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ARTICLE

Parenting and person correlates of prosocial behaviors in Asian Indian young adults

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Abstract

The primary goal of this study was to examine the intervening roles of prosocial moral reasoning and respect for family in associations between parent attachment and prosocial behaviors in Asian Indian young adults. Participants included 281 Asian Indian young adults (60.5% women; *M* age = 21.45 years). Path analyses suggested that parent attachment was positively associated with respect for family and prosocial moral reasoning. In turn, respect for family was positively associated with emotional, compliant, dire, and anonymous prosocial behaviors, while prosocial moral reasoning was positively associated with altruistic and negatively associated with public prosocial behaviors. Discussion focuses on the importance of both general and culture-specific mechanisms in explaining links between parenting and prosocial behaviors in Asian Indian young adults.

KEYWORDS

Asian Indians, moral reasoning, parent attachment, prosocial behaviors, respect for family

Statement of Relevance: The findings provide support for culturally-integrated models of parenting and recent conceptions of prosocial behaviors as a multidimensional construct in young adults from a non-Western, predominantly collectivist culture (i.e., India). Furthermore, the findings highlight the indirect effects of parent attachment on distinct forms of prosocial behaviors via respect for family and prosocial moral reasoning, which suggests the need for more nuanced conceptions of these links in Asian Indian young adults.

1 | INTRODUCTION

Asian Indians represent the fastest growing cultural group in Asia (United Nations Population Division, 2019), and by 2027 India is expected to become the most populous country of the world. Despite the growing presence of young adults in India (Census of India, 2011), little is known about normative developmental processes in Asian Indian young adults. Although scholars have underscored the importance of studying parent–youth relationship quality, cultural values, and moral traits and behaviors in Asian Indian young adults (Main, 2019), empirical research linking positive relationship quality with parents to normative developmental outcomes such as prosocial behaviors (or voluntary behaviors intended to benefit others; Carlo, 2014) in Asian Indian young adults is scarce. Moreover, cultural socialization theorists have asserted that general psychological processes and culture-specific processes are equally important in explaining associations between parent attachment and prosocial behaviors (Carlo & de Guzman, 2009). Conceptually, parents might socialize prosocial moral reasoning (i.e., decision making about helping opportunities where one's needs are in conflict with those of others; Eisenberg, 1986) and respect for family (i.e., cultural values of regard for the authority and wishes of the family; Fuligni, 2007). Furthermore, both prosocial moral reasoning and respect for family have been tied to increased prosocial behaviors in diverse cultural samples (Carlo, Mestre, et al., 2011; Streit et al., 2020), albeit in samples other than Asian Indians. Thus, this study examines associations between parent attachment and prosocial behaviors, as well as the intervening roles of prosocial moral reasoning and respect for family in these associations among Asian Indian young adults.

2 | CULTURAL CONTEXT OF INDIA

India is a vast, densely populated country located in Asia. India is remarkably culturally diverse along the lines of religion, caste, language, and geography (Census of India, 2011). Although there is wide variability within Asian Indian culture, there are shared cultural values and beliefs across most Asian Indians (Panda & Gupta, 2004). Asian Indian culture, for example, has been characterized as collectivistic, respectful, and family-oriented (Hofstede, 1980; Panda & Gupta, 2004). Owing to Asian Indians' reliance on immediate and extended family, the family unit is considered the cornerstone of Indian society (Heitzman & Worden, 1995). Asian Indians tend to live or spend extended periods with their parents during young adulthood (D'Cruz & Bharat, 2001), which highlights the importance of studying parent attachment in Asian Indian young adults. Additionally, Asian Indian parents tend to socialize their children with family-oriented cultural values of obligation, hierarchy, and interdependence (Rao et al., 2003), underscoring the importance of respect for family. Asian Indian adults also tend to view the failure to help in moral dilemmas more negatively than North American adults (Miller et al., 1990), which could reflect in unique patterns of prosocial moral reasoning. Thus, this study highlights the interplay of the parenting, cultural, and moral correlates of prosocial behaviors in Asian Indian young adults.

3 | PARENT ATTACHMENT AND PROSOCIAL BEHAVIOR

Attachment theorists (Ainsworth, 1979; Bowlby, 1973) have suggested that secure parent attachment may foster greater prosocial behaviors in children by encouraging care, concern,

and an overall other-orientation (Thompson, 2019). These theorists postulate that securely attached children, as a result of sensitive and consistent parenting, develop positive internal working models that reflect care and responsiveness toward others. In contrast, insecurely attached children, as a result of unresponsive and inconsistent parenting, develop negative internal working models that reflect a poor sense of self and others (Bretherton, 1991). Children's positive (or negative) internal working models have long-term impact on youths' and young adults' prosocial behaviors by laying the developmental foundations for positive and prosocial (or negative and antisocial) interactions (Sroufe, 2005). As children transition into adolescence and young adulthood, parent attachment has been operationalized as the presence of trust and communication and the absence of alienation (Armsden & Greenberg, 1987). This emphasis on mutual trust and respect, responsiveness and consistency in communication, and the lack of isolation and negative affect in parent–youth relationships is particularly salient for youths' prosocial development (Armsden & Greenberg, 1987; Thompson, 2019). Strong parent attachment might also translate to parenting practices such as modeling helping behaviors, discussing moral issues, rewarding the display of helping behaviors, and facilitating opportunities for prosociality during young adulthood (Carlo et al., 2007). Conceptually, strong attachment toward parents could make young adults more receptive to parents' prosocial practices, and more likely to engage in prosocial behaviors (Sroufe, 2005).

Despite the expected theoretical links between parent attachment and prosocial behaviors, direct empirical evidence on these links in adolescence and young adulthood is mixed. Previous researchers have demonstrated modest, positive associations between parent attachment and youth prosocial behaviors (Kumru, 2002; Nie et al., 2016). For instance, Nie et al. (2016) found that strong parent attachment was related to greater youth global prosocial behaviors. However, other researchers have found no direct links between parent attachment and global prosocial behaviors in youth (Laible, 2007; Markiewicz et al., 2001).

Studies on the links between parent attachment and prosocial behaviors in distinct, culturally diverse samples such as Asian Indians provide opportunities to examine the generalizability of attachment developmental models. While no studies have examined associations between parent attachment and prosocial behaviors in Asian Indians, parenting researchers have demonstrated relations between other parenting dimensions such as parental involvement (Aboobaker et al., 2019), parental support (Sekaran et al., 2020), and global prosocial behaviors in Asian Indian youth. For example, parental monitoring and supervision predicted greater prosocial behaviors in Asian Indian youth (Aboobaker et al., 2019). Given the absence of research on relations between parent attachment and prosocial behaviors in the Indian cultural context, research on these links among Asian Indians is needed.

3.1 | Parent attachment and multiple types of prosocial behaviors

In recent years, moral developmental scholars have suggested that parent attachment might be linked to multiple forms of prosocial behaviors (Carlo, 2014; Carlo & Padilla-Walker, 2020). Given the conceptual issues surrounding prosocial behavior (see Carlo, 2014), such behavior is treated as a multidimensional construct in this study. Carlo and Randall (2002) proposed six types of prosocial behaviors based on the personal motives and the situation surrounding helping, namely altruistic, public, emotional, compliant, dire, and anonymous. Altruistic prosocial behaviors are defined as selflessly motivated prosocial behaviors that present little to no benefits to the self. Public prosocial behaviors are defined as selfishly motivated prosocial behaviors

displayed in the presence of an audience for social gains and approval. Emotional prosocial behaviors entail helping in emotionally provocative situations. Compliant prosocial behaviors include helping in response to a request for help. Dire prosocial behaviors consist of helping in emergencies or crises. Lastly, anonymous prosocial behaviors comprise helping without the knowledge of the recipient of help. Among these types of prosocial behaviors, altruistic and public prosocial behaviors reflect selfless and selfish personal motives for helping, while emotional, compliant, dire, and anonymous prosocial behaviors reflect situational considerations for helping.

Based on this typology, theorists and researchers have postulated links between parent attachment and specific forms of prosocial behaviors. According to traditional prosocial developmental and parental socialization models (Carlo, 2014; Eisenberg, 1986), parent attachment is expected to be indirectly related to distinct forms of helping through its effects on prosocial cognitions, emotions, and values. Such prosocial cognitions, emotions, and values could reflect a positive internal working model (Thompson, 2019), which might predict multiple types of helping. In support of this theoretical notion, Carlo et al. (2012) found no direct associations between parent attachment and emotional, compliant, dire, anonymous, public, and altruistic prosocial behaviors in US Mexican young adults; however, they found indirect associations (via empathy). Similarly, McGinley and Evans (2020) found indirect rather than direct relations between parent attachment and emotional, compliant, dire, and altruistic prosocial behaviors (via peer attachment) in predominantly European American young adults. Thus, we examined whether there are indirect links between parent attachment and specific forms of prosocial behaviors in a sample of Asian Indian young adults.

4 | INTERVENING ROLES OF PROSOCIAL MORAL REASONING AND RESPECT FOR FAMILY

Cultural socialization scholars have underscored that general psychological and culture-specific mechanisms can explain youth developmental trajectories (Super & Harkness, 1986; Whiting & Edwards, 1988), including prosocial development (Carlo & de Guzman, 2009). More specifically, Carlo and de Guzman (2009) presented an ecocultural stress theory of prosocial development. This heuristic theory draws upon social ecological (Bronfenbrenner, 1977), stress and coping (Lazarus & Folkman, 1984), and value-based behavior (Knight et al., 1995) theories to highlight the interplay of background and contextual influences, intrapersonal traits, and prosocial behaviors. Moreover, the model posits that prosocial behaviors could be differentially predicted by moral and cultural correlates (Knight et al., 2015; Streit et al., 2020) such that moral processes might predict helping driven by personal motives, whereas cultural processes might predict helping driven by situational needs.

Indeed, strong parent attachment might foster both general (i.e., prosocial moral reasoning) and cultural (i.e., respect for family) processes. On one hand, attachment toward parents can facilitate a shift from self- to other-oriented forms of prosocial moral reasoning by encouraging perspective taking and references to moral feelings and evaluatives (Eisenberg, 1986; Laible, 2007). Warm and secure parent-adolescent relationships have been positively linked with youth prosocial moral reasoning (Carlo, Mestre, et al., 2011; Kumru, 2002). In one study, warm and responsive parenting was positively associated with prosocial moral reasoning over time in Spanish youth (Carlo, Mestre, et al., 2011). At the same time, strong parent attachment can also encourage respect for family in youth growing up in collectivist societies, which

emphasize interdependent views of oneself as embedded in the family and hierarchal organization of family members (Fuligni, 2007; Lee, 1983). Researchers have tied positive relationship quality with parents to greater respect for family in Asian and Latino/a samples (Fuligni & Zhang, 2004; Hardaway & Fuligni, 2006). In another study, Asian Indian parents were found to instill respect for family in their youth to match the cultural ideals of staying as one with the family unit and generational interdependence (Rao et al., 2003).

4.1 | Prosocial moral reasoning and prosocial behaviors

Prosocial moral reasoning entails thinking about helping in moral dilemmas, where there are no formal social or legal guidelines. Prosocial moral reasoning, therefore, highlights issues of care and interpersonal relationships (see Eisenberg, 1986) rather than prohibition-oriented issues of justice and life-and-death (see Kohlberg, 1969). Further, prosocial moral reasoning progresses developmentally from less advanced, self-oriented reasoning (i.e., hedonistic reasoning) in childhood to more advanced, other-oriented reasoning (i.e., internalized reasoning) in adolescence and young adulthood. Moreover, prosocial moral reasoning is a salient psychological mechanism to examine in the Indian cultural context because Asian Indian young adults are more likely to view a broader range of hypothetical situations as reflecting moral dilemmas (compared to North American counterparts; Miller et al., 1990).

Prior research has linked prosocial moral reasoning to prosocial behaviors in international samples (Carlo et al., 1996, 2010; Carlo, Mestre, et al., 2011), including Asian Indian samples (Chadha & Misra, 2004, 2006). More sophisticated moral reasoning was related to greater prosocial behaviors in Spanish and Brazilian samples (Carlo et al., 1996, 2010; Carlo, Mestre, et al., 2011). For instance, prosocial moral reasoning predicted prosocial behaviors longitudinally, and explained the links between parenting and prosocial behaviors in Spanish youth (Carlo, Mestre, et al., 2011). Prosocial moral reasoning also positively predicted prosocial behaviors in Asian Indian youth (Chadha & Misra, 2004). In a naturalistic study on prosocial reasoning, Chadha and Misra (2006) found that prosocial reasoning that emphasized mutual gains and others' needs was particularly valued in Asian Indian youth, which might translate to selfless and selfless forms of helping like public and altruistic prosocial behaviors, respectively. Moral development theory and research conducted with European American samples has supported the notion that prosocial moral reasoning might be especially predictive of (selfless/selfish) motive-oriented prosocial behaviors like public and altruistic helping (Carlo & Randall, 2002; Laible et al., 2008).

4.2 | Respect for family and prosocial behaviors

Respect for family, part of a constellation of family obligation values, highlights respecting the authority of, making sacrifices for, and considering the wishes of the family unit and its members (Fuligni, 2007). Respect for family is a salient cultural mechanism to examine in collectivist societies, such as India, because of the emphasis on relational socialization goals like family members' responsibilities and obligations to each other (Fuligni et al., 1999; Kärtner et al., 2010). As a result, Asian Indians (relative to North Americans) prioritize family and other relational expectations over justice expectations (Miller & Bersoff, 1992). Further, such family-oriented norms create clear expectations for adolescents from collectivist cultures to assist

family members and engage in prosocial behaviors that contribute toward maintenance of the household (e.g., preparing meals; Kağıtçıbaşı, 2007; Lee, 1983).

Researchers have highlighted the importance of family-oriented cultural values, especially respect for family, for youth from collectivist cultures for prosocial development (Knight et al., 2016; Streit et al., 2020). Family-oriented cultural values (i.e., familism, family obligation, and respect for family) are known to predict prosocial behaviors in Asian and Latino/a youth (Calderón-Tena et al., 2011; Telzer et al., 2011). Asian youth were found to be more likely to display cooperative and compliant prosocial behaviors, resulting from family-oriented cultural values (Farver et al., 1995; Orlick et al., 1990). Asian Indians, relative to North Americans, were more likely to engage in dire prosocial behaviors, at least partly due to family and interpersonal obligations (Baron & Miller, 2000). Specifically addressing respect for family, Streit et al. (2018, 2020) found that respect for family is associated with greater emotional, compliant, and dire prosocial behaviors in U.S. Latino/a samples. Other researchers have replicated positive relations between respect for family, and emotional, compliant, dire, and anonymous prosocial behaviors in U.S. Latino/a youth (Davis et al., 2015). Because emotional, compliant, and dire prosocial behaviors are mainly likely to be displayed in the family context (Calderón-Tena et al., 2011) and anonymous prosocial behaviors is primarily situationally influenced (Carlo & Randall, 2002), it is expected that respect for family predicts these contextually-driven prosocial behaviors.

5 | STUDY HYPOTHESES

This study addresses important gaps in research on prosocial behaviors among Asian Indian young adults. Building on attachment theory (Ainsworth, 1979; Bowlby, 1973), we hypothesize that parent attachment will be indirectly rather than directly associated with multiple forms of prosocial behaviors. Based on the ecocultural stress theory of moral development (Carlo & De Guzman, 2009), we hypothesize that parent attachment will be positively related to both prosocial moral reasoning and respect for family. In turn, prosocial moral reasoning will be positively related to altruistic and negatively related to public prosocial behaviors, whereas respect for family will be positively related to emotional, compliant, dire, and anonymous prosocial behaviors. In accordance with gender and cultural socialization theories (Gilligan, 1982; Raffaelli & Ontai, 2004), parents might socialize prosocial moral reasoning, cultural values, and prosocial behaviors differently between men and women. However, given no prior research on the hypothesized model in Asian Indian young adults, we explored whether the posited relations varied by gender.

6 | METHOD

6.1 | Participants

Participants of this study were 281 Asian Indian young adults (60.5% women; M age = 21.45 years, SD = 2.33, range = 18–25 years). In terms of their religious affiliation, participants predominantly identified themselves as Hindu (74%), followed by Jain (6.8%), Christian (6%), Muslim (5%), Buddhist (1.4%), Sikh (1.1%), and other (5.7%; e.g., Zoroastrian). A majority of the participants (83.3%) also identified as belonging to the general (or upper) caste

category. Twenty seven percent of participants considered Hindi as their native language. Participants were generally in the third year (31%) of their college education and unemployed (59.4%). Participants reported growing up with an average of five people in the household during most of their childhoods (0–18 years), typically mother, father, siblings, and grandparents, and less typically aunts/uncles and cousins. Additionally, the parent education of the sample was college level or higher (64.1% mothers, 69.1% fathers).

6.2 | Procedure

The data for the study were drawn from the Family Relationships, Adjustment, and Moral Engagement Project collected between 2017 and 2019. The data were collected with the objective of learning about Asian Indian college students' family and cultural socialization of moral developmental and mental health outcomes. The sample was recruited from five liberal arts colleges in the northern, western, and southern regions of India, where English was the primary language of instruction. Participants were recruited using flyers in classrooms and email announcements. Participants completed either paper-and-pencil surveys in classrooms (35%) or online surveys (65%) on Qualtrics, an online survey platform, in a location of their convenience. Participants were provided with a consent form with the study information at the beginning of the survey. Paper-and-pencil survey participants indicated their informed consent by signing and dating the form, whereas Qualtrics participants indicated their informed consent by clicking on an electronic button. All surveys were administered in English. Participants took approximately 30–60 minutes to complete the survey. In return for their participation, participants were entered into an Amazon gift card drawing (total = 15 \$5 and 20 \$10) with a chance to win one gift card. This study was approved by the Institutional Review Board of the University of Missouri and their equivalent bodies in the Indian colleges.

6.3 | Measures

6.3.1 | Parent attachment

Participants self-reported on their attachment toward their primary parent figure using a shortened version of the Inventory of Parent and Peer Attachment (IPPA-R; Armsden & Greenberg, 1987). Participants rated 12 items (e.g., “My parent encourages me to talk about my difficulties.”) on a 5-point scale ranging from 1 (*never*) to 5 (*always*). A mean score was calculated, with higher values indicating greater parent attachment. The IPPA-R has been well-validated and reliably used with several international samples (Li et al., 2014; Zulkefley & Wilkinson, 2015) such as Asian Indians (Pearson & Child, 2007). Prior work on the shortened measure has also demonstrated construct and predictive validity with moral traits and prosocial behaviors (Carlo et al., 2012; Laible et al., 2000). Four items were dropped from the shortened measure because they showed some low inter-item and item–total correlations and relatively low internal consistency of the measure ($\alpha = .60$). Thus, the eight-item measure (see Data S1 for item list), which demonstrated acceptable internal consistency ($\alpha = .75$), was used in this study.

6.3.2 | Respect for family

Participants reported on their values of respect toward family members using an adapted version of the respect for family subscale of the family obligation values scale (Fulgini et al., 1999). Participants indicated how important each of the six items (e.g., “Treat your parents with great respect.”) was to them on a 5-point scale ranging from 1 (*almost never*) to 5 (*almost always*). Mean scores were computed, and greater scores suggested higher endorsement of respect for family. Data on one item from the original 7-item measure (“Respect your older brothers and sisters”) was not collected because this study was targeted toward college students with and without siblings (see Data S1 for item list). This scale has demonstrated construct validity and acceptable reliabilities in Asian American and Asian samples (Fulgini, 2007; Fulgini & Zhang, 2004). Furthermore, the adapted measure displayed acceptable internal consistency ($\alpha = .74$) in the current sample.

6.3.3 | Prosocial moral reasoning

Prosocial moral reasoning was measured using the Prosocial Reasoning Objective Measure (PROM; Carlo et al., 1992). The PROM consists of stories designed to invoke prosocial moral dilemmas between the actor's wants and needs and those of others. The three stories used in this study depict situations where participants have to assess helping an injured boy versus going to a party with friends (the accident story); helping a peer being bullied risking social rejection from peers (the bully story); and taking food to their flooded village while not having sufficient food for themselves (the flood story). Participants next rated five reasons on a scale from 1 (*not at all*) to 7 (*greatly*) behind their decision making. Ranging from less to more mature forms of prosocial moral reasoning, these reasons included hedonistic (e.g., “it depends how much fun John expects the party to be and what sorts of things are happening at the party”; six items), needs-oriented (e.g., “it depends whether the boy really needs help or not”; three items), approval-oriented (e.g., “whether John's parents and friends will think he did the right or he did the wrong thing”; six items), stereotypic (e.g., “it depends whether John thinks it's the decent thing to do or not”; three items), and internalized (e.g., “it depends how John would feel about himself if he helped or not”; six items). A proportion score was computed by dividing each scale score by the sum total of all item scores. Next, scores were weighted (hedonistic and needs-oriented by 1, approval-oriented and stereotypic by 2, and internalized by 3) to reflect the increasing developmental levels (see Carlo et al., 1992). Finally, a sum composite of the prosocial moral reasoning proportionate scores was calculated, with higher values indicating more advanced prosocial moral reasoning relative to lower level reasoning. Prior research has shown construct validity for the prosocial moral reasoning composite in international samples (Carlo et al., 2010; Carlo, Mestre, et al., 2011), including Asian samples (Shen et al., 2013). The original measure demonstrated acceptable internal consistency ($\alpha = .88$) in the current sample.

6.3.4 | Prosocial behaviors

Prosocial behaviors were assessed using an adapted version of the Prosocial Tendencies Measure (PTM; Carlo & Randall, 2002; Streit et al., 2018). Participants rated types and targets of

prosocial behavioral tendencies on a 5-point scale ranging from 1 (*does not describe me at all*) to 5 (*describes me greatly*). Information on the six types of prosocial behavior (i.e., emotional, compliant, dire, emotional, anonymous, public, and altruistic prosocial) aggregated across targets of helping (i.e., family, friends, and strangers) was used in this study. Example items are listed below. Emotional subscale: “It is most fulfilling to me when I can comfort someone (i.e., family/friends/strangers) who is very distressed” (4 items each/12 items total; $\alpha = .88$). Compliant subscale: “When people (i.e., family/friends/strangers) ask me to help them, I do not hesitate” (2 items each/6 items total; $\alpha = .84$). Dire subscale: “I tend to help people (i.e., family/friends/strangers) who are in a real crisis or need” (3 items each/9 items total; $\alpha = .87$). Anonymous subscale: “I tend to help needy others (i.e., family/friends/strangers) most when they do not know who helped them.” (3 items each/9 items total; $\alpha = .91$). Public subscale: “Helping others (i.e., family/friends/strangers) when I am in the spotlight is when I work best.” (4 items each/12 items total; $\alpha = .93$). Altruistic subscale: “I think that one of the best things about helping others (i.e., family/friends/strangers) is that it makes me look good.” (3 reverse scored items each/9 reverse scored items total; $\alpha = .88$). Given the theoretical basis for studying these specific types of helping (Knight et al., 2015) and empirical interrelations among the targets of helping ($r = .49-.90$, $p < .01$), a mean composite for each type of prosocial behavior was calculated across targets. Greater scores suggested greater tendencies to engage in the corresponding types of prosocial behaviors. Previous research has shown convergent and discriminant validities and acceptable reliabilities for the PTM in international samples (McGinley et al., 2014; Rodrigues et al., 2017), including construct validity with Asian Indians (Sharma & Tomer, 2018). The adapted PTM has also demonstrated construct validity with respect for family and sociocognitive traits (Maiya et al., 2021; Streit et al., 2020). All six subscales of the adapted PTM showed acceptable internal consistencies in the studied sample.

6.3.5 | Covariates

Participants' gender (1 = *man*, 2 = *woman*) and maternal education (1 = *less than high school*, 2 = *high school*, 3 = *some college*, 4 = *college degree*, 5 = *graduate school or professional degree*) were included as covariates.

6.4 | Data analysis

Path analysis was conducted with the maximum likelihood robust (MLR) estimation in Mplus, version 8.0 (Muthén & Muthén, 1998-2017). The statistical model was specified with parent attachment as the exogenous variable; respect for family and prosocial moral reasoning as covarying mediators; and emotional, compliant, dire, anonymous, public, and altruistic prosocial behaviors as the endogenous variables (see Figure 1 for the statistical model). Gender and maternal education were added as covariates of prosocial behaviors in the statistical model. All variables were estimated as manifest variables (no latent variables were used) because of the model complexity and the unacceptable sample size to parameter estimate ratios (see Jackson, 2003).

In path analyses, model fit is considered good if the Chi-square test of model fit is nonsignificant, the root mean square error of approximation (RMSEA) is less than or equal to .06 (acceptable fit: $RMSEA \leq .08$), the comparative fit index (CFI) is .95 and above (acceptable fit:

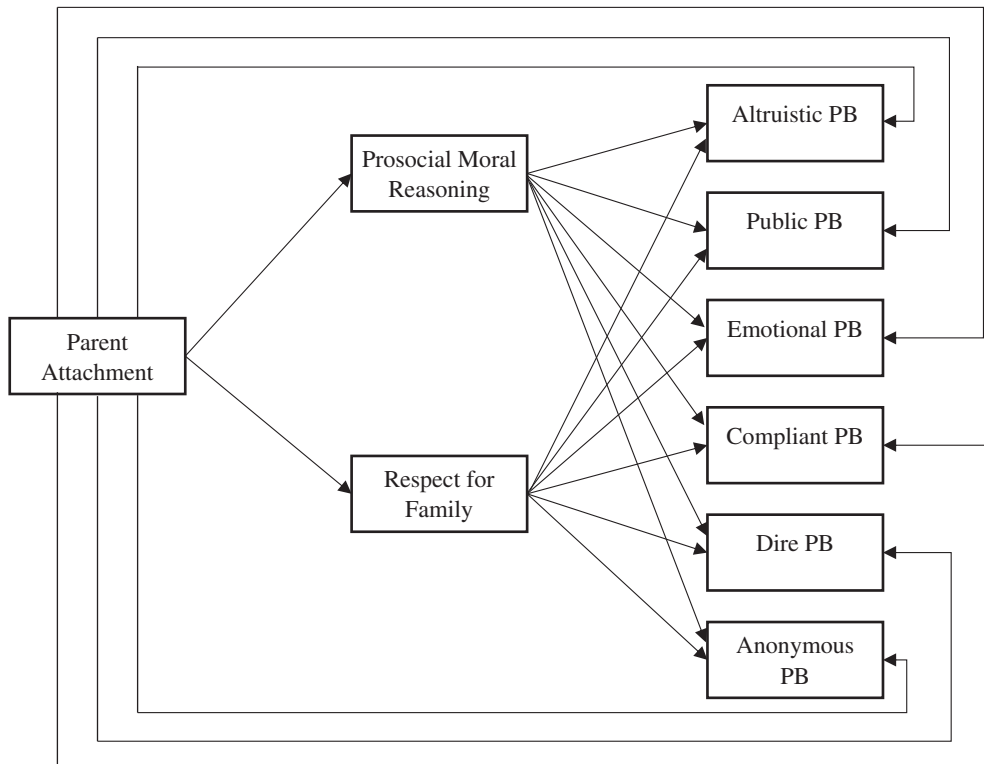


FIGURE 1 Statistical model for parent attachment, prosocial moral reasoning, respect for family, and prosocial behaviors. Covariances among the mediating and endogenous variables are specified but are omitted from the figure for parsimony. Gender and maternal education are included as controls. PB denotes prosocial behavior

CFI $\geq .90$), and the standardized root mean square residual (SRMR) is less than or equal to .06 (acceptable fit: SRMR $\leq .08$) (Hu & Bentler, 1999; Kline, 2015). Mediation tests were conducted using maximum likelihood with bootstrapping (bootstrap samples = 1000) to test indirect relations from parent attachment to prosocial behaviors via prosocial moral reasoning and respect for family. Multiple group analyses were conducted to test whether gender moderated the hypothesized associations. Satorra–Bentler scaled Chi-square difference tests were used to compare whether the model where parameters were constrained by gender was significantly different from the model where parameters were free to vary (see Kline, 2015).

7 | RESULTS

7.1 | Preliminary analysis

Descriptive and correlational statistics were estimated (see Table 1). All the study variables were normally distributed. The underlying regression assumptions were met. Regression diagnostics revealed no outliers or influential observations. Parent attachment was positively correlated with prosocial moral reasoning and respect for family. Respect for family was positively related

TABLE 1 Descriptive statistics and bivariate correlations

Variables	1	2	3	4	5	6	7	8	9
1. Parent attachment	–								
2. Prosocial moral reasoning	.17**	–							
3. Respect for family	.26**	.12	–						
4. Emotional PB	.14*	–.06	.21**	–					
5. Compliant PB	.14*	.02	.19**	.54**	–				
6. Dire PB	.13*	–.05	.28**	.65**	.70**	–			
7. Anonymous PB	.12*	.02	.23**	.34**	.29**	.34**	–		
8. Public PB	–.05	–.36**	.03	.12*	.00	.08	–.08	–	
9. Altruistic PB	.09	.36**	–.03	–.13*	–.02	–.10	.09	–.66**	–
Mean	3.60	1.81	3.91	3.84	4.03	3.96	3.53	2.46	3.50
SD	.63	.18	.66	.67	.74	.70	.88	.96	.96
Range	1–5	1–5	1–7	1–5	1–5	1–5	1–5	1–5	1–5
α	.75	.74	.88	.88	.84	.87	.91	.93	.88

Note: PB denotes prosocial behavior.** $p < .01$, * $p < .05$.

to emotional, compliant, dire, and anonymous prosocial behaviors, whereas prosocial moral reasoning was positively related to altruistic and negatively related to public prosocial behaviors. Parent attachment was positively linked to emotional, compliant, dire, and anonymous prosocial behaviors. There were significant intercorrelations between types of prosocial behaviors, such that emotional, compliant, dire, and anonymous prosocial behaviors were positively intercorrelated and public and altruistic prosocial behaviors were negatively intercorrelated with each other. There were also mean level differences in the study variables by gender; t -tests revealed that women engaged in more altruistic ($M_{\text{women}} = 3.60$, $SD_{\text{women}} = .89$; $M_{\text{men}} = 3.35$, $SD_{\text{men}} = 1.03$; $t = -2.04$, $p < .05$) and less public prosocial behaviors ($M_{\text{women}} = 2.34$, $SD_{\text{women}} = .86$; $M_{\text{men}} = 2.66$, $SD_{\text{men}} = 1.07$; $t = 2.56$, $p < .05$) compared to men.

7.2 | Main analysis

The data were missing completely at random based on Little's MCAR test: $\chi^2(21) = 23.54$, $p = .32$; therefore, full information maximum likelihood was used to handle missing data. Path analysis was conducted using MLR in Mplus, version 8.0 to test the study hypotheses. All direct relations among parent attachment, prosocial moral reasoning, respect for family, and prosocial behaviors were estimated in the path model; gender and maternal education were entered as statistical controls. The model fit the data well: $\chi^2(4) = 4.75$, $p = .31$, scaling correction = .96, RMSEA = .03, CFI = .99, SRMR = .02. Parent attachment¹ was positively associated with both prosocial moral reasoning and respect for family. Prosocial moral reasoning and respect for family were also positively interrelated. Furthermore, respect for family was positively related to emotional, compliant, dire, and anonymous prosocial behaviors. Additionally, prosocial moral reasoning was positively related to altruistic prosocial behavior and negatively related to public prosocial behavior. There were no significant relations between respect for family and

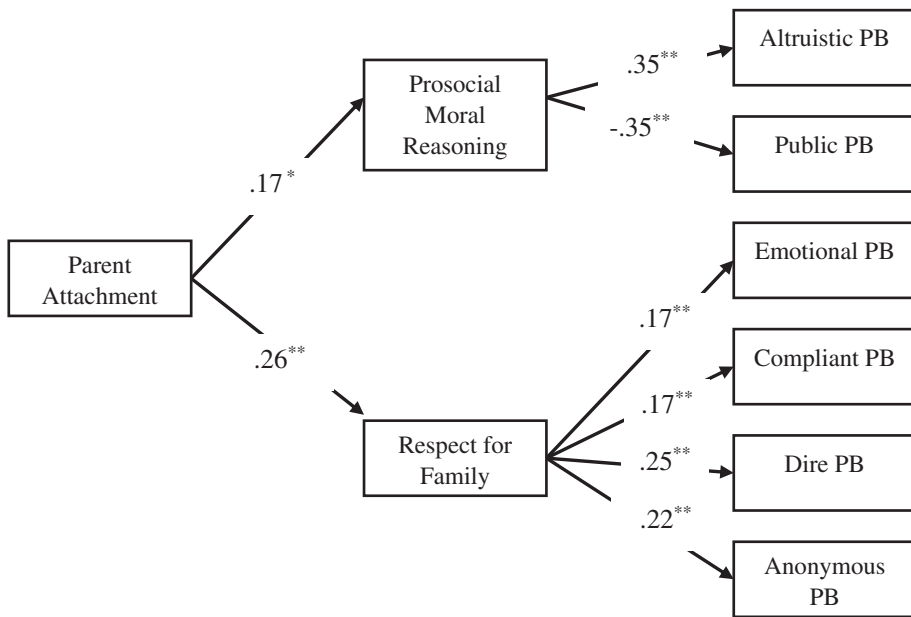


FIGURE 2 Path analysis results. Significant standardized coefficients for relations among parent attachment, prosocial moral reasoning, respect for family, and prosocial behaviors. Significant indirect effects are bolded. Covariances among the mediating and endogenous variables were specified but omitted from the figure for parsimony. Gender and maternal education were controlled for but not depicted in the figure. The model fit the data well: $\chi^2(4) = 4.75$, $p = .31$, scaling correction = .96, RMSEA = .03, CFI = .99, SRMR = .02. PB, prosocial behavior. ** $p < .01$, * $p < .05$

public and altruistic prosocial moral reasoning and emotional, compliant, dire, and anonymous, and parent attachment and all types of prosocial behaviors. Standardized direct effects between parent attachment, prosocial moral reasoning, respect for family, and prosocial behaviors are shown in Figure 2.

7.2.1 | Mediation analysis

Mediation analysis with bootstrapping (bootstrap samples = 1000) was used to test the intervening roles of respect for family and prosocial moral reasoning in relations between parent attachment and prosocial behaviors. There were four significant indirect effects via respect for family between parent attachment and emotional ($ab = .04$, $SE = .02$, 95% CI [.01, .08]), compliant ($ab = .04$, $SE = .02$, 95% CI [.01, .08]), dire ($ab = .07$, $SE = .02$, 95% CI [.02, .11]), and anonymous ($ab = .06$, $SE = .02$, 95% CI [.02, .09]) prosocial behaviors. There were also two significant indirect effects via prosocial moral reasoning between parent attachment and altruistic ($ab = .06$, $SE = .03$, 95% CI [.01, .11]) and public ($ab = -.06$, $SE = .03$, 95% CI [-.11, -.01]) prosocial behaviors.

7.2.2 | Multigroup analysis

Multigroup analysis by gender was conducted to assess whether the hypothesized model varied between men and women. Specifically, we tested multiple group differences in the direct

relations between parent attachment, prosocial moral reasoning, respect for family, and prosocial behaviors by gender using the Satorra–Bentler scaled Chi-square difference tests. The constrained model [$\chi^2(39) = 41.16, p = .38, \text{scaling correction} = .99, \text{RMSEA} = .02, \text{CFI} = 1.00, \text{SRMR} = .06$] was not significantly different than the unconstrained model [$\chi^2(4) = 2.55, p = .64, \text{scaling correction} = .94, \text{RMSEA} = .00, \text{CFI} = 1.00, \text{SRMR} = .01$] based on the S–B χ^2 difference test [$S\text{–}B \Delta\chi^2(35) = 38.52, p = .31, \text{scaling correction} = 1.00$]. Results are, therefore, reported for the full sample.

8 | DISCUSSION

This study sought to examine the relations between parent attachment and types of prosocial behaviors, as well as the intervening roles of respect for family and prosocial moral reasoning in these relations, among Asian Indian young adults. The study hypotheses were partially supported. Parent attachment was indirectly rather than directly related to all types of prosocial behaviors. More specifically, parent attachment was indirectly associated with higher levels of emotional, compliant, dire, and anonymous prosocial behaviors via respect for family. Parent attachment was also indirectly associated with greater altruistic and fewer public prosocial behaviors via prosocial moral reasoning. Further, respect for family and prosocial moral reasoning were positively correlated with each other. This pattern of associations among parent attachment, respect for family, prosocial moral reasoning, and types of prosocial behaviors was robust across Asian Indian men and women. The findings yield supportive evidence on the importance of parent attachment, prosocial moral reasoning, and respect for family in the prosocial behaviors of young adult Indians.

As expected, parent attachment was indirectly rather than directly related to higher levels of all forms of helping (i.e., emotional, compliant, dire, anonymous, public, and altruistic). This pattern of findings is consistent with attachment theory (Ainsworth, 1979; Bowlby, 1973) and research on parent attachment and types of prosocial behaviors in young adults (Carlo et al., 2012). While a secure parent attachment can foster care and sensitivity toward others' needs, attachment may be a necessary, but not sufficient, prerequisite for helping behaviors (Thompson, 2019), owing to a range of intervening (e.g., cultural values, moral traits; Carlo et al., 2012) and moderating mechanisms (e.g., gender; Davis et al., 2015). It is important to note that the current operationalization of attachment is broader than traditional conceptions of attachment, which emphasize the security of caregiver–child relationships. Nonetheless, the present findings suggest that attachment might be differentially linked to specific forms of prosocial behaviors grounded in warm and supportive parent–youth relationships.

The present findings evidence that prosocial moral reasoning is an intervening mechanism in the links between parent attachment and public and altruistic helping (see Carlo, 2014). Specifically, parent attachment was related positively to prosocial moral reasoning, which was, in turn, associated with more altruistic and fewer public forms of helping. The findings confirm prior speculation that prosocial moral reasoning is specifically linked to selflessly and selfishly motivated forms of helping in Asian Indian young adults (Chadha & Misra, 2004). The findings are also consistent with those of prior research on the relations between prosocial moral reasoning and altruistic and public helping in European American samples (Carlo & Randall, 2002; Laible et al., 2008). These findings are in accord with the conceptual notion that youth with strong attachment toward parents are particularly likely to internalize parents' moral norms (Kochanska et al., 2010) and that selfish- and selfless-motivated forms of prosocial behaviors

likely require cost–benefit analyses regarding the costs of helping others, which is directly assessed in moral reasoning measures (Carlo, 2014). Thus, this pattern of relations suggests that prosocial moral reasoning might be particularly linked to public and altruistic prosocial behaviors because such actions reflect distinct motive-based behaviors (i.e., selfishly and selflessly motivated prosocial behaviors).

Given the relatively few existing studies on the links between respect for family and prosocial behaviors and the importance of such values in Asian Indian society, the present findings demonstrate that parent attachment is related to stronger respect for family, which in turn, is associated with higher levels of emotional, compliant, dire, and anonymous forms of helping. The study findings are consistent with those of previous research on the positive links between respect for family and emotional, compliant, and dire prosocial behaviors in US Latino/a young adults (Davis et al., 2015; Streit et al., 2018, 2020) and family and interpersonal obligations and dire prosocial behavior (Baron & Miller, 2000) in Asian Indian young adults. These present findings can be interpreted in light of the fact that respect for family is a salient cultural process in predominantly collectivist cultures such as Indian. In line with collectivistic norms, Asian Indian parents might socialize their young adults to display respect for family and create opportunities to help in different situations in the household context; such opportunities to practice helping at home can translate to helping across contexts. Because emotional, compliant, and dire prosocial behaviors reflect commonly displayed forms of helping at home and because anonymous prosocial behavior is primarily a situation-influenced form of helping (Calderón-Tena et al., 2011; Carlo & Randall, 2002), our findings suggest that respect for family values are particularly relevant in situationally grounded forms of helping (as compared to motive-grounded forms).

Beyond attachment theory, the overall pattern of relations is in line with recent culture-integrated models of prosocial development (Carlo & de Guzman, 2009) that emphasize both culture-related (e.g., respect for family) and moral-related (e.g., prosocial moral reasoning) predictors of prosocial behaviors. Although there is prior support for this integrated model in Western cultures (mostly US samples; see Carlo, 2014), the present findings extend support for this model in a sample of Asian Indian young adults. Further, the specificity of the pattern of relations supports recent conceptualizations of prosocial behaviors as distinct and varied as a function of motives and situations (see Carlo & Padilla-Walker, 2020). Given the relative absence of research of Asian Indian young adults' prosocial development, these study findings also provide first evidence for differential predictors of multidimensional prosocial behaviors in young Asian Indian adults.

Somewhat unexpectedly, there were no significant gender differences in the associations among parent attachment, respect for family, prosocial moral reasoning, and prosocial behaviors in Asian Indian young adults. While some researchers have suggested gender differences in the cultural and moral socialization of prosocial behaviors (e.g., Davis et al., 2015), the present study relations were robust across gender. Asian Indian parents might socialize adaptive cultural values and moral traits to facilitate helping behaviors and other positive citizenship behaviors necessary for young adults to succeed in society, irrespective of gender.

8.1 | Limitations and future directions

The current study is not without its limitations. First, this study is based on cross-sectional data, which does not allow us to ascertain the temporality of causal relations or strong inferences

regarding cause-and-effect relations. Future researchers should examine associations between parent attachment and prosocial behaviors using fully prospective longitudinal or experimental (e.g., intervention) study designs. Second, the sample of this study is predominantly Hindu and upper caste, which restricts the generalizability of the study findings to the broader Asian Indian population. Given the diversity of religion and caste within India (see Census of India, 2011), future research can benefit from studying more diverse samples that allow for within-group comparisons by religion and/or caste of the relations between parent attachment and prosocial behaviors. Third, we dropped items from the parent attachment and respect for family measures for theoretical and methodological reasons, which limits the interpretability of our study findings compared to studies that use standard measures of parent attachment and respect for family. Future researchers should conduct validation studies with these measures with Asian Indian samples to assess whether they can be used as standard measures. Fourth, we modeled our study variables as manifest instead of latent owing to our inadequate sample size (Jackson, 2003). In future work, these variables may be modeled as latent variables to reduce measurement error. Fifth, although maternal education information was obtained, data on family income was not. Data on family income should be obtained in future research because family income could influence parenting and prosocial behaviors (Carlo, Padilla-Walker, & Day, 2011). Sixth, the current study only focused on parents as socialization agents. In collectivist cultures like India (Hofstede, 1980), researchers can also explore the moral socialization roles played by siblings, grandparents, and other extended family members in youth prosocial development. And seventh, this study highlighted the multidimensionality of prosocial behaviors but not prosocial moral reasoning and family-related cultural values. In future work, researchers can investigate multiple types of prosocial moral reasoning (e.g., hedonistic versus internalized; Carlo et al., 1996) and family-related cultural values (e.g., support versus obligation) in relation to prosocial behaviors in Asian Indian young adults.

9 | CONCLUSIONS

Despite the study limitations, the findings of this study contribute importantly to extant theory and research on prosocial behaviors in young Asian Indian adults. Our findings highlight the indirect effects of parent attachment on distinct forms of prosocial behaviors via respect for family values and prosocial moral reasoning. These findings provide support for culturally integrated models (e.g., Carlo & de Guzman, 2009) and recent conceptions of prosocial behaviors as a multidimensional construct (Carlo & Padilla-Walker, 2020) in young adults from a non-Western, predominantly collectivist culture (i.e., India). The study also contributes more generally toward the scant research on prosocial behaviors in Asian Indians. Taken together, the present findings suggest the need for more nuanced conceptions and research of the links among attachment, cultural values, social cognitions, and specific forms of prosocial behaviors in Asian Indian samples. Such work could significantly inform the development of more effective intervention efforts to foster positive youth outcomes in distinct cultures.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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ENDNOTE

¹ The results (i.e., direct and indirect effects) of the main model with the 8-item parent attachment predictor were identical to those of the alternate model with the 12-item parent attachment predictor.

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SUPPORTING INFORMATION

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