example, an intervention for parents of 2-year-old children who were exhibiting problem behaviors displayed the beneficial effects of encouraging positive behaviors over a two-year period (Dishion et al., 2008). Dishion and colleagues (2008) operationalized positive behavior support as parents' reinforcement of positive behavior, suggestion of positive activities, and positive redirection of behavior. Results identified parents' positive behavior support as the mediator for children's improvements in problem behavior (Dishion et al., 2008). Positive behavior support was related to similar results in preschool-age children. Through an intervention that supported positive behavior in students who exhibited significant levels of problem behaviors, teachers and teaching assistants were able to drastically decrease problematic behaviors, and increase classroom engagement in children (Blair et al., 2010). Specifically focusing on prosocial behavior, parents' praise and encouragement of positive behavior has been shown to increase prosociality in the long-term (Spinrad & Gal, 2018). These findings suggest that parents who support their

children's positive behavior also hold the potential to directly influence prosocial behavior.

Prosocial Behavior

Prosocial behavior refers to behaviors performed with the intent to benefit others (Eisenberg & Sadovsky, 2004). For instance, an individual choosing to volunteer their time, a child choosing to share their toys, or someone comforting a distressed peer would all be examples of prosocial behavior. Children begin to develop the capacity for prosocial behavior early in life, approximately between 12 and 24 months of age (Brownell, 2013). It has been shown that high participation in prosocial behavior has a reciprocal effect, where receivers of kind deeds are far more likely to engage in future prosocial acts (Chancellor et al., 2018). Higher participation in prosocial behavior was also shown to have a protective effect against both internalizing and externalizing behaviors later in life (Gülseven et al., 2022). Parents have the potential to influence children toward prosocial behavior as well. The facilitative effect of parenting, specifically, when parents encourage children to take on others' perspectives, was deemed to have a profound effect on the development of prosocial behavior (Farrant et al., 2012).

Present Study

The present study examined the extent to which child-centered mothering attitudes were associated with prosocial behavior, as well as if supporting children's positive behaviors explained this association. It was hypothesized that child-centered parenting would be positively associated with prosocial behavior. It was also hypothesized that child-centered parenting attitudes would influence maternal reports of

children's prosocial behaviors through supporting positive behaviors. Findings from this study may illustrate that child-centered parenting attitudes could positively influence children's prosocial behaviors. It has been documented that performing prosocial behavior increases happiness in individuals of all ages (Aknin et al., 2015; Buchanan & Bardi, 2010). In children, prosocial behavior has been shown to positively influence peer acceptance in addition to happiness and life satisfaction (Layous et al., 2012). It has also been demonstrated that parents play a vital role in facilitating the development of prosocial behavior in children (Farrant et al., 2012; Spinrad & Gal, 2018). Thus, considering the positive effects of performing prosocial behavior, as well as how parents can influence children toward prosociality, it was important to examine the potential benefits of child-centering attitudes, a construct within the dominant parenting ideology in the U.S. (Ishizuka, 2019), in relation to children's prosociality. The results of this study can help determine a potential predictor of prosocial behaviors in children, hence informing future parenting recommendations and practice. It is also possible that the findings of this study can be applied to constructing an intervention centered on parent-child interactions to increase child prosociality.

CHAPTER 3

METHODOLOGY

Participants

The current research utilized data from a 2022 study titled "Intensive Mothering and Child Executive Function: The Role of Parenting Stress." This was a cross-sectional study of 255 mothers of children ages 3-5 years old (M = 3.87, SD = .763). Mothers ranged from 21-48 years old, with a mean age of 33.96 (SD = 5.05). Mothers had one child (30.6%), two children (43.5%), three children (16.1%), four children (6.3%), or five or more children (3.5%), however they were only reporting on the behaviors and parenting for one of their children (i.e., the target child). Many participants completed some form of higher education, including obtaining a graduate degree (36.1%), a 4-year degree (36.9%), and the rest completing some college (15.3%), vocational school (1.2%), high school or GED (8.2%) and some high school (2.4%). Most mothers were married (81.2%), followed by cohabitating with a partner (6.7%), single (5.1%), and separated/divorced (5.1%). The majority of participants were middle class (60%), then lower/working class (22.2%), and upper class (11.8%). The sample was predominantly White (83.5%), with the rest of participants being Black or African American (5.7%), Hispanic or Latinx (5.9%), Asian (3.5%), and other races (0.4%) (see Table 1).

Participants were recruited via availability sampling by distributing both electronic and physical flyers through social media platforms, early childcare centers, and social service agencies. A small proportion of the sample (9.4%) was recruited through Amazon's Mechanical Turk (Mturk). Prior to partaking in the study, participants were given information about the online study and were directed to complete informed consent

if they wished to complete the series of online measures. This study was approved by Virginia Tech's internal review board (IRB- 21-403).

Measures

Child Prosocial Behaviors

The *Strengths and Difficulties Questionnaire* (SDQ; Goodman, 1997) was used to measure child prosocial behaviors. Five items from the SDQ were used to assess prosociality. Respondents were asked to complete the questionnaire on behalf of their child, ranking the trueness of each statement with 1 "*not true*", 2 "*somewhat true*", and 3 meaning "*certainly true*". An example of a statement that contributed to the prosocial subscore is "*Shares readily with other children, for example toys, treats, pencils.*" This subscore was computed by summing responses on each of the five questions pertaining to prosocial behaviors. The Cronbach's alpha for the items of the prosocial subscore (α = 0.74) confirmed adequate reliability. Furthermore, this construct was verified as symmetric enough (skewness = -.652).

Child-Centered Mothering Attitudes

The *Intensive Parenting Attitudes Questionnaire* (IPAQ; Liss et al., 2013) was used to measure the child-centered mothering attitudes. Responses from three different statements on the IPAQ were summed to produce scores for child-centeredness. Participants scored their own alignment with each statement on a six-point Likert scale with 1 being "*strongly disagree*" and 6 being "*strongly agree*". Statements on the IPAQ pertaining to child-centered mothering attitudes include statements such as "*Children's needs should come before their parents'.*" Cronbach's alpha for the child-centered

mothering attitudes subscale ($\alpha = 0.77$) displayed adequate reliability for this measure. Additionally, this construct was found to be symmetric enough (skewness = -.139).

Supporting Positive Behaviors

The *Parenting Young Children Questionnaire* (PARYC; McEachern et al., 2012) was used to measure how mothers support children's desirable behavior. The PARYC consists of 21 activities in which mothers were asked to report their participation using a scale of 1, "*Not at all"* to 7, "*Most of the time"*. Seven items from the PARYC were used to assess this variable. An example of these statements would be *"Notice and praise your child's good behavior",* in which the mother would assess their participation in said activity from 1 to 7. Responses from seven items were summed to produce the subscore of supporting positive behaviors. Cronbach's alpha was calculated for the supporting good behavior subscale ($\alpha = 0.71$), which confirmed adequate reliability. This construct was determined to be symmetric enough (skewness= -.526).

Plan of Analysis

Analyses were conducted using the Statistical Package for Social Sciences (SPSS) Version 29. Descriptive statistics were conducted to determine skewness and to identify outliers, averages, and standard deviations. A bivariate correlation was conducted with demographic and primary variables to check for multicollinearity and to identify which demographics should be controlled for in the main analyses.

The PROCESS Macro (Hayes, 2013) was used to test the final model (see Figure 1). This model specified the association between a mother's child-centric attitudes and their child's prosocial behavior, as well as how this association may work indirectly through a mother's support of her child's positive behaviors. Five thousand bootstrap

models were fit across one model to test for direct and indirect effects. Significance was determined for indirect effects when the 95% confidence interval did not contain zero.

CHAPTER 4

FINDINGS

Preliminary Findings

Correlations Between Predictors and Outcome

Bivariate correlations were conducted with demographic and primary variables to check for multicollinearity and to identify which variables should be included in the models as covariates. Several demographic variables were identified in the correlation analysis as being significantly correlated with key study variables, and thus were identified as covariates. Specifically, prosocial behavior was correlated with maternal age ($r = .177$, $p < .01$), level of education ($r = .280$, $p < .01$), and with number of children ($r = .136$, $p < .05$) (see Table 2). Additionally, child-centered attitudes were correlated with maternal age ($r = -.149$, $p < .05$), number of children ($r = -.155$, $p < .05$), and level of education ($r = -.249$, $p < .01$). Lastly, supporting positive behavior was correlated with maternal age ($r = .176$, $p < .01$) and number of children ($r = .157$, $p < .05$) (see Table 2). Thus, maternal age, level of education, and total number of children were controlled for in the main analyses.

A series of Kruskal-Wallis tests were also performed to further examine the significance of the association between a mother's age and child-centered attitudes, as previous literature found that younger mothers tend to be more child-centered (Forbes et al., 2019). This test was selected to explore this potential connection because it allows for comparison across three or more groups for a continuous variable. The results of this test confirmed that there was a statistically significant association between maternal age and child-centered attitudes ($p = .043$), indicating a significant difference for

child-centeredness across age. Specifically, the Kruskal-Wallis test revealed that younger mothers in the sample tended to hold more child-centered parenting attitudes than older mothers. In addition, another Kruskal-Wallis test was used to examine any potential group differences in child-centered attitudes according to the race of mothers given previous literature that found IM beliefs vary based on race (Nichols et al., 2015; Romagnoli & Wall, 2012). However, the results of this test indicated that there was not a significant association between race and child-centered attitudes ($p = .173$), therefore it was not necessary to control for race in the analyses.

Next, an independent t-test was conducted to investigate any association between poverty and either supporting positive behaviors, or prosociality given the evidence that families with fewer resources tend to report higher levels of IM ideations (Elliot et al., 2015; McGregor, under review; Walls et al., 2014). This method of analysis was appropriate to examine this association since t-tests are used to compare mean scores for a continuous variable across two groups. In this case, scores for mother's child-centeredness, support of positive behaviors, and child prosocial behaviors were being compared across those above and below the poverty line. The results revealed no significant association between poverty and mother reports of supporting children's positive behaviors ($p = 0.92$). Thus, there was not a significant variance in how mothers support their child's positive behavior across poverty status. However, there was a significant association between poverty and prosocial behavior ($p = .033$). Specifically, mothers reported fewer prosocial behaviors if their family fell below the poverty threshold. These results delineated poverty as another covariate for the main analyses. In

summary, the control variables for the main analyses were maternal age, level of education, total number of children, and poverty status.

Main Analyses

Bootstrap Direct and Indirect Results

A bootstrapping method was performed using the PROCESS Macro (Hays, 2013) to examine the effects of child-centered attitudes on mother reports of child prosocial behavior and supporting positive behaviors. Specifically, PROCESS allows for the analysis of two-way models, and estimates its direct and indirect effects (see figure 2). In this study, PROCESS was used to examine how child-centered attitudes directly affect maternal reports of child prosocial behaviors, as well as how this pathway works indirectly through the role of supporting positive behavior. It was also explored how supporting positive behaviors directly influences maternal reports of children's prosocial behavior. Five thousand bootstrap models were fitted across the model, and significance was determined for indirect effects when the 95% confidence interval did not contain zero. Maternal age, poverty status, level of education, and total number of children were all included as covariates.

The results of the bootstrapping analysis showed no significant association between child-centered attitudes and how much mothers support their child's positive behavior (B = .15, SE = .09, t = 1.64, p = .10). When controlling for the effects of supporting positive behaviors among the other covariates, child-centered attitudes were not shown to have a significant association with reports of prosocial behaviors (B = .06, SE = .22, t = .26, p = .80). When examining each direct pathway, the association between supporting positive behavior and prosocial behavior was found to be statistically

significant (B = .88, SE = .15, t = 5.93, p < .0001). In this model, 70.6% of the variance in prosocial behavior was accounted for. The total effect model (i.e., direct and indirect effects) based on five thousand bootstrapping samples showed a non-significant association between child-centered attitudes and prosocial behaviors, working through supporting positive behaviors (B = .14, SE = .08, 95% CI [-.03, .29]). Furthermore, this total effect of the model only explained 10.7% of the variation in children's prosocial behavior. Therefore, it was indicated that both the association between child-centered attitudes and prosocial behavior was not significant, as is the hypothesized mechanism working through supporting positive behaviors.

Regression Results

To further examine the only significant path between supporting positive behavior and prosocial behavior in children, a simple regression was run. As discovered with the bootstrap analysis, the results from the regression showed a statistically significant positive association between supporting positive behaviors and prosocial behavior after controlling for maternal age, education, poverty, and total number of children (B = .957, SE = .149, β = .374, p < .001). In other words, mothers who participated in higher levels of supporting their child's positive behavior reported higher levels of prosocial behavior from their children. Moreover, 20.2% of the variance in prosocial behavior was accounted for (R^2_{Adjusted} = .202).

CHAPTER 5

CONCLUSION

The purpose of the current study was to examine the association between child-centered parenting attitudes and positive child outcomes (i.e., prosocial behaviors), and whether this association was explained through the role of mother's supporting a child's positive behaviors. Results of the analyses did not show a significant association between child-centered parenting attitudes and child prosocial behavior. The non-significant direct association between mothers' child-centered attitudes and their child's prosocial behavior disproved the initial hypothesis of supporting positive behaviors being an explanation for the hypothesized association. Thus, we must accept the null hypotheses for each of the initial hypotheses. However, a significant association was found between mothers' support of their child's positive behavior and maternal reports of prosocial behavior in children. This finding raises an important consideration for future parenting recommendations.

As mentioned previously, prosocial behaviors are actions performed with the intent to benefit others (Eisenberg & Sadovsky, 2004). Previous literature has documented that prosocial behavior carries a host of benefits for children, including peer acceptance, improved life satisfaction, and increased overall happiness (Aknin et al., 2015; Buchanan & Bardi, 2010; Layous et al., 2012). Furthermore, prosocial behavior has also demonstrated protective qualities in children, against both internalizing and externalizing behaviors later in life (Gülseven et al., 2022). These findings, among many others, highlight the importance of cultivating children's prosociality.

The current significant finding builds on previous studies by adding to the literature that suggests parenting processes could impact variation in children's prosocial behavior (Farrant et al., 2012; Spinrad & Gal, 2018). Specifically, this study highlighted one mechanism through which children's prosocial behaviors could be supported; parents' use of encouraging children's positive behaviors, such as praising children when they've put away their toys, or allowing children to devise their own solutions to a challenging task (i.e., a difficult puzzle) (PARYC; McEachern et al., 2012). Similarly, previous findings found that when parents encourage children to take on others' perspectives, this increases the likelihood of children's prosociality (Farrant, et al., 2012). The results of the current study coincide with this principle, but instead of encouraging perspective-taking, parents are encouraging positive, desirable behaviors. It seems that the same mechanism that allowed parents to increase prosocial behavior through encouraging perspective-taking may be at play in the link between supporting positive behaviors and prosociality. Though, it is also necessary to address the distinctions between these two constructs. At face value, the terms "supporting positive behaviors" and "prosocial behavior" appear that they could be synonymous with one another. Nevertheless, these are distinct measures, as the PARYC operationalizes "supporting positive behavior" as typical behaviors that parents may deem desirable, such as learning a new skill (i.e., learning to tie shoelaces), cleaning up after oneself, and completing a difficult task independently. On the other hand, the SDQ operationalizes prosocial behavior as children's consideration for others' feelings, or their tendency to help and comfort others. Thus, these two constructs are distinguishable from one another, and are not measuring the same behaviors. With that in mind, the significant association between

the two must be investigated more deeply by addressing the following limitations to bolster its significance.

It is important to note that the nature of this study was meant to shed light on a potential positive aspect of IM, despite mixed findings in the literature in regards to the influence that this parenting paradigm has on families. For instance previous research has investigated how each facet of IM, or attitudes around essentialism, the fulfilling role of parenthood, the challenging nature of parenting, child-centered attitudes, and the idea that children require copious cognitive stimulation, were associated with child outcomes (Schiffrin et al., 2014). Surprisingly, IM attitudes were only significantly associated with improved gross motor skills in children, whereas results showed non-significant influences on fine motor development, language skills, and subjective happiness (Schiffrin et al., 2014). In fact, this unique study investigated how each facet of IM could influence these child outcomes, and it was found that the construct of stimulation, or the provision of a cognitively-rich environment, was positively associated with language development and subjective happiness. Meanwhile, essentialism, or the idea that mothers' are of central importance in child rearing, was found to negatively influence fine motor skill development (Shiffrin et al., 2014). Though this study documented some positive outcomes in children, effects were modest. However, additional research highlights negative influences of IM, such as the stress and burden that IM confers on mothers (McGregor, under review; Rizzo et al., 2012; Sutherland, 2010).

The current study was meant to depict a possible upside of this parenting ideology that appears to be popular within the United States (Forbes et al., 2019; Ishizuka, 2019). On its own, child-centered parenting has been documented in the literature as having

positive effects for children, for example, lowered emotional problems, increased self-regulation, and improved social-emotional and self-image (Hur et al., 2015; Maynard et al., 2012; Saldinger et al., 2004). So considered as a tenet of IM, this study sought to identify child-centeredness as a positive quality of the ideology. In other words, the inspiration behind the premise of this research was to analyze child-centered parenting attitudes as a beneficial aspect of IM, specifically by testing for positive behavioral outcomes in children (i.e., prosocial behavior). As mentioned previously, it seems that the child-centered attitudes captured in this data was likely more intensive than what was captured in other literature surrounding child-centered parenting without concern for IM (Kokko & Pulkkinen, 2000; Liberto, 2016; Saldinger et al., 2004; Smith et al., 2010). This means that there is the possibility that child-centered parenting is indeed a beneficial approach to fostering children's development, when performed outside of the intensive ideals that are captured with the IM paradigm. Each of the studies that produced the positive findings of child-centered approaches examined it as an independent construct, which may speak to its strong influences on child development, and the absence of negative influences on parental well being (Hur et al., 2015; Maynard et al., 2012; Saldinger et al., 2004). Conversely, Schiffrin and colleagues (2014) found that child-centered attitudes as a component of IM positively predicted anticipatory problem solving (APS), which is when parents anticipate and resolve prospective problems on behalf of their child. Though this is done with the intention of benefiting the child, this study found that APS is significantly associated with dependency and coping problems in later years (Schiffrin et al., 2014). Thus, mothers who hold more child-centered IM beliefs had the tendency to participate in APS as a means of "putting the child's needs

first", when in reality, this can hinder some aspects of development that are honed when a child overcomes developmentally appropriate challenges. These findings may provide a possible explanation for why the results of the current research determined a non-significant link between child-centered attitudes in the scope of IM and children's prosocial behavior. Upon examination of the previous literature, as well as the findings of the current study, it seems that child-centered approaches to parenting without being "intensive" may yield more optimal outcomes for both children and parents.

The current study also contributes to the literature through the incorporation of the influence of positive parenting strategies (i.e., supporting positive behaviors) as a confounding variable on the outcome of prosocial behavior. Positive parenting practices have shown significant short-term and long-term behavioral improvements in children (De Graaf et al., 2008). Pastorelli and colleagues (2016) studied the impact of positive parenting practices on children's prosocial behavior. In their study, the definition of positive parenting was narrowed down to two aspects; the mother-child relationship (i.e., warmth, responsiveness, and parental involvement), and balanced positive and reasonable disciplinary strategies. Results showed a significant increase in prosocial behavior among children whose parents utilized positive parenting (Pastorelli et al., 2016). Furthermore, Spinrad and Gal (2018) found that supportive parenting increased prosocial behavior in children. Particularly, parents' verbal encouragement of their children during tasks that foster social-emotional development (i.e., encouraging children to express their emotions) resulted in increased social-emotional competence. This increased emotional competence was shown to enhance prosocial behaviors in children. Hence, the link between "supportive parenting" as it is called by Spinrad and Gal (2018) (i.e., support and

encouragement of children's positive behaviors), and prosocial behavior was found to be mediated by self-regulation and emotional competence in children. In another study, supporting positive behaviors, the specific positive parenting strategy examined within the current study, was also identified to improve problem behaviors in children (Dishion et al., 2008). Thus, given the previous literature that advocates for supporting childrens' positive behaviors as an effective method of promoting prosocial behavior, and through conceptualizing "child-centered attitudes" as potentially beneficial for conferring more supportive parenting behaviors, it was expected that children would participate in more prosocial behaviors whenever parents subscribed to intensive child-centered attitudes.

Limitations & Future Directions

While the results of the current study have provided valuable insights into how parents can influence children toward prosocial behavior, it is important to consider its limitations. For example, future research on the topic should utilize a larger and more representative sample, as the current study utilized a relatively small and homogenous population (N = 255). With a more diverse sample, a similar study may yield significant results where the current study found non-significance. Even though the results of the current study were consistent with the literature which maintains that younger mothers tend to hold more child-centered attitudes than older mothers (Forbes et al., 2019), the current sample still tended to score lower on the IM attitudes as a whole, including child-centeredness. This is likely due to the fact that less educated, lower income mothers have demonstrated higher levels of IM ideations (Dow, 2012; Elliot et al., 2015; McGregor, 2021; Walls et al., 2014). Thus, it is logical that the mothers in this study reported low-to-moderate levels of child-centered attitudes since participants were

primarily upper-middle class and more highly educated. Interestingly, previous research highlights these income inequalities as divisors for parental investment in child rearing (Elliot et al., 2015; Lareau, 2003; Schneider et al., 2018). The findings of these studies argue that middle-class mothers are the most targeted by the IM ideals; these mothers tend to have more resources, and thus, providing a stimulating environment for their children is more within reach than for working-class mothers. However, upper-class mothers with even more resources tend to outsource as means for development, and more commonly participate in "concerted cultivation" as a means of promoting their child's development. "Concerted cultivation" refers to how parents, primarily upper-class parents, heavily structure their child's daily life with various organized extracurricular activities in an effort to foster development (Lareau 2003). So, it seems that upper-class mothers elude the burden of IM, while working-class mothers have the rationale of less resources, leaving middle-class mothers to be faced with the pressures of IM on their own (Elliot et al., 2015; Lareau, 2003; Schneider et al., 2018). However, the sample of participants that informed the current study were largely middle-class and still, IM attitudes were generally low to moderate. It is possible that a more diverse sample in regards to socioeconomic status, education, and race could illuminate more variation in IM attitudes and the potential contexts in which such attitudes confer influence on parents and children.

In addition to a more diverse and nationally representative sample, future studies should take on a longitudinal approach to investigate a possible mediation or moderating effect, as well as to see the long-term influence of parental support on children's prosocial behavior. An interesting addition to the literature on this topic would be the incorporation

of parental-wellbeing as a confounding variable within this association. As found by McGregor (under review), parenting stress can have a significant influence on the executive functioning skills of young children. This raises the question of whether or not parental-wellbeing plays a role in the prosocial behavior of children.

Another consideration when viewing the results of the current study regards the diction of the measures. The language on the child-centered attitudes subscale of the Intensive Parenting Attitudes Questionnaire is strong (IPAQ; Liss et al., 2013). For instance, one statement reads "The child's schedule should take priority over the needs of the parents." After all, the intention of the IPAQ is to measure *intense* parenting attitudes, which it seems to achieve via these strongly worded statements. This may be a limitation of the current study. As a whole, the sample was not very child-centered, likely since the majority do not hold very "intensive" mothering beliefs, therefore making it more difficult to produce significant results. If the statements were simply measuring typical child-centered beliefs as investigated by other researchers (Ashton-James et al., 2013; Smith et al., 2010), it is possible that the mothers within this sample would have been more agreeable to the child-centered views. This in itself may be a limitation of the current data; it is worth noting that low variability in scores, in this case, for child-centeredness, may affect levels of significance and beta weights. The skewness for this data has been verified as acceptable, however this low variability in child-centeredness may make it more difficult to produce significant findings.

Lastly, a consideration for the current study is that prosocial behaviors in children were assessed by maternal reports. Self-report allows for the possibility of response bias, as parents may prefer to view their child in a more positive, or prosocial manner

(Althubaiti, 2016). Seeing as self-reporting would not be a realistic collection method for 3 to 5 year-old children, instead, utilizing teachers as reporters may be more effective since they have a wider frame of reference for child behavior than most parents (Cho et al., 2011).

Recommendations for Practice

The results of this study have contributed to the previous literature that have identified parenting practices as having the potential to prompt prosocial behaviors in children. Therefore, the findings of the current research should be used to inform future parenting recommendations and practice. The findings should also be considered when constructing interventions on parent-child interactions, specifically those intended to increase positive behaviors in children (i.e., prosociality). For example, family life education and parenting programs should consider incorporating skill building specifically targeting parental support of children's desirable behavior to more effectively foster prosociality in children. Previous effective interventions aiming to foster prosocial behavior in children were primarily school-based. For instance, a meta analysis of nineteen school-based interventions reported that encouragement of perspective-taking and emotion-understanding were important methods to consider when looking to foster prosocial behavior (Malti et al., 2016). Another intervention that focused on parent-child interactions showed decreases in problem behaviors and increases in prosocial behavior by enhancing parenting skills (Tolan et al., 2002). Specifically, "interventionists" (therapists working in line with the specific goals of the study) aimed to coach parents on involvement and communication with their child, helped them to create a positive alliance with one another, and finally, to decrease aggressive behaviors in children by

increasing cooperation and prosocial behaviors. It was found that the parent-child alliance, cooperation, and communication is vital when trying to improve children's behavior. Overall, this proved to be an intervention method of changing behavior in children by working on parenting skills. However, it seems no previous interventions have utilized parents' encouragement of children's positive behavior, which is a potential limitation in current practice. Since many school-based interventions have seen success when encouraging positive behaviors (Malti et al., 2016), and Tolan and colleagues (2002) stressed the parent-child relationship as important in increasing positive behavior, there lies the potential for a strong intervention that combines both approaches. This may prove to be a worthwhile endeavor, as the results of the current study suggest the importance of the role of parents in children's developing prosocial behaviors.

Conclusively, although the current study shows that parents play a crucial role in promoting prosocial behavior in children, a more detailed comprehension of this association through more diverse, longitudinal data is imperative to make a greater positive impact on the behavior of children. The implications of the current findings highlight the importance of parenting practices, and their potential influence on child behavior. It is recommended that future research further dissects the significant association found between supporting positive behaviors in children and children's prosocial behavior. It is also suggested that new interventions to increase prosocial behavior in children consider the parent-child relationship, and how parenting approaches can influence behavior in children. The current study also underscored parental encouragement of positive behavior as a possible catalyst for prosocial behavior, and thus, should be incorporated into such interventions as well. Overall, the influence of

parenting practices on children's behavior must be continually investigated so that the most impactful findings can be used to better guide parents and professionals on nurturing compassion and empathy in children.

Table 1. *Descriptive statistics for demographic variables. Percentages based on valid, non-missing responses (N = 255).*

Demographics	
	Mean *(SD)*
Age	33.96 (5.05)
	n (%)
Race:	
White	213 (83.5)
Black/African American	17 (6.7)
Hispanic/Latinx	15 (5.9)
Asian	9 (3.5)
Other race	1 (0.4)
Sexual Orientation:	
Straight	239 (93.7)
Bisexual	13 (5.1)
Prefer not to Disclose	3 (1.2)
Education Level:	
Some high school	6 (2.4)
High school/GED	21 (8.2)
Vocational school	3 (1.2)
Some college	39 (15.3)
College (4-year degree)	94 (36.9)
Graduate Degree (Master's or PhD)	92 (36.1)
Marital Status:	
Single	13 (5.1)
Cohabitating with a Partner	17 (6.7)
Married	207 (81.2)
Separated/Divorced	13 (5.1)
Other	5 (2.0)
Number of Children:	
One	78 (30.6)
Two	111 (43.5)
Three	41 (16.1)
Four	16 (6.3)
Five or more	9 (3.5)

Table 2: *Correlations between Prosocial Behavior, Child-Centered Mothering Attitudes, Supporting Positive Behaviors, and Demographic Variables (N* = 255).

Variable	1	2	3	4	5	6	7	8	9
1. Prosocial Behavior	–								
2. Supporting Positive Behaviors	.374**	–							
3. Child-Centered Attitudes	-.058	.047	–						
4. Maternal Age	.177**	.176**	-.149*	–					
5. Race	-.017	-.047	.113	-.098	–				
6. Number of Children	.136*	.157*	-.155*	.232**	-.118	–			
7. Level of Education	.280**	.051	-.249**	.348**	.013	-.002	–		
8. Marital Status	-.122	.00	.106	-.062	-.004	.103	-.339**	–	
9. Sexual Orientation	-.071	.013	.105	-.216**	-.109	-.013	-.129*	-.018	–-
M	7.76	5.88	1.90	33.96	1.35	2.09	5.84	2.18	1.04
SD	1.94	.758	.530	5.05	.943	1.02	1.29	.685	.248

*$p < .05$, **$p < .01$

Table 3: *Direct and Indirect Effects Between Child-Centered Attitudes, Supporting Positive Behaviors, and Prosocial Behavior (N = 255)*

Variable / Effect	*b*	*SE*	*t*	*p*	*95% Confidence Interval*	
CCA → SPB	.067	.090	.743	.458	-.110	.244
CCA → PRO	-.278	.213	-1.304	.194	-.698	.142
CCA → SPB → PRO	-.214	.230	-.930	.353	-.666	.239
SPB → PRO	.966	.149	6.480	< .0001	.672	1.260
Effects						
Direct	-.278	.213	-1.304	.194	-.698	.239
Indirect	.064	.092			-.134	.238
Total	-.214	.230	-.930	.353	-.666	.239

*Based on 5000 bootstrap samples

Table 4*: The Results of the Simple Linear Regression- Prosocial Behavior by Supporting Positive Behavior*

Factor	***B***	***95% CI***	**β**	***t***	***p***
(Constant)	.207	[-2.02, 2.43]	-	.183	.855
Supporting Positive Behaviors	.881	[.592, 1.17]	.345	6.002	< .001

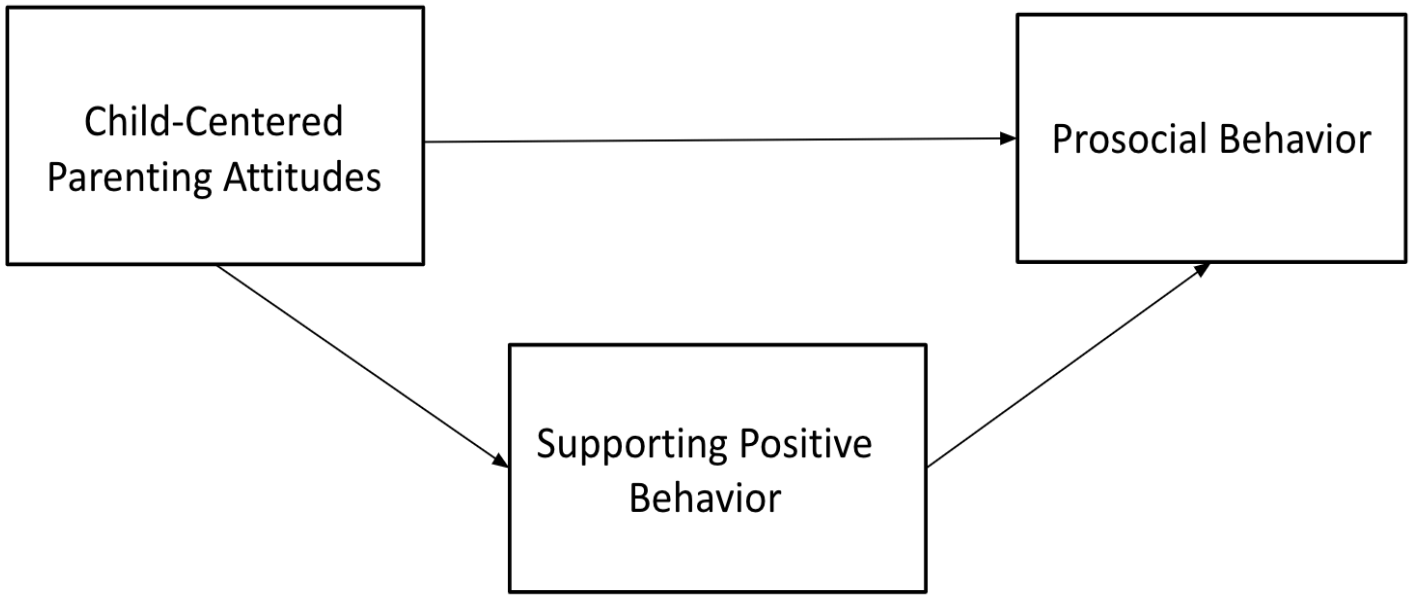

Figure 1. Hypothesized model of child-centered parenting attitudes predicting prosocial behaviors through supporting positive behaviors. Analysis controlled for maternal age, level of education, and number of children (*N* = 255).

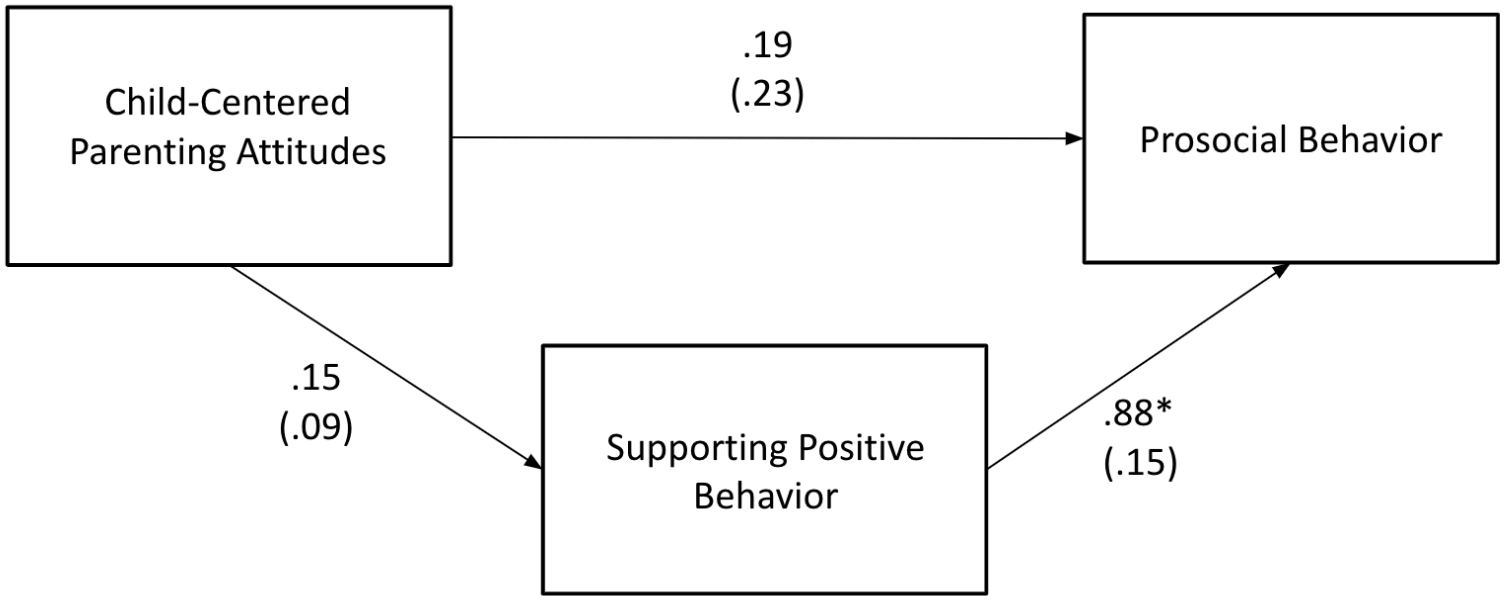

Figure 2: Tested model of child-centered parenting attitudes predicting prosocial behaviors through supporting positive behaviors. Analysis controlled for maternal age, poverty, level of education, and number of children (*N* = 255). Note: Unstandardized coefficients. R^2 = .107, *p < .0001

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