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Social Mechanisms of Child Maltreatment

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Explicating the Social Mechanisms Linking
Substance Use Behaviors and Ecology to Child Maltreatment

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Abstract

This article begins to describe and explicate the specific mechanisms by which substance use and the substance use environment contribute to specific types of child maltreatment. These mechanisms relating alcohol outlet densities and drug market activities to child maltreatment described here include effects on social disorganization, parent's drinking and drug use behaviors, and parental supervision. By investigating potential mechanisms, new information could be obtained on the importance and role of alcohol, drugs, and their availability in the etiology of child maltreatment. This knowledge can be used to further tailor interventions to those conditions most likely to prevent and reduce maltreatment.

Key words: substance use, child maltreatment, alcohol outlet density, drug market activity, alcohol use, drug use, supervisory neglect, physical abuse

Introduction

In 2007, approximately 800,000 children had substantiated reports of child maltreatment (about 12 per 1,000 children, U.S. DHHS, 2009a), and about 500,000 children resided in foster care (U.S. DHHS, 2009b). General population estimates of physical abuse and neglect suggest that the actual rates of child maltreatment are likely to be much higher. For example, Straus and colleagues (1998) found that rates of physical abuse and child neglect in a general population survey were more than 11 times higher than official data from Child Protective Services. The vast majority of research on child physical abuse and neglect has traditionally focused on the psycho-social characteristics of parents and caretakers that lead to child maltreatment. However, a growing number of studies suggest that characteristics of the environment in which these families live may also affect parenting behaviors. Yet, with a few notable exceptions (see Molnar et al., 2003, Coulton et al., 1999), these studies of individual or environment characteristics occur in isolation of each other. Statistical methods have advanced sufficiently that we can begin to incorporate both to better understand the interplay between individual behaviors and conditions and environmental influences that may result in child maltreatment. For this paper, child maltreatment will be used interchangeably with ‘child abuse and neglect’ and refers to physical abuse, sexual abuse, and neglect as defined by the Child Abuse Prevention and Treatment Act of 1974.

Currently broad theories exist that seek to understand why individuals maltreat their children (e.g., stress and coping) while others seek to understand how the larger environment affects rates of maltreatment (e.g., social capital). An overarching framework that can encompass these and other theories is the ecological framework by Bronfenbrenner (1979) that posits multi-levels of relationships and environments influence behavior. Lacking in most of

these theoretical frameworks are explicit statements or understandings of the social mechanisms at play. Here social mechanisms are defined as “frequently and easily recognizable causal patterns that are triggered under generally unknown conditions or with indeterminate consequences” (Elster, 1998, p. 45). While large scale theories are general enough to include explanations for all types of behaviors, social mechanisms seek to identify under what conditions certain behaviors are more or less likely to result in abusive or neglectful parent practices.

This paper provides a framework for beginning to explicate the specific mechanisms by which the ecology of where children and families interact with family and parental characteristics that result in child maltreatment. Specifically, the mechanisms of the drug and alcohol environment will be explored in order to develop a greater understanding of the environmental and social mechanisms that support or hinder maltreating behaviors by parents. By investigating potential mechanisms new information could be obtained on the importance of alcohol, drugs, and their availability in the etiology of child maltreatment. Findings from studies investigating these mechanisms can be used to develop primary prevention activities aimed at populations of families living in neighborhoods with characteristics deemed high risk for potential abuse and neglect. Interventions that change neighborhood conditions may have a greater probability of creating and sustaining safer environments for children.

Social Mechanisms

The approach to studying social mechanisms has often been described as trying to break open the “black box” (Hedström & Swedberg, 1998). In other words, as researchers, we often are able to identify relationships between variable “x” and variable “y.” For example, parents who abuse alcohol are more likely to physically abuse their children (Ammerman, et al, 1999; Chaffin, Kelleher, & Hollenberg, 1996), greater densities of alcohol outlets are related to higher

rates of child maltreatment in neighborhood areas (Freisthler, 2004; Freisthler et al., 2004), those in poverty are more likely to be involved with the child welfare system (Pelton, 1981), and list can go on indefinitely. These correlational relationships, once identified, provide almost no information on why these relationships exist. Certainly, explanations for and theories about why these relationships occur are provided, but the exact mechanism that links one variable to another is generally unknown. In fact, without identifying the mechanisms that generate the relationships, we might unintentionally be giving too much weight to some variables and not enough to others (Hedström & Swedberg, 1998). The relationship between poverty and child maltreatment as measured through official reports has been often studied with many theories being provided as to the cause: Are poor parents more likely to be reported for maltreatment because they are involved with mandated reporters at higher rates? Do poor parents engage in abusive or neglectful parenting practices at a higher rate? If so, is that because they lack resources needed to care adequately for children? If not, are child welfare workers more likely to substantiate cases of child maltreatment for poorer families because of perceived risk to the child or children? Incorporating the appropriate variables related to each of these hypotheses may erase the statistical relationship between poverty and child maltreatment. This allows us to get at the real source of what is causing maltreatment or causing poor children to be involved in the child welfare system at higher rates. Without knowing the exact social mechanisms producing the relationship between poverty and child maltreatment, developing interventions to address and reduce child maltreatment is difficult.

Focusing on the mechanisms underlying these relationships or certain behaviors requires us to think systematically about why and how these relationships occur and to collect data in such a way that allows us to explicitly test sets of mechanism. Instead of just measuring poverty,

one might also need to include a measure of contact with mandated reporters or conduct a general population study that allows for comparisons of parenting behaviors across income groups. Further we might begin to consider that these relationships are more likely to occur only under specific conditions or with specific populations. Once these conditions are specified, it moves development of policy and practice intervention techniques from a “one size fits all” approach to one that requires specific information on the clients or communities with whom we work.

This line of inquiry also allows for incorporating complexity of human behavior by identifying ways in which environments differentially affects individuals. Hedström and Swedberg (1998) identify a typology of mechanisms that can guide how they are studied. This typology specifically examines the interaction between the larger environment and individual behaviors through three types of mechanisms: situational, action-oriented, and transformational. A situational mechanism (macro to micro) occurs when an individual encounters a situation that affects his or her behavior in a particular way. Action-oriented mechanisms (micro to micro) transpire when the characteristics of an individual (e.g., beliefs, desires) results in a specific action. Finally, transformational mechanisms (micro to macro) arise when the behavior of individuals as they interact with each other result in a collective action at the macro level. Put more simply “...one should always try to establish how macro-level events or conditions affect the individual (situational mechanism), how the individual assimilates the impact of these macro-level events (action-oriented mechanism), and how a number of individuals, through their actions and interactions, generate macro-level outcomes (transformational mechanism)” (Hedström & Swedberg, 1998, pp 21-22). This typology frames many of the mechanisms described within this

paper and allows us to better understand the ways in which social mechanisms can be used to develop interventions to reduce social problems.

Background of Child Maltreatment

Scope of Child Maltreatment. Child maltreatment, particularly child neglect, within the general population is widespread (Straus et al., 1998); however official reports tend to underestimate the scope of the problem (US DHHS 2009a). Past year prevalence estimates for the general population suggest that about 60% of parents used corporal punishment including spanked on the bottom with a bare hand or with a belt, hairbrush or other object (Straus et al., 1998). According to this same study, 5% of all parents have engaged in physically abusive behaviors in the past year such as slapping in the face, hitting with a fist, or kicking hard. About 1 in 4 parents engaged in neglectful parenting practices that could result in harm to their child(ren). Of parents who committed child neglect, about 70% reported leaving a child home alone even though an adult should be with him or her, 40% reported not being able to provide the food the child needed, and 8.5% reported being too high or drunk to care for their child (Straus et al. 1998). Supervision problems (i.e. supervisory neglect) account for 30% of all cases seen in the child welfare system (Coohey, 2003). This is higher than both physical abuse (10.8%) and sexual abuse (7.6%). (U.S. Department of Health and Human Services, 2009).

Individual Characteristics and Child Maltreatment. There are a variety of parental and child characteristics that related to child maltreatment. Research on child maltreatment has consistently found that it is disproportionately reported among poor families (Pelton, 1981; Gelles, 1997), those with lower levels of education (Gelles, 1997), younger parents (Straus et al., 1998), parents who were abused and neglect as children (Berger, 2005; Black et al., 2001), parents reporting higher levels of depressive symptoms (Black et al., 2001), parenting stress,

parent reactivity (e.g., impulsivity; Berger, 2005), and those who have more children at home (Berger, 2005; Gelles, 1997).

Neighborhood Environment and Child Maltreatment. Consistently, areas with high poverty rates, housing stress (e.g., residential instability), and drug and alcohol availability have higher rates of maltreatment (Freisthler et al., 2006). High levels of unemployment and high levels of child care burden (e.g., higher ratios of men compared to women) also tend to have high rates of child maltreatment but this relationship is not as stable (Freisthler et al., 2006). These relationships are often interpreted within the framework of social disorganization as is described below.

Child Maltreatment and Social Disorganization. Population-level studies of child maltreatment have found a positive relationship between social disorganization and child maltreatment (Coulton et al., 1995, Freisthler, 2004; Freisthler et al., 2006). A socially disorganized neighborhood is one that lacks a structure to help maintain social controls that allow communities to realize commonly held values. Neighborhoods are commonly measured by constructs related to concentrated disadvantage, child care burden, and residential instability (Coulton et al., 1995; Sampson & Groves, 1989; Sampson et al., 1997). Neighborhood areas with high levels of social disorganization may impede the development of collective efficacy (i.e., the willingness of neighborhood residents to intervene for the common good) and other socially supportive relationships with neighbors that may prevent or reduce maltreatment (Sampson et al., 1997, 1999).

Social Support and Social Networks in Neighborhoods. Having more individuals to provide support with parenting tasks lessens some of the burdens related to child care and can provide parents with emotional support during times of extreme stress. Social support can come

in a variety of forms: (1) Emotional support (e.g., talking through problems and asking for advice); (2) instrumental (or tangible) support (e.g., material aid such as money or babysitting); and (3) social companionship (e.g. spending time with friends and families in recreational activities) (DePanfilis, 1996).

When controlling for neighborhood socio-economic status, “high” risk neighborhoods (i.e., those with higher than expected rates of maltreatment) had fewer neighborhood resources and support than the “low” risk (i.e., lower than expected rates of maltreatment) neighborhoods (Garbarino & Kostelny, 1992; Garbarino & Sherman, 1980; Vinson et al., 1996); individuals in these areas also have smaller social networks (Coulton et al., 1999; Molnar et al., 2003; Vinson et al., 1996). In a review of the social support literature, DePanfilis (1996) found that neglectful families might lack access to network support and be distrustful of social support that is available. Parents who neglect their children generally have fewer network members, less frequent contact with members in their supportive networks, and tend to live further away from those network members (Coohey, 1996, 2007; Thompson et al., 1985) although this research is not consistent. Coohey (1998) found no difference in social support (i.e., emotional, instrumental, and social companionship) among parents who did and did not adequately supervise their children. At the neighborhood level, Molnar et al. (2003) found that larger neighborhood social networks (i.e., more members) were related to lower parent-to-child physical aggression for Hispanic families, controlling for levels of social support given by family members. Mothers who experienced an increase in instrumental support decreased their child physical abuse potential (McCurdy, 2005). Thus disorganized neighborhoods, or those characterized by high residential turnover and disadvantage may prevent social networks from

forming or decrease the shared connections between residents that may prevent child maltreatment.

Two studies have examined how neighborhood-level social disorganization and individual-level social support affect rates of child maltreatment and found that more social support from family members is related to lower physical abuse while smaller social network size at the neighborhood level is related to more physical abuse (Coulton et al., 1999; Molnar et al., 2003). However, neither of these studies considered neighborhood and individual level interactions (e.g. social support * social disorganization). Additionally, these studies did not assess how alcohol use or alcohol outlet density might affect this relationship.

Substance Use and Child Maltreatment

Children who live in homes with parents identified as substance abusers and have substantiated child maltreatment reports are more likely to be removed from their home when compared to children who do not have substance abusing parents (U.S. Department of Health and Human Services, 1999). Parents with a diagnosed substance use disorder are more likely to be physically abusive, commit child neglect, and have a higher child abuse potential than in those without a diagnosed substance use disorder (Ammerman, et al, 1999; Chaffin, Kelleher, & Hollenberg, 1996). In fact, children in these families are 2 times more likely to be at risk for child maltreatment (Walsch, Macmillan, & Jamieson, 2003). Finally, parents with alcohol or drug problems are more likely to inadequately supervise their children compared to parents who do not have alcohol or drug problems (Coohey, 1998; Hixon, 1992).

The Role of Heavy Drinking. Rates of child maltreatment, particularly physical abuse, are higher among individuals reporting heavy drinking (Berger, 2005; Famularo et al., 1986; Murphy et al., 1991, Kelleher, 1994; Sun et al., 2001). As 1 in 10 children currently resides in

the home of a parent who can be considered dependent on alcohol and other drugs (Huang, Cerbone, & Gfoerer, 1998), the effects of parental drinking on child maltreatment is likely to be extensive. In a national study of young adult parents, about one-third reported having more than five drinks in one occasion during the past two weeks (Freisthler & Waller, 2006). In that study, heavy drinkers were more likely to kick, hit or slap children and to be investigated by social services than moderate drinkers or abstainers (Freisthler & Waller, 2006). While the exact risk to children's welfare from a parent's alcohol dependence or risky drinking is not known, it is likely to be substantial as estimates suggest that 40 to 80% of parents involved with the child welfare system have a substance abuse problem (Child Welfare League of America, 1990). Kelleher et al. (1994) found that parents who were identified as alcohol dependent or alcohol abusers were 4.7 times more likely to physically abuse their children and 5.3 times more likely to neglect their child than matched controls. Further alcohol-abusing parents are more likely to be reported multiple times to the child welfare system for child maltreatment than those parents who do not abuse alcohol (Wolock & Magura, 1996).

The Role of Drug Use. It is generally well-accepted that drug abuse is related to higher rates of child maltreatment and involvement with the child welfare system (Kelleher et al., 1994; Sedlak et al, 2010). Kelleher et al. (1994) found that parents who were identified as drug dependent or drug abusers were 2.9 times more likely to physically abuse their children and 10.4 times more likely to neglect their child than matched controls. Furthermore, Deren (1986) found that of children who died due to abuse or neglect, 25% had a mother who was a drug addict. Drug use can affect children through the cost of purchasing drugs, time spent seeking drugs potentially leaving children at home without adequate supervision (e.g., supervisory neglect),

and the physical and mental incapacitation that can occur when using drugs (e.g., not having food in the home, “physical neglect”).

The Role of the Substance Use Environment. Child maltreatment due to substance use is a complicated issue for many reasons, including the difficulty in determining the conditions under which drinking and drug use behaviors result in child maltreatment. Individuals who are consistently heavy drinkers are not the only caregivers at risk for committing some forms of child maltreatment. A parent who drinks a couple glasses of wine at a family dinner in a restaurant may find himself or herself over the legal limit. After dinner, the parent may have to drive home, with his or her children in the car. Parents living in areas with higher densities of restaurants that serve alcohol have more opportunities to drink and drive when eating out. These situational types of child maltreatment are certainly much more difficult to detect but can have deadly consequences for children. Thus, while much of the focus on the relationship between child maltreatment and alcohol use focuses on those caregivers who are dependent on alcohol or drugs, the environment in which alcohol or drug occurs can also provide important information on maltreating behaviors.

Social Mechanisms: Alcohol Environment and Child Maltreatment

Figure 1 shows one conceptual model of the social mechanisms that may better represent the relationship between alcohol and child maltreatment at both the level of the individual and the level of the environment. An underlying assumption of this model is that there are certain conditions under which alcohol use and the density of alcohol outlets may be more or less likely to result in abusive or neglectful parenting practices. That is, not all parents have to abuse alcohol for alcohol to play a role in parenting practices that could be deemed physically abusive or neglectful.

The Role of Alcohol Outlets. Density of alcohol outlets appear to be positively related to rates of child maltreatment when using several geographic units of analysis (Freisthler, 2004; Freisthler, Midanik & Gruenewald, 2004; Freisthler, Needell, & Gruenewald, 2005a; Markowitz & Grossman, 1998). At the state level, Markowitz and Grossman (1998) studied the relationship between state excise taxes on beer, alcohol outlet density, and child maltreatment. They found that fewer outlets per 1,000 people were significantly related to a decrease in the probability of severe child maltreatment (Markowitz & Grossman, 1998). Specifically, they found that a reduction of one outlet per 1,000 people decreased the probability of severe violence by 4%. Alcohol outlet densities may contribute to child maltreatment in smaller geographic areas as well. Recent cross-sectional studies have found that higher densities of bars are related to higher substantiated reports of child maltreatment at the Census tract and block group levels (Freisthler, 2004; Freisthler et al., 2005a). This relationship remained after controlling for measures of social disorganization, including concentrated disadvantage, residential instability, immigrant concentration, and child care burden at the neighborhood level. This suggests that alcohol outlets are not just a marker for socially disorganized neighborhoods but contribute independently to problems in these areas. The total number of bars in an area (as measured by density) begins to change the fabric of the neighborhoods. For example, the addition of one bar to any given neighborhood may not vastly change neighborhood processes but when this addition means that areas have one bar on every block it begins to change the structure of the neighborhood environment.

Type of alcohol outlet density appears to be differentially related to type of child maltreatment such that densities of off-premise outlets are positively associated with rates of child physical abuse and densities of bars are related to higher rates of substantiated child neglect

(Freisthler, Midanik & Gruenewald, 2004). These results signify that the different mechanisms that produce child maltreatment in neighborhood areas may also be affected by the types of alcohol outlets in a neighborhood. For example, in cases of physical abuse, parents may be purchasing alcohol at off-premise outlets to be consumed at home. Drinking alcohol may cause some parents to exhibit more aggressive behaviors not normally displayed resulting in physical abuse (Pihl et al., 1993, 1997). Here the primary situational mechanism by which densities of off premise alcohol outlets affects child physical abuse may be through a parent's drinking behavior. In the case of areas with higher densities of bars, parents will have more places in the immediate area that provide entertainment and/or activities for adults and where children are not permitted. By virtue of spending time in these establishments parents will have more opportunities to leave their children home alone or with inadequate supervision, thereby committing neglect. Thus the dominant mechanism by which bar density may affect child neglect is through venue use (e.g., number of evenings spent at a bar) and not necessarily parental drinking behaviors.

Alcohol Outlet Densities and "Frail" Neighborhoods. Neighborhood areas with high levels of social disorganization already have a number of conditions (e.g., low collective efficacy) that make them vulnerable to a variety of social problems including crime and child maltreatment (Coulton et al., 1995, Freisthler, 2004; Sampson et al., 1997). With an already weakened (or "frail") neighborhood structure, these neighborhoods may lack the appropriate social capital to absorb the negative effects related to high densities of alcohol outlets in their community (Gruenewald et al., 2006). In this case, alcohol outlet densities may accelerate that risk by bringing into the neighborhood non-resident individuals prone to participating in criminal activities (Alaniz et al., 1998) further deteriorating neighborhood conditions that support healthy family functioning. Moreover, an over-concentration of alcohol outlets (particularly bars and

liquor stores) may be visible signs of the social disorder in those neighborhoods. Greater densities of alcohol outlets in areas with high social disorganization act in a manner that increases the likelihood residents will retreat from neighborhood interactions depriving themselves of those contacts with neighbors that might develop into socially supportive relationships (Bennett, DiIulio, & Walters, 1996). On the other hand with this transformational mechanisms, neighborhoods that have higher densities of alcohol outlets but lower levels of social disorganization may be able to absorb the effects of outlets without risking further harm to children due to the increased levels of social capital available to those neighborhood residents.

Context-Specific Effects of Alcohol Outlets. Most recently, studies examining the effects of alcohol outlet density on assaults have found that these effects may be context-specific (Gruenewald et al., 2006; Gruenewald & Remer, 2006). For example, Gruenewald et al. (2006) found that bar density was only related to rates of violence in residentially unstable poor rural areas while increases in percentage of males in an area with high densities of bars was related to substantial increases in violent assaults (Gruenewald & Remer, 2006). These studies suggest that neighborhood characteristics moderate the relationship between alcohol outlet density and violence. Similar relationships have not been studied for child maltreatment.

Social Mechanisms: Alcohol Outlets, Alcohol Use, and Child Maltreatment.

Greater alcohol outlet densities may lead to more frequent and higher quantity of alcohol use by parents, placing children at greater risk for being abused or neglected. Thus, a major mechanism by which the physical availability of alcohol affects child maltreatment may be through parental drinking. Greater alcohol use may increase aggressive tendencies, increasing the propensity to commit child physical abuse. Alcohol use may also increase a parent's propensity to commit child neglect. For example, parents who display more risky drinking

behaviors (e.g., drinking to intoxication) may impair their ability to adequately supervise and monitor their children's behaviors (e.g., supervisory neglect), resulting in injury or other harm to their child. Moreover increased frequency of drinking may divert financial resources from essential needs of children in the home (e.g., physical neglect) placing those children at further risk for harm. Research has also shown that heavy drinking is associated with the neglect of various personal habits (e.g., nutritional deficits caused by substituting alcohol for food, Ma, Betts, & Hampl, 2000), which may extend to neglecting one's children as well.

Parents who frequently drink heavy amounts may regularly place their children at increased risk for abuse and neglect making it more likely that they will come to the attention of Child Protective Services. However, there is still likely to be risk for abuse or neglect for children of parents who are moderate or infrequent drinkers. These children may still be at risk but that risk may be more infrequent and less likely to be detected. These children may be at low levels of risk associated with various forms of neglect on a repeated basis. Additionally an infrequent drinker (e.g., less than once a month) who drinks only at special occasions (e.g., weddings) but consumes large quantities to the point of intoxication may drive home with his or her children in the car, a form of supervisory neglect (Coohey, 2003, Sedlak & Broadhurst, 1996). These children may be at high risk for abuse or neglect but only on an occasional basis throughout the course of the year. This more infrequent maltreatment may be more difficult for health professionals and social workers to detect unless the child suffers a severe injury from maltreatment during this time period. Understanding the spectrum of harm for physical abuse or neglect across all drinking levels is an important contribution as moderate and light drinkers may be more likely to be affected by environmental prevention efforts.

Social Mechanisms: Routine Drinking Activities and Venue Use.

Venue use (e.g., bars, restaurants) for drinking activities varies by both sociodemographic characteristics and drinking behaviors. Married people tend to use bars less often than single people and married people with children tend use bars less often than that (Gruenewald et al., 1995). Married individuals drink at their own home more often than single individuals (Treno et al., 2000). On the other hand, heavier drinking married people use bars more often than single people or married couples without children (Treno et al., 2000). Further, the type of alcohol outlets within an area may affect venue use. Through this situational mechanism, the density of bars may reduce the amount of time parents spend with their children as bars are a place that children are not allowed. In these situations, parents need to make alternative child care arrangements to lessen a children's risk for harm. Greater densities of bars provide more opportunities for strictly adult companionship without children and increased opportunities to leave a child home alone or with inadequate supervision (i.e., supervisory neglect). Similarly as an action-oriented mechanism, a parent's utilization of bars as a recreational activity may decrease parental supervision and monitoring therefore increasing a child's risk of being neglected (Coohey, 2008) particularly since these activities take a parent away from home. In 19% of supervisory neglect cases in New York state, parents were found to be "out" participating in illegal or irresponsible activities, including drinking. An additional 12% were "out" for entertainment purposes when the supervisory neglect incident occurred (Jones, 1987). Use of bars can also represent an economic strain on families as alcohol at this venue is more expensive than purchases made through off-premise alcohol outlets (Gruenewald et al., 2000). Thus, parents who spend significant amounts of time at bars drinking may also be spending valuable resources that may lead to physical neglect of their child(ren)'s needs.

Outlet Density and Venue Utilization. As shown in Figure 1, drinking behaviors and drinking venue utilization are expected to be directly related to specific types of child maltreatment. Additionally, venue utilization may moderate the relationship between drinking behaviors and child maltreatment. These mechanisms rely on the tenets of routine activities theory which states that harm occurs when there is a suitable target (the child), a motivated offender (parent or other adult), and the absence of effective guardians (Cohen & Felson, 1979). Under most conditions parents will not participate in abusive or neglectful behaviors but that may change in certain locations and/or under certain circumstances. Alcohol outlets (e.g., liquor stores) that allow ready access for consumption in the home (where fewer guardians capable of stopping the violence are present) may then indirectly influence child maltreatment rates, particularly with respect to physical abuse (Freisthler et al., 2004). Furthermore, drinking to extremes (e.g., passing out) may impair parents' supervision of their children, resulting in higher rates of accidents and injuries in the home. In particular, individuals who prefer to spend time in bars or drink regularly at bars may not arrange for reliable child care for their children leaving their children vulnerable to injury or harm from supervisory neglect. Greater densities of on-premise outlets (i.e. bars) provide more opportunities for parents to drink away from home. Combining utilization of on-premise alcohol outlets and drinking to intoxication may considerably increase a child's risk for being neglected. Individuals prone to aggressive acts who prefer to drink at home may intensify those aggressive tendencies increasing the likelihood that they will commit child physical abuse. However, for this to occur, alcohol must be available in the home for consumption. Purchase of alcohol for use at home generally occurs at off-premise establishments, such as liquor, grocery, or convenience stores. Thus, the primary mechanism affecting child maltreatment may be through greater densities of off-premise alcohol outlets.

This greater density may decrease the costs associated with obtaining alcohol (e.g., reduced travel costs) and increase the frequency of alcohol use, thereby increasing the risk of committing child physical abuse. The effects of off-premise density and alcohol use on perpetration of physical abuse may be higher in homes of single parents as fewer guardians are available to prevent the physical abuse from occurring (Freisthler et al., 2004).

Venue Utilization and Support. Recent research by Coohy (2007) suggests that parents who leave kids home alone (vs. with inadequate supervision) may do so because individuals in their social networks are not adequate caregivers. For example, parents who spend increased amounts of time at bars may be likely to develop support networks of individuals who are also bar-goers and likely drinkers. Although these individuals provide social companionship support, having social network members who drink increases the risk of physical abuse (Holmes, in review) and may also not be reliable temporary caregivers for parents who need additional babysitting support and are likely to not be available at night when the parent is spending time at bars. In this case preferred drinking venue may interact with type of social support from social networks such that parents spending large amounts of time in bars are receiving social companionship, but not tangible support (i.e., babysitting) leaving children vulnerable to supervisory neglect. Not only might bar density increase the number of locations parents can go without children, it may also change the types of support networks these parents have placing child at higher risk for being left home alone or without adequate supervision.

Social Mechanisms: Drug Environment and Child Maltreatment

Some elements of alcohol use and the mechanisms relating the alcohol environment to child maltreatment translate in a similar manner to understanding the role of the drug environment on child maltreatment. However, a key difference between the two is that the drug

environment and particularly drug markets are more difficult to identify because they are illegal and not regulated in the same manner as alcohol markets. The illegality of drug markets and drug use makes it difficult to establish the centers that market and sell illicit substances in order to determine where the risks from exposure to those markets is greatest. Figure 2 provides a diagram examining some of the mechanisms relating the drug environment and drug use to child maltreatment. Eck (1995) theorizes that drug markets operate through two primary structures: social networks and routine activities. Both structures hold implications for the perpetration of maltreating behaviors by parents. A social network drug market is one that is primarily invisible and contacts for drug sales are made through friends and friends of friends. This helps to ensure that the drug seller maximizes control of the market in order to increase the level of safety from detection by law enforcement. A routine activity drug market is one that is positioned in a place where individuals who want drugs are likely to look for places to purchase drugs. This often includes environments that are high traffic areas with multiple access routes. These types of drug markets serve as the basis for examining the social mechanisms as they are related to abusive and neglectful parenting practices.

Role of Drug Markets. There is some limited evidence that certain aspects of drug market activity may be positively related to rates of child maltreatment (Albert & Barth, 1996; Freisthler et al., 2005b; Freisthler & Weiss, 2008). Three studies have examined aspects of drug market activity as they are related to rates of child maltreatment—all using official reports of child abuse and neglect obtained from the child welfare system. Freisthler et al. (2005b) found that drug possession incidents in Census block groups were related to higher rates of substantiated reports of child maltreatment controlling for other Census-based indicators of social disorganization (Freisther et al., 2005b) and that increases in drug arrests at the county level were related to

increases of referrals to Child Protective Services over from 1998 – 2001 (CPS; Freisthler & Weiss, 2008). Further, Albert and Barth (1996) found that drug arrests for women are related to rates of maltreatment in urban and rural counties but there was no relationship between drug arrests and maltreatment in suburban counties. Other work has revealed that self-reported levels of illegal drug use (largely associated with marijuana) are correlated with greater visibility of public drug markets within neighborhoods and in areas adjacent to neighborhoods where these active markets are found (Freisthler et al., 2005a). This suggests some spatial effects, with characteristics of one neighborhood (public drug markets) correlated with problems in nearby neighborhoods (drug use). Similar spatial effects appear in studies of relationships between social disorganization and the appearance of drug markets across community areas, with market activity related to person and place characteristics within and between adjacent geographic units (Freisthler & Gruenewald, 2005).

Social Mechanisms: Public Drug Markets and Social Disorganization

As the routine activities approach to drug sales relies more on detailing the type of places that are attractive to drug dealers, individuals living within these areas may be at greater risk for being targeted by drug dealers to participate in some aspect of the markets—either as drug users or low level sellers. Further, the drug dealer is at greater risk for being detected as he or she is less likely to know anything about his or her customers. Thus dealers will find places with high levels of disorganization as attractive places to “set up shop.”

Drug Market Activities and Social Disorganization. Increased drug activity in a neighborhood may exacerbate child maltreatment in already socially disorganized neighborhoods (e.g., high levels of disadvantage and residential instability) by further contributing to overall greater levels of social disorganization that disrupt social ties, networks and support in

neighborhood areas. Thus more active drug markets may contribute to abuse and neglect by intensifying effects due to overall greater levels of social disorganization through the disruption of social ties, networks and support in these neighborhood areas. Specifically, areas with higher densities of visible drug markets may interact with the indicators of highly socially disorganized neighborhoods to increase child maltreatment in neighborhood areas. In this case, these drug markets may accelerate that risk by bringing into the neighborhood non-resident individuals prone to participating in criminal activities (Alaniz et al., 1998) further deteriorating neighborhood conditions that support healthy family functioning.

Effects of social disorganization and visible drug markets may not be distributed evenly across similarly disorganized areas. A disorganized neighborhood that is surrounded by more organized neighborhoods may experience less incidents of child maltreatment because the disorganized area is able to draw on the resources of these adjacent areas. In these instances, persons who reside in one neighborhood are more heavily influenced by experiences they have in or characteristics of an adjacent area (e.g., low income family districted for a more affluent school district in an adjacent area; Freisthler et al., 2006). In other words, disorganized neighborhoods with more visible drug markets located next to more organized neighborhoods may benefit from access to increased resources in those adjacent areas, decreasing the likelihood of abuse or neglect (i.e. spillover effects). Similarly, organized neighborhoods with greater concentrations of drug market activities located next to socially disorganized neighborhoods will have higher rates of child abuse and neglect.

Socially disorganized neighborhoods generally lack collective efficacy (i.e., a strong willingness to intervene on behalf of others to promote a common good). In these areas, social networks are likely to be smaller, members live further away and are less likely to provide

tangible (i.e., child care, financial) support, and levels of collective efficacy will be lower thus increasing risk for maltreatment (Molnar, 2003). Through a transformational mechanism, a neighborhood with high collective efficacy and supportive ties may be less likely to tolerate abusive or neglectful behaviors towards children. These neighborhoods may place pressure on parents to act responsibly with the welfare of their children, reducing the likelihood that they act in abusive or neglectful ways or may be more willing to intervene in and support families at-risk for committing abuse or neglect. Sampson et al. (1999) found that measures of social disorganization including concentrated affluence, residential stability, and low population density were positively associated with higher levels of various measures of collective efficacy including reciprocated exchange (i.e. the relative frequency of social interaction within the neighborhood on issues of consequence for children) and child-centered social control. They conclude that neighborhoods with multiple problems decrease expectations of residents around collective action for children.

Social Mechanisms: Private Drug Markets, Social Networks, and Child Maltreatment

Within Figure 2, drugs sold through a social network approach are more likely to affect parents whose social network includes many individuals who use drugs as demonstrated by these action-oriented mechanisms. The more members of one's social network who use drugs increase the opportunities that a person will either be introduced to the drug seller or increase the chances that they can purchase drugs in this manner. Here the characteristics of social network members and the type of social support received by those members are important mechanisms for determining the risk of maltreatment for children. For example, network members who use or sell drugs may not be viewed as attractive individuals with whom one can leave his or her children, reducing the number of network members who can be relied on for tangible support.

On the other hand, these same network members may be viewed as attractive for “social companionship” types of activities providing opportunities for parents to spend more time with these friends in social activities. Without adequate additional resources, both of these types of relationships may increase the likelihood that a parent chooses to leave his or her children alone instead of with these potentially unreliable network members

Further having members of a social network being involved with the drug trade, especially methamphetamine manufacturing may increase other risks for a parent’s children. The parent may visit his or her friend putting any children who also attend the visit at risk for environmental exposure to methamphetamine use and its related problems (Brown & Hohman, 2006; Hohman et al., 2004).

Social Mechanisms: Drug Availability, Drug Use, and Child Maltreatment

Similar to drinking alcohol, increased availability of drugs whether through social networks or more public drug markets means that more parents may be using drugs or parents may be using drugs more frequently in areas within or adjacent to areas where levels of drug market activity are greater. Further, the characteristics of adjacent neighborhoods (e.g., drug activity) may affect child maltreatment in a local area (i.e., spatial lags) which has not been studied with regards to child maltreatment.

Finally, as a situational mechanism, parental drug use may increase a child’s risk for entering foster care, not because the parent commits some heinous act of maltreatment but if the illegal drug use results in arrest and conviction. Although these children may not have active substantiated reports of maltreatment, parents who are convicted of drug crimes and sent to jail may have no other option but to let their children be placed in foster care for the duration of their sentence. These relationships are made more complicated by the reality of substance abuse

treatment which encompasses multiple recovery and relapse cycles than can further endanger the well-being of a child. Here child welfare officials may rule on the side of safety, making it a requirement that the parent maintain drug-free before children are returned. Further, once released from jail, the parent will most likely return to the same environment with high levels of drug availability and the same friends who may also continue to use drugs that fueled the initial addiction. Thus a parent recovering from drug addiction faces multiple challenges in parenting and remaining drug free. These challenges may perpetuate a cycle of further abuse or neglect as part of the cycle of drug addiction.

The Role of Resources

The purpose of this article was to begin to describe and explicate in greater detail the specific mechanisms by which the substance use and the substance use environment contribute to specific types of child maltreatment. Lacking from this discussion has been the role that resources, social services, or intervention programs can play in reducing or mitigating the effects of substance use and its ecology. Another equally important line of inquiry that could extend this framework would be to provide an in-depth examination those factors that might affect service utilization: availability (location), accessibility (travel considerations), acceptability (stigma attached), and affordability (Stefl & Prospero, 1985). Thus it is not enough to say there are programs designed to reduce substance use but these programs have to be located in or around areas where maltreating parents can easily use and access them. Lack of gender-neutral and supportive services for substance abuse treatment, the cyclical nature substance use recovery including one or more relapse episodes followed by treatment and abstinence, and the lack of availability of treatment for mothers involved in the child welfare system make it difficult for these individuals to obtain adequate treatment services within a timeframe that promotes

reunification (Tracy, 1994). Part of the recovery process for substance abuse often entails making major changes in a person's environment in order to maintain a substance-free lifestyle (Hohman & Butt, 2001). Accordingly, these programs must be mindful of helping clients navigate the risky aspects of the environment in which they are living that may promote substance use or maltreating behaviors.

Challenges to Studying Social Mechanisms

In order to study the exact mechanisms by which the environment or individual behaviors are related to child maltreatment, one must be able to specify what those mechanisms are. This requires detailing the mechanisms a priori. As stated by (Stinchcombe, 1968), most scientists can easily provide two or three explanations for their findings in correlation studies after the fact. The real difficulty is in providing a strong theoretical justification for studying specific mechanisms and being able to test them with the data at hand. The mechanisms described here are complicated as they are trying to realistically depict the complexities of human behavior and our interactions with our social and physical environment.

Further, without investigating these relationships over time or some aspect of the patterning of the events, the studies remain correlational with little to no information on the causality of the mechanisms. Studying these relationships cross-sectionally will provide a basic understanding of whether or not there is any evidence to support the theoretical justification for specific mechanisms. However to truly explicate the relationships, surveys must ask questions about when, for example, substance use occurs in relationship to maltreating behaviors. Another approach would be to study these mechanisms in longitudinal studies where the beginning of substance use behaviors and influence of neighborhood environment can be studied over time. These studies also require large sample sizes in order to have enough statistical power to identify

significant relationships when they exist. All of these result in higher monetary costs and larger amounts of time and effort need to complete such studies. These costs may be prohibitive limiting one's ability to design and complete this type of research.

The reality is that no matter what mechanisms you specify, by virtue of choosing to measure some constructs, some behaviors, and not others, it influences what you do or do not find. This is one of the greatest challenges faced in understanding and studying the effect of mechanisms on behavior. At some point the focus must be on determining what mechanisms are most likely to result in child maltreatment so practitioners can develop prevention efforts that will be most effective at reducing maltreatment. One way to better understand the contribution of each of these mechanisms is by using Bayes factor. Bayes factor is not your traditional hypothesis testing where you reject or fail to reject one hypothesis over another, rather it combines the prior and posterior information in a ratio that provides evidence in favor of one model over the other. In essence, this ratio represents the data support for one hypothesis over another. Advantages of this approach are that models do not need to be nested, multiple hypotheses can be compared at one time, and it allows the data to support multiple hypotheses (Goodman, 1999). However, these advanced statistical analyses are complicated, difficult to implement and require that data be available to test multiple mechanisms.

The challenges associated with studying and understanding the influence of social mechanisms are not inconsequential. It requires a level of theoretical development and justification that goes past describing and explaining simple correlational findings. Despite these complexities, this approach also has the ability to significantly advance how we think about and develop interventions to address social problems, including child maltreatment.

Promise in Understanding Social Mechanisms

The potential for developing multiple avenues of prevention and intervention programs based on a better understanding of the nuances of the social mechanisms is great. Here, this paper theorizes that the substance use environment does not only affect maltreating behaviors through substance use. Social network characteristics, social support and neighborhood cohesion may all create environments that either condones or sanctions abusive and neglectful parenting practices. And, in the case of social support, it can do both depending on the type of support received. This challenges individuals designing prevention programs and working with parents at-risk for abuse or neglect to devise assessment tools and intervention strategies that assess both the positive and negative qualities of individuals, their social systems, and their environments to determine how such factors are being used by a given parent. Clinicians may want to be even more specific and ask questions about where the individuals in a client's support network live. Based on this framework, having a vast social network may not be helpful if none of the social network members live close enough to babysit in a pinch, or if the members of the client's social network who do live close are not the ones who provide tangible support. This distinction between knowing if a client has a lot of social support vs. knowing where that support lives and the specific types of support he or she receives holds implications for helping the clients with developing effective non-abuse or neglecting parenting strategies.

At the community level, understanding social mechanisms requires social service agencies to focus on the larger environment from where their clients come and work to enhance livability in those areas by developing a sound neighborhood economic structure and institutional supports possibly through local planning and development regulations that decreases the number of permits available for alcohol outlets or increasing the roles of place managers in these neighborhoods. Place managers are influential people in neighborhoods who act like "eyes on

the street” to prevent and deter crime (Eck, 1994, Mazerolle et al., 1998). This might also require neighborhood areas to find creative and innovative ways to tap into natural helping networks to formalize these relationships in at-risk areas or among at-risk populations to create stronger neighborhood foundations. As we continue to learn more about how and when the specific mechanisms result in abusive and neglectful parenting practices, this knowledge can be used to further tailor interventions that are designed to prevent and reduce child maltreatment.

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List of Figures

Figure 1: Conceptual Model of Social Mechanisms Relating Alcohol Outlet Density and Alcohol Use Behaviors to Child Maltreatment

Figure 2: Conceptual Model of Social Mechanisms Relating Drug Use and Drug Market Activities to Child Maltreatment



