CrimRxiv

The Contingent Effect of Guardianship on Victimization: An examination of people with and without mental health problems

Brent Teasdale, Leah Daigle, Taylor Gann

Published on: Jul 08, 2021

DOI: 10.21428/cb6ab371.8ea5bfca

License: [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License \(CC-BY-NC-ND 4.0\)](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Abstract

Mixed effects of guardianship on victimization have been found in the literature (Finkelhor & Asdigian, 1996; Meithe, Stafford, & Sloane, 1990; Tillyer, Tillyer, Miller, & Pangrac, 2011). It is possible that these divergent findings have emerged because research has not recognized how the need for guardianship may shape the results. That is, individuals who are not suitable targets (i.e. individuals without mental health problems – those who are not perceived as vulnerable or incapable of defending themselves) do not need guardianship, resulting in null findings for the protective effects of guardianship on victimization. We examine the possibility that mental health problems and guardianship interact to produce victimization in the Life Opportunities Survey, a nationally representative survey of individuals in the United Kingdom (n = 27,516). Logistic regression analyses support our hypothesis that the effects of guardianship on victimization, which is measured as violence or the threat of violence against an individual, are contingent on the presence of mental health problems (i.e. any emotional or psychological health condition). The risk of victimization for those with mental health problems who had guardianship was substantially lower than for those with mental health who lacked guardianship (11.5% versus 17%, respectively). We discuss this finding in light of routine activities theory and crime prevention for people with mental health problems.

Keywords: Mental Illness, Victimization, Guardianship, Routine Activities

Introduction

Research over the past few decades has focused on the link between mental illness and violence (Choe, Teplin, & Abram, 2008; Estroff, Zimmer, Lachicotte, & Benoit, 1994; Hiday, 1995; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Link, Struening, Rahav, Phelan, & Nuttbrock, 1997; Swartz, Swanson, Hiday, Borum, Wagner, & Burns, 1998). This traditional focus on violence by people with mental illness has been recently complemented by research on violence against people who suffer from mental illness. Victimization among this population includes property and personal crime, with personal victimization including physical violence or the threat of violence against an individual. Scholars have consistently found that people who suffer from a major mental illness (e.g. schizophrenia, schizoaffective disorder, bipolar, depressive psychosis) are at an increased risk for victimization in comparison to their non-disordered counterparts (Goodman et al., 2001; Hiday, Swanson, Swartz, Borum, & Wagner, 2001; Hiday, Swartz, Swanson, Borum, & Wagner, 1999;; Khalifeh & Dean,

2010; Kushel, Evans, Perry, Robertson & Moss, 2003; Roy, Crocker, Nicholls, Latimer, & Allyon, 2014; Silver, 2002; Teplin, McClelland, Abram, & Weiner, 2005; Tillyer et al., 2011; Walsh et al., 2003). For example, in a large scale epidemiological study of crime victimization drawn from 936 psychiatric agencies across Chicago, Teplin and colleagues (2005) found that over 25% of the sample of people suffering from severe mental illness had experienced some form of violent victimization (attempted or completed). This rate was 11.8 times higher than that of the general population. In addition, 21% and 28% of the disordered sample experienced theft and other property crime, respectively. Compared to the general population, the odds of experiencing either of these types of crime were significantly greater for those with severe mental illness (6 to 23 times higher odds; Teplin et al., 2005).

Similarly, Hiday and colleagues (1999) examined the prevalence of victimization among individuals with mental health problems who were admitted to psychiatric care and then released with outpatient commitment. Their analysis found higher rates of violent victimization for those with mental illness as compared to their non-disordered counterparts. In particular, 8.2% of patients reported being victims of a violent crime compared to the annual rate of 3.1% for the general population (Hiday et al., 1999). Furthermore, meta-analyses of victimization prevalence among people suffering from mental illness have summarized a similar pattern of findings, although the increased risk of victimization varies (2.3 - 140.4 times higher odds of victimization; Choe, Teplin, & Abram, 2008; Maniglio, 2008; Trevillion, Oram, Feder, & Howard, 2012). This increased risk spans across several forms of victimization including domestic violence (Trevillion et al., 2012), property crime (Maniglio, 2008), and sexual assault (Goodman, Rosenberg, Mueser, & Drake, 1997).

Although research on the victimization of this population has gained momentum, few explanations as to why these individuals experience an increased risk for victimization have been developed (for exceptions see Latalova, Kamaradova, & Prasko, 2014; Roy et al., 2014; Teasdale, 2009). To explore this risk, criminological perspectives, such as routine activities, can be employed to further investigate the dynamics of victimization for disordered samples.

Routine Activities and Victimization

Although there are numerous theories outside of the criminal justice realm that seek to explain victimization, in this paper we focus on Cohen and Felson's (1979) Routine Activities theory. Routine Activities theory, along with its counterpart, Lifestyles-exposure theory (i.e. victimization is dependent on the formulation of certain lifestyles

that lead to increased exposure to offenders; Hindelang, Gottfredson, & Garofalo, 1978), have been the dominant criminological theories of victimization for nearly four decades. Routine Activities proposes that for a victimization event to occur, a motivated offender must come into contact with a suitable target, in the absence of a guardian capable of preventing the crime (Cohen & Felson, 1979).

Cohen and Felson (1979) assert that motivated offenders are individuals who are willing and capable to commit a criminal act. These motivations are driven by a range of elements that surround a person's life, such as poverty or substance abuse. Conversely, suitable targets are individuals who are perceived as vulnerable or desirable for a variety of reasons (e.g., material possessions, perceived as weaker than the offender, externalizing behaviors that may antagonize the offender, Cohen & Felson, 1979). The selection of specific targets may stem from potential material gains, which offenders might receive from the intended victim (e.g. an offender desires what an individual possesses), or the target may be perceived as more vulnerable than others (e.g. individuals with mental health problems may not perceive danger). The final element needed for a criminal event to occur is the absence of capable guardians (Cohen & Felson, 1979). Capable guardians can vary from friends and family, to intervening strangers.

To test their hypothesis that suitable targets and a lack of capable guardianship may be predictive of predatory crime (e.g., homicide, rape, burglary), Cohen and Felson (1979) examined social patterns between the late 1940s to the mid-1970s. Their analyses suggested that shifting household activity patterns such as more women entering the labor force, more people attending college, more young people going out at night, and the resultant absence of capable guardians at home were significantly associated with increased rates of homicide, rape, burglary, and assault. This correlation stemmed from the increased nighttime activity associated with the younger generation and individuals leaving their households for an extended period of time (Cohen & Felson, 1979). Cohen and Felson (1979) asserted that people who spent increased time away from home decreased their level of guardianship, and increased their target vulnerability. Since the publication of their seminal work, routine activities theory has been subjected to much empirical testing (Finkelhor & Asdigian, 1996; Meithe & Mier, 1990; Meithe et al., 1990; Spano & Nagy, 2005).

Research employing a routine activities approach has provided support for the significance of target vulnerability, but research on guardianship has demonstrated mixed support (Meier & Miethe, 1993; Miethe & Meier, 1990; Miethe et al., 1990;

Finkelhor & Asdigian, 1996; Tillyer et al., 2011; Spano & Nagy, 2005). Although social (other individuals serving as a deterrent for crime) and physical guardianship (e.g., the ability to protect oneself via a weapon or physical ability) have been shown to have consistent effects on property crime (Bennet, 1991; Garofalo & Clark, 1992; Kennedy & Forde, 1990; Meithe, Stafford, & Long, 1987; Wilcox, Madensen, & Tillyer, 2007), guardianship from violent crime has demonstrated mixed findings, with some studies showing it is positively related to victimization, some showing it is negatively related to victimization, and others finding no relationship.

For example, Meithe and colleagues (1990), utilizing data from 33,773 individuals from eight cities in the U.S., found that the odds of serial victimization decreased when the number of household guardians (i.e. individuals residing within the residence) decreased (Meithe et al., 1990). Individuals who lived in smaller households or lived alone appeared to have decreased odds of being serially victimized. This finding contradicted prior work regarding the risks of living alone (Meithe & Meier, 1990).¹ For example, Meithe and Meier (1990) found that living alone increased the odds of personal victimization. Living alone also increased the odds of experiencing personal theft and burglary.

With regard to familial ties, using data from the first wave of the National Longitudinal Study of Adolescent Health, Tillyer and colleagues (2011) examined the importance of parental guardianship (i.e. attachment and direct control) in preventing violent victimization. Their results evidenced minimal support for attachment, but direct control had a significant effect on personal victimization in the opposite of the predicted direction—it increased risk (Tillyer et al., 2011). Similarly, Schreck and colleagues (2002) examined the relationship between familial ties and risk of violent victimization through data collected from high school students in Arkansas. Their analysis indicated that guardianship (i.e. familial ties and commitment to school) did not directly nor indirectly relate to personal victimization. Further, stronger familial bonds showed a positive association with victimization – increasing risk (Schreck et al., 2002). Others have found a similar, positive relationship with sexual victimization. In particular, Fisher, Daigle, and Cullen's (2010) examination of sexual victimization of college women randomly selected from 233 universities across the U.S. revealed that carrying self-protection is related to an increased risk of sexual victimization.

Other studies have demonstrated the protective power of guardianship for victimization (Meithe et al., 1990; Spano & Nagy, 2005). For example, using the British Crime Survey, Meithe and Meier (1990) examined the relationship between routine

activities theory and different forms of victimization (i.e. burglary, personal theft, and personal violence). Their results indicated that social guardianship (as measured by the level of parental monitoring, whether the individual lives with their parents, whether they have a curfew, and whether the parents know where the respondent is) were significant predictors of all three types of victimization studied (Meithe & Meier, 1990). Finkelhor and Asdigian (1996), employing U.S. data from the National Youth Victimization Prevention Study, found that social guardianship (as measured by parental supervision, positive parent-child relationships, and parental structure) was a significant protective factor for sexual assault. In their analysis of rural adolescents in Alabama, Spano and Nagy (2005) also found a significant association between social guardianship (as measured by parental monitoring and social isolation) and physical assault victimization. Specifically, parental monitoring acted as a deterrent factor while social isolation (the absence of guardianship, in which an individual has no one to talk to, or someone they can turn to for help) increased the risk of victimization.

Conversely, several studies have null effects of guardianship on violent victimization (Bennet, 1991; Finkelhor & Asdigian, 1996; Schreck et al., 2002). In particular, Schreck and colleagues (2002) examined the association between routine activities/lifestyles and violent victimization among adolescents. Employing data collected from high schools within the U.S., their results evidenced null effects of guardianship (i.e. social ties such as attachments to parents and school) on violent victimization. Paralleling the domestic findings, Bennett (1991) analyzed data from a cross-national study to test the relationship between routine activities and victimization across 52 different nations. Bennett (1991) found that guardianship (as measured by “female participation in the labor force” (p. 151) played no role in explaining variation in violent victimization, internationally.

Guardianship, Mental Illness, and Victimization

In contrast to the somewhat mixed patterns found within the general victimization literature, guardianship has been consistently linked to violent victimization amongst people with mental illness (Dean et al., 2007; Kushel et al., 2003; Latalova et al., 2014; Maniglio, 2009; Teasdale, 2009). Examining individuals from four urban mental health facilities within the UK, Dean and colleagues (2007) assessed the prevalence of reported victimization occurring over a two year period. They found that persons with mental illness who had received little to no daily contact with supportive guardians (family and friends) experienced higher rates of personal victimization (Dean et al.,

2007). That is, lower levels of guardianship resulted in increased rates of violent victimization.

This consistent finding that lack of capable guardianship increases risk of victimization for persons with mental illness is especially important given that experiencing social isolation from others is common among persons with mental illness (Latalova et al., 2014; Maniglio, 2009). This social isolation can lead to instabilities in guardianship or the complete absence of a protective network (Spano & Nagy, 2005). Several studies have highlighted increased instability in guardianship among persons with mental illness and have found that this unreliability among guardians is a significant predictor of increased victimization (Goodman et al., 2001; Hiday et al., 1999; Kushel et al., 2003). For example, using a large sample of adults with severe mental illness recruited through the mental health systems of four eastern U.S. states, Goodman and colleagues (2001) found that individuals suffering from a mental disorder who had experienced unstable housing in the past 6 months experienced higher rates of victimization. Homelessness contributed to the absence of capable guardians and increased exposure to risk.

This finding raises the question of why people who suffer from mental illness require capable guardianship. It may be that people who suffer from severe mental illness may inadvertently alienate significant others through externalizing behaviors, resulting in relationships that involve conflict (Markowitz, 2011; Silver, 2002). In fact, Silver (2002) estimated that 38% of people suffering from major mental illnesses were in relationships that involved conflict, operationalized as relationships with people “with whom you really don’t get along, or don’t like or who seems to upset you” (p. 197).

Moreover, caregiver burnout has been raised as a significant concern for those who provide assistance to people who suffer from mental disorders. Although not all individuals with mental health concerns require a caregiver, burnout among care providers for those who do need assistance is an important psychological concern (Chadda, 2014). Roughly one-quarter of the partners of people who suffered from mental illness were characterized as highly burdened (Angermeyer, Bull, Bernert, Dietrick, & Kopf, 2006). This burden is especially pronounced for caregivers of individuals with schizophrenia due to deficits in knowledge of the illness, objective burden attributed to external symptoms, and subjective distress of the caregiver (e.g. depersonalization, financial burden, social isolation, etc.; Chan, 2011). It may be that burnout coupled with relationships involving conflict significantly reduces the supply

of capable guardians for people who suffer from mental illnesses, leaving them vulnerable to violence.

The necessity of capable guardians for persons with mental illness in preventing victimization raises issues regarding the research on the victimization of this group. Because the general victimization literature provides mixed support for the need for capable protectors, the apparent contrast in the mental illness literature suggests that specific factors unique to individuals with mental health problems are influencing this relationship. Perhaps those who suffer from mental illness are perceived as more suitable targets than their non-disordered counterparts. This increased target suitability necessitates capable guardians to prevent victimization. For those who do not suffer from mental illness and therefore are less-suitable targets, guardianship is not necessary.

Mental Illness and Target Suitability

Although this is not the main focus of this study, the following section briefly presents possible explanations as to how individuals suffering from mental illness may be perceived as suitable targets. Employing aspects from Finkelhor and Asdigian's (1996) reconceptualization of target suitability (i.e. vulnerability and antagonism), individuals with mental illness may be more vulnerable given deficits in their capacity to deter victimization. Given that symptoms associated with mental illness (i.e. impaired reality, disorganized thought process, and poor planning/problem solving) may inhibit one's cognitive processing, individuals suffering from mental illnesses may not perceive a situation to be dangerous, or may not react appropriately (Teplin et al., 2005). Further, potential disorganized thought processes may negatively influence the way in which an individual suffering from a mental illness assesses the need for assistance (Irani, Seligman, Kamath, Kohler, & Gur, 2012). Although those who suffer from thought-disturbances are a relatively small sub-set of the population who live with a mental illness, common disorders such as anxiety disorder may also contribute to perceived vulnerability, and thus potential victimization (Arseneault, Bowes, & Shakoor, 2010).

Along this same vein, stigma associated with mental illness may influence perceptions of vulnerability and empowerment among people who suffer from mental illnesses (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997; Rusch, Angermeyer & Corrigan, 2005). That is, individuals with mental illness are often negatively labeled (Link et al., 1997). These negative depictions of the mental illness population not only affect perceptions of self, but also impact career development and formulation of social ties (Rusch et al., 2005). With respect to self-esteem, stigmatization stemming from a

mental illness label may lower self-esteem and increase the risk of victimization (Slee & Rigby, 1993). For example, Sharp (1996) examined the relationship between low self-esteem and bullying among 377 adolescents within post-secondary schools in England. Her analyses reported a significant association between self-esteem and bully victimization, and found that those with lower self-esteem were bullied more extensively.

Conversely, individuals suffering from mental health problems may unintentionally antagonize their offenders through disruptive behaviors (Hiday, 1997; Silver, 2002). Although these behaviors are not typical of the general population who suffer from mental illness, Hiday (1997) contended that attempting to exercise social control over this fraction of individuals with mental illness in order to cease antagonistic behaviors may result in tense situations. These situations may further escalate, and may result in physical harm to the individual suffering from mental illness. Silver (2002) termed these social situations as “conflicted relationships”, and sought to test the association between these strained ties and victimization of those with mental health problems. Employing data from the MacArthur Foundation’s Violence Risk Assessment Study, Silver (2002) found not only a positive association between violent victimization and involvement in conflicted relationships, but that these relationships fully mediated the link between patient status (i.e. possessing a mental illness) and violent victimization. This finding further highlights the importance of target antagonism among the mentally ill. Although the above researchers have suggested that those who suffer from mental illness may unintentionally antagonize offenders, this is, in no way, acceptable behavior.

Based on the foregoing, we hypothesize (consistent with the original Routine Activities theory; Cohen & Felson, 1979) that the impact of guardianship on victimization will depend on target suitability, or stated differently – that guardianship will be important in reducing victimization for those with mental health problems because they are more likely to be suitable targets.

The Current Study

The inconsistent pattern of findings with regards to guardianship raises an interesting possibility. Perhaps, we cannot take a one-size-fits-all approach to assessing the effects of guardianship on victimization. That is, perhaps guardianship works only for those who need it – suitable targets. This assertion, we argue, is consistent with the original premise of routine activities, which suggests the convergence in space and time of all three elements (a motivated offender, a suitable target, and the absence of capable

guardians) is necessary for a crime to occur. Simply lacking guardianship alone (a main effect) is insufficient to produce victimization. In contrast, when a suitable target is left without guardianship (an interaction effect), then a victimization event is more likely to occur. Thus, we hypothesize that for people who have mental health problems, guardianship will have stronger effects on victimization than for people without mental health problems. The key hypotheses are as follows:

1. Individuals suffering from mental health problems will have higher odds of being victimized than those who do not suffer from mental health problems.
2. The impact of guardianship on victimization will depend on whether or not the individual has a mental health problem.

Methods

The data for this study come from the Life Opportunities Survey (LOS), a nationally representative study conducted by the Office for Disability Issues, part of the Office for National Statistics in the United Kingdom. The survey was designed to assess both disabled and non-disabled individuals in terms of work, education, social participation, and use of public services. Importantly, the survey collected information about victimization, mental health status, and guardianship, allowing us to test our key hypotheses.

Sampling for the LOS utilized a simple random sample of households (Dawe, 2011). The researchers identified 34,004 eligible households, with 19,951 participating, a response rate of 59% (Office for Disability Issues, 2011). Addresses were considered ineligible if there was no private home at the address. Each address had approximately a 1 in 700 chance of inclusion (Howe, 2010). Within participating households, every household member was eligible to be interviewed. This strategy resulted in completed interviews with 31,161 individuals. The data were collected between 2009 and 2011. Data collection was completed using computer assisted personal interview (CAPI). Special accommodations were made to assist individuals with survey completion. For example, Braille cards were made for those who were vision impaired, as were large print versions of the survey; British Sign Language interpreters were provided, and interviewers were also provided with disability awareness training (Emerson & Roulstone, 2014).

Measures

victimization. Our dependent variable was measured by a single item, that asked individuals “In the last 12 months, have you personally experienced violence or force used or threatened against you?” Response options were coded as 1 = yes and 0 = no.

mental health problems. Mental health problems were measured based on an item that asked “Do you have any emotional, psychological, or mental ill health conditions that have lasted, or are expected to last, 12 months or more?” Response options were coded 1 = yes and 0 = no.

guardianship. Guardianship was measured based on an item that asked “How many people would you say you feel close to, that is, you could count on them if you had a problem?” Response options were coded none, one or two, three to five, and six or more. Because of the skewed distribution of the variable, we dichotomized it so that 1 = six or more and 0 = five or fewer. In addition, in order to capture physical guardianship, we include a dichotomous indicator of homelessness (1 = homeless and 0 if otherwise).

public transportation. Usage of public transportation may expose riders to risk, as this activity draws people away from their homes. Thus we control for riding public transportation in the analyses that follow. We measure public transportation based on six items ($\alpha = .58$) that capture public transportation use. Those include the following: “In the last 12 months, have you travelled on local buses?”, “In the last 12 months have you travelled on long distance buses/coaches?”, “In the last 12 months, have you travelled on the underground?”, “In the last 12 months, have you travelled on local trains?”, “In the last 12 months, have you travelled on long distance/intercity trains?”, and “In the last 12 months, have you travelled in taxis or minicabs?” All six items had response options of 1 = yes and 0 = no. The six items were summed to create the index of public transportation utilization.

social service utilization. Social service utilization was measured by a single item, which asked respondents “In the last 12 months, have you contacted or had dealings with any of the services on this card?” One of the response options was “Social Services.” Those who replied yes to this item were coded 1 and those who responded no were coded 0.

controls. In addition to the variables of substantive interest, we also control for *sex* (1 = female), *race* (a dichotomous indicator of white =1 versus all others=0), and multiple indicators of socio-economic status: *education* (1 = college degree, 0 = no), *gross income (measured in British Pounds per year)*, *unemployment* (1 = yes). In

addition, to control for country-level differences in exposure to crime, we control for *country of residence* (Scotland, Wales, and Ireland, versus England – the omitted referent category). In addition, we control for *immigrant status* (1 = yes, 0 = no), to adjust for the possibility that immigrants are targeted for victimization or reside in communities that expose them to increased victimization risk. Finally, we include a dichotomous indicator of cigarette use (1 = smokes currently, 0 = non-smoker).

Data Analysis

To take into account the dichotomous nature of our dependent variable, crosstabs and logistic regression analyses were performed. To test our moderation hypothesis, we created a cross-product multiplicative term between mental illness status and guardianship.

Results

As shown in Table 1, most individuals are not victims of violence. Indeed, only 5% of respondents reported a past year violent victimization. Few of the individuals reported mental health problems (6%) and most had extensive guardianship networks (61.7%). Most of the respondents were female (55%), White (92%), and from England (75%). Turning to the bivariate results, mental health problems were significantly associated with victimization based on a chi square test of independence ($p < .000$). Of those who reported a mental health problem, 14.4% reported a violent victimization, while only 4.2% of those without a mental health problem reported victimization. Similarly, guardianship was significantly (although modestly) associated with victimization based on a chi square test of independence ($p < .000$). Of those who reported extensive guardianship networks, 4.5% reported victimization, while 6.0% of those without extensive guardianship reported victimization. We also examined mental health problems amongst those with and without large guardianship networks. A greater percentage of those without a mental health problem had a large guardianship network compared to those with a mental health problem (62.9% vs. 42.7%, respectively).

Insert Table 1 About Here

Interestingly, when we examine the effect of guardianship on victimization at the bivariate level, split by mental health status, a more complex pattern emerges. As shown in Table 2, amongst those with no mental health problems, guardianship reduced victimization slightly (4.9% without extensive guardianship reported

victimization and 4.2% with extensive guardianship reported victimization); however, amongst those with mental health problems, guardianship reduced victimization significantly and substantially. Amongst those with a mental health problem, approximately 17% of those without extensive guardianship reported victimization, while 11.5% of those with extensive guardianship reported victimization. In order to assess this interaction further, we turn to a multivariate logistic regression model.

Insert Table 2 About Here

As shown in Model 1 of Table 3, there were a number of significant predictors of victimization in our multivariate model. First, mental health problems significantly increased the odds of victimization (OR = 3.02). Second, guardianship significantly reduced the odds of victimization (OR = .85). Those who were unemployed have significantly higher odds of victimization (OR = 1.25), as did those who rode public transportation (OR = 1.08) and those who utilized social services (OR = 2.41). Several control variables were also significantly associated with victimization risk. Females had significantly lower odds than males of victimization (OR = .74). Older individuals had a significantly decreased odds of victimization (OR = .97). White individuals had significantly lower odds of victimization than non-White individuals (OR = .70). Education correlated with significantly decreased odds of victimization (OR = .84). Finally, cigarette use was significantly associated with increased odds of victimization (OR = 1.59).

Finally, we assess our hypothesis that the effect of guardianship on victimization depends upon mental health status. As shown in Model 2 of Table 3, there is a significant interaction effect ($p = .020$). The direction suggests that guardianship has a stronger effect in reducing the odds of victimization for those with a mental health problem than for those without. This finding is consistent with the literature on mental health, guardianship, and victimization, and also consistent with routine activities theory's prediction that a convergence in space of a suitable target without capable guardianship is necessary for a victimization event to occur.

Discussion

In building on research examining victimization of persons with mental illness, we assessed the relationship between mental health problems, capable guardianship, and victimization. Our first main finding is that persons with mental health problems experienced an increased risk of victimization compared with others. This finding is consistent with the growing body of literature that explores the risk of victimization for

persons with mental illness (Dean et al., 2007; Goodman et al., 2001; Hiday et al., 1999; Teplin et al., 2005). We also found that persons with mental health problems were less likely than those without a mental health problem to have a large social network of people whom they can count on, in the event of a problem. This difference demonstrates that people with mental health problems have fewer people who can provide capable guardianship. It may also mean that in the event of victimization, persons with mental health problems may not have appropriate supports to whom they can turn. This lack of capable guardianship, we found, is related to victimization amongst this group. Although speculative, it also may mean that persons with mental illness are more at risk of experiencing revictimization after an event, because they are less likely to have supports who can provide advice and care, or point them to victim services or other resources after a victimizing event. Research has documented how important it is for victims to have supportive responses after victimization (Ullman, 2010), in that receiving perceived negative responses is linked with delayed recovery and overall negative health outcomes (Campbell, Ahrens, Sefl, Wasco, & Barnes, 2001). Future research should more fully consider the implications of having a social network to turn to post-victimization for people with mental illness.

Directions for Future Research

Beyond these initial findings, our work suggests an important consideration in the empirical testing of routine activities theory. That is, we argue that main effects analyses of routine activities may be inappropriate. The assertion from Cohen and Felson (1979) that it is the convergence of a suitable target with a lack of capable guardianship that predicts victimization suggests the appropriate empirical test is one of a moderation effect, not a main effect. Specifically, they argue that the absence of one of these conditions may make the presence of the other irrelevant for a victimization event (e.g., if a suitable target is not present, it does not matter if there is a lack of capable guardianship-victimization will not occur). Such a relationship is suggestive of a moderating impact, not an additive one. It is our expectation that this conditional effect of guardianship on victimization may help explain some of the mixed findings with regards to guardianship in the victimization literature. That is, guardianship works when it needs to--when a suitable target is present.

Substantively, our findings suggest that those without mental illness may be less suitable targets and therefore may not require capable guardianship. In contrast, as Teasdale (2009) has argued, individuals who suffer from mental disorders may be more focused on their own internal states and may therefore require additional

guardianship, which their non-disordered counterparts do not. This explanation is consistent with our finding that guardianship moderates the impact of mental health problems on victimization. It is also consistent with the work of Outlaw (2015), in her examination of intimate partner violence. She argues that the effects of guardianship on victimization depend on motives for violence. In her paper, she ignores the target suitability issue, because IPV victims are selected as partners first, not based on target suitability (Outlaw, 2015: 3). Our extension of this line of thought examines variation in the impact of guardianship based on target suitability.

A full test of these ideas, we argue would be a three-way interaction between offender motivation, target suitability, and capable guardianship. Interestingly, early empirical work on routine activities focused on these interaction effects (Cohen, Felson & Land, 1980; Lynch, 1987; Miethe & Meier, 1990), with mixed results. For example, Miethe and Meier conclude that “Multiplicative models that test for interactions among these major variables also produce results that are contrary to theoretical predictions” (p. 243). Interestingly, a close examination of their results for assault (pgs. 256-257) suggests a significant interaction, with patterns of attractive targets without capable guardians fairing consistently worse on assault outcomes. This parallels our findings. Similarly, Cohen and colleagues (1980) conclude “Thus, the multiplicative structure specified in our theory also is supported” (p. 108). We call on future researchers to return to an examination of interaction effects rather than main effects in testing routine activities. In particular, the three-way interaction between exposure to motivated offenders, lack of capable guardians, and target suitability seems worthy of investigation. We believe this is an important next step in the empirical testing of routine activities theory.

Further, other groups of suitable targets should be targeted for research on how capable guardianship interacts with motives and target suitability. For example, persons with disabilities may be viewed as suitable targets by offenders and in need of capable guardianship. For them, having capable guardianship may be more effective than for those without disabilities. Similarly, LGBT individuals may be viewed as more suitable targets. Because of this potential need, specific groups may require more significant efforts by capable guardians to prevent victimization. If persons of particular groups are indeed at increased risk given their perception of vulnerability, the role of diversity should be included in the conceptualization of target suitability. Difference and diversity may be symbols for would-be assailants that members of these groups are suitable as targets. Future research should explore these possibilities.

Our findings also suggest the need for expanding and improving capable guardianship for persons with mental health issues. Although some mental illnesses may be linked with behaviors that can be aggravating or alienating (Silver, 2002), it is important that people with mental illness have social networks in tact that they can rely on. In practice, this may mean that health care professionals need to coordinate with family and friends of people with mental illness to ensure that they are aware of the importance of providing prosocial support. It may also mean that friends and family are targets for educational training on the behaviors of persons with mental illness so that they do not react negatively (even with violence), and that they understand the important role they may play in reducing victimization of their loved one. This line of thought coincides with Brea Perry's work on social networks and mental health (Perry, 2006; Perry & Pescosolido, 2015). For example, Perry and Pescosolido (2015) find that patients who are able to utilize their social support networks for effective support have better mental health outcomes than those who do not. Furthermore, Perry (2006) found that individuals who experienced social network disruptions and were unable to find new supportive networks in foster care had worse psychological outcomes than those with strong supportive networks. For those people in clinical settings, particularly in-patient care, our findings highlight the importance that these prosocial networks are developed or enhanced pre-release.

Limitations

Our work, like any survey research project, is subject to some important limitations. First, we are not able to establish temporal ordering. It is possible that victimization causes mental health problems or decreases in guardianship, rather than as we have proposed that those variables lead to victimization. Despite this limitation, it is hard to account for the interaction effect we find in the current project from a reverse temporal order perspective. That is, it is hard to imagine why victimization would decrease guardianship more for those with mental health problems than those without. Perhaps victimization creates greater levels of psychosocial distress (Boney-McCoy & Finkelhor, 1995) among those with a mental health problem that then reduces the likelihood that those close to the victim respond with warmth and care. Such a relationship, however, has not been empirically explored. This inability to establish time-ordering may also explain why social service utilization is a risk factor in our study. It may be that those who are victimized are more likely than others to seek out social services rather than vice versa. As with any survey research project, another limitation of the current study is potentially spuriousness. Although, we attempt to control for a variety of risk factors for victimization, there is the possibility that

unaccounted for variables may be creating spurious associations in our data. While it is easy to imagine additional variables that might create victimization risk, it is more difficult to uncover omitted variables that might simultaneously cause victimization, mental health problems, and guardianship, since the interaction effect incorporates both of these independent variables. Any source of spuriousness for the moderation hypothesis should theoretically cause all three variables.

Another limitation surrounds the use of secondary data in that we used dichotomous indicators of guardianship and social service utilization that were provided in the data. Although we would desire to use additional measures that account for the full conception of guardianship and social service utilization, we were limited with what was available. Nonetheless, despite this lack of variation, our results are supportive of guardianship being more relevant for victimization among those with mental health problems. Future research should consider a broader range of guardianship and service utilization measures, including continuous measures.

Finally, the data, while well-suited to test our moderation hypothesis is based on a relatively homogenous sample, with mostly White respondents. We believe this lack of racial diversity is an important consideration. Whether the results we find here generalize to other groups is an open empirical question. We call on future researchers to examine other race/ethnic groups, LGBT minorities, and disabled persons, in order to see if the moderation of guardianship in predicting victimization depends on these other target characteristics.

Conclusion

Our findings show that capable guardianship is more effective for persons with mental health problems in reducing the odds of victimization than for those without mental health problems. Considering our findings coupled with research by Outlaw (2015), we believe that there are preliminary indications that the relationship between motivated offenders, suitable targets, and capable guardians is more nuanced than how it is generally assessed in the victimization literature. As such, researchers should continue to explore how the effects of guardianship may be contingent on the other concepts germane to routine activities theory—target suitability and motivated offenders.

References

Angermeyer, M. C., Bull, N., Bernert, S., Dietrich, S., & Kopf, A. (2006). Burnout of caregivers: a comparison between partners of psychiatric patients and nurses.

Archives of psychiatric Nursing, 20(4), 158-165.

Arseneault, L., Bowes, L., & Shakoor, S. (2010). Bullying victimization in youths and mental health problems: 'Much ado about nothing'? *Psychological Medicine*, 40(5), 717-729.

Bennett, R. R. (1991). Routine activities: A cross-national assessment of a criminological perspective. *Social Forces*, 70(1), 147-163.

Campbell, R., Ahrens, C. E., Sefl, T., Wasco, S. M., & Barnes, H. E. (2001). Social reactions to rape victims: Healing and hurtful effects on psychological and physical health outcomes. *Violence and victims*, 16(3), 287.

Chadda, R. K. (2014). Caring for the family caregivers of persons with mental illness. *Indian Journal of Psychiatry*, 56(3), 221.

Chan, S. W. C. (2011). Global perspective of burden of family caregivers for persons with schizophrenia. *Archives of psychiatric nursing*, 25(5), 339-349.

Choe, J. Y., Teplin, L. A., & Abram, K. M. (2008). Perpetration of violence, violent victimization, and severe mental illness: balancing public health concerns. *Psychiatric Services*.

Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 588-608.

Dawe, F. (2011). Life opportunities survey: Wave one technical report, 2009/11. Newport, Wales: *Office for National Statistics*.

Dean, K., Moran, P., Fahy, T., Tyrer, P., Leese, M., Creed, F., & Walsh, E. (2007). Predictors of violent victimization amongst those with psychosis. *Acta Psychiatrica Scandinavica*, 116(5), 345-353.

Emerson, E., & Roulstone, A. (2014). Developing an evidence base for violent and disablist hate crime in Britain: Findings from the life opportunities survey. *Journal of Interpersonal Violence*, 29(17), 3086.

Estroff, S. E., Zimmer, C., Lachicotte, W. S., & Benoit, J. (1994). The influence of social networks and social support on violence by persons with serious mental illness. *Psychiatric Services*, 45(7), 669-679.

Finkelhor, D., & Asdigian, N. L. (1996). Risk factors for youth victimization: Beyond a lifestyles/routine activities theory approach. *Violence and Victims, 11*(1), 3-19.

Fisher, B. S., Daigle, L. E., & Cullen, F. T. (2010). What distinguishes single from recurrent sexual victims? The role of lifestyle-routine activities and first-incident characteristics. *Justice Quarterly, 27*, 102-129.

Garofalo, J., & Clark, D. (1992). Guardianship and residential burglary. *Justice Quarterly, 9*(3), 443-463.

Gladstone, B. M., Boydell, K. M., Seeman, M. V., & McKeever, P. D. (2011). Children's experiences of parental mental illness: a literature review. *Early Intervention in Psychiatry, 5*(4), 271-289.

Goodman, L. A., Rosenberg, S. D., Mueser, K. T., & Drake, R. E. (1997). Physical and sexual assault history in women with serious mental illness: prevalence, correlates, treatment, and future research directions. *Schizophrenia Bulletin, 23*(4), 685.

Goodman, L. A., Salyers, M. P., Mueser, K. T., Rosenberg, S. D., Swartz, M., Essock, S. M., & Swanson, J. (2001). Recent victimization in women and men with severe mental illness: prevalence and correlates. *Journal of Traumatic Stress, 14*(4), 615-632.

Hiday, V. A. (1995). The social context of mental illness and violence. *Journal of Health and Social Behavior, 122*-137.

Hiday, V. A. (1997). Understanding the connection between mental illness and violence. *International Journal of Law and Psychiatry, 20*(4), 399-417.

Hiday, V. A., Swanson, J. W., Swartz, M. S., Borum, R., & Wagner, H. R. (2001). Victimization: a link between mental illness and violence? *International Journal of Law and Psychiatry, 24*(6), 559-572.

Hiday, V. A., Swartz, M. S., Swanson, J. W., Borum, R., & Wagner, H. R. (1999). Criminal victimization of persons with severe mental illness. *Psychiatric Services, 50*(1), 62-68.

Hindelang, M. J., Gottfredson, M. R., & Garofalo, J. (1978). *Victims of personal crime: An empirical foundation for a theory of personal victimization*. Cambridge, MA: Ballinger.

Irani, F., Seligman, S., Kamath, V., Kohler, C., & Gur, R. C. (2012). A meta-analysis of emotion perception and functional outcomes in schizophrenia. *Schizophrenia*

research, 137(1), 203-211.

Kennedy, L. W., & Forde, D. R. (1990). Routine activities and crime: An analysis of victimization in Canada. *Criminology*, 28(1), 137-152.

Khalifeh, H., & Dean, K. (2010). Gender and violence against people with severe mental illness. *International Review of Psychiatry*, 22(5), 535-546.

Kushel, M. B., Evans, J. L., Perry, S., Robertson, M. J., & Moss, A. R. (2003). No door to lock: victimization among homeless and marginally housed persons. *Archives of Internal Medicine*, 163(20), 2492-2499.

Latalova, K., Kamaradova, D., & Prasko, J. (2014). Violent victimization of adult patients with severe mental illness: a systematic review. *Neuropsychiatry Dis Treat*, 10(1925), 521.

Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: labels, causes, dangerousness, and social distance. *American Journal of Public Health*, 89(9), 1328-1333.

Link, B. G., Struening, E. L., Rahav, M., Phelan, J. C., & Nuttbrock, L. (1997). On stigma and its consequences: evidence from a longitudinal study of men with dual diagnoses of mental illness and substance abuse. *Journal of Health and Social Behavior*, 177-190.

Maniglio, R. (2009). Severe mental illness and criminal victimization: a systematic review. *Acta Psychiatrica Scandinavica*, 119(3), 180-191.

Markowitz, F. E. (2011). Mental illness, crime, and violence: Risk, context, and social control. *Aggression and Violent Behavior*, 16(1), 36-44.

Meier, R. F., & Miethe, T. D. (1993). Understanding theories of criminal victimization. *Crime and Justice*, 459-499.

Miethe, T. D., & Meier, R. F. (1990). Opportunity, choice, and criminal victimization: a test of a theoretical model. *Journal of Research in Crime and Delinquency*, 27(3), 243-266.

Miethe, T. D., Stafford, M. C., & Long, J. S. (1987). Social differentiation in criminal victimization: A test of routine activities/lifestyle theories. *American Sociological Review*, 184-194.

Miethe, T. D., Stafford, M. C., & Sloane, D. (1990). Lifestyle changes and risks of criminal victimization. *Journal of Quantitative Criminology*, 6(4), 357-376.

Office for Disability Issues. (2011). Life opportunities survey: Wave one results, 2009/11. London, England:

Outlaw, M. (2015). Guardians Against Spousal Violence? A Case for Considering Motive. *Journal of Family Violence*, 30(1), 1-12

Perry, B. L. (2006). Understanding social network disruption: The case of youth in foster care. *Social Problems*, 53(3), 371-391.

Perry, B. L., & Pescosolido, B. A. (2015). Social network activation: the role of health discussion partners in recovery from mental illness. *Social Science & Medicine*, 125, 116-128.

Roy, L., Crocker, A. G., Nicholls, T. L., Latimer, E. A., & Ayllon, A. R. (2014). Criminal behavior and victimization among homeless individuals with severe mental illness: a systematic review. *Psychiatric services*, 65(6), 739-750.

Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. *European psychiatry*, 20(8), 529-539.

Schreck, C. J., & Fisher, B. S. (2004). Specifying the influence of family and peers on violent victimization extending routine activities and lifestyles theories. *Journal of Interpersonal Violence*, 19(9), 1021-1041.

Schreck, C. J., Wright, R. A., & Miller, J. M. (2002). A study of individual and situational antecedents of violent victimization. *Justice Quarterly*, 19(1), 159-180.

Sharp, S. (1996). Self-esteem, response style and victimization: Possible ways of preventing victimization through parenting and school based training programmes. *School Psychology International*, 17(4), 347-357.

Silver, E. (2002). Mental disorder and violent victimization: the mediating role of involvement in conflicted social relationships. *Criminology*, 40(1), 191-212.

Slee, P. T., & Rigby, K. (1993). The relationship of Eysenck's personality factors and self-esteem to bully-victim behaviour in Australian schoolboys. *Personality and Individual Differences*, 14(2), 371-373.

- Spano, R., & Nagy, S. (2005). Social guardianship and social isolation: An application and extension of lifestyle/routine activities theory to rural adolescents. *Rural Sociology*, 70(3), 414-437.
- Swartz, M. S., Swanson, J. W., Hiday, V. A., Borum, R., Wagner, H. R., & Burns, B. J. (1998). Violence and severe mental illness: the effects of substance abuse and nonadherence to medication. *American Journal of Psychiatry*.
- Teasdale, B. (2009). Mental disorder and violent victimization. *Criminal Justice and Behavior*, 36(5), 513-535.
- Teplin, L. A., McClelland, G. M., Abram, K. M., & Weiner, D. A. (2005). Crime victimization in adults with severe mental illness: comparison with the national crime victimization survey. *Archives of General Psychiatry*, 62(8), 911-921.
- Tewksbury, R., & Mustaine, E. E. (2003). College students' lifestyles and self-protective behaviors: Further considerations of the guardianship concept in routine activity theory. *Criminal Justice and Behavior*, 30(3), 302-327.
- Tillyer, M. S., Tillyer, R., Miller, H. V., & Pangrac, R. (2010). Reexamining the correlates of adolescent violent victimization: The importance of exposure, guardianship, and target characteristics. *Journal of Interpersonal Violence*.
- Trevillion, K., Oram, S., Feder, G., & Howard, L. M. (2012). Experiences of domestic violence and mental disorders: a systematic review and meta-analysis. *PloS one*, 7(12), e51740.
- Ullman, S. E. (2010). Talking about sexual assault: Society's response to survivors. American Psychological Association.
- Walsh, E., Moran, P., Scott, C., McKenzie, K., Burns, T., Creed, F., Tryer, P., Murray, R., & Fahy, T. (2003). Prevalence of violent victimisation in severe mental illness. *The British Journal of Psychiatry*, 183(3), 233-238.
- Wilcox, P., Madensen, T. D., & Tillyer, M. S. (2007). Guardianship in context: Implications for burglary victimization risk and prevention. *Criminology*, 45(4), 771-803.

Table 1: Descriptive Statistics (n = 27,516)

--	--	--	--	--

	Mean	SD	Min	Max
Victimization	.05	.22	0	1
Mental Health Problem	.06	.22	0	1
Guardianship	.62	.49	0	1
Homeless	.01	.10	0	1
Unemployed	.04	.20	0	1
Public Transportation	2.42	1.57	0	6
Social Services	.08	.28	0	1
Cigarette Use	.21	.41	0	1
Female	.55	.50	0	1
Age	50.1	17.6	16	80
White	.93	.26	0	1
Degree	.19	.39	0	1
Gross Income	162690.1	18695.1	0	134310
Scotland	.09	.29	0	1
Wales	.05	.21	0	1
Ireland	.05	.23	0	1
Immigrant	.10	.29	0	1

Table 2: Layered Crosstab Examining Guardianship, Mental Health, and Victimization

		Victimization		
--	--	---------------	--	--

	Guardianship	No	Yes	χ^2
No Mental health Problem	No	9127 95.2%	460 4.8%	4.57*
	Yes	15573 95.8%	688 4.2%	
Mental Health Problem	No	782 81.8%	174 18.2%	18.89***
	Yes	637 89.5%	75 10.5%	

* $p < .05$

** $p < .01$

*** $p < .001$

Table 3: Multivariate Logistic Regression (n = 27,516)

	Model 1	Model 2				
	b	se	OR	b	se	OR
Mental Health Problem	1.11***	.08	3.02	1.26***	.10	3.51
Guardianship	-.17**	.06	.85	-.11	.06	.90
Homeless	.19	.27	1.21	.20	.27	1.22
Unemployed	.22*	.11	1.25	.22*	.11	1.25
Public Transport	.08***	.02	1.08	.08***	.02	1.08

Social Services	.88***	.08	2.41	.88***	.08	2.42
Cigarette Use	.47***	.06	1.59	.46***	.06	1.59
Female	-.30***	.06	.74	-.30***	.06	.74
Age	-.03***	.00	.97	-.03***	.00	.97
White	-.35**	.11	.70	-.35**	.11	.71
Degree	-.23**	.08	.84	-.23*	.08	.79
Gross Income	.00	.00	1.00	.00	.00	1.00
Scotland	-.26*	.11	.78	-.25*	.11	.78
Wales	-.19	.43	.83	-.18	.43	.84
Ireland	-.13	.40	.88	-.14	.41	.87
Immigrant	-.03	.11	.97	-.03	.11	.97
Mental Health X Guardianship	-	-	-	-.38*	.16	.69
Pseudo R ²		.11			.11	

* p < .05

** p < .01

*** p < .001

Footnotes

1. Although the authors found an unexpected relationship between guardianship and serial victimization, they also found that deficits in guardianship (i.e. smaller households) increased victimization risk over time. This further demonstrates the

mixed support for the aspect of guardianship on personal victimization across different analyses. [↩](#)