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Family violence: Fathers assessing and managing their risk to children and women



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ABSTRACT

All too often, child protective workers fail to identify domestic violence, thus, endangering both child and adult family members. A potential solution is engaging men who abuse in assessing and managing their own risk to family members. This was the aim of a psycho-educational fathering program developed and tested in the southeastern United States. Over the course of the group, the men set goals on how to relate to their children and to their current or former partners, and they reflected on their achievement of these goals. The men's self-appraisals were supported by their caseworkers' assessments. A comparison of child protection data before and after entry in the group showed an extensive decrease in the families assessed with child protection findings and with household domestic violence. The evaluation used a qualitative comparative analysis (QCA) that identified configurations of conditions overlapping with child protection outcomes. Some of the men's characteristics included in these configurations ran counter to predictors usually associated with child maltreatment and domestic violence. The evaluation results point to the unique contributions that QCA can make to risk assessment.

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1. Introduction

In assessing risk, child welfare agencies face competing demands. On the one hand, they are mandated to investigate child maltreatment and intervene to prevent recurrences. On the other hand, they are expected to engage families in collaborative processes to address their needs and concerns. The complexity of these demands heightens when fathers abuse their partners, putting both the mothers and the children at risk of future harm.

A potential strategy for mitigating the recurrence of family violence is to support the men in assessing and managing their own risk to family members. This was the aim of the Strong Fathers program that was developed and tested in North Carolina, a state in the southeastern United States. The program was a parenting group for men with a history of committing domestic violence and whose families received child protection services.

The overarching framework of Strong Fathers moved away from crime-centered risk approaches (Baird, 2009) to engage men in solution finding (Hoyle, 2008). Guided by this theory of change, the program encouraged the men to specify their change goals, develop skills for reaching these goals, and reconstruct themselves as responsible fathers. The program evaluation examined the extent to which the men, from their own perspective, attained their goals. The men's self-assessments were checked against state administrative data on child maltreatment and domestic violence.

Given the blurred and shifting boundaries on goal achievement, the evaluation used a qualitative comparative analysis and categorized the degree of achievement into fuzzy sets (Ragin, 2000; Smithson & Verkuilen, 2006). This methodology also made it possible to identify configurations of conditions predicting child protection findings and domestic violence before and after entry into the Strong Fathers program. Because the program focused on changing how abusive fathers relate to their children and their partners, the authors begin by reviewing the prevalence and interaction of co-occurring domestic violence and child maltreatment.

2. Co-occurrence of domestic violence and child maltreatment

The US state administrative data show that 25.1% of child victims in 2011 were exposed to domestic violence (US DHHS, 2012). These data further indicate that 16.7% of child fatalities were associated with domestic violence, a higher rate than for either alcohol abuse at 5.7% or drug abuse at 12.8%. Although fathers usually spend less time with children than mothers, they were identified as involved in 47.7% of parent-perpetrated child maltreatment and 49.7% of parent-perpetrated child fatalities (US DHSS).

These agency figures underreport the rate of co-occurring women abuse and child maltreatment. Victims, especially women of color and indigenous women, often hide the abuse committed against them. The women may fear that child protection will use their victimization as grounds for removing children from their care, or they may fear that the workers will give them an ultimatum to leave the perpetrator without regard to the impact on the family (Douglas & Walsh, 2010).

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A US study (National Survey of Child and Adolescent Well-Being) interviewed female caregivers who had been investigated as well as their caseworkers. Analysis of the data found that 31% of the women identified that they suffered physical abuse by their partners in the past year (Kohl, Barth, Hazen, & Landsverk, 2005). In contrast, their workers identified the women's victimization in only 8% of these cases. Women whose workers did not identify active abuse were seven times less likely to receive domestic violence services (Kohl et al.). Not surprisingly, without adequate services in place, physically abused women in this national study had twice the rate of being rereported to child welfare than mothers who did not experience such violence (Casanueva, Martin, & Runyan, 2009). Moreover, the speed of repeat reports was almost twice as rapid for the abused women (Casaneuva et al.). The abused women's high rates of repeat reports may be a function of their parenting under stress or of efforts by their abusers to undermine them in the eyes of child protection workers.

Men who batter directly harm their partner and also compromise the mother's authority as a parent and her capacity to care for and protect her children. The father's tactics may take the form of abusing her in front of the children or swinging between authoritarian and laissezfaire parenting styles that destabilize the family (Bancroft, Silverman, & Ritchie, 2012). All this can create traumatic bonds that ally the children with the father against the mother and models disrespect toward women. If a mother attempts to leave or leaves the battering father, the violence is likely to escalate, and the father may seek child custody in order to intimidate her (Hannah & Goldstein, 2010).

The interaction of physical child abuse and intimate partner violence is specifically of concern in North Carolina where the Strong Fathers program is being tested. North Carolina has the fourth highest rate, among US states, of lifetime prevalence of partner violence against women (Black et al., 2011). Located in the Southern United States, North Carolina is in a region with elevated levels of child maltreatment fatalities (Douglas & McCarthy, 2011). Corporal punishment, which is associated with child abuse (Chu, Pineda, DePrince, & Freyd, 2011), remains normative in North Carolina. The state, along with neighboring South Carolina, had notably higher self-reported rates of parents' hitting children with an object than other parts of the country (343/1000 versus 332/1000), with nearly half of the children ages eight and nine years in the Carolinas struck by an object (Zolotor, Theodore, Chang, & Laskey, 2011).

3. Risk assessment of domestic violence

The frequency and consequences of co-occurring domestic violence and child maltreatment point to the necessity of assessing the likelihood, imminence, and severity of future harm committed by men against their intimate partners. Today, risk assessment tools in child protection take into account children's exposure to a battering father. A widely used instrument is the Children's Research Center's (2009) Family Risk Assessment which includes items associated with future harm. Examples of predictors are a history of prior child protection assessments, a household with more than two children, and a caretaker under 30 years of age. The numeric scores on different items are added to "structure" child protection workers' assignment of total risk scores for child neglect and for child abuse. The instrument permits policy or worker overrides given the severity of a situation. A validation study showed that the level of risk identified by this structured professional judgment tool positively correlated with recurrence of subsequent substantiation of child maltreatment, placement, and injury (Shlonsky & Wagner, 2005). The North Carolina Division of Social Services requires workers to complete this decision-making form (NC DHHS, 2009).

The difficulty, as previously outlined, is that workers commonly do not identify domestic violence on their caseloads (Kohl et al., 2005). Domestic violence poses a challenge in determining how risk factors interact and change over time in diverse community contexts. For instance, younger age, lower academic achievement, and blue-collar occupation

are treated as generic factors without consideration as to how they translate across different cultural groups (Aldarondo & Castro-Fernandez, 2011). Added complications for co-occurring domestic violence and child maltreatment can result from divisions between women's advocates and child protection workers. As a North Carolina study reported, their differing mandates and approaches can generate mutual distrust and impede their sharing information and collaborating on family safety (Francis, 2008).

Using risk assessment tools can guide workers to pay attention to likely predictors of victimization. This structure can mitigate professional judgments skewed by racial and ethnic biases and can assist with managing risk so as to protect victims. The link between assessed risk and its management, however, is tenuous. A British study found that domestic violence workers, out of a sense of caution and under the pressure of processing a high volume of cases, rarely downgrade high risk scores but frequently upgrade low risk scores (Robinson & Howarth, 2012). Some of these workers' decisions are supported by the same study's findings on physical revictimization. For instance, the workers elevate the risk level if the victims have children, which maps onto the association of repeat abuse and disputes over child contact.

Other decisions by the workers in this British study do not fit with the findings on revictimization. For instance, the workers do not elevate risk when women separate from perpetrators, a juncture when abuse often turns lethal (Campbell, Webster, & Glass, 2009). As common among practitioners, domestic violence workers overlook static factors which they cannot change such as the perpetrators' past violence and instead focus on dynamic factors that they can address such as the women's current level of fear (Robinson & Howarth, 2012). Both historical and contemporaneous factors need to be considered in risk assessment.

In assessing the risk posed by perpetrators of domestic violence, indicators include the perpetrator's violent acts, threats, and attitudes; escalation of violence; use of weapons; violation of court orders; general criminality; childhood experience of child abuse and exposure to interparental violence; and problems with intimate relationships, employment, substance use, and mental health (Bowen, 2011; Kropp, 2008). Risk assessment instruments using these types of factors can modestly increase accuracy in predicting recidivist domestic violence but need to be administered as recommended (Kropp & Gibas, 2010). A perfect instrument would have a sensitivity of 1.0 (predicting all instances of recidivism) and a specificity of 0 (not falsely predicting recidivism). An instrument that does not improve prediction over chance would have an accuracy of 0.5. Tests of the predictive validity of five domestic violence instruments show an average of .615, demonstrating improved accuracy but leaving room for further advancement (Messing & Thaller, 2013). Any instrument cannot cover all contingencies, and in order to develop an effective service plan, other means of assessing risk need to be incorporated.

A strategy for enhancing the accuracy of risk assessment is to involve the survivors in the assessment, an approach supported by research findings that abused women provide somewhat different perspectives on risk than victim advocates (Bennett Cattaneo, 2007). A caution is that abused women may minimize or deny the risk, and this is especially likely if they are fearful that their own victimization could lead to removal of their children (Humphreys & Absler, 2011). Asking the men about their level of risk raises questions regarding willingness and capacity to identify their own potential for reoccurring abuse. Nevertheless, self-report of violence, at least in the mental health field, is more accurate than either collateral observation or official records (Monahan et al., 2001). The validity of self-reports, though, is called into question if individuals fear negative repercussions.

Much of the violence risk assessment literature has focused on structured professional judgment and empirically based instruments with a third approach called anamnestic assessment given far less attention (Heilbrun, Yasuhara, & Shah, 2010). Anamnestic assessment refers to a process of individuals' recounting in detail their own history, thus,

making it possible to identify personally relevant needs and protective factors and forming and implementing a plan to reduce their particular risk to others. Such an approach to risk requires reflexivity, that is, the processes by which people actively self-reflect, rewrite their biographies, and are reconstructed as they try to make sense of social change and cultural uncertainty (Farrugia, 2013). For men who abuse, reflexivity requires a social context that supports them in confronting family violence and its impact, setting their goals, and reworking their sense of identity as a father and partner.

4. Father engagement and family violence

Governments in the United States and other English-speaking countries are urging greater paternal involvement in recognition of the positive contribution that men can make to child development (Lamb, 2010). Nevertheless, child protection workers continue to engage primarily with mothers. Workers view the men as less amenable clients and as less valuable investments of time because so many men lack parenting skills (O'Donnell, Johnson, D'Aunno, & Thornton, 2005). Understandably, hesitancy in working with the fathers heightens when the men have committed intimate partner violence (Gordon, Oliveros, Hawes, Iwamoto, & Rayford, 2012).

Ignoring the fathers, though, means that workers cannot directly address the abuse that men perpetuate against their children and the mothers of their children. Giving up on the men also means that fathers do not have the opportunity to learn about parenting and change how they relate to their partner. Labeling of fathers then hardens with little flexibility allowing the men to demonstrate that they can progress or have progressed (Maxwell, Scourfield, Featherstone, Holland, & Tolman, 2012). Focusing on the father–child interactions alone without consideration of the parents' relationship, however, is especially problematic in the context of family violence (Featherstone, 2010).

In response, parenting programs have been developed for men who abuse that place responsible fathering squarely within a framework of nonviolent relationships (Edleson & Williams, 2007). Recognizing that the majority of men who abuse are also in a fathering relationship with children, these programs seek to increase the fathers' often limited awareness of the impact on their children of inter-parental conflict (Salisbury, Henning, & Holdford, 2009). These programs tap into the men's desire to be closer to the children, even though the men may be resistant at least initially to changing their ways of relating to intimate partners (Mederos, 2004). Fathering programs for men who abuse include curricular modules that connect the men to their own childhood experiences and cultural origins in order to increase child empathy and support responsible fathering (Areán & Davis, 2007; Carrillo & Tello, 2007). As the case with other batterer intervention programs, the focus is advisedly on the men's current efforts to change rather than their past wrongdoing and on their setting and meeting their own goals (Adams, 2009).

Outcome evaluation of fathering programs for men who abuse is quite limited. Available are the results from a Canadian pre/post study of 98 fathers (Scott & Lishak, 2012). Comparing the men's self-reports before and after treatment, the study found significant reductions in over-reacting to their children's behaviors and improvements in coparenting. Impeding evaluation of batterer intervention programs, in general, are their high attrition rates averaging 50% (Bent-Goodley, Rice, Williams, & Pope, 2011). This is of particular concern because program completion is associated with reductions in recidivism, and this effect increases over time (Gondolf, 2002).

Drawing upon the experiences of other fathering programs, the Strong Fathers program was developed and tested in North Carolina. This fathering program for men with a history of domestic violence fit well with the differential response system called "Multiple Response System" adopted by the North Carolina Division of Social Services (NC DHHS, 2012). The North Carolina system has two responses. The investigative assessment response must be applied to any abuse cases

and can lead to substantiation of child maltreatment by an identified perpetrator(s). The family assessment response can selectively be applied to cases of child neglect and dependency (lack of an available or adequate caretaker) and can lead to a finding that the family is in need of services rather than that a perpetrator committed child maltreatment. Annually more children are found in need of service than substantiated for maltreatment (Duncan et al., 2013). Receiving services is mandatory for both substantiated and in-need-of-services cases. The investigative or family assessment may identify that domestic violence has resulted in an injurious environment to the children's welfare and that their family requires services. Strong Fathers is such a service.

5. Strong Fathers program

The curriculum for Strong Fathers was developed by the Center for Child and Family Health, a national childhood trauma center. Family Services, Inc., a community-based agency with extensive family support and safety programming, began groups in 2009 in Winston-Salem, and the Center for Child and Family Health started facilitating groups in 2012 in Durham. The evaluation was conducted by a separate university center. Referrals to the groups were made by county departments of social services in the surrounding areas. Child welfare workers referred men who had a history of domestic violence, had not committed child sexual abuse, and did not have a protective order disallowing contact with their children. The men could have a protective order prohibiting contact with the children's mothers.

Prior to enrolling the referred men, the implementing sites conducted intake interviews, providing the opportunity to explain the program and its evaluation and as needed, redirect the men to other programs such as ones focused on partner abuse rather than on fathering. The men were made aware of mandatory reporting if they disclosed information leading the group facilitators to suspect previously unreported child maltreatment.

The Strong Fathers program used a psychoeducational, cognitive-behavioral approach to assist the men in adopting safe and caring ways of relating with their families. The 20-session curriculum (Ake, Bauman, Briggs, & Starsoneck, 2009) included didactic instruction on child development and family violence; in-group and athome practice of parenting; stress management, help seeking, and other skills; and self-reflection on childhood experiences and current interactions. A fuller description of the program is available (Pennell, Sanders, Rikard, Shepherd, & Starsoneck, 2013). After each group session, the co-facilitators completed a checklist of modules. Demonstrating fidelity to the curricular plan, almost invariably all modules were completed.

Model fidelity was promoted by a number of factors. The groups had two facilitators, usually a man and a woman, to reinforce each other's efforts and model collaborative relationships. At least one of the facilitators was always African American, helping to create a more hospitable environment for the non-White participants. The facilitators received training on the curriculum and provided input into its refinement, were experienced in dealing with family violence, and had supportive agency contexts.

The group was structured to support the men in setting their own goals, assessing their progress in achieving these goals, and sharing their accomplishments and challenges with the other participants. The men's self-reports on goal achievement could then be checked against child protection assessments. Other factors such as the men's demographics and program attendance were also likely to predict workers' assessments. Accordingly, the study addressed the following questions:

- What goals do the Strong Fathers participants set for themselves?
- To what extent do the participants see themselves as fulfilling these goals?

- Are the men's statements on goal achievement consistent with child protection assessments?
- What properties of the men predict child protection outcomes?

6. Method

6.1. Study design

Based on the men's own words, a qualitative analysis first derived positive goals likely to lessen the risk of family violence and then assessed the extent to which the participants saw themselves as reaching these goals over the course of their group attendance. The men's expressed belief in their goal achievement was compared with child protection assessments of child maltreatment, level of risk, and domestic violence in the household as contributing to the need for child protection intervention. The study then examined the men's properties predicting the child protection outcomes.

6.1.1. Fuzzy sets and crisp sets

Self-assessment can lead to the participants reworking their views of what they can and want to achieve. For this reason, the men's portrayals of their goal attainment were categorized into fuzzy rather than crisp sets. Fuzzy sets are designed to address uncertainty, specifically degree-vagueness, which is the result of a property that can be possessed by objects to varying degrees. Fuzzy sets are applied in diverse fields from systems engineering to linguistics to give greater precision in the context of vague terminology and incomplete information (Zadeh, 2008). In the social world, fuzzy sets are a way to treat in a rigorous manner the vague parameters of groups (Smithson & Verkuilen, 2006). Such uncertainty certainly applies to the Strong Fathers participants given the transitions which they experienced.

The term set rather than variable is used because the intent is to assign the degree of membership of cases in a set. The Strong Fathers study employed both crisp and fuzzy sets:

Crisp sets Membership of cases in a crisp set is binary, either 0 (totally out) or 1 (totally in). The two end points are concepts that are qualitatively defined. An example of a crisp set is whether the Strong Fathers participants were White or not White. Continuous factors such as men's age were "fuzzified" (Longest & Vaisey, p. 91) by rank ordering values and then standardizing all nondichotomous variables to range from 0 to 1.

Fuzzy sets Membership in a fuzzy set is graduated, ranging from 0 (totally out) to 1 (totally in), with the interior points referring to different levels of partially in or out. Typically, the level of measurement is ordinal but has a natural zero (Verkuilen, 2005). For the Strong Fathers participants' goals, three points were used: 0 (goal not achieved), 0.5 (steps identified to achieve goal), and 1 (goal achieved). The mid-point 0.5, no more in than out, reflected the men's resolve to reach the desired outcome.

Fuzzy sets make it possible to retain the gradations in set membership while analyzing the different combinations of predictors of an outcome.

6.1.2. Qualitative comparative analysis (QCA)

Qualitative comparative analysis (QCA) encompasses various methods, including fuzzy set or fsQCA approaches, to identify configurations of conditions and their impact on outcomes (Chuang, Dill, Morgan, & Konrad, 2012). QCA serves as a means of integrating qualitative and quantitative data. Rules, known as fuzzy set operations, applied to the properties of cases can determine in a systematic way multiple pathways to reach an outcome (equifinality). These operations include terms familiar from Boolean logic such as union (and/or) and intersection (both only) but with the degree of membership taken into account.

Whether samples are small or large, fuzzy and crisp sets of cases can be examined in terms of which properties evince "consistent connections" to an outcome (Ragin, 2008, p. 2, italics in original). Analyses of the predictors of the presence of an outcome are treated separately from those for the absence of an outcome (asymmetry). In this study, the focus was on the predictors of the child protection outcomes rather than on the predictors of their absence.

Two measures are used to evaluate the fuzzy set results, consistency and raw coverage, and both range in value from 0 to 1. Consistency refers to the extent to which the cases that share a property or combination of properties always display an outcome (Ragin, 2008). The closer the consistency score is to unity the greater is the confidence that the particular properties are sufficient for producing an outcome or phrased more tentatively, are associated with an outcome. The norm is to use a consistency benchmark of at least 80%, but the methods for evaluating consistency are still in development (Longest & Vaisey, 2008). Consistency scores are a means of comparing the degree of agreement of different properties or configurations of properties to the outcome. A necessary condition would appear in all these configurations. In other words, a necessary condition must be associated with an outcome, but on its own it may not exert the influence to generate an outcome.

Consistency is helpful in developing theory but does not address the empirical question about the extent to which a condition or configuration of conditions accounts for the occurrences of an outcome. Raw coverage serves this function and is defined as "the degree to which instances of the condition are paired with instances of the outcome" (Ragin, 2008, p. 45). Given that an outcome may be associated with a number of properties, the subset of cases with a particular combination of properties may be quite small. Nevertheless, the results can offer a fine grained understanding of the interactions of different conditions and can inform practice, including risk assessment and management.

6.2. Sample

The evaluation sample consisted of the 53 men who enrolled in the program during 2009 through 2012. The men came from the first six groups at the Winston-Salem site and the first two groups at the Durham site. Other groups are ongoing.

6.3. Measures and procedures

To address the research questions, the study used two main sources of data: (1) the Strong Fathers participants' responses on their Goal Setting Worksheets and their Weekly Parenting Logs and (2) county administrative reports on child maltreatment stored in the state's Central Registry data base.

6.3.1. Goal Setting Worksheets

The Goal Setting Worksheets permitted identifying the men's goals and how their goals shifted over the group. On the worksheets, the men specified the goals that they had for themselves, their relationship with their children, and their relationship with the children's mother. The form provided space for listing three goals under each of the three areas, making space for nine goals (very rarely did a man add a fourth goal). The men completed the worksheet at three time points: Session 2; Session 7, 8, or 9; and Session 10, 11, or 12. The variation in the timing of the Goal Setting sessions reflects modifications to the curriculum. Some men, who entered after the start of the group, completed their first worksheet in one of the second set of sessions. For the men present at the three Goal Setting sessions, they were provided the opportunity to list 27 goals. A total of 99 worksheets were filled out in part or full.

6.3.2. Weekly Parenting Logs

On the Weekly Parenting Logs (adapted with permission from the workbook for Caring Dads, Scott & Crooks, 2004), the men reflected

on their progress over the course of the program. On each log, the men were asked to complete two statements: "This week, the one thing I felt best about as a father was" and "This week, my biggest struggle as a father was." They also completed one or two additional statements that might relate to accomplishing their goals or to applying the prior session's material (e.g., asking for help). The logs were completed in Sessions 2 through 20. Because one man dropped out after the first session, the participants in writing the logs totaled 47, and they filled out 616 logs.

6.3.3. Central Registry data base

The Central Registry data (NC DHHS, 2012) made it possible to identify cases for which the child protection workers made the following determinations: (a) a finding that children were in need of protection (substantiated child maltreatment or services needed), (b) a categorization of household contributory factor-domestic violence (committed in the child's home environment), and (c) a rating of the Family Risk Assessment (low, medium, high, or intensive). The first two (a) and (b) were the study's child protection outcomes. The severity of the child protection finding (a) was determined through its interaction with the level of risk (c).

The implementation sites sent a list of the names of the 53 men and their children and each man's start date in Strong Fathers to state Social Services. Then a Social Services performance manager in March 2013 extracted data for all men for whom there were reports that children were in need of protection. The data extraction covered all reports one year before enrollment and all the time after enrollment until the time of the data query. This meant that the period of hazard for appearing in the Central Registry was longer for men who entered the group earlier.

6.3.4. Research participant protections

The Goal Setting Worksheets and Weekly Parenting Logs were administered and collected by the group facilitators. Prior to transmitting the forms to the university, the implementation sites redacted identifying information (e.g., participants' names or names of family members) and identified participants by a number that the sites generated. These identification numbers were used to connect the men's forms to the Central Registry data. All procedures were approved by the university's Institutional Review Board for the Protection of Human Subjects in Research.

6.4. Data analysis

6.4.1. Qualitative analysis of goals

The men's qualitative responses concerning their goals were synthesized into thematic units, using ATLAS.ti, version 6.2. To determine participants' goals, a researcher reviewed the Goal Setting Worksheets and developed four overarching goals. The researcher categorized the men's responses into these goals or, as necessary, into an "Other" category. The Other category was applied when the statements did not fit the four main goals or were unclear in meaning. Excluded from the analysis were instances where the men recorded that an area was inapplicable (e.g., relating to the children's mother with whom he had no contact) or where the men did not fill in an area. These blanks which may have reflected oversight on the men's part, their choice not to record a goal, or their conclusion that they had already recorded sufficient goals.

A different researcher coded the men's statements on their Weekly Parenting Logs according to the extent to which they achieved the four main goals by the time they exited the group. If the men were silent on a goal, it was not coded. The one exception was a fuzzy code on the goal Provider that used both log statements and intake assessment data on employment. If the men were employed, they did not usually discuss financial issues in their logs.

6.4.2. Fuzzy set qualitative comparative analysis (fsQCA) of child protection outcomes

fsQCA analyses were conducted using the FUZZY module in Stata 12.0 to analyze the predictors of the child protection outcomes. First, the number of cases of child protection outcomes before enrollment and after enrollment and their average risk levels were determined. Second, demographic factors and configurations of these factors were analyzed in terms of their predicting the pre-enrollment child protection outcomes. These factors were age, educational attainment, number of children, White (dummy variable), and non-White (dummy variable). As noted earlier, continuous factors were "fuzzified" (Longest & Vaisey, p. 91) by rank ordering values and then standardizing all nondichotomous variables to range from 0 to 1. Third, the postenrollment outcomes were considered in light of the men's demographic characteristics, number of sessions attended, length of post-time period, and extent of goals achieved.

7. Results

7.1. Participants

Table 1 below summarizes the descriptive data on the 53 men in the sample. On average the men were 31 years old and had 2 children. Nearly two-thirds were non-White. The most common level of educational attainment was a high school or general education diploma. Of the 53 men, 47 attended at least 1 out the 20 group sessions, and 6 did not attend any sessions. One man attended part of one group and re-enrolled for another group; only his participation in the second group is included in the outcome analyses. The average number of sessions for the 47 men was close to 14, with a wide standard deviation of over 6 sessions. For the six men who never attended a Strong Fathers session, they were similar demographically to the whole group, with the possible exception that they were less likely to be White (4 non-White, 2 unknown).

7.2. Participants' goals

The qualitative analysis of the men's Goal Setting Worksheets yielded four overarching goals with the remaining goals coded into an Other category. Table 2 below defines each of these goals and gives examples of the men's statements included under the respective goals. In addition, the table provides the frequency with which statements fitting the goal were made by the men and the percentage of participants who made at least one statement coded under the goal. The quotations of the men's statements are italicized.

In all, the 47 participants made 777 goal statements of which only 49 (6.3%) were for goals other than the four main goals. Not surprisingly in a program devoted to responsible fathering, caregiver of children was by far the most frequently cited goal (354 instances) and by the highest percentage of participants (87%). Coming in second was role model in relating to women; this goal was cited 174 times and by 72% of participants. The goals of reclaiming personhood and family provider were cited with almost the same frequency, respectively 101 and 99 times, and by the same percentage of men (58%).

Table 1 Participant demographics, N = 53. Strong Fathers Intake Assessment; for race, also facilitator identification; and attendance records.

	N	Mean	S.D.	Minimum	Maximum
Age	53	30.60	12.91	20.00	53.00
Educational attainment	53	11.53	3.39	8.00	18.00
Number of children	52	2.08	1.01	1.00	4.00
White	50	0.34	0.48	0.00	1.00
Non-White	50	0.66	0.48	0.00	1.00
Total attendance ^a	47	13.85	6.38	1.00	20.00

^a Calculated only on the 47 men who attended at least one session.

Table 2 Frequency of goal and percentage of participants specifying the goal, N = 47. Goal Setting Worksheets.

Goal Definition	Examples of goal statements	f of goal ^a	% of participants ^b
Provider: contributes to meeting the economic needs of his family by strengthening rather than detracting from the family's financial assets	Find a stable job Get another vehicle Get my own place for me and my kids Don't struggle financially	99	58
Caregiver: takes responsibility for caring for his children by ensuring that their developmental needs are met rather than undermining their development	To keep my kids on a constant routine To get the trust and feeling of safe(t)y back with my daughter Be less physical with my discipline	354	87
Role Model: demonstrates how a man should relate to women by regulating his own behaviors rather than reacting	Be home on time Be flexible I want to be able to communicate better with both my kids mothers	174	72
Personhood: reclaims his personhood and affirms the personhood of others within the family and the community by building rather than betraying trust	Let my past go! Forgive myself and love life To go wholeheartedly back into my religion To be leader and not controller	101	58
Other: goal statements do not fit under the four main goals or are goals set for others rather than self	Don't show weakness To get my wife to be more courteous of me when it comes to our baby daughter	49	36

^a The frequency with which a goal was cited.

7.3. Goal achievement

The participants' Weekly Parenting Logs were reviewed to determine their achievement of the four main goals by the point that they left the group. Goal achievement was coded into three degrees of membership. For example, caregiving was coded as follows:

0 — not taking responsibility for caregiving

0.5 — identifying steps to take responsibility for caregiving (e.g., practicing parenting skills, gaining knowledge about child development, recognizing parenting challenges)

1 — taking responsibility for caregiving.

 $\begin{tabular}{ll} \textbf{Table 3} \\ \textbf{Frequency and degree of achievement of goals}, $N=47$. \\ \textbf{Weekly Parenting Logs and just for Provider, Assessment Forms}. \\ \end{tabular}$

Goal	Degree	f^{a}	Cumulative $f^{\rm b}$	Degree $*f$
Provider	1	26	26	26
	0.5	13	39	6.5
	0	5	44	0
Caregiver	1	24	24	24
	0.5	18	42	9
	0	1	43	0
Role Model	1	15	15	15
	0.5	11	26	5.5
	0	6	32	0
Personhood	1	3	3	3
	0.5	16	19	8
	0	0	19	0

^a f refers to frequency by which the men achieved a goal.

Table 3 summarizes the men's frequency and degree of achievement of each of the four main goals. If fully achieved goals (degree = 1) in the third column are only taken into account, then the order of achievement is at the top, provider (26); a close second, caregiver (24); in third place, role model (15); and a distant last, personhood (3). If the men's midpoints (degree = 0.5) are added in, a somewhat different picture emerges. The cumulative frequencies of fully achieved and partially achieved in the fourth column are 42 for caregiver, 39 for provider, 26 for role model, and 19 for personhood. These frequencies reflect better those for the men's goal setting (Table 2). The interaction of the degree of achievement (1 + 0.5) and frequency in the fifth column shows the same order: caregiver at 33, provider at 32.5, role model at 20.5, and personhood at 11.

7.4. Child protection outcomes

7.4.1. Reports to child protection

Central Registry data showed that 34 of the 53 men's families had at least one child protection report in the year before their enrollment or in the period after their enrollment. This meant that the remaining 19 men's families did not have such a report for the study pre or postperiods. For the 34 reported families, there was a substantial drop from the pre to post-period: 30 only in the pre-period, 2 in both periods, and 2 only in the post-period. For the four families reported in the postperiod, these reports occurred for three men while they were in the group and for one man after he left the group. During the pre-period, there was no significant difference in terms of age, education level, number of children, and race for the 32 men with and the 21 men without a child protection report.

7.4.2. Pre/post outcomes

Not all the families reported had a finding of substantiated child maltreatment or services needed. Table 4 below displays the findings for 32 families during the pre-period. Before the men's enrollment, 18 families had a child protection finding, and 14 did not. For the 18 families with a finding, 16 had household domestic violence identified while 2 did not. A contributory factor is only identified if the family has a finding so the 14 without a finding did not have household domestic violence identified. After the start of the group, the number of men whose families had a child protection finding dropped to four. Among the men with a post-finding, two had a finding in the year before entry into the group, and the other two did not. All their households during the post-period were assessed as having household domestic violence contributing to the need for child protection services. Thus, household domestic violence was strongly associated with having a child protection finding in both the pre and post-periods.

To examine the severity of child protection findings, their interaction with the average risk level for the reported families was calculated for the pre- and post-periods. The severity of the finding was also examined in relationship to household domestic violence. Table 4 below summarizes the results for the pre-period. The left-hand column lists the

Table 4 Severity of child protection finding by household domestic violence before entering a Strong Fathers group, N = 32. Central Registry.

Severity of total findings	Household do	Household domestic violence				
	No = 0	Yes = 1	Total			
0	14	0	14			
3	0	7	7			
4	2	5	7			
8	0	3	3			
12	0	1	1			
Total	16	16	32			

^b Participants refers to the men who attended at least one group session in which a log was completed, and the percentage of the participants refers to the men who indicated this goal at least once.

^b The cumulative frequencies do not total 47 because some men did not make statements related to a goal.

severity of findings for the 32 families, which ranged from 0 for the 14 families with no finding to a high of 12 (3 findings \times 4 risk level) for 1 family. The majority of the families with finding had a severity interaction of 3 or 4, meaning that the number of findings and average risk levels were low or moderate. The two families with a finding but no determination of household domestic violence fell in these more moderate levels of severity. The two families with only a post-finding each had a moderate severity interaction of 3 while the two families with both pre and post-findings each had a higher severity interaction of 8.

7.4.3. Predictors of pre-outcomes

For the pre-period, five demographic characteristics and their configurations were examined as predictors of the two outcomes, severity of child protection findings and presence of household domestic violence. The results are evaluated using consistency and raw coverage. The consistency scores are the degree of association of a property or configuration with an outcome, and raw coverage scores are the degree to which occurrences of a property or configuration are associated with occurrences of an outcome. Table 5 below reports the results on consistency and raw coverage for the families of the 32 men with child protection reports before entering Strong Fathers. None of the consistency scores for individual factors or configurations of factors reached the sufficiency benchmark of .80. Nevertheless, the results point to some patterns.

The demographic characteristic most consistently connected to severity of child protection finding is higher educational attainment, which is present 55% of the time and accounts for 65% (21) of the men. The analysis also yielded two configurations with comparable levels of consistency (36% and 35%) and raw coverage (13% and 10% of the men). Being older in age and White appears in both of these configurations related to severity of child protection findings.

The outcome on household domestic violence is linked 65% of the time to being non-White which covers 69% of the men. The analysis provided three configurations with consistency scores above 30% and coverage of 6% to 9% of the men. The configuration with non-Whites also included younger age and greater number of children. The two configurations with Whites differed in their other properties and, in fact, went in the opposite direction on educational attainment.

Table 5Fuzzy-set qualitative comparative analysis: Pre period Strong Fathers participant demographics for severity of child protection findings and presence of household domestic violence.

	Consistency ^a	Raw coverage			
Total Number of Child Protection Findings * Average Risk Assessment Level					
Age	0.48	0.56			
Educational Attainment	0.55	0.65			
Number of Children	0.43	0.47			
Whites	0.36	0.33			
Non-Whites	0.46	0.67			
Configuration: Older Age	0.36	0.13			
* Greater Number of Children * Whites					
Configuration: Older Age	0.35	0.10			
* Higher Educational Attainment * Whites					
Household domestic violence					
Age	0.56	0.48			
Educational attainment	0.58	0.51			
Number of children	0.38	0.30			
Whites	0.46	0.31			
Non-Whites	0.65	0.69			
Configuration: Younger Age	0.33	0.07			
* Greater Number of Children * Non-Whites					
Configuration: Lower Educational Attainment	0.35	0.09			
* Greater Number of Children * Whites					
Configuration: Older Age * Higher Educational	0.31	0.06			
Attainment * Whites					

^a To be considered "sufficient" to produce the outcome, must have a consistency value of 0.80 or higher.

7.4.4. Predictors of post-outcomes

To examine the predictors of the post-outcomes, the men's demographic characteristics were taken into account as well as program-related factors. As noted previously, the families of these four men during the post-period had child protection findings and a determination of household domestic violence. These factors are displayed in Table 6 below. The variables on age, education, number of children, race, program completion, and child protection report during or after the group do not yield clear patterns. The goal achievement ratings, however, point to some associations with the post-outcomes.

As would be expected, the one man who completed the full program had the greatest achievement of the goals, with a sum of 2.5 out of a possible 4. The sums for the other three men, who all partially completed the program, were respectively 1.5, 1.5, and 2. The overall rates of achieving the four goals were from highest to lowest: Caregiving, Provider, Personhood, and Role Model. This pattern is similar to that for all 47 participants (see Table 3 above) except that Role Model came after Personhood. The White man was the only one of the four who had more than a high school diploma and who had a goal achievement rating of 1 on Provider. The other three men, all non-White and with limited educations, struggled economically.

According to their Weekly Parenting Logs, the four men made strides in fulfilling the goal of Caregiver. In their logs, they described with pride learning new ways to discipline their children, teach them skills, and play with them. A common refrain was the need to be more patient and control their tempers around their children. Two of the men's logs referenced rebuilding their sense of personhood through such efforts as managing their stress and developing humility. Role Model was the least mentioned goal. One man acknowledged his arguing with the children's mother, and one man became aware of the negative impact of disparaging the mother in front of the children. On their Goal Setting Worksheets in the section on relating to their children's mother, they made no comment, responded vaguely, gave broad statements about love and understanding, or wrote about what she should do or what he would allow her to do.

8. Conclusions

8.1. Goal setting and achievement

The Strong Fathers program started from the premise that fathers who abuse matter to their families and their families matter to them. Mattering can be based on traumatic or healthy bonds. To help the men forge non-violent connections, the program encouraged the men to set and reach their own goals. Making use of the instruction, group discussion, and skills practice, the men constructed positive goals: Caregiver of their children by 87% of the men, Role Model of respectful relationships with women by 72%, reclaiming their Personhood and affirming the personhood of family members by 58%, and Provider for their families by 58%. The higher percentages for Caregiver and Role Model goals are congruent with the focus of the Strong Fathers curriculum and likely reflect the men's struggles with relationships. That over half the men made goal statements related to Provider fits with the men's rates of unemployment and limited levels of formal education. Likewise over half the men made goal statements on reclaiming Personhood in their homes and communities.

Session by session, the 47 participants were asked to assess their progress. Their written self-reflections identified that by the time they left the group, more than half the men realized the Provider and Caregiver goals, less than one-third achieved the Role Model goal, and only three men reached the Personhood goal. The lack of goal achievement can be attributed, in part, to the men's absences or dropping out of the group. The lower rates of achievement of Role Model and Personhood diverge from the pattern found for goal setting.

The men who did not achieve these goals commonly identified steps for doing so. Specifying goal steps points to gains that may be more fully

Table 6 Predictors of child protection outcomes^a, post period, N=4. Intake Assessments, Attendance Records, and Weekly Parenting Logs.

Age ^b	Education	Number of children	White/Non-White	Program completed	During or after group ^c	Provider	Caregiving	Role Model	Personhood
	≤12	≤2	Non-White	No	After	0.5	1	_d	_
<30	>12	≤2	White	Yes	During	1	1	-	0.5
>30	≤12	>2	Non-White	No	During	0.5	0.5	0.5	_
>30	≤12	>2	Non-White	No	During	0	0.5	0.5	1

- ^a The families of the four men all had child protection findings and household domestic violence after the men's entry into Strong Fathers,
- b Age unknown for one man.
- ^c Reporting to child protection occurred during or after the end of the group.
- ^d Dashed line means that a goal was not mentioned.

achieved after the men leave the group and may help to explain why reductions in violence for batterer intervention programs are cumulative over time (Gondolf, 2002). When both goal achievement and identifying goal steps are combined, goal progress was indicated by most participants on Caregiver and Provider, over half on Role Model, and two-fifths on Personhood.

A possible explanation for the lower progress on Role Model and Personhood is that these goals are reached at a later stage in the Strong Fathers program. A separate analysis of the men's continuation in the group found that interacting respectfully with their partners (Role Model) and restoring their sense of moral leadership (Personhood) followed after earlier gains in forming caring relationships with their children (Pennell et al., 2013).

8.2. Risk management and child protection outcomes

This reflexive process was a means of the men's managing their own risk in a group context that monitored and supported their efforts to improve. Given the involvement of child welfare, the men also knew that there were likely consequences for repeat abuse. The men's self-reflections were similar to using anamnestic assessment for risk management (Heilbrun et al., 2010) in that the men recounted what had occurred. The process, however, diverged in that the focus was not their history of violence and instead on their efforts to change their abusive patterns of relating. To make the demand that the men self-report their abuse would have probably shut down the sharing by many group participants.

Most notably, the men's statements about their progress on the goals were consistent with the child protection outcomes. Before entering the program, the families of 32 of the 53 men were reported to child protection, and 18 of these 32 families had a child protection finding (either substantiated child maltreatment or in need of services). Most (16) of the 18 families with a finding during the pre-period had household domestic violence cited as a contributory factor to the need for child protection intervention.

After the men entered the group, the families of only four men had a child protection finding, and all had a determination that household domestic violence was a contributory factor. Among these four families, the finding came during the three men's time in the group and one afterwards. It is possible that the need for child protection intervention resulted from the men's participation. Given that only 4 out of the 53 families were reported in the post-period, it is more likely that the men's limited exposure to the group had a greater influence, especially since 3 of these 4 men did not complete the program.

8.3. Predictors of family violence

Structured decision-making instruments such as the Family Risk Assessment used in North Carolina are based on research and assist with predicting harm. These instruments orient worker's assessments to likely indicators of risk, which add up to a total risk score. Often workers, though, remain unaware of the extent of domestic violence in the families whom they serve. Families may hide the domestic

violence out of fear of losing their children. Another possibility is that workers may not consider the interaction of indicators.

For instance in this study, the qualitative comparative analysis yielded three configurations that included Older Age and that overlapped with the severity of child protection finding or with household domestic violence. The inclusion of Older Age runs counter to the usual finding that younger parental age is associated with child maltreatment (Chu et al., 2011) and with domestic violence (Aldarondo & Castro-Fernandez, 2011). Another case in point is the inclusion in two of the configurations of Higher Educational Attainment, again a characteristic usually associated with lower risk. A configurational strategy opens up interesting possibilities about the interaction of different properties that alone might not indicate greater risk. Awareness of such configurations can sensitize workers to the impact of the combinations of factors.

8.4. Strengths and limitations of methodology

A strength of the study was its use of two sources of data: the participants' self-assessments and the child protection assessments. The men's self-assessments were a form of evaluation embedded within the Strong Fathers process. The child protection assessments were separate from the group process and, thus, served as a check on the validity of the men's statements.

Analysis of the men's written statements was strengthened by having one researcher review the men's Goal Setting Worksheets and identify four overarching goals, each with three degrees of set membership. A different researcher then applied these fuzzy sets to the men's Weekly Parenting Logs in which the men documented their accomplishments and struggles. The use of direct assignment to code fuzzy sets is a common and accepted method, but it is difficult to do in a reliable manner (Verkuilen, 2005).

Nevertheless, the fuzzy set coding reflected the transitions that the men were experiencing and made it possible to identify men who did not achieve the goal, men who identified steps to reach the goal, and men who achieved the goal. Of note is that neither coder had knowledge at the time of the child protection data, reducing the possibility of bias. The accuracy of the goal achievement coding for the four men whose families had post-period child protection findings and household domestic violence fits with their limited achievement on Role Model.

The sample size for this study was modest. The qualitative comparative analysis helped to identify the nuanced configurations of predictors that account for or overlap with the child protection outcomes. Linear and/or logistic regression models may reveal the same nuanced relationships by way of two and/or three way interaction terms. Large sample sizes, however, are required to compute interaction terms in linear and/or logistic models. The sample size requirement, while desirable, places the evaluation of early stage programs at a disadvantage.

8.5. Contributions to risk assessment and management

This study makes two main contributions to assessing and managing co-occurring domestic violence and child maltreatment. The first

concerns practice. The results showed that within a positive learning environment, the men's self-assessments encouraged them to improve how they related to their children and partners. Their efforts at managing their risk for the most part were supported by the case workers' assessments.

The second contribution is methodological. In examining predictors of family violence, the fuzzy set qualitative comparative analysis (fsQCA) identified configurations of conditions. The findings for Strong Fathers were not at the level of consistency to be considered as producing the outcome. Nonetheless, analysis of configurations may prove useful to researchers in determining the level of risk for subsets of men. In isolation, characteristics such as higher education would not be seen as posing a greater risk. The study of their interaction may serve as a means of enhancing risk assessment and management to support safe family relationships.

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