What Predicts the Actions Taken Toward Observed Child Neglect?

The Influence of Community Context and Bystander Characteristics

Abstract

Objective: Using data from a sample of 3,679 respondents in 50 rural and urban communities in a Midwestern state, the authors explore the relationship between individual and community characteristics and the provision of helping behavior when child neglect is observed.

Method: Telephone surveys of community residents were analyzed in a series of logistic regression models.

Results: At the individual level, age, gender, place of residence, and sentinel status were all found to have a significant effect. The level of role overlap, cohesion, comfort, and belongingness perceived to exist in the community were found to be important community level predictors.

Conclusion: Individual and contextual characteristics affected observation of a case of child neglect and the action taken.

Introduction

After a sizeable group of bystanders failed to take action while witnessing the murder of Kitty Genovese in the 1960's, research on bystander intervention and helping behavior proliferated (Levine, 1999). Studies of helping behavior range from whistle-blowing in cases of corporate corruption (Dozier and Miceli, 1985) to urban delinquency prevention (Wilkinson, 2007) to action in cases of sexual and interpersonal violence (Banyard, Plante, & Moynihan, 2004; Banyard, 2008; Gracia & Herrero, 2006). Despite these research efforts, the relationship between demographic characteristics and helping behavior remains unclear. Additionally, while studies may consider individual characteristics such as gender, community characteristics are rarely considered, even when actions against the community (rather than an individual) are the outcome of interest. Viewing action toward child neglect as a form of helping behavior, the current study seeks to understand further the relationship between demographic characteristics, community characteristics, and helping behavior.

Within the last 30 years, research on the causes and consequences of child maltreatment has been on the rise (English, 1998). Given the deleterious effects of child maltreatment on emotional, psychological, and physical health, identification of and action toward child maltreatment are critical. Yet little extant research on child neglect has focused on why people who observe neglect choose to respond, the type of action they take, and the contextual characteristics that shape these actions. The modest amount of research that exists in this area tends to ignore the distinction between mandated reporters, who are required by law to report maltreatment (often sentinels, who are defined as individuals who regularly interact with children in their workplace environment; Goodvin et al, 2007), and those who are under no such legal obligation (non-mandated reporters). Given that non-mandated reporters are the greatest source of maltreatment reports (Giovannoni, 1995), this oversight is troubling. Even less attention has been paid to informal action toward neglect.

Even among child welfare agents and mandated reporters, it is not uncommon for recognized cases of neglect to remain unreported; children whose cases are unreported are not receiving any formal aid (Price et al., 2001). Unfortunately, neglect is even more likely to be underreported than other forms of maltreatment (Nightingale & Walker, 1986). Gracia (1995) points out that reporting bias may lead to an inaccurate picture of child maltreatment. It is important to obtain an accurate picture of what factors influence the decision to report or take informal action. This may show not only how to decrease nonintervention in the form of underreporting, but also how to reduce caseloads through community resources without a detrimental impact on the response to child

neglect. Furthermore, such an understanding may clarify the relationship between individual and community contextual factors and helping behavior more broadly.

Contributions of the Current Study

This study seeks to clarify how individual characteristics and the community context in which observations take place affect helping behavior toward child neglect. Given the omissions in the existing literature outlined above, three questions are of particular importance: first, are there demographic or perceived community characteristics which increase the likelihood of reporting an observed case of child neglect? Second, are there any characteristics which increase the likelihood of informal versus formal action toward child neglect? Finally, does the relationship between these characteristics and action toward child neglect differ according to sentinel status?

Much of the existing research on reporting child neglect has been conducted internationally, often without the option for rural/urban comparisons. Most studies relying on official neglect reports do not contain information on the characteristics of reporters because many of these reports are made anonymously. Where demographic data are available, studies tend to focus on hypothetical formal behaviors among mandated reporters, with little attention paid to the role of informal action. This oversight is particularly egregious in light of research showing that mandated reporters may not report due to a desire to provide informal, direct care for the child (Van Haeringen, Dadds, & Armstrong, 1998). Most studies tend to focus on sexual and emotional abuse, with neglect receiving far less attention. Finally, many studies of community factors focus on predicting maltreatment, with less attention paid to the influence of community factors on the likelihood of taking action toward neglect. The current study relies on self-reports of actual helping behavior toward observed cases of child neglect. The contributions of both individual and perceived community characteristics on the likelihood of taking action and the type of action taken are considered. The study also focuses on different helping behaviors toward observed cases of child neglect based on sentinel status. It is hoped that the current analysis will lead to a greater understanding of bystander action toward child neglect, which may, in turn, guide the development of a more effective response to cases of neglect. In particular, such an understanding may help to reduce underreporting of neglect. In addition, the study will serve to expand our understanding of factors which influence helping behavior more broadly.

Helping Behavior

Though the literature on characteristics predicting action toward a case of child neglect is limited, studies of helping behavior and bystander intervention provide a framework for understanding this form of helping behavior—particularly when community members are considered potential bystanders. Individuals in an emergency situation, for example, will first assess whether or not the situation is, in fact, an emergency, second, determine his or her own level of responsibility, and third, act accordingly (Tobin, Davey, & Latkin, 2005). The presence of other passive bystanders will, at both stages, cause the individual to respond to the situation less proactively than when alone, decreasingly likelihood of action; bystanders may influence not only how the emergency is perceived, but also how much personal responsibility the individual is willing to accept (Fischer 2006). However, Fischer found no evidence of a traditional bystander effect when there was a high level of danger for the victim. This suggests that the likelihood of providing helping behavior in the case of child neglect may be reduced by the perception that other community members are bystanders, resulting in diffusion of responsibility for taking action.

Levine (1999), however, argues that traditional responsibility models are incomplete. In particular, he contends that when a dispute, or even evidence of violence, appears to be between intimately related individuals (a husband and wife, family members, etc), bystanders may be substantially less likely to intervene. Though he does not discount responsibility models completely, Levine emphasizes the importance of the social roles of the bystanders, victims, and perpetrators in understanding the decision-making process behind helping behavior.

Social Roles

Role theory assumes that individual behavior is the result of one's perception of the roles one holds, in combination with situational factors, which help to determine which aspects of these roles are most salient (Callero, 1987). When a role is deemed particularly important for an individual, and is therefore integrated into that individual's sense of identity, this can be seen as a role-person merger. The greater the degree of role-person merger, the more crucial the particular role will be in shaping behavior in any given situation. Giovannoni's (1995) research suggests that it is "vantage points" which have the greatest influence on who reports what kind of neglect. Individuals occupying different social roles, whether they are mandated reporters or not, are privy to observing different forms of child maltreatment; whether one reports neglect and what form is reported are related more to the relationship that the individual has with the neglected child's family than with the individual's values or definitions of neglect. However, Giovannoni also notes that the perceived outcome of potential child protective service (CPS) intervention was a critical factor in influencing whether or not an individual would report: a positive perception

tended to increase likelihood of reporting, whereas a negative perception tended to decrease likelihood of this form of intervention. As Schene (1998) points out, CPS has often been viewed negatively by the public, particularly when one considers the family instability that may accompany the removal of a child from the home. Yet the responsibility diffusion model and role theory need not be divorced from one another. It is plausible that the social roles that an individual occupies shape the way the individual 1) determines whether the situation is an emergency or merits action and 2) determines his or her level of personal responsibility in the situation.

Much of the literature surrounding child neglect reporting behavior focuses on the actions of mandated reporters, such as physicians and educators. According to Gracia (1995), for example, primary school teachers cite lack of knowledge regarding detection and reporting procedures, fear of consequences, parental disapproval, and lack of support as some of the reasons for failure to report child maltreatment. Garbarino (1989) finds that, of mandated reporters, school nurses and ministers are the most likely to report. Korbin et al (2000) found that European-Americans were slightly more likely than African-Americans to define physical abuse as child maltreatment; conversely, African-Americans were slightly more likely to identify neglect as child maltreatment.

Garbarino (1989) notes that individuals may perceive the act of reporting neglect as ranging from a moral obligation to a violation of privacy to a threat to self (Korbin et al., 2000). For the public, uncertainty regarding who to contact, distrust of the law, heavy emphasis on values of freedom and privacy, and a personal relationship with a suspected family may also inhibit reporting (Manning & Cheers, 1995). For mandated reporters, attitudes toward (CPS), lack of awareness of reporting laws, and fear of retaliation may reduce the likelihood of intervention. The combined effects of expanding definitions of neglect and a dearth of CPS resources have caused some individuals to advocate a reduction in reporting, providing a further disincentive for mandated reporters (Giovannoni, 1995). This suggests that social roles may influence how responsibility to act is perceived by individuals.

Individual Characteristics

Findings on gender, perceptions of, and actions toward maltreatment are mixed. Warner and Hansen (1994) report that female physicians are more likely than males to rate hypothetical physical abuse as severe; such ratings may contribute to the decision to report. Some studies have found that females are more likely to suspect and report maltreatment than are males (Gunn, Hickson, & Cooper, 2005; Hansen et al., 1997), while others have found no relationship between gender and the decision to report suspected cases of abuse or neglect (Crenshaw, Crenshaw, & Lichtenberg, 1995; Kennel, 1995; King, Reece, Bendel, & Patel, 1998; Van Haeringen et al., 1998).

The literature on helping behavior suggests that gender continues to be an important factor in determining who helps, and how. Manning and Cheers (1995) find that, in reference to self-reported hypothesized behavior, women are more likely to report maltreatment than are men; however, Price and colleagues (2001) found that men were significantly more likely than women to identify slapping and threats as child abuse in hypothetical scenarios. Eagly (1986) and Paxson and Waldfogel (1999) note that while women are expected to be more empathetic and attentive to emotional needs, particularly within the family, men are expected to act "heroically" and "chivalrously". However, much of the research that finds men to provide more helping behavior focuses on situations which are biased toward male helping roles (Eagly 1986); thus, the failure of past research to account for social roles has given rise to conclusion that men offer helping behavior more frequently than do women.

Education may also have an influence on one's response to observed neglect by shaping one's social role, social networks, knowledge of resources for combating neglect, and definition of neglect. It may also be inferred that those individuals who are more likely to be around children are also more likely to observe and take action toward neglect by virtue of proximity; sentinels, for example, may be more likely to observe and take action toward neglect. Although sentinels tend to rate hypothetical neglect as being less severe than do non-sentinels (Goodvin, Johnson, Hardy, Graef, & Chambers, 2007), sentinels are more likely to be mandated reporters. This suggests that sentinels may be particularly inclined to take formal action toward neglect due to professional and legal obligations. However, a study of Head Start professionals found that, while there was a relationship between education and identification of maltreatment, this relationship was conditioned on level of training (Nightingale & Walker, 1986): more highly educated individuals with no training in identifying maltreatment were less likely to suspect neglect, while highly educated individuals with prior identification training were more likely to suspect maltreatment.

Individuals of childbearing age may be more likely not only to interact with friends and schoolmates of their own children, but also to interact with other parents of a similar age. Gracia (1995) notes that the maltreatment of younger children is more likely to be identified and reported as such. Given this, individuals who are of an age to have young children may be more likely to see a case of neglect. There may also be a cohort effect in defining child neglect, particularly since identification of maltreatment as a public issue is a relatively recent phenomenon (Fryer, 1990). Warner and Hansen (1994) note that findings on age and reporting behavior are mixed; while some vignette studies have shown that older physicians are less likely to report physical abuse than younger physicians, additional research on actual reporting behavior found no relationship with age of the physician. Meanwhile, King et al (1998)

find no relationship between age and the decision to report. Whether or not a particular case is defined as neglect is also dependent upon the bystander's definition of what constitutes neglect. It seems likely that bystanders who value a high level of individual discretion and autonomy in the rearing and disciplining of children will be less inclined to identify neglect if the case in question is perceived to be a private matter between the child and the parents (Warner & Hansen, 1994). Ashton (2001) finds that individuals displaying a greater approval for corporal punishment are less likely to perceive or report maltreatment. Thus, attitudes about the acceptable level of privacy afforded to families when punishing children may be related to how one defines neglect.

Community Context

While results have been mixed, it is possible that community contexts, such as place attachment, may also be important in determining social action. Stedman (2002) includes both physical and social aspects of an individual's environment in his definition of place. Similar to a role-person merger, Stedman asserts that a place-person merger may occur, in which those places which an individual deems most important become central to the self-definition. One is likely to participate in place-protective action if a place-person merger has occurred. According to this logic, then, one might expect that the greater the degree of place-person merger, the greater the desire an individual will have to take social action toward threats to that place-- presumably including threats to the community, such as child neglect. Stedman concludes that when a place is central to an individual's identity, that person is more willing to intervene when there has been a threat to the place's condition.

Lewicka (2005) is more skeptical, questioning the popular notion that place attachment always serves as a positive factor. Lewicka shows that place attachment is not sufficient for social action; social capital and cohesion within the community also appears to be important factors in determining action. In the case of child abuse, Gracia and Herrero (2006) find that the greater the level of perceived social disorder in a neighborhood, the lower the likelihood that an individual will report a case of abuse. Similarly, criminological research has shown that crime victims are more likely to report their victimization when there is a high level of social cohesion and community efficacy within their neighborhood (Davis & Henderson, 2003; Goudriaan, Wittebrood, & Nieuwbeerta, 2006).

Several studies (Coulton, Korbin, & Su, 1999; Coulton, Korbin, Su, & Chow, 1995; Sabol, Coulton, & Korbin, 2004) explore the effects of neighborhood characteristics such as impoverishment, child-care burden, and residential stability in predicting child maltreatment within an urban setting. The effects of these structural factors are expected to operate through social interactions between community members, which in turn influence the degree

of social isolation of maltreating families, the availability of community resources, and the level of social control and collective efficacy within the community. These studies conclude that structural community context factors are important predictors of both the incidence of child maltreatment and corollary outcomes, such as delinquency and educational attainment. Sabol et al (2004) in particular emphasize the importance of both strong interpersonal ties among community members and weak organizational and extra-community ties for the prevention of child maltreatment. Although extant research clearly shows that aggregate community characteristics, such as impoverishment and stability, are key components for understanding child maltreatment, these studies focus on predicting maltreatment rather than action toward maltreatment.

The level of role overlap, characterized by the interaction of community members in multiple settings, may be important in shaping social action (Roberts, Battaglia, & Epstein, 1999). Role overlap reflects the extent to which social roles in the community overlap with one another. Higher overlap is expected in smaller communities and rural areas. For example, an individual in a community characterized by a high level of role overlap may interact with her employer at the grocery store, the Parent Teacher Association meeting, and at church. With these interactions comes a higher level and pace of information sharing. This factor may be particularly salient in the context of child neglect because of the sensitive nature of action in this context; if individuals believe that their actions will be quickly and widely known in the community, they may be disinclined toward particular forms of action. Indeed, Manning and Cheers (1995) find that recognition of prominent community members may inhibit reporting behavior. Warner and Hansen (1994) point to previous research in which rural physicians were less likely to report neglect due to fear of negative repercussions from their reporting behavior. Similarly, King, Reece, Bendel, and Patel (1998) find that the strongest predictor of the decision to report is the level of anonymity.

The level of rurality in a particular community is likely to shape many of the above community characteristics, including the level of role overlap. Craft and Straudt (1991) found little residential difference in attitudes toward reporting cases of neglect. However, they acknowledge that, despite similarities in reporting behaviors between communities, definitions of neglect may still vary from community to community. Additionally, it is not clear whether survey responses regarding hypothetical reporting behavior would, given an observed case of neglect, match to actual behavior. Rural and urban similarities in hypothetical reporting behavior may not extend to actual reporting behavior. An analysis of rural/urban differences in observation of and action toward child neglect is a necessary next step in this line of research.

Hypotheses

Based on the ideas explored above, the following hypotheses emerge: 1) Women will be more likely than men to engage in either formal or informal helping behavior. 2) Community members who perceive a high level of role overlap in their community will take informal rather than formal action. 3) Individuals in rural areas will be more likely to take informal than formal action. 4) Individuals who feel a stronger sense of belongingness within their community will be more likely to take any form of action. 5) Individuals who perceive a higher degree of community cohesion will be more likely to take action (either formal or informal) than no action.

It is also hypothesized that (6) community sentinels will be more likely to observe a case of neglect, and will be more likely take formal than informal action than non-sentinels. It is expected that (7) individuals with higher levels of education will be more likely than those with less education to observe a case of neglect, and will be more likely to take formal than informal action. Additionally, 8) individuals with children at home will also be more likely to observe and take action toward a case of neglect. Finally (9) individuals who agree that parents should be able to raise children as they wish will be less likely than those who disagree to observe neglect or take action.

Methods
Participants

The data for this study are drawn from a telephone survey of 3,679 respondents conducted in 50 communities in a Midwestern state. The survey included measures of the incidence, identification, and reporting of child neglect. Communities were selected using a disproportionately stratified random procedure to include a range of rural and urban geographical areas, defined by zip code in the nonmetropolitan areas and by census tract in the metropolitan areas. This design oversampled rural, more ethnically diverse, and lower income communities. Within the 50 sampled areas, random-digit dialing and listed samples of telephone numbers were used to contact a representative sample of adult residents.

Informed consent was obtained prior to the start of each interview, and sampling and interviewing methods were approved by the Institutional Review Board. The household member chosen to complete the interview was randomly selected from adults aged 19 and older. In many communities, telephone numbers of persons identified as most knowledgeable about the treatment of children in the community (i.e., sentinels) were added to the sample to increase the number of sentinels sampled. The response rate was 59% (American Association for Public Opinion

Research [AAPOR] response rate 2), and the cooperation rate was 70% (AAPOR cooperation rate 2). For a more detailed description of the data and sampling frame, see Goodvin et al (2007).

The data used here have a small amount of missing values (less than two percent for most variables), due primarily to "don't know" and "refused" responses. Household income was missing for 12 percent of the respondents. The missing values were imputed using the Multiple Imputation module in SPSS ver. 17 (SPSS, 2009). Ten datasets were imputed, with the number of iterations set at 100. Variables for demographics, employment status, community type, sentinel status, neglected child demographics, type and extent of neglect, role overlap, interconnectedness of the community, response to neglect, and field of employment were used to inform the imputation model.

Measures

Three outcome measures were created to capture observing neglect and the action taken. Respondents who reported observing a case of neglect within the past year were identified, with those observing a case of neglect coded 1 and those not observing neglect coded 0. Given that observation of a case of neglect was based on self-reports by the respondents, this measure captures the difference between those who believe that they observed neglect and those who did not; we cannot distinguish between those who did not observe neglect and those who observed a case but did not identify the case as neglect. Those observing neglect were asked to give an open-ended response as to what action they took toward the observed neglect. Their responses were coded into several categories for analysis. A small number of respondents (36) providing no answer or answering "don't know" to the open-ended item were excluded from further analysis as no clear action could be coded. The remaining answers were collapsed into a variable with three categories: no action, formal action, and informal action. Formal action included reporting to authorities; informal action included behaviors such as talking to neighbors or the child's family or aiding the child directly. From this variable, a variable was created measuring if they took any action (coded 1) or took no action (coded 0). The final outcome variable assesses whether formal (coded 1) or informal (coded 0) action was taken for the subsample that reported an action. Respondents were identified either as a sentinel (coded 1) or a non-sentinel (coded 0) based on their reported current occupation, with sentinels defined as currently employed individuals whose occupations increase their likelihood of observing maltreated children (medical professionals, educators, therapists, law enforcement officials).

Previous research has suggested the utility of scales measuring elements of community organization including community identity, involvement, and interaction (Johnson, 2000). Four dimensions of the respondent's community perceptions were created from 20 survey items. These items tapped respondents' perceptions of community characteristics using five-point ordinal response categories (item wording available from author upon request). The Role Overlap Scale was created from three survey items measuring the perceived level of role overlap and interpersonal interaction within the respondent's community (alpha = .67). For example, one item was "When you go to the grocery store, how often do you see people there (other than store employees) that you know (friends, co-workers, and other acquaintances)?' The Community Cohesion Scale was based on five items measuring the respondent's perception of cohesion within the community (alpha = .71). An example item is "I would be willing to work together with others on something to improve the community". The Community Belonging Scale was formed from eight items measuring the respondent's perception of their sense of community belongingness (alpha = .92). One item was "I feel at home in this community". The final scale, Community Comfort, was created from five items measuring the respondent's feeling of comfort within the community (alpha=.66). Included in the Community Comfort Scale were items such as "If I needed advice about something I would feel comfortable talking to a neighbor or someone in the community" and "I often visit my neighbors in their own homes."

The percent of the total variance in responses to the scales that fell between the 50 communities was 22.4% for the Role Overlap, 4.8% for Community Cohesion, and 4.0% for Community Belonging. This suggests that the Cohesion and Comfort scales primarily measure individual perceptions rather than more objective characteristics of the community. To assess how belief about parental versus community obligation may affect the identification of neglect and action taken, a variable was included measuring respondent's agreement with the statement that parents should be able to raise children as they see fit. The responses ranged from strongly agree (1) to strongly disagree (5).

Other independent variables included in the models are respondents' age, educational attainment as years of schooling, race (white=1, non-white=0), gender, marital status, perceived rurality of their place of residence (coded 1 to 7, with higher scores indicating more urban), classification of the place of residence as farm, rural non-farm, or town/city, work status, annual household income, and religious attendance, with higher scores measuring more frequent attendance. Two variables were included to indicate the presence of children in the household aged 0 to 5 and aged 6 to 18.

Data Analysis

Logistic regression models were used to test the hypotheses. The first logistic model was fitted to the full sample to assess differences between those who observed a case of neglect and those who did not. The next model restricted the sample to those respondents who reported observing an instance of child neglect and compared those who reported taking any action with those who took no action. The third logistic regression model, which was restricted to the sample that reported an action, compared those who took formal action to those who reported an informal action. Analyses were conducted in Stata with the *svy* procedures to adjust for the effects of clustering by community on the standard errors. The logistic regression models were estimated in each of the 10 multiply imputed datasets, and the estimates were combined using the *mim* procedure in Stata to yield standard errors adjusted for the uncertainty introduced by the missing data. Exploratory analyses were conducted to test for possible curvilinearity and interactions among the independent variables, and the quadratic, cubic and multiplicative terms were added to the final models when these terms were significant at the $p<.01$ level.

Table 1 presents the descriptive statistics for the variables used in the analyses. These are the averages over the 10 multiple imputed datasets. Comparison with Census data for the state from the zip code characteristics tables and Census public use microdata of the means of the demographic variables of gender, age, educational attainment, race, and marital status found small differences in the sample from the population in the direction commonly found in telephone surveys. The survey overestimated the proportion female (.59 vs .51) and the proportion white (.97 vs .92), but the means of age (51 vs 47) and educational attainment (13.5 vs 13.6) were very similar. Because only one adult per household was interviewed, persons in households with more than one adult were underestimated; the percent married in the sample was 62 compared to 80 in the population. These demographic characteristics were included as control variables in the logistic regression models to adjust for any bias due to disproportional representation of some groups (Winship & Radbill, 1994). Table 1 also shows that 43.8% of the respondents reported seeing a case of child neglect in the last year. Among those observing neglect, 23.5% reported taking formal action, 35.2% informal action, and 41.3% reported that they took no action. The percent classified as sentinels in the full sample was 10.9%, and in the subsample of those observing neglect was 18.6%.

[TABLE 1 about here]

Results

Likelihood of Observing a Neglected Child

Regression models examining differences between those who observed neglect within the last year and those who did not are found in Table 2. The first column shows the coefficients when the independent variables were included singly. This shows the zero order relationship between each of the variables and odds of observing neglect. Model 1 is the basic multivariate model when all variables were included in the model, and Model 2 adds interaction terms detected in the exploratory analysis to Model 1. Age and educational attainment are centered at their means to aid in the interpretation of the curvilinear terms. Looking first at the zero order relationships, all variables except the measures of rural/urban residence were statistically significant predictors (p<.05) of the odds of observing a case of neglect. Large zero-order effects were found for sentinel status, gender, children present in the household, educational attainment, the raised as see fit attitude, and three of the four community context measures. Model 1, which includes all variables in the logistic regression model, shows that influence of some of these variables is reduced or eliminated when controls are introduced. When controls were included, farm residents were significantly less likely to observe neglect than city residents. A curvilinear relationship between age and the odds observing neglect was found, with the odds declining steadily until around age 40, and more sharply after this age. There was also a curvilinear relationship of education to observing neglect: the odds of observing neglect increased by 5.6% for each year of schooling, with a gradual decrease in this effect with more years of schooling.

Net of controls, females had 30% higher odds of observing neglect than males, and each child in the household between the ages of 6 and 18 increased the odds by 13%. Those who disagreed with the statement that parents should raise their children as they see fit were more likely to observe neglect, as were community sentinels, who were 2.7 times more likely to observe neglect than non-sentinels. The role overlap, cohesion, and belonging variables measuring respondents' perceptions of their community context were each significantly related to the likelihood of observing neglect: for every one unit increase in the perceived level of role overlap in the community, there was a 12% increase in the odds of observing a case of neglect. The respondents who reported high community cohesion were also more likely to report neglect than those who reported low cohesion. As perceived community belonging increased, however, the odds of observing a case of neglect decreased significantly.

Model 2 in Table 2 adds the only significant (p<.01) statistical interaction found in the exploratory analysis—an interaction between education and sentinel status. The interaction terms showed that the influence of sentinel status on observing neglect was greater among the better educated than among less well educated respondents.

[TABLE 2 about here]

Actions Taken When Neglect Was Observed

Table 3 reports the results of the logistic regression models of the actions reported by the respondents who observed child neglect in their community. Among those observing neglect, 41.3% took no action, 23.5% took formal action, and 35.2% reported an informal action. In Model 1, respondents who took any form of action are compared with those who took no action. Model 2 shows the regression comparing those who reported an informal response to those taking formal action. For each comparison, the zero order relationships and the basic multivariate model are reported. Exploratory analyses revealed no significant interactions.

Action Versus No Action. The first column in Table 3 provides the zero order relationship between each variable and the odds of taking action. A statistically significant zero order relationship existed between the odds of taking action and residence type, marital status, work status, age, education, gender, presence of children aged 6-18 in the household, agreement with the raise children as see fit statement, sentinel status, and the community comfort scale. Model 1 shows that, net of other variables in the model, farm residents had 29.9% lower odds of taking action toward neglect than non-farm residents. Widowed individuals were substantially more likely to take action toward neglect than married respondents, and those with an employment status of other were slightly more likely to take action than full time workers. Education was also a statistically significant predictor in the multivariate model: for every one year increase in education, there was a 7.2% increase in the odds of taking action. In contrast to the model of observing neglect in Table 2, the influence of education and age were not found to be significantly curvilinear. Sentinel status was also a strong predictor of taking any action, with sentinels having 1.29 times the odds of taking action compared to non-sentinels. In terms of community perceptions, role overlap did not significantly affect action, but community comfort and cohesion both increased the odds of taking action. In contrast, a higher level of community belonging was significantly associated with a decrease in the odds of taking action.

Formal Versus Informal Action. The final set of models provides zero order and multivariate regressions for the odds of taking formal action versus informal action. In these models, the sample is restricted to those who reported taking any action after observing a case of neglect. Statistically significant zero order relationships exist between employment status, age, education, gender, sentinel status, role overlap, community cohesion, and the odds of taking formal rather than informal action. When all variables were included in the equation (Model 2), only three

variables significantly predicted formal versus informal action: older individuals had lower odds of formal action than younger individuals; compared to non-sentinels, sentinels had 67.4% greater odds of taking formal rather than informal action; and, for every unit increase in role overlap, there was a 14.9% increase in the odds of taking formal versus informal action.

Overall, six of the nine hypotheses received partial or full support in the analyses. Three of the hypotheses (2, 3, and 4) related to the community context were not supported. Respondents reporting higher role overlap were hypothesized (2) to report taking more informal than formal action; instead, it was found that those reporting higher overlap were more likely to take formal than informal action. Although farm residents were less likely to observe neglect or take any action when compared to urban residents, there was no support for the hypothesis (3) that they favored a formal versus an informal response. The level of rurality, as measured by the rurality scale, was not a significant predictor in any of the models. One explanation for this might be that many of the differences between rural and urban areas are captured by the community context scales or the measure of community type. Repeating the analyses excluding the scales and the rural/urban measure, however, did not lead to a stronger effect of the rurality scale. Finally, respondents with a strong sense of community belonging were less likely than those with a weaker sense to observe or take action on observed neglect, but community belonging did not affect the type of action, contrary to the hypothesized relationship.

Discussion

The current study examines the individual and community characteristics which are correlated not only with identifying and responding to child neglect, but also with choosing to provide helping behavior more broadly. While some of the hypothesized relationships were either not present or not operating as expected, several important conclusions can be drawn. Females were more likely to observe neglect, suggesting a gender differential in proximity to neglect and/or definitions of neglect. In keeping with hypothesis 1, females were also more likely than males to engage in helping behavior in any form. Hypothesis 6, which stated that sentinels would be more likely to observe and take formal action toward neglect, was also supported, in keeping with research suggesting that knowledge or expertise may be an important contextual factor in determining helping behavior. The idea that higher levels of education would be positively correlated with observation of and formal action toward neglect (hypothesis 7) was partially supported: individuals with between 10 and 25 years of schooling were more likely to observe a case of neglect and more likely to take some form of action. There was also some support for hypothesis 8, which

predicted that individuals with children in the household would be more likely to observe and to take action toward a case of neglect. This was only true when older children (ages 6 to 18) were present, likely due to social interactions with the friends of one's own children.

Hypothesis 9 predicts that individuals who believe parents should be able to raise children as they wish would be less likely to observe or take action toward a case of neglect. The models supported this hypothesis; however, among those who chose to take action, agreement with the statement was not a significant predictor of formal versus informal action. This variable appears to be more important for determining how one defines neglect and chooses to act rather than what type of action one elects to take. This speaks to Levine's (1999) work, which suggests that one must first identify a situation as one requiring helping behavior, but this identification is less likely to happen when those involved in the situation are perceived to be intimates, as in the case of child neglect.

Type of residence, role overlap, cohesion, and belonging were significant community predictors of observing a case of neglect. Farm residents were less likely than non-farm residents to observe neglect, possibly reflecting fewer opportunities to observe children in the neighborhood. While higher levels of overlap and cohesion corresponded to a greater likelihood of observing neglect, there was a negative relationship between belongingness and observing neglect. One important means of increasing identification of and formal action toward neglect, then, may be to increase community awareness of what constitutes neglect and how to respond to it when it is observed.

The hypothesis (5) that individuals who perceive a higher degree of community cohesion will be more likely to take action was supported. The prediction that a stronger sense of community belongingness would lead to a higher likelihood of both formal and informal action was not supported, and the associations were generally in the opposite direction. This could reflect bonding among community members: if one feels more closely bonded to other community members, he or she is less likely to define neglectful behavior as such or to take action against community members who are perceived to be neighbors and friends. Given the relationship between action, cohesion, and belongingness, targeting interventions at increasing cohesion may have negative consequences for action towards neglect if these interventions also increase belongingness. In contrast to previous findings, which suggest that anonymity is an important factor in the decision to report maltreatment, this study found little evidence that individuals who perceived a high level of role overlap in their community were more inclined to take formal than informal action. Although individuals in high role overlap communities were more likely to take any form of action, they were also more likely to take formal than informal action. It may be the case, then, that role overlap

affects community members' choice of action by providing them with the tools for taking action (particularly formal action) rather than increasing concern regarding repercussions of action.

Taken as a whole, these findings regarding community characteristics suggest that, much like group composition and dynamics influence helping behavior (Fischer, 2006), so too do community characteristics. Bystander intervention—particularly formal intervention—in the case of child neglect necessarily occurs within the context of the broader community; community dynamics, such as role overlap, cohesion, and belongingness appear to influence whether action is deemed appropriate and, if so, what kind of action will be acceptable. Addressing community dynamics and adjusting programmatic responses accordingly may serve to increase bystander intervention when community members observe a case of child neglect.

Additionally, findings from this study may be used to inform research on maltreatment and family violence more broadly. Studies of attitudes towards corporal punishment in Spain have demonstrated that attitudes may influence perception of child abuse as a social problem (Gracia and Herrero, 2008). Previous research on attitudes regarding violence against women in the U.S. has found that demographic characteristics such as gender, ethnicity, and education, and neighborhood characteristics such as socioeconomic conditions and social disorder are important predictors of attitudes (Flood and Pease, 2009). Additional studies (Chan, Chun, and Chung, 2008; Gracia and Herrero, 2007; Lawoko, 2008; Stickley, Kislitsyna, Timofeeva, and Vagerö, 2008; Uthman, Moradi, Lawoko, 2009) show that gender, education, socioeconomic position, neighborhood characteristics, and even country context are significantly related to attitudes about violence against women in a variety of international settings. While Chan, Chun, and Chung (2008) find, using a Chinese sample, that adults identify and report abuse differently based on whether the victim is the offender's child, spouse, or elderly relative, suggesting that direct application of child neglect studies to other areas of family violence may not be appropriate. However, the fact that most family maltreatment tends to be identified as a private family matter suggests that the bystander (and particularly community) findings of the current study may be helpful for understanding family violence more broadly.

In sum, characteristics such as age, education, and gender are related not only to which individuals are in the proximity of neglected children, and are thus likely to observe neglect, but also what behaviors those individuals will define as neglect. Moreover, one's perception of the community context appears to be a salient factor in determining whether one defines a case of neglect as such; contextual factors play a crucial role in determining whether one defines a situation as requiring helping behavior. Once a bystander has defined the case as neglect,

individual and contextual characteristics continue to play a role in determining what action, if any, the bystander will feel responsible to take. Higher levels of community belongingness appear to be correlated with lower levels of helping behavior toward neglect. This suggests that as individuals are more fully integrated into a group, they are less likely to take action against other group members; indeed, it may be the case that integrated individuals may no longer perceive themselves to be bystanders and thus do not choose to provide helping behavior. However, individuals who perceived higher levels of role overlap were also more likely to observe neglect and to take formal action. This suggests that capitalizing on role overlap to increase reporting may be an effective strategy.

Limitations

While the current study provides a starting point for understanding action toward neglect as a form of helping behavior, more research is needed. First, although the sample used here encompasses many types of communities, it is not representative of the U.S. population. Repeating the study in a national sample would be useful to further the generalizability of the findings. Additionally, the current study contains no information on the severity of the neglect or on the characteristics of the neglected child. Such information would likely increase the explanatory power of the models. Similarly, information regarding the relationship between the bystander and the neglecting adult would increase understanding of the processes involved in making decisions on actions. A further limitation is that the analyses rely on individual self-reports of observations and actions; studies comparing the characteristics of persons who self-report with those of persons whose reporting status is available in official records would be increase the value of the findings. Finally, it is not clear whether sentinels who observe neglect outside of their professional environment react in their professional capacity in this context; nor is it clear whether sentinels are more likely to observe neglect simply due to their work with children, or whether this difference also reflects sentinel education about what constitutes neglect. Because we found that the odds of observing neglect among sentinels increased with greater educational attainment, we expect both factors may be involved. Further research is needed, however, to understand fully the relationship between sentinel status, observation of neglect, and type of action taken (if any).

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Table 1. Descriptive Information for Variables Used in Analyses for Full Sample and Sample of Respondents Who Reported Observing Child Neglect

Variable	Full Sample				Subsample Observing Child Neglect			
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev	Min	Max
Female	0.598	0.490	0	1	0.650	0.477	0	1
Age or Respondent	51.336	17.159	19	96	46.819	14.672	19	94
Years of Schooling	13.566	2.536	1	28	13.994	2.499	2	25
Farm Residence	0.252	0.434	0	1	0.235	0.424	0	1
Rural non-farm	0.088	0.284	0	1	0.096	0.294	0	1
Town or City	0.660	0.474	0	1	0.669	0.471	0	1
Race: White	0.971	0.169	0	1	0.964	0.187	0	1
Married	0.616	0.486	0	1	0.661	0.473	0	1
Never Married	0.129	0.335	0	1	0.127	0.333	0	1
Widowed	0.125	0.331	0	1	0.132	0.339	0	1
Divorced/Separated	0.119	0.323	0	1	0.067	0.250	0	1
Work Full Time	0.572	0.495	0	1	0.642	0.479	0	1
Work Part Time	0.104	0.305	0	1	0.118	0.322	0	1
Unemployed or other	0.057	0.232	0	1	0.061	0.238	0	1
Retired	0.175	0.380	0	1	0.085	0.279	0	1
Keeping House	0.093	0.290	0	1	0.095	0.294	0	1
Role Overlap Scale	8.836	1.944	3	12	9.108	1.898	3	12
Community Comfort Scale	13.751	2.978	4	20	13.944	3.075	4	20
Community Cohesion Scale	18.553	2.729	5	23	18.861	2.721	5	23
Community Belonging Scale	32.002	5.415	8	40	31.662	5.948	8	40
Rurality Scale	3.194	2.140	1	7	3.110	2.073	1	7
Annual Household Income	6.824	2.802	1	14	7.132	2.758	1	14
Religious Attendance	4.034	1.453	1	6	4.122	1.390	1	6
Raise Children as see fit	2.146	1.065	1	5	2.293	1.145	1	5
Children under 5 in Hhold	0.347	0.615	0	3	0.382	0.638	0	3
Children 6 - 18 in Hhold	1.492	1.080	0	5	1.544	1.070	0	5
Sentinal Status	0.109	0.312	0	1	0.186	0.389	0	1
Saw Child Neglect	0.438	0.496	0	1				
Took Formal Action					0.235	0.424	0	1
Took Informal Action					0.352	0.478	0	1
Took No Action					0.413	0.492	0	1
Number of Cases	3,640				1,595			

Table 2. Logistic Regression Analyses of the Likelihood of Having Observed Child Neglect

	Zero Order		Model 1		Model 2	
	b	*O. R.*	*b*	*O. R.*	*b*	*O. R.*
Residence Type						
Town/City (Reference Group)						
Farm	-0.144	0.866	-0.256 **	0.774	-0.259 **	0.772
Country	0.131	1.140	-0.063	0.939	-0.061	0.941
Rurality Scale	-0.033	0.968	-0.013	0.988	-0.011	0.989
Marital Status						
Married (Reference Group)						
Never Married	-0.150	0.861	-0.189	0.827	-0.186	0.831
Widowed	-0.023	0.978	-0.015	0.985	-0.014	0.986
Divorced	-0.989 **	0.372	-0.129	0.879	-0.106	0.899
Work Status						
Full Time (Reference Group)						
Part Time	0.026	1.026	0.089	1.093	0.095	1.100
Other Employment statu	-0.114	0.892	0.208	1.232	0.205	1.228
Retired	-1.282 **	0.278	-0.130	0.878	-0.137	0.872
Keeping House	-0.160	0.852	0.257	1.293	0.242	1.273
Age (centered)	-0.029 **	0.972	-0.024 **	0.977	-0.024 **	0.976
Age Squared			-0.001 **	0.999	-0.001 **	0.999
Education (centered)	0.122 **	1.130	0.056 **	1.057	0.032	1.033
Education Squared			-0.002	0.998	-0.004	0.996
Education Cubed			-0.001 *	0.999	-0.001	0.999
Female	0.389 **	1.475	0.262 **	1.300	0.274 **	1.316
Kids Under 5	0.264 **	1.302	-0.001	0.999	0.008	1.008
Kids 6-18	0.357 **	1.429	0.122 *	1.130	0.119 **	1.126
White	-0.430 *	0.651	-0.240	0.787	-0.272	0.762
Total Family Income	0.070 **	1.073	-0.018	0.982	-0.017	0.983
Raise as See Fit (disagree = high)	0.231 **	1.260	0.156 **	1.169	0.155 **	1.168
Religious Attendance	0.075 **	1.078	0.038	1.039	0.040	1.041
Sentinel Status	1.468 **	4.341	1.005 **	2.731	0.681 **	1.975
Role Overlap Scale	0.131 **	1.140	0.114 **	1.120	0.113 **	1.119
Community Comfort Scale	0.039 **	1.040	0.012	1.012	0.011	1.011
Community Cohesion Scale	0.075 **	1.078	0.113 **	1.120	0.113 **	1.120
Community Belonging Scale	-0.021 *	0.980	-0.059 **	0.942	-0.060 **	0.942
Education X Sentinel Status					0.269 **	1.309
Education2 X Sentinel Status					-0.006	0.994
Education3 X Sentinel Status					-0.001	0.999
Constant			-1.807	0.164	-1.769	0.171

Notes: * p<.05; ** p<.01; N = 3,640

Table 3. Logistic Regression Models for Taking Action on Observed Neglect and Type of Action Taken

| | Took Action vs. No action | | | | Took Formal vs. Informal Action | | | |
| | Zero Order | | Model 1 | | Zero Order | | Model 2 | |
	b	O.R.	b	O.R.	b	O.R.	b	O.R.
Residence Type								
Town/City (Reference Group)		1.000		1.000		1.000		1.000
Farm	-0.4301 **	0.650	-0.3407 **	0.711	0.0736	1.076	0.0894	1.094
Country	-0.2560	0.774	-0.2913	0.747	0.1207	1.128	0.2039	1.226
Rurality Scale	0.0315	1.032	0.0132	1.013	0.0051	1.005	0.0635	1.066
Marital Status								
Married (Reference Group)		1.000		1.000		1.000		1.000
Never Married	0.1355	1.145	-0.0219	0.978	0.2521	1.287	0.0464	1.048
Widowed	0.4898 **	1.632	0.4463 *	1.563	-0.0721	0.930	-0.0442	0.957
Divorced	-0.2720	0.762	-0.0679	0.934	-0.3667	0.693	0.0253	1.026
Work Status								
Full Time (Reference Group)		1.000		1.000		1.000		1.000
Part Time	-0.0445	0.956	0.0246	1.025	-0.1092	0.897	-0.0031	0.997
Other Employment statu	0.2682	1.308	0.4807 *	1.617	-0.0057	0.994	0.2661	1.305
Retired	-0.5764 **	0.562	-0.0190	0.981	-1.2054 **	0.300	-0.6173	0.539
Keeping House	-0.3004	0.741	-0.0378	0.963	-0.2409	0.786	-0.0525	0.949
Age (centered)	-0.0124 **	0.988	-0.0080	0.992	-0.0169 **	0.983	-0.0165 *	0.984
Education (centered)	0.1390 **	1.149	0.0696 **	1.072	0.0628 *	1.065	0.0060	1.006
Female	0.3668 **	1.443	0.2305	1.259	0.3391 *	1.404	0.3231	1.381
Kids Under 5	0.0061	1.006	-0.0664	0.936	0.0185	1.019	-0.1317	0.877
Kids 6-18	0.1179 **	1.125	0.0576	1.059	0.0382	1.039	-0.0515	0.950
White	-0.5481	0.578	-0.3874	0.679	-0.0606	0.941	-0.0128	0.987
Total Family Income	0.0315	1.032	0.0117	1.012	0.0343	1.035	0.0175	1.018
Raise as See Fit (disagree = high)	0.1026 *	1.108	0.0280	1.028	0.0780	1.081	0.0274	1.028
Religious Attendance	0.0329	1.033	-0.0075	0.993	-0.0040	0.996	-0.0566	0.945
Sentinel Status	1.0740 **	2.927	0.8288 **	2.291	0.6101 **	1.841	0.5150 **	1.674
Role Overlap Scale	0.0346	1.035	0.0264	1.027	0.1039 **	1.109	0.1389 **	1.149
Community Comfort Scale	0.0353 *	1.036	0.0459 *	1.047	0.0139	1.014	-0.0222	0.978
Community Cohesion Scale	0.0375	1.038	0.0711 *	1.074	0.0590 *	1.061	0.0694	1.072
Community Belonging Scale	-0.0103	0.990	-0.0365 *	0.964	0.0018	1.002	-0.0201	0.980
Constant			-0.8248	0.438			-2.6134	0.073
Number of Cases	1595				936			

Notes: * p<.05; ** p<.01

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