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Father–Child Relationship Quality and Social Functioning Among Children at Risk for Child Maltreatment

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Abstract

Despite the considerable growth and advancement in fatherhood research, relatively little is known about the effects of father–child relationship quality on social functioning among children who experience child maltreatment. Applying the strengths-based perspective, the current study sought to examine the association between father–child relationship quality and social functioning (social competence and positive peer relationships) among at-risk children, and to determine whether these associations are moderated by perpetrator type. This study included a sample of 681 US children (age 12 years) drawn from the Longitudinal Studies of Child Abuse and Neglect. We conducted a series of ordinary least squares multiple regression analyses. Higher-quality father–child relationships were associated with higher levels of social competence ($B = 0.19$, $SE = 0.06$, $p = .002$) and positive peer relationships ($B = 0.05$, $SE = 0.02$, $p = .005$). Significant interaction effects were found. The positive association between father–child relationships and peer relationships was significantly stronger among children with a history of maltreatment perpetrated by fathers with or without mothers ($B = 0.16$, $SE = 0.05$, $p = .002$). Findings highlight the importance of positive father–child relationships in building social resilience among children who experience maltreatment. Practitioners working with youth who are at risk for maltreatment should consider engaging fathers in services to support the development of strong father–child relationships.

Keywords Child maltreatment · Father–child relationship quality · Perpetrator type · Resilience

Ample empirical evidence suggests that fathers make a vital contribution to their children's development and well-being (Diniz et al., 2021; Lamb, 2004; Rollè et al., 2019; Sarkadi et al., 2008). Despite the considerable growth and advancement in fathering research, several important research gaps remain. First, relatively little is known about the role of father–child relationship quality on children's social functioning because previous studies have mainly focused on children's behavioral and cognitive outcomes (e.g., Cano et al., 2019; Rollè et al., 2019). Further, the benefits of positive father–child relationships for child social functioning have been understudied among children who experience risk factors, such as child maltreatment. In particular, previous studies have often overlooked how the identity of the perpetrator (e.g., maltreatment perpetrated by a mother alone) may change the effects of the quality of father-child relationship on children's social functioning. Understanding how father-child relationship quality interacts with the perpetrator's identity to influence children's social development is crucial for designing effective family-based intervention programs that support healthy child development. To this end, the current study applied a strengths-based perspective and sought to examine the association between father–child relationship quality and social functioning among children at risk for child maltreatment. Further, we tested whether this association differs by children's history of exposure to maltreatment perpetrated by fathers.

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Father–Child Relationship Quality and Child Social Functioning

Currently, there is little information on the link between positive father–child relationships and social functioning, such as social competence and positive peer relationships, among children who experience maltreatment or are at risk of maltreatment. Thus, for a comprehensive review of empirical evidence in this area, we turn to the literature on father involvement and child social functioning in the general population. Additionally, drawing from family systems theory (Bowen, 1993; Minuchin, 1974, 2018), which posits that families function as systems in which individual parts influence one another, we consider mother–child relationships along with father–child relationships in this review. Family systems theorists emphasize that families function as a unit, with different dynamics among the family members driving individual behaviors. Building on the idea that the family is an interconnected system in which the thoughts, emotions, and actions of one member impact other parts of the system (Bowen, 1993), father–child relationship quality may not be adequately understood without also considering mother–child relationship quality, and vice versa. For this paper, we consider father involvement and father-child relationships quality across all family contexts, including non-traditional structures, such as unmarried coparenting arrangements and non-residential fathers. This approach is crucial given the rapidly increasing diversity of family structures (Smock & Schwartz, 2020). Family systems theory emphasizes the importance of examining the role of non-residential fathers, as the impact of their involvement is not limited to traditional family structures but extends to any arrangements and contexts (Cox & Paley, 1997). Father involvement can significantly affect family dynamics, interparental relationships, family functioning, and child outcomes even when fathers are not living in the home.

A growing body of empirical evidence indicates the role of high-quality father–child relationships in the development of positive social functioning in children (Cabrera et al., 2011). For example, father involvement was related to higher levels of social competence among preschool children in a Portuguese sample (Torres et al., 2014). Similarly, consistent and responsive parenting by fathers was associated with higher ratings of social competence among children in Puerto Rican families (Fagan, 2000). Additionally, positive paternal parenting behaviors, such as higher engagement in the child's activities, responsiveness, and intimacy, were linked with improved social competence in daughters in a Korean sample (Chae & Lee, 2011). Conversely, conflict between father and child was found to be predictive of lower social competence in a sample of Chinese children (Zhang, 2013).

In addition to social competence, father–child relationship quality has been related to children's peer relationships (Cabrera et al., 2011; Lieberman et al., 1999). Focusing on ethnically diverse children, Cabrera et al. (2011) found that father–child relationship quality served as an important predictor of children's peer relationships during middle childhood. Similarly, Veríssimo et al. (2011) revealed that higher quality of attachment to one's father was predictive of friendships among preschool children, even after controlling for mother–child attachment relationships. A significantly larger volume of research has examined the role of mother–child relationship quality in children's social functioning and has consistently found that higher-quality mother–child relationships predicted more positive child social functioning, including social competence and better peer relationships (e.g., Attili et al., 2010; Cohn, 1990; Kim & Cicchetti, 2004; Seibert & Kerns, 2015).

Together, previous studies have identified both mother–child and father–child relationship quality as significant predictors of children's social functioning (Boling et al., 2011; Fernandes et al., 2020; Groh et al., 2014). However, less is known the benefits of positive father-child relationship quality on children's social functioning for children who have experienced or are at risk of experiencing child maltreatment. A small volume of research has focused on children who have experienced risk factors, including maltreatment or other forms of family violence, and generated preliminary evidence that higher-quality paternal involvement (e.g., positive father–child relationships) is associated with better emotional and behavioral functioning, such as lower levels of internalizing and externalizing problems and fewer depressive symptoms (Dubowitz et al., 2001; Leon et al., 2016; Yoon et al., 2018, 2021). These findings suggest that positive father-child relationships may have similar benefits on child social functioning, yet the extent to which father–child relationship quality is linked to children's social functioning, such as social competence and peer relationships, after exposure to maltreatment remains unclear.

Interaction Between Father-Child Relationship Quality and Perpetrator Type

Perpetrators of child maltreatment are most likely to be the child's parents. According to the 2022 national *Child Maltreatment* report, 89.0% of victims are maltreated by one or both parents. Of those, 37.4% were victims maltreated by a mother acting alone, 24.5% were maltreated by a father acting alone, and 19.2% were maltreated by both parents (US Department of Health and Human Services, 2024). Therefore, when investigating the association between father–child relationship quality and a child's social functioning, it

is important to consider whether the child has experienced maltreatment by parents.

Several studies have examined the benefits of positive parent-child relationship quality on child functioning in the context of child maltreatment, but findings have been mixed. Some studies found no evidence of significant interaction effects of child maltreatment and father–/mother–child relationship quality on child outcomes, including antisocial behavior and internalizing or externalizing symptoms (Kim & Cicchetti, 2004; Sousa et al., 2011). Other studies, however, found significant interaction effects between maltreatment and father–/mother–child relationship quality. For instance, Alink et al. (2009) found that child maltreatment was associated with lower levels of emotion regulation and greater internalizing and externalizing symptoms among children with poor-quality mother–child relationships. To the authors' knowledge, only one study to date has examined the interaction effects between father-child relationship quality and perpetrator type on child outcomes (Yoon et al., 2022). Yoon et al. (2022) found that higher-quality father–child relationships buffered the negative impact of maltreatment on a youth's internalizing and externalizing problems when maltreatment was perpetrated by mothers alone. The inconsistent findings from previous studies point to the need for further research to disentangle the associations between father–child relationship quality, perpetrator type, and social functioning among children at risk for maltreatment.

The Present Study

Despite prior research pointing to positive parent–child relationships as one of the most salient protective factors for children with maltreatment histories (Afifi & MacMillan, 2011; Meng et al., 2018), little research to date has applied a strengths-based lens to examine the role of positive father–child relationships in building social resilience (i.e., social aspects of resilience, such as social competence and positive peer relationships) among children at risk for child maltreatment. Understanding the protective role of positive father-child relationships and determining their benefits in the context of a history of maltreatment perpetrated by parents is important for effectively supporting this population. Using data from a sample of children who experienced or were at risk for maltreatment, the present study aimed to examine whether positive father-child relationships are associated with better social functioning. Additionally, this study sought to test the moderating role of exposure to father/mother-perpetrated child maltreatment. We focused on the following two research questions: (1) are there significant associations between father–child relationship quality and social functioning (social competence and positive peer relationships) among children at risk for maltreatment? (2) are these associations moderated by perpetrator type (such as a history of exposure to maltreatment perpetrated by father with or without mother)? Our corresponding hypotheses were as follows: (1) It was hypothesized that higher-quality father–child relationships would be associated with higher levels of social competence and positive peer relationships. (2) No hypothesis was formulated about the interaction effects between perpetrator type and father/mother–child relationship quality, due to the limited and inconsistent results of previous studies.

Method

Study Design and Procedures

We conducted a secondary data analysis using data from the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN). LONGSCAN represents a multisite cohort study that investigates the causes and consequences of child abuse and neglect in the United States (Runyan et al., 2014). LONGSCAN participants ($N = 1{,}354$ children) were recruited from five consortium sites and had varying levels of maltreatment exposure or risk for maltreatment. Children at the East site ($n = 282$) were identified as high risk for maltreatment based on either child risk factors such as inadequate physical growth or parental risk factors such as HIV infection or substance use. Children at the Midwest site ($n = 245$) included those with a history of prior Child Protective Services (CPS) reports and a matched community comparison group. Children at the Northwest site ($n = 254$) had CPS reports prior to age 5. Children at the Southwest site ($n = 330$) had been removed from their home due to maltreatment and placed in out-of-home care prior to age 4. Children at the Southeast sample ($n = 243$) were identified as high risk at birth through a state public health tracking system.

All five study sites used common procedures and measures to collect data. Data were collected via interviews with children and their primary caregivers at child ages 4, 6, 8, 12, 14, 16, and 18. The current study used data collected at age 12 in which father–child relationship quality was assessed.

Participants

The analytic sample of the current study was limited to children who reported having a father or someone who acts like a father to them (a father figure) at the time of data collection (age 12). Children who reported having no father or father figure at age 12 (and thus no father–child relationship) were omitted from the data analysis in this study, resulting in

Table 1 Sample characteristics and descriptive statistics of study variables (N = 681)

Characteristic	%	M (SD)
Child sex (female)	48.89	
Child race/ethnicity		
Black	53.30	
White	28.93	
Hispanic	6.31	
Other	11.46	
Live with father/father figure	73.27	
Relationship to father/father figure		
Biological father	39.62	
Stepfather	21.06	
Adoptive father	7.80	
Grandfather	7.51	
Mother's boyfriend	6.63	
Foster father	3.09	
Other	14.29	
Lifetime exposure to child maltreatment (by type)		
Neglect	59.77	
Physical abuse	38.33	
Emotional abuse	37.15	
Sexual abuse	16.89	
Lifetime exposure to maltreatment perpetrated by parents		
Maltreatment perpetrated by mother alone	40.38	
No maltreatment perpetrated by parents	34.37	
Maltreatment perpetrated by father alone	4.40	
Maltreatment perpetrated by father and mother together	20.85	
Father child relationship quality		24.48 (4.79)
Mother child relationship quality		25.98 (3.76)

the loss of 673 children and a final analytic sample size of 681. Children who were excluded from the analytic dataset were not significantly different from children included in the analysis in terms of sex ($\chi^2 = 3.65$, $p = .056$); race/ethnicity ($\chi^2 = 11.98$, $p = .062$); or child physical abuse ($\chi^2 = 0.45$, $p = .500$), sexual abuse ($\chi^2 = 2.69$, $p = .101$), emotional abuse ($\chi^2 = 0.16$, $p = .690$), or neglect ($\chi^2 = 0.00$, $p = .990$).

Sample characteristics are summarized in Table 1. A little less than half (48.89%) of the sample was female; 53.30% of children in the sample identified as Black, 28.93% as White, 6.31% as Hispanic, and 11.46% as some other race, such as Native American, Asian or Pacific Islander, or mixed race; 73.27% of the children lived with their father/father figure. Among fathers, 39.62% identified as the child's biological father, 21.06% as stepfather, 7.80% as adoptive father, 7.51% as grandfather, 6.63% as mother's boyfriend, 3.09% as foster father, and 14.29% as other.

Table 2 Correlations among key study variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Child social competence	---													
2. Child peer relationships	0.17**	---												
3. Father–child relationship quality	0.17**	0.14**	---											
4. Mother–child relationship quality	0.13**	0.15**	0.44**	---										
5. Maltx by father w/ or w/o mother	−0.06	−0.03	−0.09*	−0.10**	---									
6. Maltx by mother alone	0.02	−0.03	0.00	0.01	−0.48**	---								
7. Physical abuse	−0.07*	−0.11**	−0.12**	−0.13**	0.47**	0.07**	---							
8. Sexual abuse	−0.02	−0.02	−0.10*	−0.04	0.35**	−0.03	0.32**	---						
9. Emotional abuse	−0.03	−0.06	−0.09*	−0.08*	0.38**	0.16**	0.51**	0.29**	---					
10. Neglect	0.00	−0.04	−0.07	−0.10**	0.25**	0.57**	0.40**	0.26**	0.45**	---				
11. Live with father	0.03	0.00	−0.02	−0.01	0.04	−0.05	0.05	−0.02	−0.01	0.00	---			
12. Sex, female	−0.07*	0.05	−0.10**	−0.03	−0.01	0.00	−0.06*	0.18**	0.04	0.00	−0.03	---		
13. Race, Black	0.11**	0.05	0.13**	0.17**	−0.27**	0.04	−0.24**	−0.19**	−0.24**	−0.16**	−0.19**	0.03	---	
14. Race, Hispanic	−0.04	−0.05	−0.01	−0.08*	0.04	0.00	0.03	0.04	0.04	0.02	0.01	−0.01	−0.30**	---
15. Race, Other	−0.05	0.04	−0.10**	−0.06	0.12**	−0.02	0.16**	0.07*	0.11**	0.07*	0.04	−0.01	−0.42**	−0.11*

Note *$p < .05$. **$p < .01$; maltx = maltreatment; w/ = with; w/o = without

Table 3 Predictors of social competence and peer relationships

	Social Competence						Peer Relationships					
	Model 1			Model 2			Model 3			Model 4		
	B	SE	*p*	B	SE	*p*	B	SE	*p*	B	SE	*p*
Sex (female)	−0.87	0.52	0.096	−0.89	0.52	0.088	**0.36**	**0.17**	**0.035**	**0.33**	**0.17**	**0.048**
Child race/ethnicity[a]												
Black	**2.40**	**0.68**	**0.000**	**2.46**	**0.68**	**0.000**	**0.46**	**0.22**	**0.037**	0.42	0.22	0.055
Hispanic	0.86	1.20	0.475	1.03	1.20	0.389	0.33	0.39	0.390	0.36	0.39	0.346
Other	0.29	0.91	0.752	0.35	0.91	0.701	0.48	0.29	0.103	0.48	0.29	0.104
Study sites												
East	**-2.28**	**0.95**	**0.017**	**-2.21**	**0.96**	**0.021**	−0.53	0.31	0.086	−0.48	0.31	0.123
Midwest	−0.69	0.99	0.488	−0.64	0.99	0.518	−0.44	0.32	0.174	−0.43	0.32	0.185
Northwest	−0.99	0.78	0.206	−0.95	0.78	0.223	0.07	0.25	0.796	0.09	0.25	0.714
South	**-2.44**	**0.88**	**0.006**	**-2.26**	**0.89**	**0.011**	−0.13	0.29	0.658	−0.09	0.29	0.766
Live with father	0.94	0.58	0.106	0.95	0.58	0.102	0.22	0.19	0.247	0.19	0.19	0.315
Maltreatment type												
Physical abuse	-1.13	0.74	0.125	-1.18	0.74	0.109	**−0.52**	**0.24**	**0.032**	**−0.50**	**0.24**	**0.036**
Sexual abuse	0.52	0.77	0.501	0.49	0.77	0.528	0.03	0.25	0.893	0.04	0.25	0.876
Emotional abuse	0.12	0.69	0.858	0.06	0.69	0.931	−0.09	0.22	0.674	−0.07	0.22	0.767
Neglect	0.51	0.96	0.594	0.47	0.96	0.622	−0.09	0.31	0.783	−0.06	0.31	0.849
Perpetrator type[b]												
Father (w/ or w/o mother)	−0.54	1.17	0.646	−0.35	1.18	0.764	0.04	0.38	0.906	−0.01	0.38	0.986
Mother alone	−0.34	1.07	0.747	−0.08	1.07	0.939	0.06	0.34	0.867	0.03	0.34	0.931
Father-child (F-C) relationship	**0.19**	**0.06**	**0.002**	**0.34**	**0.11**	**0.002**	**0.05**	**0.02**	**0.005**	−0.03	0.03	0.450
Mother-child (M-C) relationship	0.11	0.08	0.170	0.18	0.15	0.239	**0.05**	**0.03**	**0.043**	**0.15**	**0.05**	**0.003**
Father w/ or w/o x F-C relationship				−0.26	0.16	0.098				**0.16**	**0.05**	**0.002**
Mother alone x F-C relationship				−0.20	0.14	0.164				0.08	0.05	0.088
Father w/ or w/o x M-C relationship				−0.19	0.21	0.350				**−0.18**	**0.07**	**0.008**
Mother alone x M-C relationship				−0.04	0.19	0.829				−0.09	0.06	0.163

Note[a]reference group = White, [b]reference group = no maltreatment by parents

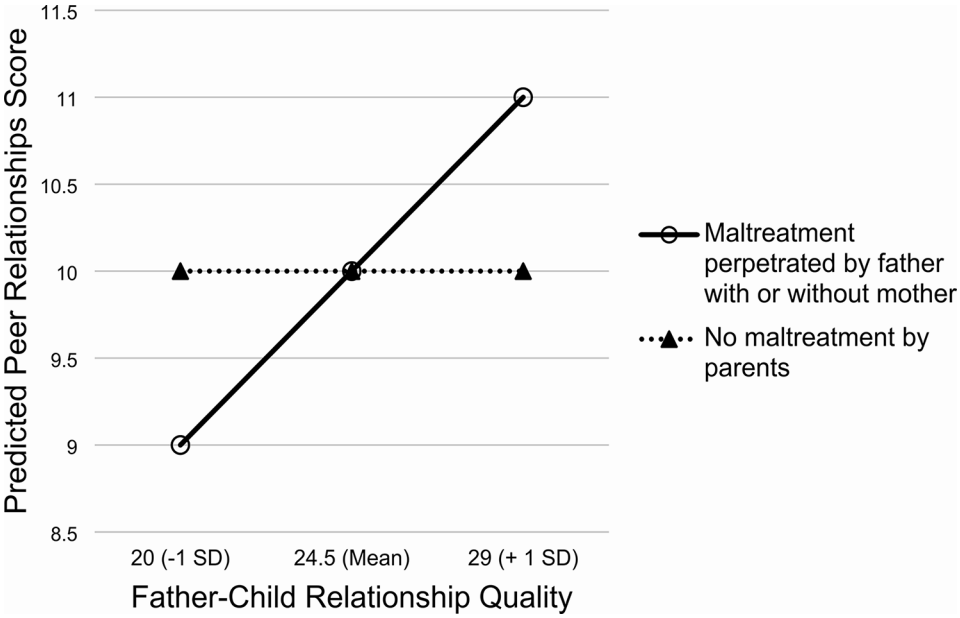


Fig. 1 Interaction effects of father–child relationship quality and perpetrator type on positive peer relationships

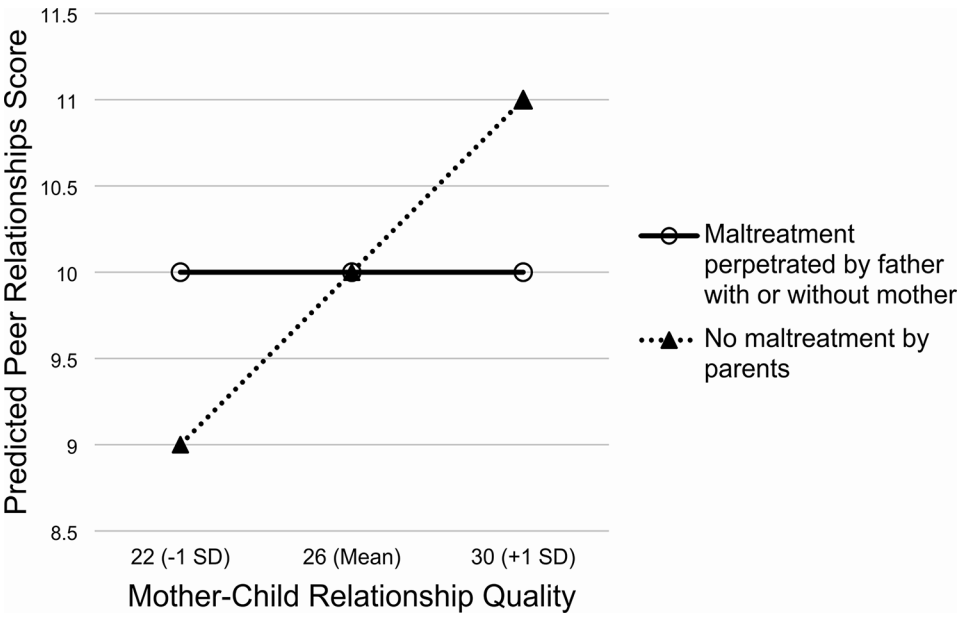


Fig. 2 Interaction effects of mother–child relationship quality and perpetrator type on positive peer relationships

Measures

Social Competence

Children's social competence was measured at age 12 using the Youth Self-Report (Achenbach, 1991) Social Competence scale. The Social Competence scale (20 items) measures the child's participation in activities, clubs, sports, hobbies, and friendships to assess the degree to which children show successful adaptation in the areas of social relationships and social activities. The scale consists of two subscales: the social subscale (with questions like "How well do you get along with your brothers and sisters?," "How many close friends do you have?," and "How well do you get along with other kids?") and the activities subscale (including questions such as "How well do you do this activity [hobbies/games]?," and "How active are you in this group [clubs/teams/organizations]?"). Children self-reported their social competence by rating themselves on each item. Item were summed and then converted to gender- and age-normed *t* scores, with higher scores indicating higher levels of social competence. Cronbach's alpha for the scale in this sample was acceptable ($\alpha = 0.75$).

Positive Peer Relationships

Positive peer relationships also were measured at age 12 through self-reports. Three items assessed the children's perception of how other children treated them at school through questions such as "How many of the other kids at school are friendly toward you?" The response options ranged from 1 = *Almost no one* to 4 = *Almost all*. The responses to the items were summed to create a total positive peer relationships score, with higher scores indicating more positive peer relationships (α = 0.66).

Father– and/or Mother–Child Relationship Quality

Father–child relationship quality was assessed at age 12 through children's self-reports on the Quality of Relationship scale. This scale consists of six items adapted from the Add Health study (Resnick et al., 1997). The items measured the following aspects of relationship quality: closeness ("How close do you feel to him?"), understanding ("How often does he understand you?"), trust ("How often does he trust you?"), shared decision-making ("How often do you and he make decisions together about things in your life?"), caring ("How much do you think he cares about you?"), and getting along ("How often do you and he get along well?"). On each item, children rated the extent to which the statements applied to them, from 1 = *Not at all/never* to 5 = *Very much/always*. The total score was created by summing the responses to the items, with higher scores indicating better father–child relationships. The identical measure of mother–child relationship quality also was utilized. Both scales had acceptable Cronbach's alphas (α = 0.83 for fathers; α = 0.81 for mothers).

Perpetrator Type

Children's history of exposure to maltreatment perpetrated by fathers and/or mothers was assessed using CPS records from birth to age 12. The LONGSCAN coding team coded perpetrator–victim relationships based on the Modified Maltreatment Classification System (English et al., 2002). Inter-rater reliability among coders was acceptable, with Kappas greater than 0.70 (Larrabee & Lewis, 2016). The following perpetrator type/relationship codes were used to identify fathers/father figures: biological father, adoptive father, stepfather, foster father, grandfather, and mother's boyfriend. Similar codes were used to identify mothers/mother figures: biological mother, adoptive mother, stepmother, foster mother, grandmother, and father's girlfriend. Due to low frequency (4.4%), maltreatment perpetrated by father alone was combined with maltreatment perpetrated by father and mother together (20.9%). Children's lifetime maltreatment experience based on perpetrator type was categorized into three categories: (1) maltreatment perpetrated by mother alone; (2) maltreatment perpetrated by father with or without mother (i.e., maltreatment by father alone or father and mother together), and (3) no maltreatment by parents.

Control Variables

Models controlled for child sex, race/ethnicity, fathers' residential status, maltreatment types, and study sites. Children's sex (0 = *male*, 1 = *female*) and race/ethnicity were reported by the caregiver at baseline. Child race/ethnicity was dummy coded as Black, Hispanic, or Other, using White as the reference group. Fathers' residential status was assessed using children's response to the question "Do you live with your father right now or someone who acts like a father to you?" (0 = *no*, 1 = *yes*). The history of exposure to different types of child maltreatment (from birth to age 12) was assessed by using CPS data, with four dichotomous maltreatment type variables (0 = *no*, 1 = *yes*) created: physical abuse, emotional abuse, sexual abuse, and neglect.

Data Analysis

Prior to primary analysis, preliminary analyses (univariate descriptive statistics and bivariate correlations) were performed to check the assumptions of ordinary least squares (OLS) multiple regression. To reduce multicollinearity, continuous variables were mean centered prior to regression analysis. We found no indication of multicollinearity, with all correlations among predictors being below 0.70 and variance inflation factor values being below 4 (Allison, 1999). To address research questions, we conducted a series of OLS multiple regression analyses. In each regression model, outcome variables (social competence and positive peer relationships) were regressed on father–child relationship quality, controlling for mother–child relationship quality, perpetrator type, fathers' residential status, maltreatment types, and child demographics. To test interaction effects between father/mother–child relationship quality and perpetrator type, a total of four interaction terms were created: (1) father–child relationship quality × a history of exposure to maltreatment perpetrated by fathers with or without mothers; (2) father–child relationship quality × a history of exposure to maltreatment perpetrated by mother alone; (3) mother–child relationship quality × a history of exposure to maltreatment perpetrated by fathers with or without mothers; and (4) mother–child relationship quality × a history of exposure to maltreatment perpetrated by mother alone. Since perpetrator type was a categorical variable, the "no maltreatment by parents" group was used as the reference

group and was excluded from the analysis, including the creation of interaction terms. All analyses were conducted using SPSS V.28.

Results

A total of 681 children (age = 12 years) were in the current study. Missing data on all study variables was less than 5%, with social competence being the variable with the most missing data (4.8%). Missing data were handled using listwise deletion. Bivariate correlations between key study variables are presented in Table 2. The results of the OLS regression analyses are shown in Table 3. Model 1 and Model 2 pertain to the analyses in which social competence was examined as an outcome and Model 3 and Model 4 pertain to the analyses in which peer relationships were examined as an outcome (see Table 3).

For first research question that focuses on the associations between father–child relationship quality and social functioning among children at risk for maltreatment, it was hypothesized that higher-quality father–child relationships would be associated with higher levels of social competence and positive peer relationships. OLS regression analyses were conducted to test the hypothesis and the results supported our hypotheses.

Model 1 focused on the main effects of father–child relationship quality on children's social competence. Higher-quality father–child relationships were associated with higher levels of social competence ($B = 0.19$, $SE = 0.06$, $p = .002$). Model 3 focused on the main effects of father–child relationship quality on children's peer relationships. Higher-quality father–child relationships ($B = 0.05$, $SE = 0.02$, $p = .005$) were associated with higher levels of positive peer relationships.

No hypothesis was formulated about the interaction effects between perpetrator type and father/mother–child relationship quality on children's social functioning (research question 2), due to the limited and inconsistent results of previous studies. Model 2 involved testing the interaction effects between father–child relationship quality and perpetrator type on children's social competence. The results indicated no statistically significant interaction effects on children's social competence. Model 4 involved testing the interaction effects between father–child relationship quality and perpetrator type on children's peer relationships. There was a significant interaction effect between father–child relationship quality and perpetrator type on peer relationships ($B = 0.16$, $SE = 0.05$, $p = .002$). The positive association between father–child relationships and peer relationships was significantly stronger among children with a history of maltreatment perpetrated by fathers with or without mothers (Fig. 1). Additionally, mother–child relationship quality had a significant interaction effect with maltreatment perpetrated by fathers with or without mothers on peer relationships ($B = -0.18$, $SE = 0.07$, $p = .008$). The positive association between mother–child relationships and peer relationships was significantly stronger for children who had not experienced maltreatment by parents, compared to those with a history of maltreatment perpetrated by fathers with or without mothers (Fig. 2).

Discussion

The current study contributes to the limited literature on father–child relationship quality and positive social development among children at risk for maltreatment by examining child social functioning in the context of the interplay between father–child relationship quality and perpetrator type. Overall, the study findings illustrate the benefits of positive father–child relationships for children's social functioning, suggesting significant associations between better father–child relationships and greater social functioning, including higher levels of social competence and positive peer relationships. Interestingly, the moderation results indicate the need for a more nuanced understanding of these associations; the degree to which father–child and mother–child relationship quality predicted peer relationships varied by children's history of exposure to maltreatment perpetrated by fathers with or without mothers.

The results indicate that higher-quality father–child relationships are associated with both greater social competence and better peer relationships. These findings are in line with attachment theory and corroborate empirical evidence from previous general population research (Cabrera et al., 2011; Keizer et al., 2019; Veríssimo et al., 2011). Our findings also expand the existing maltreatment literature on father involvement by showing that higher-quality father–child relationships are linked not only with a lower likelihood of negative outcomes such as emotional or behavioral problems (Dubowitz et al., 2001; Leon et al., 2016; Yoon et al., 2018, 2021) but also with a higher likelihood of positive outcomes (greater social functioning) in children. These findings suggest that fathers continue to serve as a significant source of social support for children in early adolescence, despite the fact that children's focus begins to shift to friendships during this developmental period (Laursen & Veenstra, 2021).

Fathers play a unique role in children's emotional and behavioral regulation (Majdandžić et al., 2014; Sarkadi et al., 2008; Van Lissa et al., 2019), which may help to promote their social functioning. Father–child relationships may also encourage child social functioning via fathers'

roles as social guide/advisers or sources of social opportunities/activities such as team sports (Cabrera & Tamis-LeMonda, 2013). It is essential to note that higher-quality father–child relationships were significantly associated with children's positive social functioning in our study, even after controlling for mother–child relationships. In fact, mother–child relationship quality was not significantly associated with social competence in the study. Compared to mothers, fathers tended to activate their children and encourage them to explore their environment (Bretherton, 2010; Dumont & Paquette, 2013). Such a father–child activation relationship and a secure father–child attachment may promote children's social functioning through the development of independence and social skills (Webster et al., 2013). Further investigation is needed to elucidate the precise mechanisms linking positive father–child relationships with social functioning among children who are at risk for maltreatment.

The interaction analysis yielded novel and intriguing findings. The test of the interaction effects between perpetrator type and father–child relationship quality on peer relationships revealed that better father–child relationships serve as a strong protective factor for children with a history of maltreatment perpetrated by fathers with or without mothers. In other words, the high quality of current father–child relationships buffered the adverse impact of past exposure to maltreatment perpetrated by fathers with or without mothers on peer relationships. Drawing from the notion of cumulative protective and compensatory experience (Hays-Grudo & Morris, 2020), it may be that children's feelings of satisfaction and enjoyment in their current relationships with fathers counterbalance and compensate for past negative experiences. More research is needed, however, to understand why the positive association between father–child relationships and peer relationships is significantly stronger for children with a history of maltreatment perpetrated by fathers with or without mothers.

Surprisingly, in contrast to the findings for father–child relationships, the interaction effect between perpetrator type and mother–child relationships indicated that the positive effect of high-quality mother–child relationships on peer relationships did not hold for children with a history of maltreatment perpetrated by fathers with or without mothers. This finding is somewhat inconsistent with the findings of a previous study, which found a stronger protective effect of father–child relationships for adolescents who had experienced maltreatment perpetrated by mothers alone (Yoon et al., 2022). Our findings suggest that the trauma associated with maltreatment perpetrated by fathers with or without mothers could diminish the protective effect of mother–child relationships on peer relationships. Together, these findings suggest that the ways in which exposure to maltreatment perpetrated by fathers with or without mothers influences children's outcomes might differ from the ways in which maltreatment perpetrated by mothers alone affects children. It is possible that these differences might stem from the differences in the type of maltreatment between male perpetrators and female perpetrators; mothers are associated with neglect whereas fathers are more associated with physical abuse (The Office of The Assistant Secretary for Planning and Evaluation, 2004). It might also be that there are gender differences in interaction patterns between perpetrator type and parent-child relationship quality, with father–child relationships (and maltreatment by mother alone) and mother–child relationships (and maltreatment by father with or without mother) playing distinct and different roles in children's social functioning. Further, considering that child sex was a significant predictor of peer relationships in our study (Models 3 & 4 in Table 3) and prior studies have reported gender differences in the influence of father– and/or mother–child relationship quality on peer relationships (Updegraff et al., 2004), further research needs to consider both parent's and child's gender to disentangle these complex relationships.

Strengths and Limitations

The current study has several limitations. First, we used a cross-sectional design, which prevented us from making any causal inferences. Second, father/mother–child relationships and social functioning outcome variables were collected via youth self-reports, which are prone to errors, such as reporting bias, recall bias, or measurement error. Future research should consider using multiple informants and multiple data collection methods to address this limitation. Third, due to the low frequency (4.4%) of cases involving 'maltreatment perpetrated by father alone,' this category was combined with 'maltreatment perpetrated by both father and mother'. This approach limits our ability to precisely determine whether positive father-child relationships are effective in fostering healthy social functioning in children who have a history of maltreatment by their father alone. Lastly, this study focused on children who have experienced or are at risk of experiencing maltreatment and thus the findings may not be generalizable to the general population.

Despite these limitations, the current study has notable strengths and makes a meaningful contribution to the literature. The study participants consisted of racially and ethnically diverse children, including racially/ethnically minoritized groups of children. A little over half (53.30%) of the sample was Black and about 6.31% was Hispanic. Thus, the study results contribute to our knowledge regarding the role of father-child relationship quality on social functioning among racially and ethnically diverse children. Our focus on fathers is another strength as it contributes

to diversity and inclusion by engaging fathers who have historically been given less attention in the child welfare literature.

Conclusion and Implications

The current study's findings highlight the importance of positive father–child relationships in building social resilience among children at risk for maltreatment. Intervention programs that aim to enhance healthy social functioning among children who experience maltreatment may benefit from targeting father involvement as a key intervention component. Practitioners working with children who have experienced or are at risk for maltreatment should consider engaging fathers in services to support the development of strong father–child relationships. Further, given our finding that exposure to maltreatment perpetrated by fathers with or without mothers substantially reduces the benefit of positive mother–child relationships for peer relationships, current policies and practices should be expanded to support father-inclusive maltreatment prevention and positive parenting programs. Interventions such as ParentWorks—a universal, father-inclusive parenting intervention—may help fathers gain knowledge and skills related to positive parenting and father involvement (Piotrowska et al., 2020).

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Declarations

Compliance with Ethical Standards No funding was received for this study. The authors report no conflicts of interest. Written informed consent/assent was obtained from all LONGSCAN participants. The current study was a secondary data analysis of the LONGSCAN dataset and was determined to be exempt from review by the Ohio State University Institutional Review Board.

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