

THE IMPACT OF COMMUNITY RESOURCES ON VIOLENT AND PROPERTY CRIMES

by

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Abstract

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Violent and property crimes are of serious consequences across the world, the US and Texas. This research reports the findings of an exploratory study that assessed the relationships between different community resources – jobs and vocational training resources, advocacy resources, law enforcement resources, mental health and substance abuse resources, recreational resources, and social service and parenting resources and violent and property crimes in 254 counties in Texas.

This cross-sectional study was conducted based on a 2012 secondary data of 254 counties in Texas. Data for the independent variables were derived from the US Census Bureau and KIDS COUNT data center, while the dependent variables were derived from the Federal Bureau of Investigation's (FBI) Uniform Crimes Report. Community resource was measured through the community resource scale, while violent and property crimes were measured using the violent and property crime scale. One construct emerged from the independent variable – community resources, while two constructs emerged for the dependent variable – violent crimes and property crimes.

Data analyses included Pearson's correlation, confirmatory factor analysis, and structural equation modeling. All of the community resources – mental health and substance abuse resources, jobs and vocational training resources, social services and parenting resources, mental health and substance abuse resources, law enforcement

resources, and advocacy resources all have positive impact on violent and property crimes. Location in metropolitan or Non-metropolitan County, percentage of children less than 18 years old, and unemployment rate all had positive impact on violent and property crimes. The results of this study will expand our ability to understand to further design and improve resources in ways that may contribute to the larger ecological approaches to violent and property crimes prevention and intervention, from a social work standpoint. Implications for the profession of social work theory, education, research, policy, practice are discussed.

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Chapter 1

The Impact of Community Resources on Violent and Property Crimes

Introduction

Across the globe, incidences of community crimes such as murder, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and other crimes are high (Federal Bureau of Investigations, 2010a; 2010b; 2011; 2012; 2013). In the US, crime is identified as a major public health problem that must be addressed (Salzinger, Ng-Mak, Feldman, Kam & Rosario, 2006). This study specifically focuses on the relationships between community resources such as mental health services, substance abuse treatment resources, faith-based organizations, law enforcement resources, jobs and vocational resources and recreational resources on violent and property crimes.

Violence and Property Crimes

Violence is a terminology that has many definitions. Bartel, Borum, and Forth defined violence as “an act of physical battery sufficiently severe to cause injury that would require medical attention, a threat with a weapon in hand, or any act of forcible sexual assault” (Otto & Douglas, 2010, p. 63). This definition portrays violence as involving observable injury requiring professional response, crimes of sex, and use of injurious instruments such as guns against another person. According to the World Health Organization (WHO, 2013), violence is “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation.” Although this definition is similar to Bartel, et al.’s definition, it includes several additional categories of violence such as suicide, interpersonal violence, community violence, as well as their consequences.

According to Steinbrenner (2010), violent crimes share the following attributes: 1) it occurs at the interpersonal level, and can affect an individual or a community, 2) it can be perpetrated by a known person or by a stranger, 3) its occurrence is sudden to the victim; and, 4) it takes place in the home, online, in the community. To Cooley-Quille, Boyd, Frantz, and Walsh (1995), violence is an intentional act designed to inflict physical injury on one or more individuals in a community. One weakness that comes from this definition is that it captures physical consequences as the only factor in determining whether or not violence has occurred. The definition does not account for psychological and other non-physical consequences that a victim of violence may suffer. Although these definitions view the concept of violence from somewhat different angles, they overlap in at least, one aspect – violence is a negative phenomenon that may involve physical deprivations and/or injuries.

The Federal Bureau of Investigations (FBI, 2012) provides categories for violent crimes. Violent crimes are murder/homicide, rape/sexual assault, aggravated assault, and robbery. Property crimes are larceny theft, arson, burglary, and auto theft. Based on these attributes and the definitions discussed above, this study will consider violence as all the crimes listed by the FBI (2012) under the violent crime category. It will also consider property crimes as those crimes listed in the category(FBI, 2013). Consequently, murder/homicide, sexual assaults, aggravated assault, robbery, auto theft, burglary, larceny theft, and arson (Kennedy & Bennett, 2006; FBI, 2013), are conceptualized as violent and property crimes.

Prevalence of Violent Crimes

Despite the burgeoning amount of resources and efforts dedicated to preventing and controlling the phenomena, violent and property crimes have continued to remain at epidemic level. According to the Federal Bureau of Investigation preliminary report for

2012 (FBI, 2013), data collected from 13,770 law enforcement agencies between 2011 and 2012 showed about 1.2% increase in violent crimes in US communities, with approximately 1,214, 462 violent offenses committed nationwide in 2011 (FBI, 2013). Aside from the preliminary report, the overall report for 2011 and 2012, showed that violent crimes increased by 0.7% (FBI, 2013). In other words, a violent crime was committed every 26.0 seconds in the US, for year 2012.

Current data shows that murder which comprised of 1.2% of total violent crimes in 2012 was committed every 35.4 minutes in 2012, with an estimated 14,827 individuals murdered. Thus, there is about 1.1% increase in the rate of murder compared to 2011 outcomes. This translates to 4.7 murders per 100,000 individuals in 2012 (FBI, 2013).

Rape and sexual assault, a form of violent crime is also prevalent in communities across the US (Basile, Chen, Black, & Saltzman, 2007; Black, et al., 2011). According to the FBI (2012), about 84,376 incidences of forcible rape were reported in 2012. In other words, there was about 0.2% increase in forcible rapes between 2011 and 2012. The prevalence of forcible rape for 2012 is about 52.9 per 100,000 residents (FBI, 2013). Overall, 17.7 million females in the US have been victimized by rape (attempted or completed) while about 2.78 million men have also been victimized by rape (Rape Abuse and Incest National Network, 2014). This means that 1 in every 6 women in the US has a lifetime rape victimization (14.8%, completed) and 2.8% (attempted). For males, the prevalence of rape is 3%. This means that one in every 33 males in the US has been victimized by completed or attempted rape (Rape Abuse and Incest National Network, 2014). Rape, which accounted for 6.2% of total violent crimes, was committed every 6.2 minutes in 2012 (FBI, 2013).

Robbery is another form of violent crime. A total of 354, 420 robberies occurred in the US in 2012. This amounted to 0.1% decrease from 2011 estimates. In other

words, 119.2 incidences were recorded per 100,000 people (FBI, 2014). Robbery accounted for 29.2% of total crimes as robbery was committed every 1.5 minutes in 2012. This is notwithstanding the possibility that about one-quarter of all robberies is usually unreported to law enforcement (Goode, 2011). According to the FBI, about \$414 million dollars is lost annually through robbery (FBI, 2014). Aggravated assault is another form of violent crime. In 2012, the FBI reported 760, 739 estimated aggravated assaults across the country (FBI, 2013). Aggravated assault, which accounted for 62.6% of total violent crimes, was committed every 41.5 seconds in 2012.

Prevalence of Property crimes

Despite that property crimes slightly declined (.9%) in the US from 2011 to 2012, they are destructive and rampant. According to the Federal Bureau of Investigation (FBI, 2012), there were about 8,975,438 property crimes in the US in 2012. A property crime was committed every 3.5 seconds, (FBI, 2012). The total cost of property crimes during 2012 (the most recent available data) was estimated at \$15.5 billion (FBI, 2014). Larceny theft comprised 68.5% of the total property crimes in 2012. A total of 6,150,598 larceny thefts occurred in the US in 2012 (FBI, 2012), with an average loss estimated at \$987 per offense. The rate of larceny thefts in the same year is 1,959.3 per 100,000 people. This rate remained the same for 2012 when compared with the 2011 estimate. The total cost of larceny thefts in 2012 was estimated at \$6 billion (FBI, 2012). Burglaries comprised about 23.4% of all property crimes in 2012. In fact, a total of 2, 103, 787 burglaries occurred in 2012. Although this is a decline of about 3.7% compared to the 2011 data (FBI, 2012), it still has significant consequences for victims. For example, \$4.7 billion is estimated as the total amount lost by victims due to burglary by its victims, in 2012. So, on average, each offense had a loss valued of about \$2,230.

Auto theft constituted 8.0% of the total property crime rate in 2012 (FBI, 2012). A total of 721,853 auto thefts occurred nationwide in the same year. This is a rate of 229.7 per 100,000 residents. This rate also represents an increase of 0.6% of total auto thefts, when compared with 2011 estimates. Auto thefts also resulted in average cost of \$6,019 per offense. Arson is also a form of property crime. According to the FBI (2011), arson is “any willful or malicious burning or attempting to burn, with or without intent to defraud, a dwelling house, public building, motor vehicle or aircraft, personal property of another, etc.” (p.1). Throughout the US, 18.7 arson was committed for every 100,000 resident, in 2012. A total of 52,766 arsons were reported by law enforcement agencies in 2012. Close to 47 percent of all arsons involved buildings such as residential homes, storage facilities, and public buildings. Also 23.1 percent of arsons were against mobile property. 30.1 percent of all reports of arson were against crops, timber, fences, In terms of monetary cost, the mean dollar loss for each arson was \$42,133. There was an increase in arson in 2012. When compared with 2011 data, the increase was less than one-tenth of 1 percent.

Despite the slight decrease in violent crimes and property crimes nationwide in the most recent year of reports on crimes, the prevalence of all kinds of crimes remains high and demands added attention. Although there seems to be large amounts of resources and research to address violent and property crimes, we need further research to explore additional crime reduction efforts to adequately address and prevent community crime.

Risks for Violent and Property Crimes

Numerous risk factors for crime have been highlighted in the literature. The individual-level include mental health and substance abuse issues such as Post-

traumatic Stress Disorder (PTSD), depression and externalizing problems such violence and aggression (Elbogen & Johnson 2009; Kaufman, Kaufman, Kaufman, Dringus, Weiss, Delaney-Moretlew, and Ross, 2013). Substance abuse is another important risk factor for crime. Marijuana, cocaine, crack and alcohol abuse have all been found to contribute to the perpetration of community crime (Ceballos, McLoyd & Toyokawa, 2004). Poor academic performance, including school dropout, has also been found to be associated with the perpetration and victimization of community crime (Delaney-Black, Covington, Ondersma, Nordstrom- Klee, Templin, Ager, J., et al., 2002). Studies find that youth with aggressive tendencies which manifests in anger outbursts and violent actions are also at risk for crime (Bell & Jenkins, 1993; Farrell & Bruce, 1997; Garbarino, Dubrow, Kostelny, & Pardo, 1992). Additional risk factors of crime include family problems manifested by exposure to domestic violence or poor marital relationships (Gorman-Smith, Henry & Tolan, 2010; Holtzman & Roberts, 2012). Gender is also a risk factor for crime. Males are more likely than females to s to perpetrate and be victimized by acts of violent and property crimes (Farrell & Bruce, 1997).

There are numerous community-level risk factors for violent and property crimes. Community-level risks include crime exposure (Shieldow, Gorman-Smith, Tolan & Henry, 2001; Ho, 2008), living in an urban neighborhood (Sheidow, Gorman-Smith, Tolan & Henry, 2001;), living in a public housing facility (Peterson, Krivo & Harris, 2000), poverty and unemployment (Shiedow et al., 2001); ethnic heterogeneity (Bell & Jenkins, 1993), and a general lack of community resources (Peterson, Krivo & Harris, 2000). Ccommunity-level risks are briefly mentioned in this section and are discussed extensively in Chapter Two.

Consequences of Violent and Property Crimes

The consequences of community crime are many and severe (Hamblen & Goguen, 2007) and are well documented in the literature (Overstreet & Braun, 2000; Lambert, Copeland-Linder & Jalongo, 2008). Literature documents a complex relationship between the risk factors of community crime and the consequences of community crime. In other words, many factors are both a risk factor for community crime and a consequence of community crime. For example, mental health issues, including Post-Traumatic Stress Disorder (PTSD), substance abuse, aggressive tendencies, poor academic achievement, and family violence may be considered as both risks and consequences of crime. Consequences of violent and property crimes occur at both the individual level and the community level.

Individual-Level Consequences

There are several individual level consequences of violent and property crimes. Studies find that individuals who witness violence may be at risk of numerous mental and physical health problems (Lambert, Copeland-Linder & Jalongo, 2008). As noted by Salzinger, NgMak, Feldman, Kam, and Rosario (2006), individuals who are exposed to violent crimes may feel unsafe, and may experience some reduction in their ability to trust people. They may also experience dysfunctions, behavioral challenges such as poor affect regulation, and adaptation difficulties, which affects the larger community or society. Studies find that people exposed to violent crimes may display internalizing symptoms such as depression, suicidal thoughts and ideation, insomnia, and facial tick, as well as externalizing symptoms such as aggressiveness and impulsive behavior (Lambert, Copeland-Linder, & Jalongo, 2008; Wilson-Genderson & Pruchno, 2013).

Perhaps one of the most remarkable consequences of witnessing and experiencing violence is the greater likelihood of perpetration of future violence. Studies

find that exposure to or witnessing violence is strongly and positively associated with individual involvement in future violence (Farrell & Bruce, 1997). For example, Schwab-Stone, Chen, Greenberger, Silver, Lichtman and Voyce (1999) examined the consequences of violence in a community and found that participants who committed violence that warranted hospital/professional had been previously exposed to violent crimes.

Also, individuals exposed to violence may have a higher tendency towards poor academic performance compared to individuals without such experience (Lambert, Copeland-Linder, & Jalongo, 2008). Substance use has also been identified as a consequence of violence exposure. Particularly, marijuana, hard drug, and abuse of alcohol (Vermeiren, Schwab-Stone, Deboutte, Leckman, & Ruckin, 2003) have been documented as consequences of violence and crime exposure.

Community-level Consequences

Just as violence and crimes have consequences at the individual level, there are also consequences at the community level. Community level consequences include high financial impacts, and 2) low sense of safety among residents. The cost of violence in the US is estimated at about 3.3% of the Gross Domestic Product (GDP). Also, the cost of lifetime treatment for violence in the US, per individual is estimated at between \$37,000 and \$42,000. Importantly, communities bear most of the financial cost of violence. For example, studies show that between 56% and 80% of the cost of treatment for gun wounds and stabbing in the US are borne by the public (WHO, 2004). Although individual costs of crime vary by incidents, the costs remain high (National Crime Prevention Council, 1999; Fromm, 2001; Miller, Cohen & Wiersema, 1996; Gunderson, 1999; Cook & Ludwig, 2002). Overall, high prevalence of violent and property crimes

often result in diversion of money that could be used in developing communities to fight crimes.

Individuals want to feel safe in their communities in order to achieve their desired wellbeing. However, violent crimes and property crimes impose a general lack of sense of safety among individuals residing in or doing business in such communities (Overstreet & Braun, 2000). The links between poor sense of safety and crime can be understood based on the reactions of community members who have witnessed violence. For example, in the aftermath of the shootings that occurred in Newtown, Connecticut in December, 2012, in which school-aged children, and six adults, including the shooter's mother were killed (Public Broadcasting Service, PBS, 2012), community members reported poor sense of safety and general sense of fear. Similar consequences were also reported in the case of the shooting in Aurora, in which 12 people were killed with 58 wounded (Wall Street Journal, 2012). In Columbine High School in Colorado where a shooting took place in 1999 that killed 12 people and wounded 28, about 59% of the staff left the community within three years of the shooting (Wall Street Journal, 2012). As discussed above, violent and property crimes affect both individuals and communities, and has serious consequences. Comprehensive approaches towards violence and crime prevention are necessary. In agreement with the foregoing, Wilson-Genderson and Pruchno (2013) emphasized a need to implement crime prevention strategies at the individual and community levels. This study assesses community resources as a critical component of any comprehensive strategy to address violent and property crimes.

Prevention of Violent and Property Crimes

Although we know much about the problems created by community crime, we know much less about how to prevent them. Existing studies focusing on the prevention of community crime seem to focus on community resources as having mediational

relationship rather than direct relationship with violence and crime. This approach has been well articulated by Zimmerman and Messner (2012). We also know that communities with high rates of resource deprivation have high rates of homicide and murder (Sampson, Morenoff, & Cannon-Rowley 2001) and other forms of community crime. Also, Sampson and Groves' (1989) study empirically tested social disorganization as an explanatory perspective for violence and crime and found a relationship between community resource deprivation and property crimes, specifically, burglary, theft, and vandalism. But despite these findings, studies aimed at preventing violent and property crimes in community settings through resource allocation remain relatively scarce.

Although the relationship between resources and violent and property crimes is well documented, there is not enough research that examine how a congeneric set of resources may relate to specific types of crimes (Yates, Egeland, & Srouge, 2003). In response to Zins, Weissberg, Wang, and Walbergs' (1994) call for broader community efforts to prevent and address community crime, this study seeks to assess the impact of community resources on violent and property crimes.

Purpose of the Study

Limited research have explored the relationship between community resources (from a social work standpoint) and violent and property crimes, and there are no known studies to the author that address how different kinds of community resources impact violent and property crimes in counties in Texas. This study examines the relationships between community resources: 1) social services/parenting and family resources, 2) health and mental health resources/ substance abuse treatment resources, 3) law enforcement resources, 4) advocacy resources, 5) jobs and vocational resources, and 6) recreational facilities, violent crimes, such as murder/homicide, aggravated assaults,

robbery, and sexual assaults, and property crimes, including larceny theft, burglary, auto theft, and arson. The study will specifically assess how the prevalence of community resources relate to the prevalence of violent and property crime in Texas.

Significance of the Study

In recent years, studies and interventions aimed at preventing or decreasing crime have increased (Zimmerman & Messner, 2012). However, crime incidences have remained high in communities across the US. Although numerous studies have been conducted in the area of crime prevention (Humphreys, Moos & Cohen, 1997), the relationships between different types of community resources and violent and property crimes have yet to be fully explored. Additionally, most studies examining the relationships between community factors (such as resource distribution) and community crime are based on the larger ecological frameworks of crime to which social work contribution and/or perspective is largely lacking. The field of social work has done a good job in addressing the consequences of violence and crime at the micro level, by way of providing individual, group and/or family psychotherapy to victims, as well as engaging in program development and management around these issues. However, the field is lacking significantly in the larger efforts on ways to understand and address violence and crime at the institutional and/or macro level. This therefore attempts to provide this otherwise needed contribution to the larger ecological discussion on violence and crime prevention and mitigation. Also, the socio-ecological model of crime has been widely discussed and assessed, but there has been none about social work resources as a part of that ecological model.

This study extends previous studies on community crime in multiple ways. First, it assesses the relationships between social work – related resources and different types of crimes. Second, it applies resource dependency, an organizational theory in assessing

how the resources relate to violent and property crime, based on a social work conceptualization. Hence, one of the goals of this study is to create and test the Resource Model of Violent and Property Crimes. In doing this, I developed a measurement model assessing the fit of the two categories of crime according to the FBI (violent and property crime). I also derived a community resource scale. Although an exploratory study, this study may provide practical and useful information of how community resources relate to different types of crime. The study only assesses the relationships between violent and property crimes and does not infer causality.

Chapter 2

Literature Review

Introduction

This chapter provides an overview of literature pertaining to several aspects of violent and property crimes. Following a discussion on the various forms of violent and property crimes comprising community crime, I address community- level and individual- level risk factors for violent and property crimes. I also discuss community resources as protective factors against community crime, as well as my conceptualization of community resources. I discuss various kinds of community resources and present the limited literature on how specific kinds of community resources relate to community crime. I conclude the chapter with a general summary of the review of the literature.

Forms of Violent and Property Crimes

Violent crimes include murder/manslaughter/homicide, forcible rape, robbery, and aggravated assault (Goode, 2011; FBI, 2013). Property crimes include burglary, larceny-theft, and motor-vehicle theft (Goode, 2011; FBI, 2013).

Violent Crimes

The FBI (2013) categorizes violent crimes as murder/homicide, forcible rape, aggravated assault and robbery (FBI, 2013). As noted in Chapter One, about 1,214, 462 violent offenses were committed nationwide in 2011 (FBI, 2014). This translates into one violent crime, per 26 minutes in the same year.

According to the FBI (2013), murder is committed when an individual willfully kills another individual. However, deaths that occur as a result of suicide, negligence, accident, attempted murder, or justifiable homicide (which occurs when a law enforcement officer kills an individual in the performance of his or her legal duties), are not considered murder. Furthermore, a felon who is killed while engaging in a felony is

not considered to have been murdered. Murder is one of the most common forms of violence in the US (FBI, 2008). According to the FBI (2012) murder comprised about 1.2% of total violent crimes in 2012 and was committed every 35.4 minutes in the same year. Particularly, 14,827 individuals were murdered in the US in 2012. Thus compared to 2011, the rate of murder that occurred in communities in the US increased by about 1.1% in 2012. In other words, the rate of murder was 4.7 murders per 100,000 individuals in 2012 (FBI, 2012).

Another form of violent crime (FBI, 2010) is forcible rape. According to the FBI (2010), forcible rape is the “carnal knowledge of a female forcibly and against her will.” This definition shows that the FBI did not include statutory rape (that is, rape that involves no use of force) in the category of forcible rape. However, attempts to rape an individual by use of force or by threat to use force are considered as forcible rape under the definition. Still under FBI definition of forcible rape, sexual violence on males was considered circumstantial, and was mostly counted as aggravated assaults, rather than sexual assaults (Goode, 2011). Consequently, this definition was changed in 2011 due to obvious limitations on the old definition. Hence the new definition identifies rape as “penetration no matter how slight, of the vagina or anus with anybody part or object, or oral penetration by a sex organ of another person without the consent of the victim” (FBI, 2013, p. 1). Available data shows that 84,376 incidences of forcible rape were reported in communities in the US, 2012 (FBI, 2012). This means that forcible rapes increased by 0.2% between 2011 and 2012. This means that the rate of forcible rape per for 2012 was about 52.9 per 100,000 residents (FBI, 2013).

Robbery is another form of violent crime (FBI 2013). According to the FBI (2013), robbery is “the taking or attempting to take anything of value from the care, custody or control of a person or persons by force or threat of force or violence and or putting the

victim in fear.” Robbery is different from theft and burglary because it involves a face-to-face encounter between the perpetrator and the victim. Apart from the physical and material consequences of robbery, scholars are also interested in the psychological effects of the act on victims. A total of 354,420 robberies took place in the US in 2012. In other words, 119.2 incidences of robbery were recorded per 100,000 people (FBI, 2014). Also, robbery accounted for 29.2% of total crimes and was committed every 1.5 minutes in 2012.

Lastly, aggravated assault, defined as “an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury” (FBI, 2010) is a violent crime. Aggravated assaults have been associated with PTSD and other consequences among community members. According to the FBI (2013) 760,739 estimated cases of aggravated assaults occurred in communities in the US in 2012 (FBI, 2013). Specifically, this type of violent crime constituted 62.6% of total violent crimes that occurred in 2012. This means that a case of aggravated assault was recorded every 41.5 seconds in 2012.

Property Crimes

The FBI identifies four types of property crime. They are burglary, larceny theft, auto theft, and arson (FBI, 2011). Burglary is “the unlawful entry of a structure to commit a felony or theft, whether or not force was used to gain access to a property is not a necessary condition in determining if burglary has taken place” (Goode, 2011, p. 105). The major factor about burglary is that there is an unlawful entry into someone else’s property; whether or not something is stolen is irrelevant. As noted earlier, burglary accounted for about 23.4% of all property crimes in the US in 2012. That means that a total of 2,103,787 burglaries occurred in the same year. Burglary has significant consequences for victims. For example, \$4.7 billion is estimated as the total amount lost

to burglary by its victims, in 2012. So, on average, each victim/offense had a loss valued at \$2,230. Many community members suffer from burglaries, and may experience changes in their life circumstances due to being victimized by burglary. According to a 2012 report by the FBI (2012), the cities in which burglaries are more prevalent were Cleveland Ohio, Toledo Ohio, Memphis Tennessee, Detroit Michigan, Cincinnati Ohio, Indianapolis Indiana, Oklahoma City Oklahoma, St Louis Missouri, Tulsa Oklahoma, and Oakland California. The annual incidences of burglary in these cities ranged from 1,515.0 per 100,000 residents to 2,473.5 per 100,000 residents.

Larceny theft is a property crime. Larceny-theft involves stealing. However, it is not robbery, and it is not burglary. According to the FBI, larceny-theft is the “unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another; attempts to do these crimes are included in this definition” (Goode, 2011, p. 105). Examples of larceny-theft include snatching of purse, stealing from cars and other vehicles, pocket-picking, and bicycle thefts, among others. Larceny-theft might negatively impact resident’s ability to socialize and feel safe in their communities, among other consequences. In 2012, the FBI reported the national larceny theft incidences at 6,150,598. Hence, the rate of larceny-theft was at 1,959.3 per 100,000 residents. Additionally, larceny- theft constituted about 68.5% of all property crimes in 2012, with an average cost of \$ 987 per victim or offense. At the national level, the overall cost of larceny-theft in 2012 was above \$6 billion (FBI, 2012).

Motor vehicle theft is a property crime that involves “the theft or attempted theft of a motor vehicle. This offense includes the stealing of automobiles, trucks, busses, motorcycles, snowmobiles, etc.” (Goode, 2011, p.105). Nationally, the cost of motor vehicle test was estimated at \$4.3 billion with the average loss estimated at \$6,019.

Also, the national prevalence of motor vehicle theft is estimated at 229.7 thefts per 100,000 residents. The total auto theft for 2012 is estimated at 721,053 (FBI, 2012).

Arson is another form of property crime. In fact, according to Baird (2006), arson has become a weapon of mass destruction with numerous consequences. Throughout the US, 18.7 arson was committed for every 100,000 resident, in 2012. A total of 52,766 arsons were reported by law enforcement agencies in 2012. Close to 47 percent of all arsons involved buildings such as residential homes, storage facilities, and public buildings. Also 23.1 percent of arsons were against mobile property. 30.1 percent of all reports of arson were against crops, timber, fences. Arson has also been identified as a form of weapon of mass destruction (Baird, 2006). In terms of monetary cost, the mean dollar loss for each arson was \$42,133. There was an increase in arson in 2012. When compared with 2011 data, the increase was less than one-tenth of 1 percent.

Risk Factors of Community Crime

Numerous studies have examined the risk factors for individual involvement in community crime. The risk factors for community crime can be broadly categorized into community-level risk factors and individual-level risk factors. However, I discuss the lack of community resources as a risk factor for community crime in greater detail than other risk factors because of this study's focus on the relationships between community resources and community crime.

Community-Level Factors

This section discusses the community-level risk factors of community crime. These include: 1) Violence exposure, 2) Living in an urban community, 3) Public housing, 4) Poverty and unemployment, 5) Gang involvement, and 6) General lack of community resources. Due to the focus of this study is to explore how community resources are

related to violent and property crime, lack of community resources will be discussed in more detail than the rest of the community-level risk factors.

Violence exposure

Before going forward, it is important to define the term “exposure to violence.” Some previous studies have used the term to mean witnessing violence or being a victim of violence. For example, in a study of violence exposure, Lambert et al. (2005) included violence witnessing and victimization as forms of violence exposure. Violence exposure is a serious issue, and communities with high incidences of violence have been compared to war situations (Horowitz, McKay & Marshal, 2005). In Bell and Jenkins’ (1993), study on violence in Chicago’s Southside significant associations were found between violence exposure and their engagement in violent acts such as fighting.

In a meta-analysis involving 114 studies on violence and crime exposure, Fowler et al. (2009) found that violence exposure had its largest effects on aggressive tendencies (externalizing symptoms) among the study sample. The smallest effects were reported on internalizing symptoms such as depression. In a study of 225 adolescents, DuRant, Pendegrast, and Cadenhead (1994) found that violence exposure correlated with participation in physical fights. Additional exposure also influenced participants’ involvement in gangs. In addition, a study of 80 adolescents by Ho (2008) found that participants who were exposed to violence had propensity to violate rules and engage in aggressive acts. In another cross-sectional study that examined the antisocial and pro-social characteristics in 78 adolescents exposed to violence, van der Merwe and Dawes (2000) found a significant relationship between exposure to violence and the development of antisocial characteristics. In a study examining the impact of exposure to violence among urban youth, Selner-O’Hagan et al. (1998) found that youth who

perpetrated violence were more likely to report having been exposed to violence compared to the sample with no history of violence exposure.

Some have explored predictive connections between violence exposure and violence perpetration. For example, Guerra, Huesmann and Spindler (2003) investigated attitudes towards violence exposure and aggression among 4,458 children who had been exposed to violence. Findings from the study showed that those who were exposed to violence had significant increased aggressive behaviors, and were more likely to accept violence. Additionally, a study by Gorman-Smith, et al. (2004) found that exposure to violence as a youth was a predictor of future perpetration of violence. In a study by Brady (2006) on the consequences of violence exposure, results showed that violence exposure predicted subsequent risk behaviors, such as risk sexual behaviors, lifetime substance abuse, and criminal activity.

Living in an urban community

Crime and violence are more prevalent in urban communities than in rural communities (Selner-O'Hagan, et al., 1998). The links between urban residence and violent and property crime is widely suggested in the literature (Gorman-Smith, et al., 2004; Tolan Gorman-Smith, & Henry, 2003; Schwab-Stone et al., 1995). For example, Gorman-Smith, et al. (2004) found that individuals living in urban neighborhoods were at more risk for exposure to violence and crime compared to those living in rural neighborhoods. Miller et al. (1999) found that youth who resided in urban New York were at high risk for being around high levels of violence including stabbings and murder. Furthermore, in a longitudinal study that examined the impact of geographical environments on participants' involvement in violence, Tolan, Goran-Smith, and Henry (2003) found that participants in urban communities experienced significantly more violence than people living in nonurban communities.

Living in Public housing

Studies show a relationship between living in public housing and community crime (Peterson, Krivo and Harris, 2000). Studies show that public housing strongly relate to high crime rates and neighborhood decline (US Department of Housing and Urban Development, 2000; Popkin et al., 2012). Popkin, Rich, Hendeby, Parrila, and Galsters' (2012) study on public housing and crimes in Atlanta and Chicago, found that communities in which public housing establishments were demolished experienced less crime levels compared to communities to which public houses were relocated, although the receiving neighborhoods had lesser crime rates than expected.

According to US Department of Housing and Urban Development (199), across the US, individuals residing in public housing facilities are more than two times likely to be victimized by gun violence compared to individuals residing in other communities. For example, 66 out of the 100 largest public housing authorities recorded about 360 homicides in 1998. By the first 6 months in 1999, the nation's public housing facilities also recorded 296 homicides. In a study by the US Department of Housing and Urban Development (1999), based on preliminary data from the National Crime Victimization Survey, results showed that residents in public housing facilities in smaller metropolitan areas had higher rates of violence victimization compared to those residing in public housing facilities in larger metropolitan areas. In a study on the impact of social disorganization on crime and delinquency, Peterson, Krivo and Harris (2000) also argue that public housing is a strong correlate of social disorganization. Social disorganization is a framework that posits community crime as the breakdown of community institutions and a sense of collectivity among members of a community which is associated with community crime.

In a study that assessed the effects of public housing on violent index crime rates for census tracts in Columbus, Ohio, for 1990, based on 177 tracts with at least 700 persons within the city, Peterson, Krivo, and Harris (2000) reported that public housing correlated positively with homicide, rape, robbery, and assault. The Housing and Urban Development (HUD) in a survey that sought to identify prevention strategies for public housing violence and crime found that many residents in a public housing facility reported a general lack of sense of safety in their neighborhood. Specifically about 22% of the participants reported that the public housing in which they resided were partially unsafe (13.5%) or very unsafe (9%). More than 50% of the participants reported gun violence as a major concern in their community.

Unemployment/poverty and community disadvantage

Although studies specifically measuring the relationships between unemployment, poverty and community disadvantage and community crime are evident, this review attempted to use related literature in advancing these relationships. Studies, over time, suggest that community level- poverty and the number of unemployed individuals are positively associated with community crime (Brooks-Gunn, Duncan, & Aber, 1997; Sampson, Raudenbush, & Earls, 1997). For example, In a more recent study using national data, Lin (2008) found that for each percentage unit increase in unemployment, crime rates increased by 1.8%. However, when a two-stage least squared regression was used to estimate the impact of unemployment on prevalence of crimes, crime rates increased to 4.8%.

Just like the discussion with unemployment, poverty has also shown to correlate with crime. Some scholars use terms such as economic disadvantage to describe communities with high prevalence of poverty (Peterson, Krivo & Harris, 2000). Gorman-Smith et al. (2000) reported that residents in communities with high rates of poverty had

more tendencies to exhibit escalating behaviors (which includes be violent acts) compared to residents in similarly impoverished communities but with improved social organization, and who had increased access to resources.

Gang involvement

Many violent incidences are correlated with gang involvement (Chigbu & del Carmen, 2013). In a cross-sectional study involving 702 youth, Barkin et al. (2001) found that adolescents' interest in gang violence predicted intent to engage in violence among females. Voisin, Torten, Slazar, Crosby and DiClemente (2008) also reported positive correlations between gang membership and crime in their study on pathways to drug abuse and risky sexual conducts among the participants. DuRant, et al. (1994) reported that about 91% of gang member participants had engaged in some form of crime perpetration or exposure, and about one-third (30%) of the participants had perpetrated street violence in the previous six months. In a study investigating the risk factors for violence perpetration among 676 youth, from 25 school districts in Southern California, Sussman, Skara, Weiner, and Dent (2004) found that participants who identified with "high risk groups" such as gangs had more propensities to perpetrate violence compared to the non-high risk group.

According to the FBI (2011), there are about 33,000 criminally-active street, motorcycle, and prison gangs in the US, with an estimated 1.4 million individual membership. The FBI (2011) also underscores the consequences of gangs to include different forms of crime – property and violent offenses. Particularly, gang violence in communities in the US ranged from 48% to 90%. According to FBI National Gang Threat Assessment Report (2011), a national report, up to 90% of crimes reported in some communities were committed by gang members (FBI, 2011). There were about 1,824 gang-related homicides in 2011 (US Department of Justice, 2013), and between 2001

and 2010, the FBI's Violent Gang Safe Street Taskforce recorded a total of 12,169 complaints, made 57,106 arrests and had 23,094 convictions due to gang violence. According to the FBI (2013), gangs use violence as a means to control the communities in which they exist.

General Lack of Community Resources

Lack of community resources is a risk factor for violent and property crimes (Barnette & Mencken, 2002), while the presence of community resources may be a protective factor against violent and property crimes. Barnett and Mencken (2002) found that lack of resources in a community is a risk factor for community crime. Specifically, Barnett and Mencken (2002), found that for each standard deviation unit increase in lack of resources or resource disadvantage, violent crimes increased by 55%. Studies consistently find relationship between institutional resource deficiency (otherwise lack of community resources) and crime (Sampson, Morenoff, & Gannon-Rowley, 2002; Sampson, Raudenbush, & Earls, 1997). Aizer's (2008) study of neighborhood violence among youth living in urban areas found that the most violent communities were also the most disadvantaged in that they had higher rates of unemployment, poverty and illiteracy level. The study measured disadvantage in terms of maternal education, family earnings, and dependence on government assistive programs.

In a study by Rosenfeld (1997) in Chicago, a police officer, in explaining the effects of lack of community resources posed the following rhetoric's: "Do you see any hardware stores? Do you see any grocery stores? Do you see any restaurants? Any bowling alleys? There is none here... Everything we take for granted ... It's not here... What do the kids have to do? Nothing." (Rosenfeld, p. 34). Communities that lack resources such as mental health services, substance abuse treatment services, faith-based services, vocational training services, recreational centers, legal services, family

and social services, and law enforcement services may be at higher risk for violent and property crimes compared to communities that have these resources.

In a study that examined the roles of neighborhood level resources on youth aggression and delinquency, using data from the Project on Human Development (N = 2226) and their caregivers in 80 neighborhoods in Chicago, found that residing in a Molnar, Cerda, Roberts, and Buka (2008) community with a high number of resources (organizations that provide services for youth and adults) was correlated with decreased aggression. Although aggression may not necessarily translate to community crime, the connections between aggression and future violence perpetration is documented in the literature (Holtzman & Robert, 2012).

Communities are said to be disadvantaged when they are unable to attract or maintain conventional resources that mitigate crime and violence (Peterson, Krivo & Harris, 2000). According to Peterson, Krivo and Harris (2000), a major result of community disadvantage is increased crime. As a consequence, individuals who reside in disadvantaged communities may lack resources that promote wellbeing and provide employment, and other resources. In such communities, resources that enhance opportunities such as libraries, recreational centers, and social services, may be positively related to crime, while resources that have been found to correlate positively with crime may remain prevalent (Peterson & Krivo, 2000).

Individual-level Risk Factors

This section discusses the individual level risk factors. The risk factors discussed under the section are: 1) mental illness, 2) gender, 3) substance abuse, 4) ethnic heterogeneity, and 5) family problems.

Mental Illness

The relationship between mental illness and community crime perpetration and exposure is well documented in the literature (Ozer & McDonald, 2006; Cooley-Quille et al., 2001; Dempsey, 2002; Duckworth et al., 2000; Farrell & Bruce, 1997; Foster et al., 2004; Gorman-Smith, & Tolan, 1998; Hammack et al., 2004; Howard et al., 2002), although the direction of the relationship between mental illness and violence is often not clear. Some studies find that mental health problems relate to crime (Glieb & Frank, 2014). For example, Cooley-Quille et al. (2001) found significant associations between anxiety and violence exposure but it was unclear if anxiety lead to violence exposure or vice versa.

In a cross-sectional study of the attitudes and life experiences among 521 male college students between 18 and 55 years old, Voller and Long (2009) found that perpetrators of sexual assault (a form of violent crime) had higher depression scores compared to non-perpetrators. Similarly, in a longitudinal study of the impact of serious mental illness on violence perpetration, Elbogen and Johnson (2009) found that people with serious mental illness had more violence propensities compared to participants without severe mental illness. Although severe mental illness did not predict violence in the study, it was related to having a history of violence, juvenile detention, physical abuse, perceived threats, substance abuse history, being unemployed, and being victimized through violence.

In a study that reviewed the files of people who were found not guilty by reason of mental illness (NGMI) who committed murder, attempted murder or serious assaults leading to serious injury between 1992 and 2008, Nielssen, Malhi, McGorry, and Large (2012) found that 12 of the study participants (n = 272) were manic when they committed the crimes for which they were held accountable, 10 had schizoaffective disorder, while

two of the participants had bipolar disorder. In another study that assessed the relationships between mania, homicide, and severe violence, Nielssen, Malhi, and Large (2012) also found that 49% of the participants in the study who attempted suicide, 53% of the participants engaged in self-injurious behaviors, 39% of the participants committed homicide, and 38% of the participants engaged in aggravated assault. All of these individuals were experiencing psychosis, a form of mental illness when they committed their offenses.

In a systematic review of studies on the associations between violence exposure and mental health symptoms, McDonalds and Richmond (2008) found that community crime correlated with mental health symptoms such as anxiety, depression and suicidal ideation. The study also, found that violence had the highest correlations with PTS. In a systematic review of 20 studies with information on 18,423 people with schizophrenia or other mental health diagnoses, Fazel et al (2009) found that 9.9% of the study sample who were diagnosed with schizophrenia and who experienced psychotic symptoms engaged in violent acts, compared to 1.6% of the study's sample who were not diagnosed with schizophrenia but without psychotic symptoms. In a study by Cooley-Quielle et al (2001), the authors found significant correlations between anxiety problems, a form of mental illness and community crime. Dempsey (2002) also found a relationship between depression, symptoms of post-traumatic stress disorder (PTSD) and community crime.

Gender

Just like mental illness, gender has also been identified as a risk factor for community crime, and has been documented as one of the predictors of violence. Being male correlates with perpetration of violent crimes (Bell & Jenkins, 1993; FBI, 2012; Farrell & Bruce, 1997; O'Keefe, 1997; Schwab-Stone, Chen, Greenberger, Silver,

Lichtman, & Voyce, 1999; Weist, Acosta, & Youngstrom, 2001). Hayine and Armstrong (2006) studied gender differences in the commission of the crime of homicide using data from multiple secondary datasets including the 1990 US census and the FBI Uniform Crime Reports (1987 to 1993) focusing on 148 cities. Findings from this study showed that males committed a much higher number of stranger homicides (14.5 per 1000) than females (0.27 per 1000).

According to the FBI's (2012), there was 14,485 homicides/murder incidences in 2011. Of this number, males committed more murder/homicides ($n = 9,485$, 62.5%) than the females ($n = 1,138$, 7.8%). Specifically, males consisted of 80.4% of all arrests made in relations to violent crimes and 62.9% of all arrests made on property crimes. In a study on the effects of violence and crime exposure on violent perpetration among adolescents in urban settings, Farrell and Bruce (1997) found that the male participants were exposed to more violence than the female participants. The study also found that the male participants reported higher frequencies of violence behavior compared to the females in the sample. In a longitudinal study that assessed parent support and pro-social cognition as protective factors against community crime, Schwab-Stone et al. (1999) found that the male participants perpetrated more violent acts than female participants both in 2000 and in 2001.

According to the US Department of Justice (2002) females are generally less likely to commit crimes such as homicides, compared to their male counterparts. Bacchini et al. (2011) found that violence exposure is correlated with greater numbers of aggressive acts in boys than girls. These findings are similar to that reported by Cooley-Quille et al. (2001) in which it was found that male participants were more likely to be exposed to violence compared than female participants.

Substance Abuse

Evidence suggests that violence and substance abuse are strongly correlated (Vermeiren, Schwab-Stone, Deboutte, Leckman, & Ruckin, 2003; Voisin, Neilands, Salazar, Crosby, and DiClemente, 2008) and that substance abuse, including drugs and alcohol, play an important role in the perpetuation of violence and crime. In a study by MacDonald, Erickson, Wells, Hathaway and Pakula (2008), 56.8% of the participants who were receiving treatment for cocaine reported being involved in violence. In a study assessing the association between criminal offending and substance use among 133 prisoners, Kouri, Pope, Powell, and Oliva (1997) found that 58% of the study participants were intoxicated at the time they committed crime. Additionally, 6% of the sample were experiencing drug-related withdrawal symptoms from illegal substances at the time they committed their crimes.

Collins and Schlenger (1988) studied the effects of alcohol on violence using data from 1,149 convicted felons. The authors assessed the drinking patterns of the study participants prior to the violent event and after violence perpetration. Findings showed that alcohol intoxication was positively and significantly associated with violence perpetration and subsequent incarceration. The Manitoba Auto Theft Task Force in 2009 reported that substance abuse was highly related to auto theft. A similar finding was also reported by the Arizona Criminal Justice Commission (2004). Specifically, the report showed that drug use was a motivating factor for auto thefts in Arizona based on a secondary analysis using the FBI Uniform Crime Report.

Similarly, studies find that the use of substance is related to sexual violence. Jewkes, Nduna, Shai, and Dunkle (2012) examined the risks of rape perpetration among 1,147 men (15 to 26 years old) in a randomized control trial and found higher incidences of rape perpetration among men who used drugs. In fact, according to the authors, 24%

of the rapes reported would not have occurred if drug use was not involved. Additionally, a cross-sectional path analysis of predictors of assault perpetration by Abbey, Parkhill, BeShears, Clinton-Sherrod, and Zawacki (2005), showed that alcohol problems were directly linked to the number of sexual assaults perpetrated by the participants. In a longitudinal study that investigated the risk factors for violence perpetration among 676 youth (14 to 19 years old), from 29 school districts in Southern California, Sussman, Skara, Weiner, and Dent (2004) found that acceptance of hard drug use by a participants predicted future violence perpetration. Although the linkages between substance abuse and violence have been clarified in some studies, some studies show conflicting information. For example, Bennett, Ogloff, Mullen, Thomas, Wallas, and Short (2011) in a study of the relationships between mental illness, substance abuse and homicides, found no significant differences between individuals with and without substance abuse and comorbid schizophrenia, and homicide perpetration.

Ethnic Heterogeneity

Ethnic diversity has been identified as a risk factor for violence and crime. Howard, Newman and Freilich (2002) assessed the relationships between ethnic heterogeneity and violence and crimes in their recent work entitled "Further evidence on the relationship between population diversity and violent crime." In their study, Howard, Newman, and Freilich (2002) found that higher incidences of violent crimes compared to the degree of ethnic heterogeneity in the setting. The US reported higher rates of rape and robbery than expected based on ethnic heterogeneity. The authors concluded that the association between ethnic heterogeneity and violence depends on the type of violence being studied.

In a study of ethnic heterogeneity as a predictor of violence in 57 countries including the US, Altheimer (2007) found that ethnic heterogeneity was a significant

predictor for homicide, a form of violent crime. Particularly in this study, countries with larger ethnic disparities had high levels of conflicts. Hence the author highlighted the importance of including ethnic heterogeneity as an important variable in the study of violence and crime. Thompson and Gartner (2013) assessed the ecological correlates of homicides in Toronto, and found that heterogeneous communities experienced more crimes compared to non-heterogeneous communities. In a study that examined the relationships between population changes and violent and property crimes, Barnett and Mencken (2002) found that ethnic heterogeneity was a significant predictor of crime. The study found that each percentage increase in population change resulted in significant increase in property crimes. In a study by Gorman-Smith et al. (2004), the authors found statistically significant differences among the ethnic groups in terms of rates of community crimes.

Family Problems

The family, as an important unit within the context of a community, is important to consider in studies focusing on violence. Evidence suggests that family problems can be a risk factor of violent and property crime (Gorman-Smith, Henry, & Tolan, 2010; Dubrow & Garbarino, 1988; Furstenberg et al., 1993). Two sets of risk factors within the family problems construct are related to violence perpetration. First, I discuss studies on child abuse, neglect and exposure to domestic violence. Following this, I discuss studies on parenting styles, specifically those that have been underscored by studies showing a relationship to future violence perpetration.

Numerous family problems such as child abuse and neglect and exposure to domestic violence have been underscored as risk factors or correlates of violence and other crimes (Herrenkhol, Sousa, Tajima, Herrenkhol & Moylan, 2008). For example, in a longitudinal study examining the impact of family problems on internalizing and

externalizing behavior problems in 457 youth, Herrenkhol, Sousa, Tajima, Herrenkhol & Moylan (2008) found that family problems such as child abuse and domestic abuse significantly lead to violence and aggression among the study participants. Furthermore, the participants who were exposed to family abuse and neglect had higher externalizing behaviors such as aggressive and violent behaviors compared to those who were not exposed to these circumstances. Also, participants who were victims of child abuse or neglect or exposure to domestic violence more than once were more likely to have aggressive behavior and violence, compared to those who were only exposed to the circumstances at one time.

Violence exposure is associated with future perpetration of crime (Brady, 2006; Fowler et al., 2009; Guerra, Huesmann, & Spindler, 2003; Ho, 2008). For this reasons, studies looking at the relationships between family problems and community crime are presented to complement the studies discussed above. Holtzman and Roberts (2012) examined the mediating effects of exposure to violence in a sample of 232 adolescents (aged 11-16 years old). The authors found that children from families that had problems such as domestic abuse, child abuse and neglect, had higher crime exposure compared to children from families without such problems. Also, in another study by Dong et al. (2004), it was found that people who had experienced a combination of child maltreatment and domestic violence in their homes had significantly higher levels of exposure to other forms of violence, compared to those who did not have such experiences.

Gorman-Smith, et al.'s (2004) study on the impact of exposure to violence on future perpetration of violence found that parenting and family were important moderating variables. Specifically, the authors found that youth from families where parents used discipline appropriately and monitored their children's activities were less likely to be

exposed to community crime than youth from families that failed to use discipline appropriately and did not monitor their children's activities. Thus, the authors concluded that family function is connected to community crime exposure.

Community Resources as Protective Factors against Community Crime

Just as there are risk factors of community crime as discussed in the previous sections, there are protective factors that may prevent or mitigate violent incidences in communities. Protective factors of crime are often the antithesis of risk factors. However, this study considers protective factors as those factors that enable community members to live without, or cope with crime (Aisenberg & Herrenkohl, 2008).

In other words, the protective factors provide avenues for community crime prevention or reduction. Because this study focuses on community resources as a protective factor for violent and property crime, the following section discusses community resources as protective factors, in detail. The relationship between community resource and the prevalence of violent and property crimes in US has been well highlighted in the literature (Sampson, Peterson, & Krivo, 2001; Gorman-Smith & Henry, 2004).

Community Resources: Conceptualization

There is no generally-accepted definition of community resources. However, based on the literature reviewed for this study, several authors define community resources differently. According to Kowaleski-Jones (2000), community resources can be understood as social investments that are implemented or provided to community members in order to maximize future desired social behavior.

Types of Community Resources in the Literature

In a study to assess the effects of violence exposure on a sample of urban youth, Hill and Madhere (1996) identified three broad resource typologies namely, social support

which include family, peers, and teachers; maternal education, and maternal coping styles. Peterson, Krivo and Harris (2000) in a study of the impacts of neighborhood institutions on violent crimes, identified four types of community resources: recreational facilities, employment/retail resources, libraries, and bars. Kowaleski-Jones (2000) in a study on the effects of community resources on youth who had experienced problems identified the following as community resources: 1) residential stability, 2) viable economic base, 3) adequate schools and, 4) a baseline rate of public safety. In an assessment of health-related consequences of neighborhood disadvantage, Pearce, Witten, Hiscock, and Blakey (2007) identified the following as community resource categories: 1) recreational amenities such as leisure facilities, and beaches, 2) shopping facilities such as supermarkets, dairy and fruit, and service stations; and 3) educational facilities such as day care centers, primary schools, intermediate and full primary schools, as well as secondary schools, 4) health facilities such as general practitioners, pharmacies, accident and emergency services, Plunket (a child wellness service established by the New Zealand government in 1907), ambulance, and fire stations, and 5) marae (a resource used in New Zealand). Although this study was conducted outside of the US, it provides some information on what scholars consider as community resources. Steenbeek, Volker, Flap and Oorts' (2012) study included bars, restaurants and supermarkets as resources, and so did Peterson, Krivo and Harris (2000). Sampson, Peterson and Krivo (2000) focused on individual-level variables such as 'maternal self-efficacy.' It might be impossible to produce an exhaustive list of resources or assets that may contribute to reducing crime in a community.

Riggan and Crimano (2005) provided the following categories of community resources: 1) health and diagnostic services, comprising both medical, and mental health providers, 2) rehabilitation services comprising community rehabilitation programs,

employment program, substance abuse treatment programs, peer self-help programs and social security programs, among others; 3) legal and social services comprising, advocacy and guardianship services, civil rights and equal opportunity services, advocacy services, children and family services, women's centers, family planning and public assistance services, and 4) educational and human services comprising career and technical education services, adult and special education, centers for independent living, housing development, public and specialized transport systems, and community service organizations.

What we Know about Community Resources and Violent and Property Crimes

According to Molnar, Cerda, Roberts and Buka (2008), some community resources correlate with decreased crime notwithstanding whether or not risk factors (such as poverty and unemployment) may exist in such community. However, although these community resources are associated with decreased crime, each kind of community resource may have important or distinct influence on violent and property crimes. For example, bars and taverns have been found to correlate with higher incidences of crime compared to other community types of resources. In a recent longitudinal study on the impacts of local establishments on violence in nine cities in the US, Wo's (2014) found that alcohol outlets lead to increase in violence. Morenoff, Sampson, and Raudenbush (2001), found that community resources such as local organizations, and networks increase social control (which is a measure to check violence) in the neighborhood.

Steenbeek, Volker, Flap and Oort (2012), studied the impacts of local businesses on physical disorder in a community. They found that the level of community resources (local business) in the community positively and significantly decreased physical disorder in the community. Specifically, for each standard deviation increase in local business

outlet density, physical disorder decreased by .20. Steenbeek, Volker, Flap and Oort (2012) also found that bars and restaurants (forms of local businesses) increased physical disorder in the community. Specifically, when fast-food restaurants and supermarkets were loaded into one model, the businesses increased the chance of community physical disorder by 1.05.

Types of Community Resources Considered in the Study

The community resources considered in this study are: Social services/parenting and family resources, mental health resources/substance abuse treatment resources, law enforcement resources, advocacy resources, jobs and vocational resources, faith-based organizations and resources, and recreational facilities (Crimano & Hagggar, 2005). These resources have been shown to increase community safety and advantage, which are the opposites of violence and crimes (Steenbeek, Volker, Flap, & Oort, 2012). Unlike other community establishments such as bars, fast-food restaurants, alcohol outlets, and taverns, that may increase crime potentials in community settings (Pridemore & Grubestic, 2012; Steenbeek, Volker, Flap, & Ort, 2012). Also, most communities in the US are likely to have these resources (to varying degrees) as they are basic and necessary institutions for community sustenance, protection and functioning.

The community resources included in this study, were chosen with the understanding that communities that have adequately structured resources that target community risk factors may experience less prevalence of violent crimes and vice versa (Kowaleski, 2000; Sampson, Raudenbush, & Earls, 1997; Small, 2006; Molnar et al., 2008; Hill & Madhere, 1996; Steenbeek, Volker, Flap, & Oort, 2012; Thompson & Gartner, 2013). The idea of selecting each community resource over other types of resources is a common practice among scholars (Steenbeek, Volker, Flap & Oort, 2012). In other words, no studies known to the author have included all known community

resources in its estimation; rather, inclusion criteria have always depended upon on the goal and scope of the study.

Social Services/parenting and Family Resources

Social services/parenting and family resources range from wrap-around services providing family reliefs to specialized agencies that address specific family needs. These services also include county relief and assistance systems. Many services available to community members are provided through social services agencies. The task of separating social services/parenting and family resources is not easy as there can be overlaps between them. Generally, social services are important community resources. They include children and family services, advocacy and guardianship services, child protective systems, family planning and aid/assistance programs (Crimando & Riggan, 2005). For example, family services offered by the District of Columbia include provision of food and clothing, day care programs, energy assistance, financial assistance, and other support services (District of Columbia, n.d.).

There are no specific studies known to this researcher that assessed how social services impact community crime. One study that remains somewhat relevant to this situation, although not directly related was conducted by Sheno et al. (2013). In this study, the authors tested the relationships between child homicides and community resources in Houston, Texas. Their study did not focus mainly on social services. However, some of their findings can be understood as related to social services and parenting. For example, results from the study showed that homicides were predicted by the number of single-parent households, and poverty (low income) within the sampled area. Child maltreatment also accounted for 94% of the incidences of child homicides in the study. The problem of single parent household, low median income, and child abuse, are community issues that are addressed by social services agencies offering parental

support, income relief and assistance, among others. Thus, social services may be important resources for addressing community crime.

Mental Health / Substance Abuse Resources

Mental health services or resources include hospitals and clinics, as well as day treatment centers, and individual or group psychotherapy services. As discussed under the risks section of this study, mental health problems are associated with community crime perpetration. Thus, it seems plausible that the provision of mental health services in a community may affect the prevalence of crime in communities. Although it is reasonable to assume that communities will experience less prevalence of violence and crime if resources such as mental health treatment centers (in-patient or out-patient services) are available to meet the needs arising from mental illness, studies assessing the impact of the availability of mental health services on violent and property crimes are scarce, prompting the need to assess proxy studies.

As community crime has been shown to cause internalizing symptoms (such as depression and anxiety) and externalizing symptoms (aggression and violence) among community members (Horn & Trickett, 1998; Henry, Tolan & Gorman-Smith, 2001) providing programs that address these needs in communities might be helpful in preventing or decreasing community crime. Examples of community mental health resources include mental health case management services, counseling services, community and in-home psychotherapy services, skills training services, group homes, in-patient residential treatment centers, and acute treatment services.

Additionally, the US Surgeon General (1999) suggests that residential treatments have been used as a tool for community protection. Other scholars also highlight the importance of alternative-to-inpatient resources in addressing mental health problems among community members. These services include therapeutic foster care and group

homes, (US Surgeon General, 1999), multidimensional treatment foster care (Chamberlain & Mihalic, 1998; Chamberlain, Leve, & DeGarmo, 2007), and therapeutic group homes (Hoagwood et al. 2001, Burns et al., 1999).

Evidence supports that mental health-targeted case management and wrap-around services can improve community functioning and wellbeing (Hoagwood et al., 2001; Burns, et al., 1999). According to the Substance Abuse and Mental Health Services Administration (SAMHSA, n.d), wraparound services involve comprehensive plans that address individuals problems. These services have been implemented in numerous cities and situations involving children, adolescents, adults, older adults and substance abuse patients. Snowden, Cuellar and Libby (2003) studied the impact of mental health treatment on youth offending, among a child/adolescent sample. Findings showed that mental health services decreased youth violence recidivism and subsequent detention rates among the sample. Also, a follow-up randomized control trial of a multi-systemic therapy intervention among 176 seriously violent offenders by Schaeffer and Bourdin (2005) showed that, both participants in individual therapy and multi-systemic therapy had low recidivism rates, although those who participated in multi-systemic therapy had lesser recidivism at follow up (80%) compared to their counterparts (50%). Participants in the multi-systemic therapy also had fewer arrests (54%) or less days of detention in adult corrective facilities (57%).

Substance abuse treatment resources provide resources for individuals, couples, and families impacted by challenges alcohol, substance addiction, and many other issues. Substance abuse treatment services can be in the form of hospitals, detoxification centers, and day treatment centers. Community resources in the form of substance abuse treatment services can influence crime. In a meta-analysis that examined the effectiveness of outpatient chemical dependency programs on youth,

Wilson and Tanner-Smith (2013) found that all the resources or services assessed were effective in reducing substance use among the study samples. Particularly, family therapy emerged as the strongest evidence-supported outpatient resource for substance abuse treatment. As with the first analysis family programs and group and mixed therapy yielded the highest treatment benefits. Also in a study of 628 alcoholics without treatment history 68.2% of whom were followed longitudinally (3 and 8 years after), Humphreys, Moos and Cohen (1997), found that those who participated more in outpatient treatments during the first 3 years had more propensity to experience remission at or after 8 years. Level of participation in inpatient treatment was not related to remission at 8 years later. This suggests that use of substance abuse treatment services can be effective in addressing substance abuse issues and subsequently, violent and property crimes.

Like the study described above, Hunter, Ramchand, Griffin, Suttorp, McCaffery, and Morral (2012) conducted a meta-analysis assessing the effectiveness of neighborhood-based substance abuse on a treatment sample. Results showed that the treatments group had decreased symptoms in 5 out of the 12 months (post-intervention). Also, a study conducted by Humphreys, Moos, and Cohen (1997) which assessed the effects of social and community resources on prolonged recovery from alcoholism, based on a sample of 628 individuals with alcohol problems (who were untreated prior to the study), found that participation in day treatment programs in the first three years was a good predictor of relapse at eight years. Outpatient treatment was more efficacious compared to Alcohol Anonymous meetings, in terms of each session attended. We know that individuals may engage in criminal acts when they are intoxicated or when they are under the influence of drugs or alcohol. For example, substance abuse violations accounted for the highest number of crimes in the US (1, 531,251). People arrested for driving under the influence of alcohol was estimated at 1,215,077 (FBI, 2012). In 2012,

cases involving 362 victims of homicide were related to narcotic law violations. Also 82 murder cases in the same year were related to brawl as a result of alcohol intoxication while 58 deaths occurred due to brawl due to narcotic intoxication (FBI, 2012).

Faith-based Organizations

Faith-based organizations such as churches, synagogues, mosques, and other faith agencies provide numerous services to community members that can serve as a protective factor for community crime. These services may include religious or worship services, physical health services, mental health services (US Department of Health and Human Services, 2008), job training services, and other social services (United States, The White House, 2009). Faith-based organizations are involved in a lot of efforts that enhance community development and promote peace. For example, the Catholic Charities, a faith-based organization provides services that include housing support, family services, counseling services, educational services, among others (United Way, 2012). In many communities in the US, faith organizations make social services available while maintaining their mission and affiliation (US Department of Health and Human Services, 2008). Even community members who do not share the same belief systems with these agencies receive services from faith-based organizations, and consequently get their needs met.

Studies examining the effects of faith-based organizations in a community on its prevalence of crime are scarce if not non-existent. There are no studies known to this author on the impact of faith-based services on violent and property crimes. What we know is that in some cases, community members receive social services such as emergency food and case management services through faith-based establishments (Shin et al., 2011). Faith-organizations can be providers as well as brokers of community resources. Although this study did not focus on the impact of faith-

based organizations on violent and property crimes, Shin et al. (2011), in a cross-sectional study of 284 workers in faith-based organizations, 15% of the participants received medical services through faith-based organizations. 19% of the participants sought spiritual support through faith-based organizations, and about 25% sought emotional help through faith-based organizations.

Findings from Shin et al. (2011), as discussed earlier show that faith organizations can enhance service utilization among community members. Because there are no studies assessing the impacts of faith-organizations in reducing or preventing community crime in the US, the United Nations Fund for the Pacific Asia's (2012) assessment of faith-based organizations' response to interpersonal violence is deemed appropriate to report here, despite that the study focused specifically on violence against women and girls. This review (United Nations Fund for the Pacific Asia, 2012), showed that faith-based organizations provided both prevention and victim/survivor support, and addressed numerous forms of crime including sexual assault, physical assault, psychological assault, and neglect. The review also highlighted that faith-organizations provided community services such as counseling, referrals, mental health/medical support, shelter, and self-help groups.

Law Enforcement Resources

Law enforcement resources help protect citizens by maintaining law and order in society (MacDonald, Klick & Grunwald, 2012). There is a general notion that increased police presence in a community leads to reduction in crime (Maguire & Pastore, 1995), although scholars do not have a consensus on this (Eck & Maguire, 2000). In his study, Levitt (2002) found that increased police presence significantly reduced both violent and property crimes. Also, although their study focused on a particular community setting, MacDonald, Klick and Grunwald (2012) found that having

additional police presence in their study setting resulted to between 45 to 60% reduction in crimes in the nearby communities. Hence, MacDonald, Klick and Grunwald (2012) opined that having increased police presence in communities will lead to decreased incidences of crime. In addition, Evans and Owens (2007) studied the associations between the prevalence of police officers in cities with populations above 10,000 and crime. They found that police prevalence was associated with between 2 to 5% crime reduction. Also, in a study that assessed the impact of police presence on crime, Draca, Mirko, Machin, Stephen, Witt, Robert (2011) found that police presence reduced crimes by 3 to 4%. In a Los Angeles study by Berk and MacDonald (2010), the authors found that increased police presence was associated with 30 to 40% reduction in crime. In addition to the above, in a study of 110 street blocks with highest crime rates in Minneapolis in 1999, Sherman and Weisburg (1995) reported that areas with increased police presence (the experimental group) experienced 6 to 13% crime reduction compared to areas without increased police presence (the control group).

These findings support the notion that the presence of law enforcement in a community is associated with violent and property crimes reduction. Also, in a systematic review on studies by Eck and Maguire (2000), 20% of the studies reviewed showed inverse relationship between increased police presence and violent crimes. Although there are no studies examining the relationships between other advocacy resources such as law offices and other advocacy outlets and violent and property crimes, it might be plausible to assume that adequate advocacy resource outlet density in a community might serve as a buffer against community crime perpetration.

Jobs and Vocational Resources

Jobs and vocational resources can be defined as community agencies that empower individuals towards achieving job and vocational related goals. These

resources offer different trainings and assistance, depending on the needs of the client being served. Job and vocational resources are community services that are geared towards providing income and skills training to community members. A few studies have been conducted on the effects of jobs and vocational resources on community crime but they generally focus on the relationships between the availability of employment and poverty-alleviation resources and community crime (Kellerman, Fuqua-Whitley, Rivara, & Mercy, 1988; Peterson, Krivo, & Harris, 2000; Steenbeek, Volker, Flap & Oort, 2012). In a study by Peterson, Krivo and Harris (2000), the authors found that retail and employment resources (institutions) had negative correlations with all types of violence including homicide, rape, robbery, and aggravated assault. Community members need work in order to achieve their goals and meet their financial obligations.

As discussed previously, studies have shown that communities with high levels of unemployment are likely to be socially-disadvantaged which may result in high crime rates (Steenbeek, Volker, Flap, & Oort, 2012). Thus, community resources that target employment and vocational training provide avenues for community members to acquire skills for employment and other community activities such as volunteering, and are positive factors against community crime. Employment and vocational resources provide capital and hope to community members (Kellerman, Fuqua- Whitley, Rivara, & Mercy, 1998).

Vocational training programs that are well structured and executed have efficacy in increasing educational achievement and in reducing crime rates within a community (Washington State Institute for Policy, 2001).The Washington State Institute for Policy (2001) reviewed 305 studies within the US and Canada. Services reviewed included vocational and rehabilitation services for the young and adult population. Findings showed that job and vocation training programs had useful benefits. Specifically, program

effects sizes for job/vocational training across all ages ranged between -0.3 and -13 indicating that the programs were effective. Peterson, Krivo, and Harris' (2000) study on the relationships between community institutions and violence found that employment institutions had negative correlations with all types of violence, although these relationships were not statistically significant.

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Recreational Resources

Recreation resources are public outlets established to serve the needs of members who may be in need of things to do in order to occupy their time. They provide space for individual and informal enjoyment and activities for individuals and groups. Several forms of recreational programs exist. Some examples are the YMCA programs, the Boys and Girls Club programs, and other community parks and recreational facilities.

According to Brownson et al. (2001), community recreational infrastructures provide opportunities for physical activity and socialization among community members. These two factors are important for community well-being. Additionally, community recreational facilities are important for community cohesiveness and development and they provide avenues for both idle people, and others to occupy their time with healthy activities. Recreational facilities provide space and opportunities for community members and families to enjoy a wide range of services including after-school programs, vocational trainings, sports activities, and child care services.

Community recreation centers may serve as buffers against violence among inner city youth but we have little empirical evidence to support this. Petterson, Krivo and Harris (2000) argue that recreation centers make available spaces for people to congregate in a time-structured manner which leads to time structuring and observing one another. They also reported that having a recreation center in an area of extreme economic disadvantage contributed to reduction in violent crimes. Specifically, communities with extreme disadvantage, without a recreation center had 17.4 per 1,000 crime rates compared to 15.1 per 1,000 crime rates in communities with one recreational center. In fact, Peterson, Krivo, and Harris (2000) found that by adding a recreational center in a community, violent crimes were reduced to 2.3 per 1,000 population. For this reason, the authors submitted that, by making recreation centers available in disadvantaged communities, violence and crimes can be reduced.

Brownson et al. (2001) found that despite residing in poor neighborhoods (based on a national sample of 1,818 individuals), community members who had access to recreational resources engaged in physical activities. Gordan-Larsen, McMurray and Pupkin (2000) also documented that youth who accessed recreational resources had 75% chance of engaging in physical activities. Schinke et al. (1992) found that

recreational programs positively benefited youth. Specifically, Schinke et al. (1992) found that in public housing areas with recreational program (provided by Boys and Girls Club), police reports of crime were 13% less compared to housing projects that did not provide recreational programs. Thus, recreational infrastructure might be deterrence to time-wastage, neighborhood loitering, and gang affiliations and activities, all of which may be connected to community crime.

Summary of Review of Literature

Although many studies address the risk and protective factors of community crime in various communities (Penelope, Lorena & Horn, 2003; Steinbrenner, 2010; Lambert, Copeland-Linder, & Ialongo, 2008); Kennedy & Bennett, 2006; McDonald & Richmond, 2008; Cooley-Quille et al., 2001; Duckworth et al., 2000; Farrell & Bruce, 1997; Foster et al., 2004; Gorman-Smith, & Tolan, 1998; Hammack et al., 2004; Howard et al., 2000) only a few have assessed the relationships between community crime and community resources such as mental health and substance abuse, jobs and vocational training, recreational facilities, social services and parenting, advocacy, and law enforcement (Sampson, Raudenbush, & Earls, 1997; Steenbeek, Volker, Flap, & Oort, 2012; Pearce, Witten, Hiscock, & Blakey, 2006; Hill, & Madhere, 1999). This suggests that most of the existing studies mainly assess relationships between crimes and other forms of community resources; they have not usually assessed assess the same kind of resources that this study assesses.

In some cases, studies have looked at individual-level factors as measures of resources rather than community-level factors or both. For example, such studies consider factors such as maternal resources and support as resources that they measure (Kowaleski-Jones, 2000). None of the existing studies has studied the relationships

between community resources and crime by specifically examining how the prevalence of various forms community resources relate to the prevalence different forms of crime.

The high prevalence of violent and property crime in US communities (FBI, 2013) calls for consideration of additional ways to explore how violent and property crimes are related to some of the macro-level protective factors as a social work contribution to the existing ecological discussion on prevention of violence and crime. One way to apply this change is by examining how various types of community resources impact various kinds of community crime. Hence, this study focuses on examining the relationships between violent crimes (aggravated assaults, sexual assaults, murder/homicide) and property crimes (burglary, larceny, auto theft, and arson) and community resources (social services/parenting and family resources, health and mental health resources, substance abuse treatment resources, law enforcement, advocacy resources, jobs and vocational resources, faith-based organizations and resources, recreational facilities). Having considered the state of the literature on the relationships between community resource and violent and property crimes, the next chapter discusses the theoretical basis for the current study.

Chapter 3

Theoretical Framework

Introduction

In this chapter, I present resource dependency as the theory, that guides the current study. First, I provide a background to resource dependency theory, and a rationale for use of the theory in the study. Second, I describe the applicability of the theory to the present study, and discuss its critiques and empirical support. Third, I provide conceptual models that show the hypothesized relationships between community resources and violent and property crime, based on the resource dependency theory.

The conceptual models are developed in consideration of current gaps in the study of violent and property crimes. These gaps are as follows: First, although literature consistently finds that there is relationship between community resources and crime (Morenoff, Sampson, & Raudenbush, 2001) no studies known to this author has explored the impacts of community resources such as mental health/substance abuse treatment resources, family/social services, faith-based organizations, law enforcement, legal services, vocational/rehabilitation resources, and recreational centers on different kinds of violent crimes such as homicide, rape, robbery, aggravated assaults, and property crimes such as larceny theft, auto theft, and burglary. In fact, literature suggests that studies on the relationships between community resources and violent and property crimes have examined a limited number of community resources rather than considering many resources at a time (Shenoi et al., 2013). For example, Shenoi et al.'s recent study (2013) only examined how three community resources – health clinics, religious organizations, and city centers impacted child homicide.

Second, no studies known to the author has applied RDT in the study of how community resources relate to violent and property crimes. Hence, one of the goals of

this study is to test the Resource Model of Violent and Property Crimes Prevention. The above are my contributions to the existing body of knowledge in the study of community resources and violent and property crimes.

Background to Resource Dependency Theory

Resource dependency theory (RDT) is said to have originated from a classic work by Emerson (1962) entitled “Power-dependence relations”, and was formally developed in the 1970s following the publication of a book entitled “The External Control of Organizations: A Resource Dependence Perspective” by Pfeffer and Salancik, in 1978. For several years, resource dependence theory (RDT) was a foundational framework through which the relationships between organizations and their environments were investigated (Drees & Heugens, 2013).

The basic principle behind RDT is that every organization is reciprocally dependent on other organizations as a source for its important resources. The theory explains why organizations are characterized with interdependence and inter-organizational operations. In other words, it explains why organizations rely on external resources for efficiency and survival. Further, Pfeffer and Salancik’s (1978) work pointed to inter-organizational relationships between organizations as a source of autonomy or independence. The idea is that, by collaborating with other organizations, a focal organization becomes more resourceful than when operating in isolation (Pfeffer & Salancik, 1978).

Why Resource Dependency?

I used RDT as the theoretical basis for this study because, despite that only a few studies have used RDT in the study of violent and property crimes, the theory has been documented as a widely-accepted theoretical framework for assessing and understanding organizational relationships (Dussauge, Garrette, & Mitchell, 2000; Koka &

Prescott, 2008; Paruchuri, Nerkar, & Hambrick, 2006). Apart from being a theory dedicated to the study of organizations, RDT has also been applied in the study of community-level phenomena. In fact, existing body of knowledge on RDT suggest that the theory is more of a macro-level paradigm than a micro-level theory.

Literature shows that scholars have used RDT to examine political and economic aspects of countries such as diversification of resources and economic performance (Dunning, 2005). Brunnschweiler and Bulte (2008) relied on RDT to explain the impact of natural resources on violent conflicts, although their findings showed natural resources as an impediment to growth rather than otherwise. Again, this study is not about natural resources; it is about community resources, so, findings from Brunnschweiler and Bultes' (2008) do not necessarily apply here. But the reason to include the above is to show that although RDT was originally authored to explain organizational relationships, the scope of the theory is broad enough to account for systemic issues such as economic and social wellbeing of countries and communities. Particularly in the context of this study, the theory is appropriate for understanding the relationships between different kinds of community resources and violent and property crimes.

The second reason is that communities can be understood as a form of organizations with definite structures, especially counties. According to Hillman, Whitters and Collins (2009), RDT has become "one of the most influential theories in organizational theory and strategic management" (p.1404). In fact, a great amount of focus of the RDT is on the impact of environments on organizations (Pfeffer & Salancik, 1978; Hillman, Withers & Collins, 2009). As organizations exist within an environment that could be internal or external, they can be understood as entities. So, although a thorough review conducted in the course of this study shows that RDT has yet to be

extensively applied to the study of violence and crime in a community, Burruss, Schafer, Giblin, and Haynes (2012) provide a good example of the extension of the RDT in explaining a larger social issue. In their study, the authors examined the impact of resource interdependency on preparedness to effectively respond to crime. They assessed their participants using a response set that required them to report their preparedness on a scale of 1 to 5, with 1 being inadequate and 5 being “excellent. Findings showed that organizations that shared resources derived significant benefits in terms of predicting, preventing and responding to crimes.

Sectors within the community are populated and managed by people representing special functions, interests and activities, and each sector within a community functions within a boundary thereby addressing the specific needs and benefits of its members. According to Gross (1969), an organization is a system put in place for the purpose of addressing specific goals. Based on the two definitions above, a county and an organization can be said to share the following characteristics: They are made up of administrative structures with clear leadership hierarchy, and is a source of resources towards social control. There is also a clear sense of boundaries and geographical reach. Also, in Texas, the counties are a major source of community-level resources. For these reasons, this study considers it appropriate to conceptualize a community as a formal entity or organization that can share some similarities with organizations. Consequently, the RDT can be applied in the study of how community resources relate to different kinds of crime.

Assumptions of Resource Dependency Theory

Resource Dependency Theory (RDT) is based on three assumptions. Only the first and second assumptions are considered in this study.

The First Assumption

The first assumption is that organizations need resources in order to achieve their goals and to survive. Specifically, Pfeffer and Salancik (1978) maintain that “the key to organizational survival is the ability to acquire and maintain resources” (p.2). This means that in order for an organization to become sustainable, it must not only have the necessary resources but also have the capacity to take care of such resources. For example, an organization lacking in human resources such as front-line and managerial staff and/or managerial staff will likely experience inefficiency. As noted earlier, this assumption is the focus of this study. The other assumptions are briefly discussed but not applied in this study. According to Pfeffer and Salancik (1978), “the key to organizational survival is the ability to acquire and maintain resources” (p. 2). Hence, the key to a community being able to achieve less prevalence of violent and property crimes within its boundaries may rely on the amount of community resources that it is able to acquire and maintain. Pfeffer and Salancik (1978) that organization’s survival is dependent on their effectiveness in possessing and maintaining resources. In other words, for an organization to function properly, it needs resources and needs to function effectively (Hillman, Whithers & Collins, 2009).

The Second Assumption

The second assumption is that resources provide a foundation for power, and power is therefore associational, situational and potentially mutual (Pfeffer & Salancik, 1978). In other words, when organizations have the resources they need, they are able to influence both their staff and other organizations that they may partner with. For example, an organization with adequate staff, capital, and managerial capacity, with adequate clientele is more likely to have more power over a lesser organization in terms of access to additional resources. RDT implies that an organization that has resources

that another organization needs has greater power over the otherwise dependent organization (Malatesta & Smith, 2014).

According to Ulrich and Barney (1984), power is central in resource dependence theory because it determines the level of control that an organization has over resources. Provan, Beyer, and Kruytbosch (1980) reported that organizations are able to wield power over resource providers such as the United Way by collaborating with other organizations. For example, organizations gain power by collaborating with each other. Das, Sen, and Sengupta (1989) in their study on the effects of strategic alliance on organizational assessment found that smaller organizations derive benefits such as staff support, and alliance building by maintaining cooperative relationships compared to big organizations with big staff and scope. In other words, they increase their power through collaboration. On the other hand, organizations that isolate from others are likely to lose such powers. Further, Yan and Gray (1994) found that within organizational collaboration and alliances, it is the organization that is able to control additional relevant resources that wields strategic control.

These studies support the central roles of power in organizational relationships. Malatasta and Smith (2014), clarify this concept in submitting that organizations that possess important resources gain power while those that depend on other organizations for resources become subject to the control of organizations with greater amounts of resources. So, the association between resource and power are invariable. In other words, Organization X's power on Organization Y is equivalent to organization Y's dependence on Organization X's resources (Malatasta & Smith, 2014). Pfeffer and Salancik (1978) further assert that "dominance attaches to the unit that controls the conditions necessary to the functioning of the other units" (p.44).

The Third Assumption

This assumption does not apply to the current study because I am interested in knowing how the number of community resources in a particular locality impacts the prevalence of violent and property crimes in the same locality. In this case, the third assumption holds that organizations acquire resources from their environments (Malatista & Smith, 2014). Hence, it is important for organizations to seek resources external to them. According to Pfeffer and Salancik (1978), “interdependence is the reason why nothing comes out quite the way one wants it to” (p.40). According to the RDT, organizations are interdependent (Hillman, Whitters & Collins, 2009). Within this understanding, organizations build alliances and mutual support for each other in advancing their goals and objectives (Malatista & Smith, 2014). For example, a social service organization that has a good relationship with a referral agency might have its workers first consider such an agency when seeking referrals for their clients.

However, the social services agency cannot regulate the external agencies’ staff priorities in terms of meeting a particular client’s need. In other words, organizations depend on other organizations for resources – emphasizing the interdependency of organizations. Pfeffer and Salancik (1978) submit that organizational environments provide external grounds upon which organizational effectiveness can be assessed. For example, a faith organization that provides food relief to the poor may also need a referral organization for their clients whose need extended food services.

How the First and Second Assumptions Apply to the Current Study

There are several ways in which the first and second assumptions apply to the current study. For example, this study considers a community as having similar characteristics with an organization. Each community is a system, and has a set of rules and hierarchy through which it is administered. So do organizations. Communities can be

organized at several levels. For example, in the US, communities could be conceptualized in terms of block groups, zip codes, census tracts, cities, counties, metropolitan statistical areas, tribal authorities, and state, among others. The US Census Bureau uses these levels in its geographical data distributions. As noted earlier, counties and organizations may be similar in the following ways: Both are made up of administrative structures with clear leadership hierarchy. There is also a clear sense of boundaries and geographical reach. Also, in Texas, the counties are a major source of community-level resources allocation and management. For this study, each county in Texas will be considered an organization, as a unit of analysis for the study. Texas counties have well-delimited boundaries, leadership/administration, as well as community-based resource systems such as mental health administration, among other things.

Just as organizations rely on resources in order to succeed, the county also relies on resources in order to adequately serve its subjects. This assumption can be further explicated by drawing on some of the findings presented in Chapter Two. For example, previous studies show relationships between general lack of resources and increase in violent and property crimes, Sampson, Morenoff, & Gannon-Rowley, 2002; Sampson, Raudenbush, & Earls, 1997). In fact, Barnett and Mencken (2002), found that for each standard deviation unit increase in lack of resources of resource disadvantage, violent crimes increased by 55%. Summarily, communities that have adequate resources such as mental health services, substance abuse treatment services, family/social services, faith-based services, are considered to have more power to control crime compared to communities lacking these resources.

The second assumption applies to this study in the sense that it is founded on the first assumption. Given that communities require resources to survive and maintain

their general wellbeing, it follows that the acquisition of resources could be an indicator of the amount of power that a community possesses. Pfeffer and Salancik (1978) submit that “organizations survive to the extent that they are effective (p. 2).” They added that organizational effectiveness is indicated by the organization’s ability to manage demands made by interest groups whom the organization relies upon for assistance and resources. I consider these as all indicators of power, and I subscribe that the key to community crime prevention is the ability to acquire and maintain resources that addresses the risk factors of community crime. By doing so, such counties acquire power and are able to manage the leadership and resource demands of its subjects including controlling crime.

In this study, I apply the second assumption by submitting that the amount of community resources that exists within a community is an indicator of the amount of power that such a community has towards preventing and addressing violent and property crimes within its boundaries.

Critique and Empirical Support for RDT

According to Drees and Heugens (2013), despite that RDT is recognized as a leading conceptual framework in organizational management, especially in terms of explicating the relationships between organizations and their environments, the theory has not been subjected to an acceptable level of rigorous test. In fact, according to Davis and Cobb (2010) and Hillman, Withers, and Collins (2009), some of the tests done on RDT are in the form of narratives. Knowing the limitations with narratives such as inherent sampling errors, it becomes concerning when such approaches are used as a means for theoretical testing. In addition, RDT has been challenged both on conceptual and empirical standards (Casciaro & Piskorski, 2005; Davis & Cobb, 2010). This is because results from studies on RDT have remained inconsistent. For example, while some studies show that dependence results in alliance formation among organizations

(Dussauge, Garrette, & Mitchell, 2000; Park, Chen, & Gallagher, 2002; Peng, 2004), other studies show that not all resources yield good outcomes as the RDT hypothesizes (Koka & Prescott, 2008; Paruchuri, Nerkar, & Hambrick, 2006; Vermeulen & Barkema, 2001).

In addition to these, the concept of interdependence as advanced by Pfeffer and Salancik (1978) within RDT has been criticized as being a combination of two different constructs - "power imbalance and mutual dependence" (Drees and Heugens, 2013, p. 1667). It is for this reason that Casciaro and Piskorski (2005) refer to the RDT as a metaphor rather than a principle upon which variables can be conceptualized and measured empirically. So, there are no empirical studies on RDT, especially pertaining to its explanation of violent and property crimes.

Relying on the RDT, this study seeks to examine how community resources impact of violent and property crimes. Both of the assumptions of RDT that this study relies on, are related to the following questions: 1) How do prevalence of community resources relate to the prevalence community violent and property crimes and 2) How do the prevalence of different types of community resources relate to the prevalence of different types of violent and property crimes?

Testable Models Based on RDT

As earlier noted, this study will test two models in assessing the relationships between community resources and violent and property crimes. In this section, I present the first model (the measurement model). The measurement model is one in which I estimate each of the constructs (community resources, violent crimes, and property crimes) as indicated. Specifically, community resources is indicated by: 1) social services/parenting and family resources, 2) health and mental health resources/substance abuse treatment resources, 3) law enforcement resources, 4) advocacyl

resources, 5) jobs and vocational resources, 6) faith-based organizations and resources, and 7) recreational facilities. Violent crimes is indicated by: 1) Murder/homicide, 2) Aggravated assault, 3) Rape/sexual assault, and 4) Robbery. Property crime is indicated by: 1) burglary, 2) larceny theft, 3) auto theft, and 4) arson.

The first model is the measurement model while the second model is the structural model. The structural model is one in which the three constructs – community resources (treated as a composite), violent crimes (treated as a composite), and property crimes (treated as a composite) are assumed to be correlated. The structural model will be the Resource Model of Violence and Property Crimes Prevention.

The Measurement Model

As shown in Figure 3-1, community resources is represented as a construct with seven indicators. This model will be tested to check whether or not the 6 variables are appropriate indicators of community resources. This will be done through Confirmatory Factor Analysis.

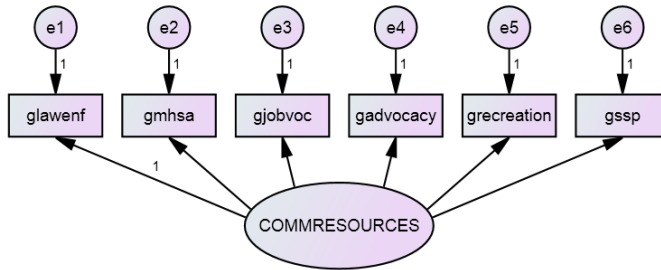


Figure 3-1 Community Resources Scale

As shown in Figure 3-2 below, violent crimes are represented as a construct with four indicators. This model will be tested to check whether or not the 4 variables are appropriate indicators of violent crimes. This will be done through Confirmatory Factor Analysis.

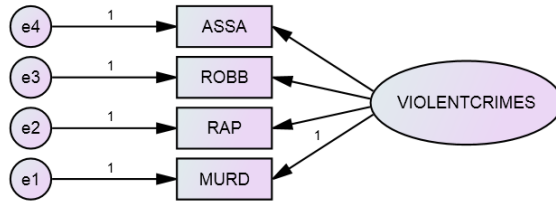


Figure 3-2 Violent Crimes Scale

Figure 3-3 represents property crimes as a construct with three indicators. This model was tested to check whether or not the 4 variables are appropriate indicators of property crimes. This was done through Confirmatory Factor Analysis.

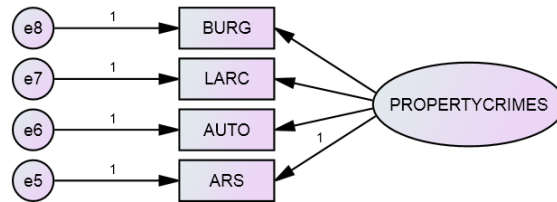


Figure 3-3 Property Crimes Scale

The Hypothesized Structural Model

Figure 3-4 below, illustrates the relationship between community resources and community crime. The model represents that increase community resources as a construct will lead to decreases in violent crimes (as a construct) and property crimes (as a construct). Furthermore, the relationships between violent crimes (as a construct) and property crimes (as a construct), are also modeled as reciprocal.

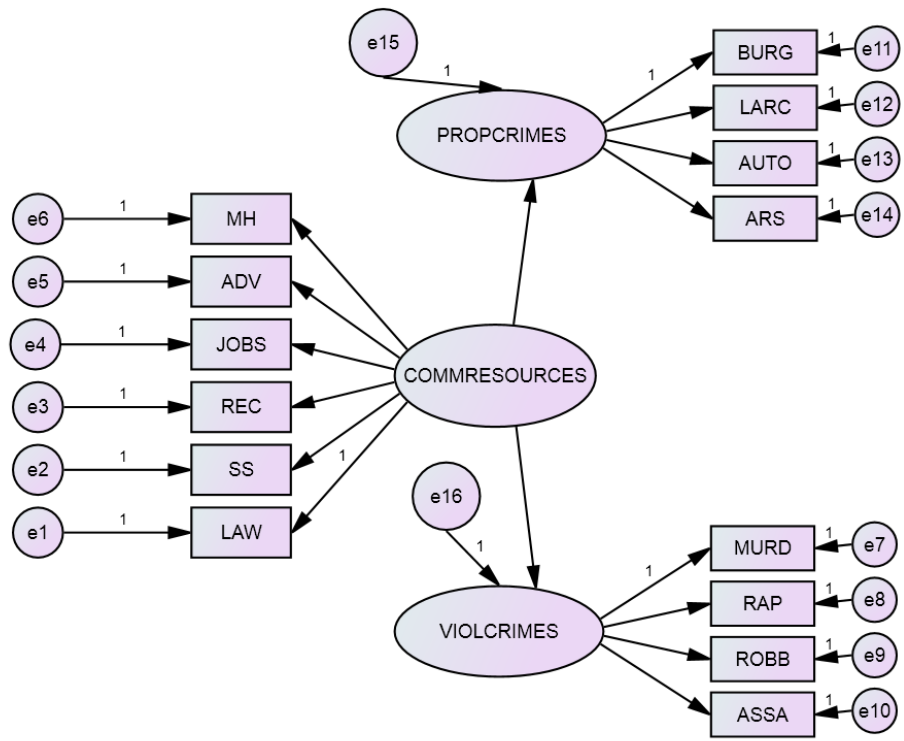


Figure 3-4 The Conceptualized Structural Model

Chapter 4

Methods

Introduction

In this chapter, I provide an overview of the research design and methods for this study as well as the research questions and hypotheses that were tested. I also discuss the study's data sources. I present the procedure for data collection and data analysis. This study is an exploratory secondary data analysis aimed at investigating the impact of community resources on violent and property crimes, based on two testable models. The overall goal of this analysis was to test the Resource Model of Violent and Property Crime. Model testing was conducted at two distinct stages. First, I tested the measurement models - community resources and violent and property crimes. In the second stage, I tested the structural model, which I refer to as the Resource Model of Violent and Property Crimes.

Research Questions

The overall research question for this study is: How do community resources impact violent and property crimes? The specific research questions addressed in this study are:

1. How does the prevalence of community resources relate to the prevalence of violent and property crimes?
2. How does the prevalence of each kind of community resources (1) social services/parenting and family resources, 2) health and mental health resources/ substance abuse treatment resources, 3) law enforcement resources, 4) advocacy resources, 5) jobs and vocational resources, 6) faith-based organizations and resources, and 7) recreational facilities, relate to prevalence of violent and property crimes?

3. Controlling for percentage of youth below age 18, unemployment rate, and county status (rural/urban), how do community resources relate to violent and property crimes?

Study Hypotheses

Hypothesis 1

1a) The prevalence of community resources will be related to prevalence of violent and property crimes.

1b) There will be inverse relationships between prevalence of community resources (treated as one construct) and the prevalence of violent crimes (treated as one construct), and property crimes (treated as one construct).

Rationale

Generally, community resources such as social services/parenting and family resources, health and mental health resources/ substance abuse treatment resources, law enforcement resources, advocacy resources, jobs and vocational resources, faith-based organizations and resources, and recreational facilities are designed to address individual and community level problems such as mental health difficulties, violence and crimes (Crimano & Haggar, 2005). Hence, increases in the prevalence of these resources in a county will likely lead to a decrease in violent and property crimes in such counties. Resources have been shown to increase community safety and advantage, which are the opposites of violent and property crimes (Steenbeek, Volker, Flap, & Oort, 2012).

Operational Definitions

Independent Variable: Prevalence of community resources.

Operational Definition: Each of the following resources was indicated by its prevalence as reported in the County Business Pattern for 2012.

1) social services/parenting and family resources, 2) health and mental health resources/ substance abuse treatment resources, 3) law enforcement resources, 4) advocacy resources, 5) jobs and vocational resources, 6) faith-based organizations and resources, and 7) recreational facilities. A full description of each resource and how it is operationalized is presented in Figure 4.1.

Dependent Variable: Prevalence of violent crimes and property crimes

Operational Definition: Violent crimes: Measured by the prevalence of murder/homicide, aggravated assaults, sexual assaults, and robbery that occurred in 2012 as reported in the Uniform Crimes Report (FBI, 2013). Property crimes: Measured by prevalence of burglaries, larceny thefts, auto thefts and arson that occurred in 2012 as reported in the Uniform Crimes Report (FBI, 2013).

Hypothesis 2

The greater prevalence of each of the community resources (social services and parenting resources, mental health and substance abuse treatment resources, faith-based resources, vocational/job resources, recreational programs, advocacy resources, and law enforcement services) the lower the prevalence of violent and property crimes. The following sub hypotheses (2a through 2f) all assume inverse relationships between each community resource and each violent and property crimes:

a) The greater prevalence of social services/parenting resources in a county, the less the prevalence of violent and property crimes it will have.

b) The greater prevalence of mental health/substance abuse resources in a county, the less the prevalence of violent and property crimes it will have.

c) The greater the prevalence of law enforcement resources in a county, the less prevalence of violent and property crimes it will have.

d) The greater the prevalence of vocational/job training resources in a county, the less prevalence of violent and property crimes it will have.

e) The greater the prevalence of advocacy resources in a county, the less prevalence of violent and property crimes it will have.

f) The greater the prevalence of recreational facilities in a county, the less prevalence of violent and property crimes it will have.

Rationale

Generally, community resources such as social services/parenting and family resources, health and mental health resources/ substance abuse treatment resources, law enforcement resources, advocacy resources, jobs and vocational resources, faith-based organizations and resources, and recreational facilities are designed to address individual and community level problems such as mental health difficulties, violence and crimes (Crimano & Haggar, 2005). Resources have been shown to increase community safety and advantage, which are the opposites of violence and crimes (Steenbeek, Volker, Flap, & Oort, 2012). Hence, I anticipated that each community resource will have independent impact on each violent and property crimes.

Operational Definitions

Independent Variable: Prevalence of community resources.

Operational Definition: Each of the following resources was indicated by its prevalence as reported in the County Business Pattern for 2012:

1) social services/parenting and family resources, 2) health and mental health resources/ substance abuse treatment resources, 3) law enforcement resources, 4) advocacy resources, 5) jobs and vocational resources, and 6) recreational facilities.

Dependent Variable: Prevalence of violent and property crimes

Operational Definition: Prevalence of Violent crimes: Measured by the prevalence of murder/homicide, aggravated assaults, sexual assaults, and robbery that occurred in 2012.

Hypothesis 3

There will be inverse relationship between community resources and violent and property crimes when controlling for percentage of youth below age 18, rural versus urban county, and unemployment rate.

Rationale

Some research (Cuellar, Markowitz, and Libby, 2003) has found that mental health services decreases youth violence recidivism. Faith-based organizations are involved in a lot of efforts that enhance community development and promote peace. For example, the Catholic Charities, a faith-based organization provides services that include housing support, family services, counseling services, educational services, among others (United Way, 2012). MacDonald (2002) in a study to determine factors for homicide and robbery in 164 cities in the found that community policing was significantly related to drops in rates of robbery and homicide (from 495 per 1000 population in 1993-1994 to 364 per 1000 population (between 1997 and 1998) due to police involvement. Also, negative linear correlations were found between strategic arrests by police officers and violence, over time. Based on these established associations between community resources and decreased violent and property crimes, it makes sense to take this knowledge a step further in investigating the impacts of community resources on violent and property crimes.

Independent Variable: Community resources as a construct.

Operational Definition: As measured by the availability of resources as reported by the US Census Bureau's Community Business Pattern for 2012 adjusted by

population: 1) social services/parenting and family resources, 2) health and mental health resources/ substance abuse treatment resources, 3) law enforcement resources, 4) advocacy resources, 5) jobs and vocational resources, 6) faith-based organizations and resources, and 7) recreational facilities(US Census Bureau, 2012). A full description of each resource and how it is operationalized is contained in Figure 8.

Dependent Variable: Prevalence of violent and property crimes

Operational Definition: Measured by the prevalence of violent and property crimes reported in the Uniform Crimes Report for years 2012. Violent crimes: 1) murder/homicide, 2) aggravated assaults, 3) sexual assaults, and 4) robbery. Property crimes: 1) burglary, 2) larceny theft, and 3) auto thefts, and 4) arson.

Study Population and Design

Study Sample and Setting

This study used the county as the unit of analysis. It included all counties in the state of Texas. I studied the state of Texas for the following reasons:1) Texas is one of the most populated states in the US, with 1.7% increase in violent crimes and in Texas with population increase from 25,631,778 (in 2011) to 26,059,203 (in 2012) (US Census Bureau, 2013), Texas also has a total of 254 counties. This made it convenient to conduct the level of multivariate statistical procedures that this study entailed, with adequate number of cases. Also, I studied the state of Texas because its large number of counties enabled me to complete a population-based analysis of the state.

Table 4-1 Prevalence of Violent and Property Crimes in the US

State	Year	Population	Total Violent Crimes	Violent Crimes per 100,000	Total Property Crimes	Property Crime per 100,000
California	2011	37,683,933	154,943	411.2	973,822	2,584.20
	2012	38,041,430	160,944	423.1	1,049,465	2,758.70
Florida	2011	19,082,262	98,198	514.6	671,200	3,517.40
	2012	19,317,568	94,087	487.1	632,988	3,276.70
Illinois	2011	12,859,752	54,523	424	344,468	2,678.70
	2012	12,875,255	53,403	414.8	332,013	2,578.70
New York	2011	19,501,616	77,463	397.2	371,837	1,906.70
	2012	19,570,261	79,610	406.8	376,140	1,922.00
Texas	2011	25,631,778	104,734	408.6	892,810	3,483.20
	2012	26,059,203	106,476	408.6	876,059	3,361.80

As shown in Table 1, Texas, with a population of 26,059, 203 in 2012, reported the 2nd highest number of violent crimes (104,476) and property crimes (876,059) in 2012. This means that violent crimes and property crimes are a challenge for Texas. There is also evidence that the number and kind of resources vary greatly in communities in Texas. And according to US Census data, as of 2009, about 40% of counties in Texas (102) had no psychologist, 48 counties had no professional counselor, 40 counties had no social worker, and 171 counties had no psychiatrist (US Census Bureau, 2010). Thus, Texas may provide an important example for how community resources impact the prevalence of violent crimes and property crimes in the state, as shown in Table 4.1.

I further used the county as my unit of analysis because both the independent variable (community resources) and the dependent variables (violent and property crimes) have secondary data at the county level that can be used to test the Resource Model of Crime and Violence. Also, using the county-level data allowed me to standardize all the variables (by grouping), so as to control for population-related prevalence differences. There are obvious similarities between county administrative characteristics and organizational administrative characteristics, making it possible to approach this study using the county as its unit of analysis, from the standpoint of resource dependence theory. Such would have been impossible if I were to rely on zip code or census tract as my unit of analysis.

Research Design

This study is an exploratory/cross-sectional secondary data analysis of the impacts of community resources on violent and property crimes. This study is considered exploratory given that it is the first population-based study of the relationships between community resources and violent and property crimes in Texas. It is also exploratory,

given that the Resource Model of Crime and Violence is being conceptualized and tested for the first time. It is cross-sectional because only 2012 data were analyzed.

Justification for Chosen Research Method and Data Sources

A secondary data analysis was chosen for this study because of the availability of statewide datasets that can be used to test the impacts of community resources on violent and property crimes in Texas. Using secondary datasets for both the independent and dependent variables made the study feasible, given the resources that were available to me at the time of the study. Also, using data from the County Business Pattern and the Uniform Crimes Report eliminated some potential challenges that I could have encountered if I had used primary data. Such possible challenges may include participant non-response or low response rate, cost of providing incentives for participants, difficulty in gaining access to communities, especially in terms of reaching all counties in Texas.

Also, using secondary data for this study, as a cross-sectional analysis (2012) prevented threats of attrition, maturation, among other threats. Attrition refers to research participants dropping out of a study thereby reducing the original sample size (Rubin & Barbin, 2011). Maturation refers to a natural change that occurs over a period of time, but since this is a cross-sectional analysis occurring at one point, the effect of maturation is controlled. Also, given some known changes in the FBI's operationalization of rape (FBI, 2012), using the 2012 data provided consistency in measurement compared to when multiple years are used. The UCR and CBP data have been used in many national studies in the US (US Census Bureau, 2010, FBI, 2013).

Data Sources and Data Collection

This study used two major data sources to estimate the impacts of community resources on violent and property crimes. This section discusses where and how data for

this study was collected. First, the data sources for community resources is presented, followed by the data sources for violent and property crimes.

Community Resources Data

Data on community resources was derived from the County Business Pattern (CBP) dataset, which is the US Census Bureau's Community Business Pattern (2012). This data provides total number of resources except law enforcement, across the US, by state, county, city-metropolis, and by zip codes. The County Business Pattern (CBP), which is a data from the US Census Bureau, provides annual subnational economic information on different types of business. Specifically, it provides data on the number of businesses or establishments, the level of employment as of the first quarter payroll and annual payroll (the week of March 12). Given that CBP dataset only has two law enforcement variables, another law enforcement variable (number of police employees in each County in Texas) was derived from the Uniform Crimes Report (FBI, 2014). Sub-category data such as level of unemployment and percentage of youth below 18 was derived from a national level databank of Census Data for Texas (kidscount.org).

According to the US Census Bureau (2014), the CBP is helpful in assessing the trends of economic activities in communities. It also serves as a source for additional studies and analytical series on economic activities. Consequently, organizations and businesses have relied on the data as a reliable source for resource estimation. Likewise, the CBP data are used by government institutions for planning purposes. Considering that I am using the county as the unit of analysis for this study, I used the dataset identified as the County Business Pattern. (US Census Bureau, 2014). County Business Pattern (2012) has a total of 20 different resources. These resources are then listed under 6 categories namely, industry code, industry code description, paid employees for pay period ending March 12, first quarter payroll, annual payroll, and total

establishments. The County Business Pattern dataset has a total of 19 variables. Resources are classified based on the North American Industries Classification System (NAICS). The NAICS is a standardized system of classification of businesses in North America. It provides information on 1200 different types of businesses in North America. It groups and identifies businesses by unique codes in the form of numbers. These codes are updated every five years (US Census Bureau, 2014). A Figure describing the classification of resources under the NAICS as well as the variables selected for inclusion in this study based on the NAICS classification is presented in Figure 4-1.

Figure 4-1 shows the CBP variables that were included in this study. As shown in Figure 4-1, social services and parenting is made up of 7 CBP variables. Mental Health/Substance Abuse Services is comprised of 9 CBP variables. Faith Organizations is comprised of 4 CBP variables. Law Enforcement Services is made up of 2 CBP variables including an additional variable (total number of police employees in each County in Texas) to be derived from the FBI's (2012) Uniform Crime Reports. Advocacy resources is comprised of 2 CBP variables. Job and Vocational Resources is comprised of 10 CBP variables, while Recreational Programs is comprised of 8 CBP variables. The first column contains the variable derived from combining each of the CBP variables as designated. The original code for each CBP data is shown in the second column. The third column shows the original CBP variables as contained in the CBP dataset.

Variable for the Current Study	Made Up of
Social Services and Parenting Resources	Individual and Family Services Residential Intellectual and DD Facilities
Mental Health/Substance Abuse Treatment	General Medical and Surgical Hosp. Ofc. of Physicians, except MH Ofc. of Physicians, MH Specialists Ofc. of MH Practitioners (except Physicians) Outpatient MH and SA Centers Psychiatric and SA Hospitals Specialty, except Psychiatric and SA Hosp. Residential MH and SA Facilities
Advocacy Resources	Offices of Lawyers Other Legal Services
Jobs and Vocational Resources	Employment Placement Agencies Executive Search Services Temporary Help Services Professional Employer Organizations Vocational Rehabilitation Services Professional and Management Training Cosmetology and Barber Schools Apprenticeship Training Other Technical and Trade School Sports and Recreation Instruction
Recreational Programs	Libraries and Archives Sports Teams and Clubs Zoos and Botanical Gardens Nature Parks and Other Similar Institutions Amusement and Theme Parks Fitness and Recreational Sports Centers Bowling Centers
Law Enforcement	Uniform Crimes Report, Texas
Age Percent Below 18	KIDS COUNT
Unemployment Rate	KIDS COUNT
Metropolitan/Non-metropolitan Counties	KIDS COUNT

Figure 4-1 Sources for Community Resources and Controls

Note: Ofc = offices. Counties with no record of the resource being calculated were scored zero on the particular variable. Most of these variables are proxies of the intended variables.

Violent and Property Crime Data

Data on community violent and property crimes was obtained from the Federal Bureau of Investigation's (FBI) Uniform Crime Report (UCR). This was conducted for year 2012. This timeframe was chosen so as to match the US Census data, which is the source of the independent variable for the study. The UCR is a federal secondary dataset on violent and property crimes in the US. Data is collected through local law enforcement agencies participating in the UCR system (FBI, 2014). The UCR provides data on variables such as number of homicides/murder, aggravated assault, rape and sexual assaults, robbery, larceny theft, auto thefts, arson, and burglaries in the US. However, this study focused on 8 variables – murder/homicide, aggravated assault, rape and sexual assault, robbery, larceny theft, burglary, auto theft, burglaries, and arson. As shown in Figure 4-2, a violent crime has 4 indicators, while property crime also has 4 indicators. As noted earlier, all dependent variables are from the Uniform Crimes Report (FBI, 2014). Figure 4-2 is only for clarification of sources of the dependent variables for this study and their operationalization.

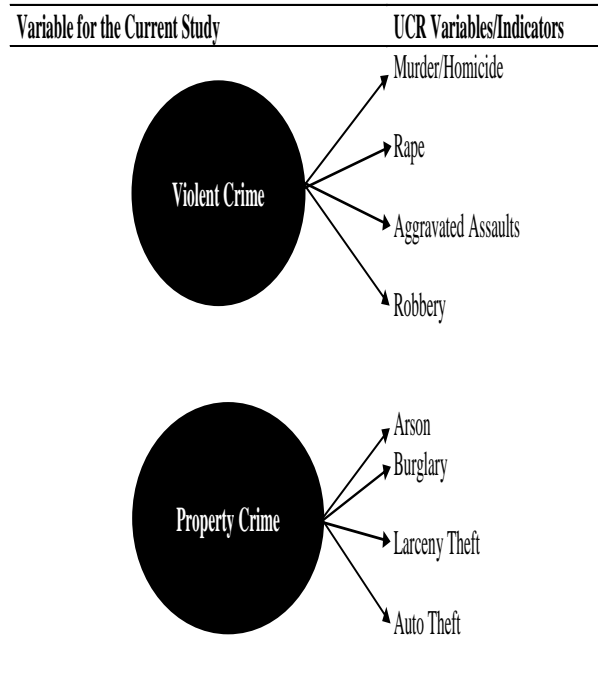


Figure 4-2 Data Source and Operationalization of the Dependent Variables

Models Tested

As earlier noted, this study tested two models in assessing the relationships between community resources and violent and property crimes. In this section, I present the first model (the measurement model), followed by the measurement model (the Resource Model of Violent and Property Crimes). The first set of models are the measurement models (Figures 4-3 to 4-5), followed by the structural model (Figures 4-6).

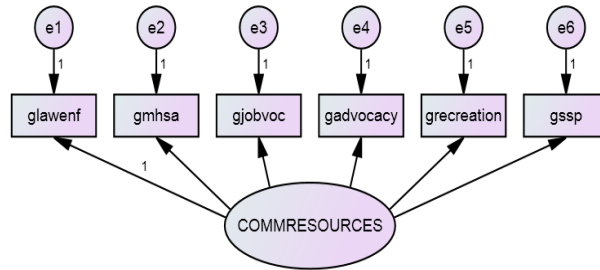


Figure 4-3 Confirmatory Factor Model of Community Resources

Figure 4-4 represents violent crimes measurement model with four indicators. This model was tested to check whether or not the 4 variables are appropriate indicators of violent crimes. This was done through a Confirmatory Factor Analysis.

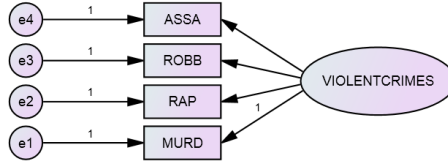


Figure 4-4 Confirmatory Factor Model of Violent Crimes/Default

Figure 4-5 represents property crimes as a construct with three indicators. This model was tested to check whether or not the 3 variables are appropriate indicators of property crimes. This was done through Confirmatory Factor Analysis.

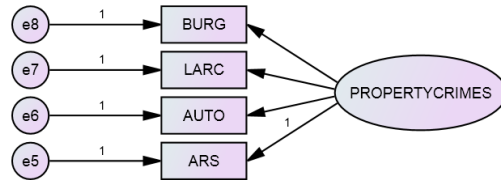


Figure 4-5 Confirmatory Factor Model of Property Crimes

Figure 4-6. Represents the structural model, the *Resource Model of Violent and Property Crimes*. In Figure 4-6, a community resource (a construct) is exogenous to two other constructs – violent crime (as one construct) and property crime (as one construct). Community resource, as a construct, has direct inverse effects on both violent crime and property crime. Three control variables (percentage of youth under age 18, county characteristics – urban/rural, and unemployment rate) are included in the model.

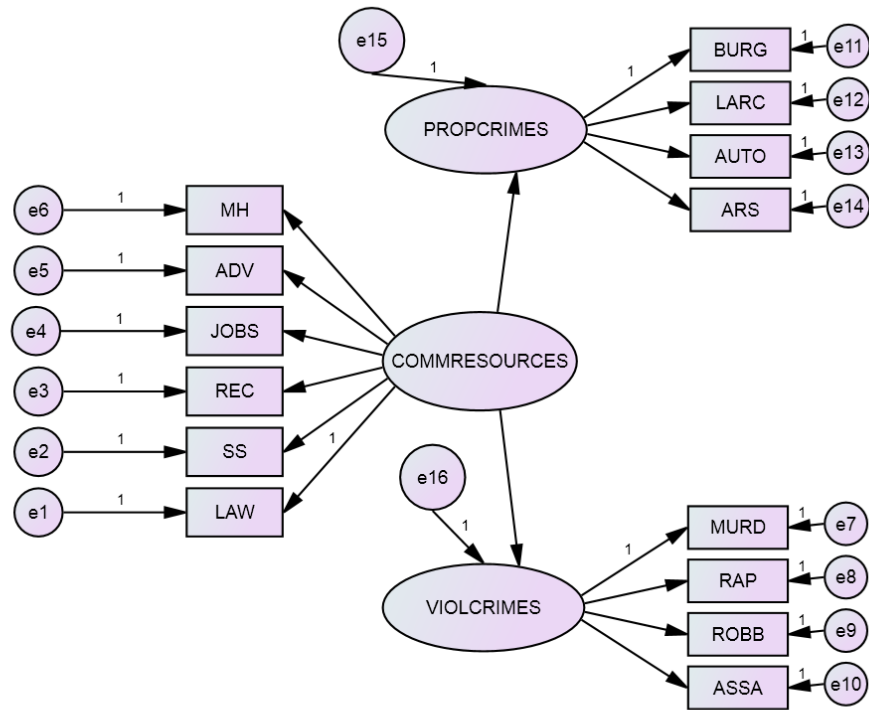


Figure 4-6 The Resource Model of Violent and Property Crimes

Data Analysis and Justification

Overall, three levels of analyses were conducted. The first analysis was a descriptive test. The second analysis involved a test of associations using bivariate statistical measures such as correlations coefficient. The third level of analysis involved Confirmatory Factor Analyses followed by Structural Equation Modeling.

Descriptive analyses

Measures of central tendencies were assessed on all the independent and dependent variables. Distributions of the variables are presented in the forms of tables. All the analysis were performed using the Statistical Package for Social Sciences (SPSS) 21 statistical and AMOS (IBM, 2012). The goal of the descriptive analytical technique (descriptive) was to describe the nature of each of the variables included in this study before engaging in higher level analyses such as correlational and multivariate analyses.

Further Analyses

Data were examined and transformed to allow for parametric testing such as Pearson's Correlation Coefficient and multivariate analyses.

I conducted a Confirmatory Factor Analysis (CFA) to establish whether or not the independent variables – social services/parenting, mental health and substance abuse treatment, jobs/vocational services, law enforcement resources, faith organizations, and recreational resources are a congeneric set. I also performed the same procedure on the dependent variables – violent crime, and property crime. Next, I tested the structural model, as a way to further examine the relationships between community resources and violent and property crimes. Where necessary, a good fit was not obtained initially, modification indices were examined in carrying out further adjustments.

Although individual-level literature were discussed previously in addition to community-level literature, the analysis conducted in this study is at the county level. In other words, the unit of analysis is county. Results and discussions are also approached at that level. As shown in Table 5-1, 254 counties accounting for all counties in Texas, were included in the analysis. Originally, there were 13 missing cases across the variables. Data cleaning was performed upon which it was determined that the missing cases were completely at random (MCAR), and were below 10% of the total study sample. In an effort to achieve more rigor, multiple imputation method was used to replace all of the missing variables

on both the independent and dependent variables. This process of missing data replacement has been underscored as a methodically rigorous method that address the problem of missing data, better than mean replacement (McCleary, 2002). Multiple imputation enabled this researcher to achieve less biased estimates, and to include all counties in the analysis, thereby retaining the sample size(McCleary, 2002).

Although some counties including Harris, Bexar, Dallas,Tarrant, Travis, and Collin counties were found to be outliers on most of the variables, the outlier cases were retained because theoretically, these counties are not the same as the other counties, in terms of their population. I expected that some counties to have more resources and larger, and had more incidences of violent and property crimes, compared to others. Also the data points, although determined to be extreme, were not as a result of data entry errors; neither were they from a different population than most of the counties. They are all within Texas. So, there was no compelling reason to exclude the cases from the analysis. This justification has also been highlighted to be of use in circumstances as with this study, by the Institute for Research and Digital Education, University of California, Los Angeles (2015). Also the number of cases in this study was 254 and it was not appropriate to lose cases, as removing outliers by looking at the z scores above 3 or -3, in this study would have led to removal of many cases. This is because it is not uncommon for outliers tend to emerge incrementally following first deletions, in a study with a distribution and sample size as this. Also, Seung-Whan (2009) found that removing outliers from a study does affect the result differently. Moreso, the counties reflected their characteristics both on the IVs and the DVs.

The data were also highly spread and varied significantly, ranging from zero to about 4,000.

Some of the independent variables initially showed high levels of multicollinearity with Pearson's correlation coefficients above .9. Also, some counties had greater number of community resources and violent and property crimes, given their population differences. In order to take care of these two challenges, the independent variables were grouped into percentiles. Those with categories in excess of 9 categories were constrained to 10. Those with less than 9 levels of grouped distribution were also grouped accordingly. The minimum number of category that resulted from this approach was 5, while the highest category was 10. Their logs (base 10) were then taken. With this iteration, the multicollinearity was reduced; with all of the variables (MH, ADV, JOBS, REC, SS, and LAW) achieving variance inflation

factors (VIF) < 6, as shown in Table 5.3 Faith-based organizations remained highly correlated with the rest of the independent variables and was dropped from the analysis. This approach also provided a form of standardization, given the spread of the data. Hence, in the final analysis, only 6 independent variable were included.

For the dependent variables, there was need to add additional indicator to the property crimes, considering the level of analysis that was going to be conducted. Hence, arson was included in the property crimes thereby making the property crimes construct achieve four indicators – burglary, larceny theft, auto theft, and arson. The dependent variables had many absolute zeros, possibly due to the non-uniformity of counties in terms of number of resources and incidences of violent and property crimes that occurred within them, in 2012. Hence, the distribution of the data became a concern. In addressing this challenge, I transformed the variables into logarithm (base 10), with a mini log transformation (in which I added a constant (1) to the variables that had zero as their minimum. The variables were then analyzed, given the fact that the violent and property crimes as reported by the FBI are given, and also given that, due to theoretical reasons, larger counties had higher levels of violent and property crimes compared to smaller counties, and to the extent that they were closer to a normal distribution.

Study Sample

Originally, there were 13 missing cases across the variables. Data cleaning was performed upon which it was determined that the data was missing completely at random (MCAR), and was below 10% of the total study sample, across the variables. For this reason, multiple imputation method was used to replace all of the missing variables on both the independent and dependent variables.

Chapter 5

Results

Introduction

In this chapter, I present the process through which data was analyzed and the findings from the study on the impact of community resources on violence and property crime. Following a description of the data analysis process, I present the descriptive findings. Second, I present findings from the hypotheses tests through bivariate analyses, and third, I present the findings from the multivariate analyses (used to test the third hypothesis). I conclude with a summary of the findings.

Table 5.1 shows the distribution of the total population by race among the counties. There were a total of 254 counties in the study. Out of the total population of Texas in 2012 (26,059,203), 44.30% are white ($n = 1,155,523$), Blacks constituted 11.46% ($n = 2,986,753$), Hispanics constituted 38.44% ($n = 1,001,635$), while other race constituted 5.77% of the population ($n = 1,503,570$). The distribution of Whites across the counties ranged from 59 to 1,253,279 for Whites, 0 to 777,936 for Blacks, 18 to 1,777,136 for Hispanics, and 5 to 336,853 for other races. Overall, this shows that the sample (254 counties) is inhabited by more Whites, followed by Hispanics, while Blacks and others combined constitute only 17.37% of the population.

Table 5-1 Distribution of Counties by Race

	County	White	Black	Hispanic	Other
N	254.00	254.00	254.00	254.00	254.00
Missing	0.00	0.00	0.00	0.00	0.00
Total Population		115,525,23.00	29,867,53.00	100,163,57.00	15,035,70.00
%		44.33	11.46	38.44	5.77
Minimum		59.00	0.00	18.00	5.00
Maximum		13,532,79.00	7,779,36.00	17,771,36.00	3,368,53.00

Note: All numbers are to 2 decimal places.

Table 5-2 shows the age percentage of individuals below 18, the percentage of high school dropouts, median income, poverty rate for individuals below 18 years old and poverty for all ages. The total population ranged from 82 (Loving County) to 4,245,204 (Harris County). The mean age percentage is .1057 (SD = .39, minimum = 0, maximum = 4.50). The average high school dropouts (in percentage) in the sample (n = 254) is 6.30 (SD = 2.04, minimum = 2.30, maximum = 15.30). Median income for the counties is \$41,439.50 (SD = \$9953.45, minimum = \$23,358, maximum = \$86037). The mean percentage of individual below 18 years old who are in poverty was about 7,000 (SD = 67980.65, minimum = 2 (Loving County), maximum = 317914(Harris County)). The mean for the sample's population living in poverty (all ages) was 17973.19 (SD = 67980.65, minimum = 12, maximum = 783419). The minimum unemployment percentage was 2.30 with a maximum of 15.30 (M = 6.2913, SD = 2.04228). Some counties including Baylor and Blanco had the minimum high school dropout percentage (n = 0) while Ector county had the maximum 18.0 (M = 3.9685, SD = 3.54851).

Table 5-2 Distribution of Population, age, high school dropout, median income, and poverty by counties in Texas

		Total Population	%Age<18	%HS Dropout	Median Income	Poverty <18	Poverty All Age
N	Valid	254.00	254.00	254.00	254.00	254.00	254.00
	Missing	0.00	0.00	0.00	0.00	0.00	0.00
Mean		102,595.3	0.11	6.30	43,814.68	6,996.76	17,973.19
Median		18,536.5	0.02	6.10	41,439.50	1144.00	3014.50
Std. Deviation		366,066.5	0.39	2.04	9,953.45	27,644.20	67980.65
Range		42,451,22	4.50	13.00	62,679.00	317,912.00	783,407.00
Minimum		82.00	0.00	2.30	23,358.00	2.00	12.00
Maximum		42,452,04	4.5	15.30	86,037.00	31,791.40	78,341.90

Note: All numbers are to 2 decimal places.

Table 5-3 shows the distributions of the independent variables in the study (following data standardization and transformation) – mental health and substance abuse resources (MH), Advocacy resources (ADV), Jobs and vocational training resources (JOBS), Recreational facilities (REC), Social service and parenting resources (SS), and Law enforcement resources (LAW). The sample represents all counties in Texas (n = 254). Mental health and substance abuse resources ranged from 0 to 0.9, respectively (M = 0.47, 0.50, SD = 0.32, 0.30). Jobs and vocation training resources and recreational facilities ranged from 0 to 0.7, respectively (M = 0.21, 0.22, SD = 0.27, 0.26). Social service and parenting resources ranged from 0 to 0.6 (M = 0.25, SD = 0.22), while Law enforcement resources ranged from 0 to 1 (M = 0.64, SD = 0.32). Variance Inflation Factor (VIF) shows that all the independent variables had less multicollinearity than before - all became <10 (MH = 5.19, ADV = 4.36, JOBS = 4.27, REC = 2.12, SS = 6.88, LAW = 5.47).

Table 5-3 Distribution of the Independent Variables

		MH	ADV	JOBS	REC	SS	LAW
N	Valid	254.00	254.00	254.00	254.00	254.00	25.00
	Missing	0.00	0.00	0.00	0.00	0.00	0.00
Mean		0.47	0.50	0.21	0.22	0.25	0.64
Std. Error of Mean		0.02	0.02	0.02	0.02	0.01	0.02
Std. Deviation		0.32	0.30	0.27	0.26	0.22	0.32
Skewness		-0.22	-0.34	0.72	0.65	0.07	-0.86
Std. Error of Skewness		0.15	0.15	0.15	0.15	0.15	0.15
Kurtosis		-1.37	-1.04	-1.14	-1.16	-1.52	-0.39
Std. Error of Kurtosis		0.30	0.30	0.30	0.30	0.30	0.30
Minimum		0.00	0.00	0.00	0.00	0.00	0.00
Maximum		0.90	0.90	0.70	0.70	0.60	1.00
VIF		5.19	4.36	4.27	2.12	6.88	5.47

Note: Outcomes reflect data distributions after transformation to Log10. Numbers reflect approximations to 2 decimal places. VIF = Variance Inflation Factor. All VIF = <10.
VIF = Variance Inflation Factor.

Table 5-4 shows the dependent variables and their respective distributions following standardization and transformation of the data. The dependent variables are Murder (MURD), Rape (RAP) Robbery (ROBB), Assault (ASSA), Burglary (BURG), larceny theft (LARC), motor theft (AUTO), and Arson (ARS). Murder has the least maximum incidence (1.89, M = .16, SD = .26), followed by Arson (2.52, M = .28, SD = .40), while the most prevalent crime recorded is Larceny theft (maximum = 4.51, M = 1.83, SD = .76), followed by Burglary (maximum = 4.14, M = 1.64, SD = .72), and Auto theft (Maximum = 3.81, M = .98, SD = .66). Two variables - murder (2.39), robbery (2.17), and arson (1.94) were positively skewed (> 1.96). The rest of the variables were not skewed, based on this criteria (rape (1.04), assault (.23), burglary (-.15), larceny (-.28), auto theft (.47).

Table 5-4 Distribution of the Dependent Variables

	MURD	RAP	ROBB	ASSA	BURG	LARC	AUTO	ARS
N	Valid	254.00	254.00	254.00	254.00	254.00	254.00	254.00
Mean		.16	.43	.35	1.06	1.64	1.83	.98
Std. Error of Mean		.02	.03	.03	.04	.05	.05	.04
Median		.00	.30	.30	1.04	1.70	1.88	.98
Std. Deviation		.26	.50	.49	.69	.72	.76	.66
Range		1.89	2.47	3.44	3.63	4.14	4.51	3.81
Minimum		.00	.00	.00	.00	.00	.00	.00
Maximum		1.89	2.47	3.44	3.63	4.14	4.51	3.81
Skewness		2.39	1.04	2.17	.23	-.15	-.28	.47
Std. Error of Skewness		.153	.153	.153	.153	.153	.153	.153

Note: All numbers are to 2 decimal places.

Bivariate Analyses

A bivariate Pearson's Correlation Analysis was conducted to assess the associations between the independent and the dependent variables.

Correlations between MH and the dependent variables

As shown in Table 5-5, a positive and significant relationship was found between mental health and substance abuse resources and murder, $r(252) = .42, p < .01$. A positive and significant relationship was found between mental health and substance abuse and rape and sexual assault, $r(252) = .59, p < .01$. A positive and significant relationship was found between mental health and substance abuse and rape and robbery, $r(252) = .53, p < .01$. A positive and significant relationship was found between mental health and substance abuse and aggravated assault, $r(252) = .68, p < .01$. A positive and significant relationship was found between mental health and burglary, $r(252) = .74, p < .01$. A positive and significant relationship was found between mental health and substance abuse and larceny, $r(252) = .74, p < .01$. A positive and significant relationship was found between mental health and substance abuse and auto theft, $r(252) = .67, p < .01$, and a positive and significant relationship was found between mental health and substance abuse and arson, $r(252) = .47, p < .01$.

Correlations between ADV and the dependent variables

As shown in Table 5-5, a positive and significant relationship was found between advocacy resources and murder, $r(252) = .39, p < .01$. A positive and significant relationship was found between advocacy resources and rape and sexual assault, $r(252) = .60, p < .01$. A positive and significant relationship was found between advocacy resources and robbery, $r(252) = .53, p < .01$. A positive and significant relationship was found between advocacy resources and aggravated assault, $r(252) = .68, p < .01$. A positive and significant relationship was found between advocacy resources and burglary, $r(252) = .74, p < .01$. A positive and significant relationship was found between advocacy resources and larceny, $r(252) = .74, p < .01$. A positive and significant relationship was found between advocacy resources and auto theft, $r(252) = .67, p < .01$, and a positive and significant relationship was found between advocacy resources and arson, $r(252) = .49, p < .01$.

Correlations between JOBS and the dependent variables

As shown in Table 5-5, a positive and significant relationship was found between job and vocational training resources and murder, $r(252) = .36, p < .01$. A positive and significant relationship was found between job and vocational training resources and rape and sexual assault, $r(252) = .60, p < .01$. A positive and significant relationship was found between job and vocational training resources and robbery, $r(252) = .61, p < .01$. A positive and significant relationship was found between job and vocational training resources and aggravated assault, $r(252) = .68, p < .01$. A positive and significant relationship was found between job and vocational training resources and burglary, $r(252) = .66, p < .01$. A positive and significant relationship was found between job and vocational training resources and larceny, $r(252) = .66, p < .01$. A positive and significant relationship was found between job and vocational training resources and auto theft, $r(252) = .64, p < .01$, and a positive and significant relationship was found between job and vocational training resources and arson, $r(252) = .56, p < .01$.

Correlations between REC and the dependent variables

As shown in Table 5-5, a positive and significant relationship was found between recreational resources and murder, $r(252) = .39, p < .01$. A positive and significant relationship was found between recreational resources and rape and sexual assault, $r(252) = .58, p < .01$. A positive and significant relationship was found between recreational resources and robbery, $r(252) = .58, p < .01$. A positive and significant relationship was found between recreational resources and aggravated assault, $r(252) = .62, p < .01$. A positive and significant relationship was found between recreational resources and burglary, $r(252) = .62, p < .01$. A positive and significant relationship was found between recreational resources and larceny, $r(252) = .62, p < .01$. A positive and significant relationship was found between recreational resources and auto theft, $r(252) = .59, p < .01$, and a positive and significant relationship was found between recreational resources and arson, $r(252) = .52, p < .01$.

Correlations between SS and the dependent variables

As shown in Table 5-5, a positive and significant relationship was found between social service and parenting resources and murder, $r(252) = .39, p < .01$. A positive and significant relationship was found between social service and parenting resources and rape and sexual assault, $r(252) = .58, p < .01$. A positive and significant relationship was found between social service and parenting resources and robbery, r

(252) = .39, $p < .01$. A positive and significant relationship was found between social service and parenting resources and aggravated assault, $r(252) = .56, p < .01$. A positive and significant relationship was found between social service and parenting resources and burglary, $r(252) = .56, p < .01$. A positive and significant relationship was found between social service and parenting resources and larceny, $r(252) = .57, p < .01$. A positive and significant relationship was found between social service and parenting resources and auto theft, $r(252) = .52, p < .01$, and a positive and significant relationship was found between social service and parenting resources and arson, $r(252) = .43, p < .01$.

Correlations between SS and the dependent variables

As shown in Table 5-5, a positive and significant relationship was found between law enforcement resources and murder, $r(252) = .38, p < .01$. A positive and significant relationship was found between law enforcement resources and rape and sexual assault, $r(252) = .57, p < .01$. A positive and significant relationship was found between law enforcement resources and robbery, $r(252) = .49, p < .01$. A positive and significant relationship was found between law enforcement resources and aggravated assault, $r(252) = .61, p < .01$. A positive and significant relationship was found between law enforcement resources and burglary, $r(252) = .75, p < .01$. A positive and significant relationship was found between law enforcement resources and larceny, $r(252) = .77, p < .01$. A positive and significant relationship was found between law enforcement resources and auto theft, $r(252) = .67, p < .01$, and a positive and significant relationship was found between law enforcement resources and arson, $r(252) = .45, p < .01$.

Table 5-5 Bivariate Correlations for all variables

1	2	3	4	5	6	7	8	9	10	11	12	13	14
N	254	254	254	254	254	254	254	254	254	254	254	254	254
M	0.47	0.47	0.50	0.21	0.22	0.25	0.64	0.16	0.43	0.35	1.1	1.64	1.83
SD	0.32	0.33	0.30	0.27	0.26	0.23	0.32	0.26	0.50	0.49	0.69	0.73	0.76
MH	1												
ADV	.860**	—											
JOBS	.781**	.774**	—										
REC	.766**	.771**	.847**	—									
SS	.670**	.660**	.641**	.672**	—								
LAW	.840**	.886**	.679**	.693**	.651**	—							
MURD	.416**	.395**	.361**	.388**	.314**	.384**	—						
RAP	.585**	.603**	.603**	.583**	.475**	.565**	.524**	—					
ROBB	.532**	.532**	.611**	.576**	.396**	.494**	.550**	.732**	—				
ASSA	.684**	.677**	.682**	.620**	.556**	.651**	.542**	.735**	.750**	—			
BURG	.737**	.736**	.661**	.623**	.555**	.754**	.557**	.738**	.732**	.871**	—		
LARC	.736**	.735**	.659**	.624**	.571**	.765**	.551**	.727**	.716**	.843**	.950**	—	
AUTO	.666**	.665**	.640**	.597**	.518**	.669**	.592**	.731**	.764**	.853**	.893**	.886**	—
ARS	.470**	.485**	.555**	.518**	.428**	.449**	.540**	.641**	.696**	.654**	.659**	.655**	.685**

** . Correlation is significant at the 0.01 level (2-tailed). M & SD to the nearest 2 decimal places.

1 = Mental health and substance abuse resources (SS), 2 = Advocacy resources (ADV), 3 = Jobs and vocational training resources (JOBS), 4 = Recreational resources (REC), 5= Social service and parenting resources (SS), 6 = Law enforcement resources (LAW), 7 = Murder and homicide (MURD), 8 = Rape and sexual assault (RAP), 9 = Robbery (ROBB), 10 = Aggravated assault (ASSA), 11 = Burglary (BURG), 12 = Larceny theft (LARC), 13 = Auto theft (AUTO), 14 = Arson (ARSO).

The Measurement Models

Confirmatory factor analyses (CFA) were conducted to examine the factor structure of the independent variables (community resources), and to see whether or not the indicators are congeneric sets. This approach is an approach enabled me to know whether or not the scales that I used in testing a theory were appropriate (Hair et al., 2005). In this study, CFA was conducted for the same reason. CFA assumes that variables are measured at the continuous level (Kline, 1998). The community resources data are continuous level data and represent total number of community resources per county as reported in 2012. The community resources scale has the following indicators: social service and parenting resources (SS), mental health and substance abuse resources (MH), law enforcement resources (LAW), recreational resources (REC), jobs and vocational training resources (JOBS), and advocacy resources (ADV).

As shown in Figure 5-1 all of the indicators loaded significantly onto the community resources factor. Factor loadings ranged from .73 to .94.

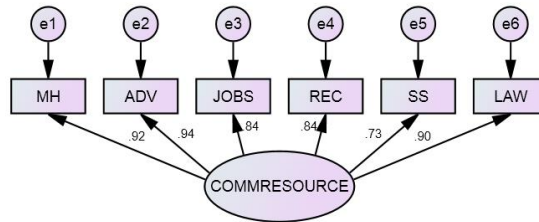


Figure 5-1 Community Resource Scale - Unadjusted

Table 5-7 shows the unstandardized and standardized regression weights or factor loadings of the community resource scale, prior to the modifications. Factor loadings ranged from .94 to .73. Advocacy resources (ADV) and mental health and substance abuse resources (MH) had the highest loadings, .94 and .92, respectively. Law enforcement resources (LAW) also loaded .90, while jobs and vocational resources (JOBS) and recreational resources (REC) loaded .84 each. Social service and parenting resources (SS) had the least loading on the unadjusted community resources scale (.73). Chi Square model fit of the model was significant $\chi^2(9) = 131.557, p < .001$, suggesting a poor fit between the hypothesized model and the data. However, given the sensitivity of χ^2 to data as discussed in Kline (1998), other goodness of fit indices were assessed, which also suggested less than acceptable model fit (GFI = .845, AGFI = .639, CFI = .922, RMSEA = .232). Hence, modification indices suggested freeing the covariance between 4 error terms. A subsequent freeing of these paths was found to have better fit compared to the constrained model.

Table 5-6 Factor Loadings of the Community Resources Scale after Adjustments

Indicators		Dependent Factors	b	S.E.	β	P
SS	<---	COMM.RESOURCES	1		.73	***
MH	<---	COMM.RESOURCES	1.83	.12	.92	***
LAW	<---	COMM.RESOURCES	1.73	.12	.90	***
REC	<---	COMM.RESOURCES	1.35	.10	.84	***
JOBS	<---	COMM.RESOURCES	1.37	.10	.84	***
ADV	<---	COMM.RESOURCES	1.71	.11	.94	***

$X^2(9) = 131.557, p < .01$. b = unstandardized regression estimate, β = standardized regression estimate, SE = standardized error, *** = $p < .01$. SS = Social services and parenting, MH = Mental health and substance abuse resources, LAW = Law enforcement resources, REC = Recreational facilities, JOBS = Jobs and vocational training resources, ADV = Advocacy resources.

Figure 5-2 is a confirmatory factor analysis (CFA) conducted to examine the factor structure of the independent variables (community resources), after the 4 error terms were freed as indicated by the modification indices. Following freeing of the error terms, the factor loadings ranged from .72 to .94. Chi Square model fit of the independent variable was not significant $\chi^2 (5) = 8.2, p > .05$, suggesting a good fit between the hypothesized model and the data. However, given the sensitivity of χ^2 to data as discussed in Kline (1998), other goodness of fit indices were assessed. Assessment of these goodness of fit indices showed acceptable model fit GFI = .989, AGFI = .953, CFI = .998, RMSEA = .050. Change in Chi Square between the constrained and non-constrained model was significant. Due to the significant improvement in the overall model fit obtained by freeing the error terms in the model, the constrained model was considered to be the better than the non-constrained model. This means that social services and parenting (SS), mental health and substance abuse resources (MH), law enforcement resources (LAW), recreational facilities (REC), jobs and vocational training resources (JOBS) and advocacy resources (ADV) are good variables (indicators) for measuring community resources. In general, it shows that community resources can be adequately measured using the community resource scale as shown in Figure 5-2.

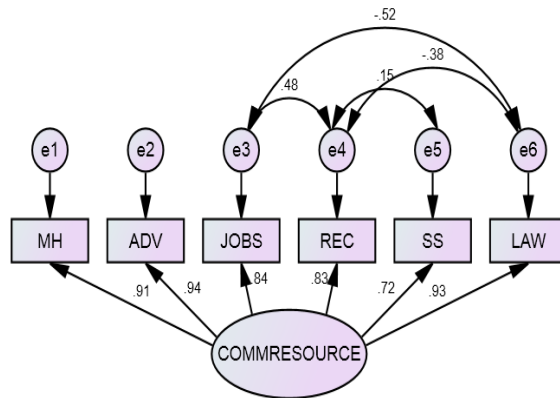


Figure 5-2 Community Resource Scale - Modified

Table 5-7 shows how each of the indicators of the community resource scale loads on the scale. As shown in Table 5-7, advocacy resources had the strongest loading (.94), followed by law enforcement resources (.93), and mental health and substance abuse resources (.91). Jobs and vocational resources and recreational resources loaded similarly (.84 and .83, respectively), while social service and parenting resources had the lowest factorial loading or standardized regression weight (.72).

Table 5-7 Factor Loadings of the Community Resources Scale

Indicators		Dependent Factors	b	S.E.	β	P
SS	<---	COMM.RESOURCES	1.00		.72	***
MH	<---	COMM.RESOURCES	1.84	.13	.91	***
LAW	<---	COMM.RESOURCES	1.82	.12	.93	***
REC	<---	COMM.RESOURCES	1.36	.10	.83	***
JOBS	<---	COMM.RESOURCES	1.39	.10	.84	***
ADV	<---	COMM.RESOURCES	1.73	.12	.94	***

$\chi^2(9) = 8.17, p = .147, b =$ unstandardized regression estimate, $\beta =$ standardized regression estimate,
 SE = standardized error, *** = $p < .01$.

The Property and Violent Crime Scale

Figure 5-3 shows the first attempt at testing the fit of the data with the CFA of the violent and property crime scale. CFA was conducted to test the theoretical fit of the dependent variable scale (violent and property sub-scale and the property crime sub-scale) with the data. The violent crime sub-scale data has the following indicators: murder (MURD), rape and sexual assault (RAP), robbery (ROBB), and aggravated assault (ASSA). The property crime scale data has the following indicators: burglary (BURG), larceny (LARC), auto theft (AUTO), and arson (ARSO). The property crime subscale has the following indicators: Burglary, larceny theft, auto theft, and arson. The property crime subscale has the following indicators: Aggravated assault, robbery, rape, and murder. All of the indicators loaded significantly onto their respective latent factors – violent crime and property crime. Factor loadings ranged from .62 to .98. The two factors were hypothesized to correlate as both are indicators of crime and violence ($r = .95$). Chi Square model fit of the model was significant $X^2 (19) = 107.451, p < .001$, suggesting a poor fit between the hypothesized model and the data. However, given the sensitivity of X^2 to data as discussed in Kline (1998), other goodness of fit indices were assessed, which also suggested less than acceptable model fit (GFI = .887, AGFI = .787, CFI = .960, RMSEA = .136).

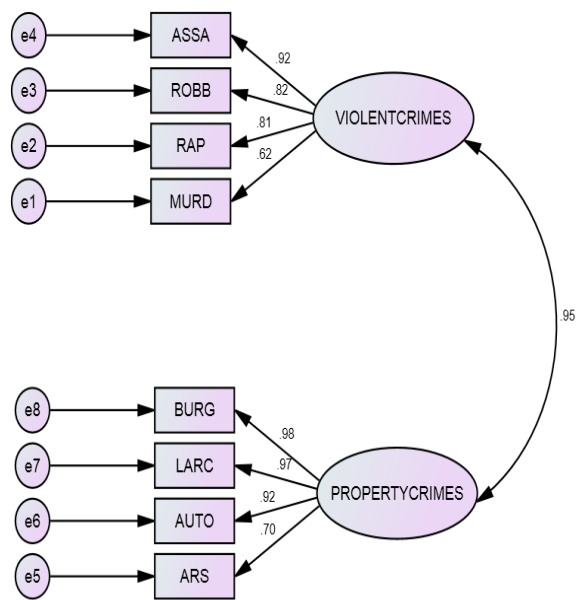


Figure 5-3 Violent and Property Scale – Unadjusted

Table 5-9 shows the unstandardized and standardized regression weights of each of the indicators on the factors. Factor loadings ranged from .61 to .97 at the initial test of the violent and property crime scale with the data. On the violent crime sub-scale, arson had the least factor loading (.69), while the rest of the indicators (auto theft, larceny, and burglary) had loadings in excess of .90. On the violent crime sub-scale, murder had the least factor loading (.61), while aggravated assault had the strongest factor loading (.92). Rape and sexual assault and robbery both had .81 and .82 factor loadings, respectively. A factor loading shows how appropriate a variable is in measuring a construct, along with other variables.

Table 5-8 Factor Loadings of the Violent and Property Crime Scale- Unadjusted

Indicators		Factors	B	S.E.	β	P
ARS	<---	PROPERTY CRIME	1.00		.69	***
AUTO	<---	PROPERTY CRIME	2.19	.154	.92	***
LARC	<---	PROPERTY CRIME	2.63	.177	.96	***
BURG	<---	PROPERTY CRIME	2.52	.169	.97	***
MURD	<---	VIOLENT CRIME	1.00		.61	***
RAP	<---	VIOLENT CRIME	2.52	.240	.81	***
ROBB	<---	VIOLENT CRIME	2.49	.235	.82	***
ASSA	<---	VIOLENT CRIME	3.96	.347	.92	***

$\chi^2(19) = 107.451, p < .01, b =$ unstandardized regression estimate, $\beta =$ standardized regression estimate, SE = standardized error, *** = $p < .001$.

Figure 5-4 shows the violent and property crime scale, after the error terms were freed as indicated by the modification indices. Figure 5-4 is different from Figure 5-5 because it shows the processes and the specific parameters that were adjusted in attempting to derive a better measurement model for violent and property crime. A review of the modification indices suggested freeing the covariance between 6 error terms (a parcel on the violent crime subscale and a parcel on the property crime subscale). A subsequent freeing of these paths was found to result in a better fit compared to the constrained model as shown in Figure 5-4.

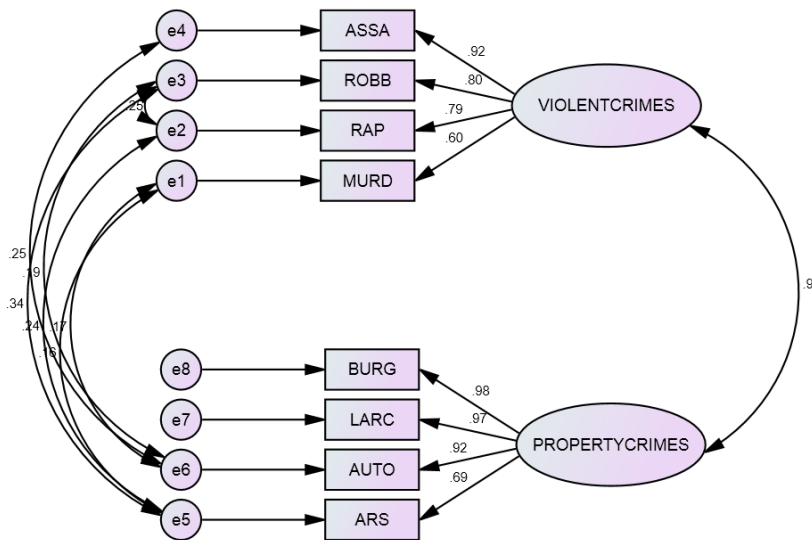


Figure 5-4 Violent and Property Crime Scale – Adjusted

Figure 5-5 is a confirmatory factor analysis (CFA) conducted to examine the factor structure of the dependent variables (violent and property crimes), after the error terms were freed as indicated by the modification indices. Following freeing the error terms, factor loadings ranged from .60 to .98. The two factors were hypothesized to correlate as both are indicators of crime and violence ($r = .96$). Chi Square model fit of the model was significant $\chi^2(11) = 24.617$, $p < .05$, suggesting a poor fit between the hypothesized model and the data. However, given the sensitivity of χ^2 to data as discussed in Kline

(1998), other goodness of fit indices were assessed. Assessment of these goodness of fit indices showed acceptable model fit $GFI = .977$, $AGFI = .923$, $CFI = .994$, $RMSEA = .070$. According to Hair et al. (2005), an $RMSEA$ of $<.08$ with $CFI = .97$ or higher indicates a reasonable model fit. This shows that the violent and property crime scale is good for measuring violent and property crimes, based on the data. Change in Chi Square between the constrained and non-constrained model was significant. Due to the significant improvement in the overall model fit obtained by freeing the error terms in the model, the constrained model was considered to be the better than the non-constrained model.

Table 5-8 shows the unstandardized and standardized regression weights of each of the indicators on the factors for the violent and property crime scale, after it was adjusted. Factor loadings ranged from .68 to .96 following the adjustment of the violent and property crime scale, as indicated by the modification indices. On property crime sub-scale, arson had the least factor loading (.68), while the rest of the indicators (auto theft, larceny, and burglary) had loadings in excess of .90. On the violent crime sub-scale, murder had the least factor loading (.60), while aggravated assault had the strongest factor loading (.92). Rape and sexual assault and robbery both had .79 factor loadings.

Table 5-9 Factor Loadings of the Violent and Property Crime Scale- Adjusted

Indicators		Factors	B	S.E.	β	P
ARS	<---	PROPERTY CRIME	1.00		.68	***
AUTO	<---	PROPERTY CRIME	2.19	.153	.91	***
LARC	<---	PROPERTY CRIME	2.68	.186	.96	***
BURG	<---	PROPERTY CRIME	2.59	.177	.98	***
MURD	<---	VIOLENT CRIME	1.00		.60	***
RAP	<---	VIOLENT CRIME	2.51	.250	.79	***
ROBB	<---	VIOLENT CRIME	2.45	.244	.79	***
ASSA	<---	VIOLENT CRIME	4.04	.367	.92	***

$\chi^2(19) = 107.451, p = .01, b =$ unstandardized regression estimate, $\beta =$ standardized regression estimate, SE = Standard error

Test of Hypotheses

Hypothesis 1a.

Prevalence of community resources will be related to prevalence of violent and property crimes

In testing this hypothesis, a bivariate correlation analysis was conducted between total community resources and total violent crimes, followed by structural equation modeling. Findings from the correlation analysis showed a strong positive linear relationship between total community resources and total violent crimes, $r(252) = .720, p < .01$. A bivariate correlation analysis was also conducted between community resources (as a construct) and property crimes (as a construct). A strong positive linear correlation was found between total community resources and total property crime, $r(252) = .770, p < .01$. Strong associations were found between community resources and violent and property crimes.

Findings from the structural equation modeling showed that prevalence of community resources is related to the prevalence of violent crimes.

Hypothesis 1b.

There will be inverse relationships between prevalence of community resources (treated as one construct) and the prevalence of violent crimes (treated as one construct), and property crimes (treated as one construct).

In testing this hypothesis, a bivariate correlation analysis was conducted between total community resources and total violent crimes.

In testing this hypothesis, a bivariate correlation analysis was conducted between total community resources and total violent crimes and total property crimes. Findings showed a strong positive linear relationship between total community resources and total violent crimes, $r(252) = .720, p < .01$. A bivariate correlation analysis was also conducted between community resources (as a construct) and property crimes (as a construct). A strong positive linear correlation was found between total community resources and total property crime, $r(252) = .770, p < .01$.

Although strong associations were found between community resources and violent and property crimes, the associations were not inverse. Hence, I fail to reject the null hypothesis, although the sub-hypothesis which assumes a relationship between the prevalence of community resources and violent and property crimes is upheld.

Hypothesis 2.

Greater prevalence of each of the community resources (social services and parenting resources, mental health and substance abuse treatment resources, faith-based resources, vocational/job resources, recreational programs, advocacy resources, and law enforcement services) the lower the prevalence of homicide/murder, aggravated assault, rape, robbery, and larceny theft, burglary, and auto theft. The following sub hypotheses (2a through 2f) all assumed inverse relationships between each community resource and each violent and property crimes. As noted in the methods section, due to multicollinearity issues, faith-based organizations was dropped from the analysis. Multicollinearity is a statistical problem that occurs when the extent to which a dependent variable (violent crime or property crime) can be explained by an independent variables is complicated due to high correlations between the independent variable and one or more other independent variables in the study (Hair, Black, Babin, Anderson, & Tathan, 2005). Faith-based organizations, as an independent variable was almost perfectly-correlated with other independent variables in the study. So, in order to avoid the problem of multicollinearity, it was dropped. Table 5.5 shows the findings of bivariate correlations between the variables listed in a-f below.

Table 5-10 shows the results of Pearson's correlation analysis between the independent and the dependent variables as outlined in hypothesis (2a-f).

Table 5-10 Associations between the Independent and Dependent Variables

Variables	Total Property Crimes	Total Violent Crimes
Total Violent and Property Crimes	.905**	.905**
MH	.725**	.668**
SS	.568**	.529**
ADV	.727**	.667**
JOBS	.685**	.687**
REC	.644**	.650**
LAW	.737**	.633**

N = 254. SS = Social services and parenting, MH = Mental health and substance abuse resources, LAW = Law enforcement resources, REC = Recreational facilities, JOBS = Jobs and vocational training resources, ADV = Advocacy resources, r = Pearson's correlation, ** = correlation is significant at $p < .01$.

As shown in Table 5-10, positive linear correlations were found between all the community resources and violent and property crimes as listed in a-f.

Correlations between Social Services and Parenting and Total Violent and Property Crimes

Hypothesis 2a

The greater the prevalence of social services/parenting resources in a county, the less the prevalence of violent and property crimes it will have. Findings showed a medium positive linear relationship was found between social service and parenting resources and violent crimes, $r(252) = .53, p < .01$. A less strong but positive linear relationship was found between social service and parenting resources and violent crimes, $r(252) = .53, p < .01$ than its correlation with property crimes, $r(252) = .57, p < .01$.

Hypothesis 2b

The greater prevalence of mental health/substance abuse resources in a county, the less the prevalence of violent and property crimes it will have. Findings showed a strong positive linear relationship between mental health and substance abuse resource and violent crimes, $r(252) = .73, p$

<.01. A less strong but positive linear relationship was found between mental health and substance abuse resources and property crimes, $r(252) = .67, p <.01$.

Hypothesis 2c

The greater the prevalence of law enforcement resources in a county, the less prevalence of violent and property crimes it will have. Findings showed a strong positive linear relationship between law enforcement resources and property crimes, $r(252) = .77, p <.01$. A less strong but positive linear relationship was found between law enforcement resources and property crimes, $r(252) = .633, p <.01$.

Hypothesis 2d

The greater the prevalence of vocational/job training resources in a county, the less prevalence of violent and property crimes it will have. Findings showed a medium positive linear relationship between vocational/job training resources and violent crimes, $r(252) = .69, p <.01$. Equal positive linear relationship was found between vocational/jobs training resources and property crimes, $r(252) = .69, p <.01$.

Hypothesis 2e

This hypothesis assumed that the greater the prevalence of advocacy resources in a county, the less prevalence of violent and property crimes it will have. Findings showed a strong positive linear relationship between vocational/job training resources and violent crimes $r(252) = .67, p <.01$. A stronger positive linear relationship was found between advocacy resources and property crimes ($r(252) = .73, p <.01$) than its correlation with violent crimes.

Hypothesis 2f

This hypothesis assumed that the greater the prevalence of recreational facilities in a county, the less prevalence of violent and property crimes it will have. Findings showed a strong positive linear relationship between recreational resources and violent crimes, $r(252) = .65, p <.01$. A stronger positive linear relationship was found between recreational resources and property crimes, $r(252) = .650, p <.01$ than the observed its correlation between recreational resources and violent crimes.

As shown by the above findings, all of the independent variables are positively correlated with violent and property crimes. Although there exists a positive linear relationship between the independent variables (SS, MH, LAW, JOBS, ADV, and REC) and the dependent variables (property crime and

violence crime), I fail to reject the null hypothesis because I did not observe any inverse relationship between any of the independent variables and the dependent variables.

Hypothesis 3

The prevalence of community resources will be inversely related to violent and property crimes, controlling for percentage of youth below age 18, rural versus urban county, and unemployment rate.

In testing this hypothesis, a confirmatory factor analysis (CFA) was conducted, followed by a structural equation model (SEM). The CFA is the measurement model that was derived from the study while the SEM is the structural model derived.

SE = Standardized error, *** = $p < .001$.

Figure 5-5 shows the structural equation model (SEM) conducted to examine the direct/standardized relationships between community resources and violent and property crimes. Factor loadings ranged from .69 to .98. Community resources, with 6 indicators is the independent factor while violent crime with 4 indicators and property crimes with 4 indicators were the dependent factors. Chi Square model fit of the model was significant $\chi^2(75) = 545.320, p < .001$, suggesting a poor fit for the structural model.

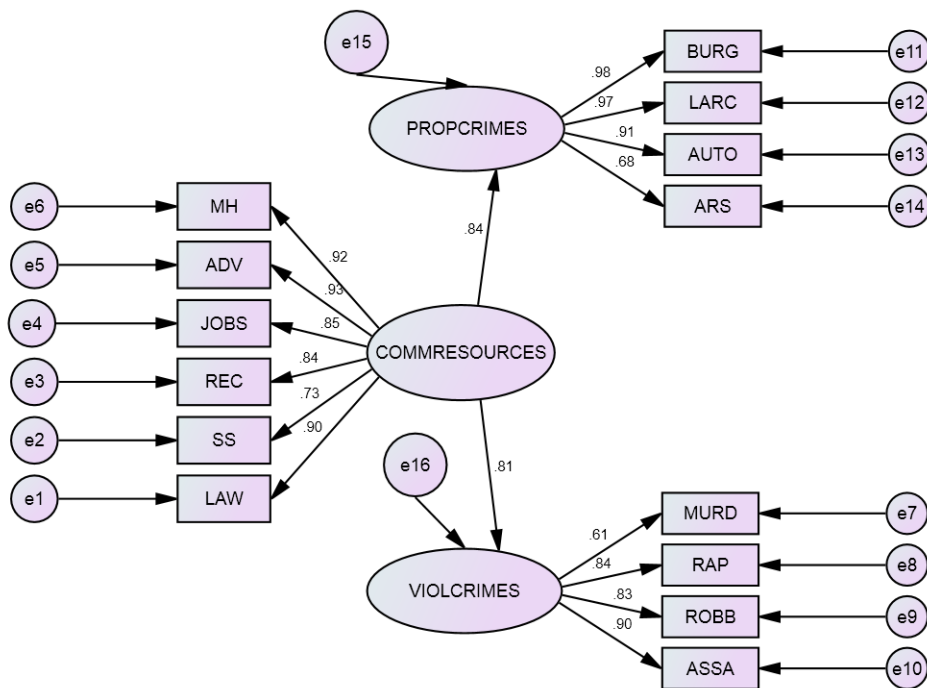


Figure 5-5 The Resource Model of Violent and Property Crimes - Unadjusted

However, given the sensitivity of χ^2 to data as discussed in Kline (1998), other goodness of fit indices were assessed. Assessment of these goodness of fit indices still showed unacceptable model fit GFI = .772, AGFI = .681, CFI = .175, RMSEA = .157. Due to the poor fitting nature of the model as indicated by the goodness of fit indices noted above, the error terms were freed as indicated by the modification indices as shown in Figure 5-6, below.

Table 5-11 Unstandardized and Standardized Loadings of the structural model, standardized errors in parentheses

Dependent Factors		Independent Factors	b	S.E.	β	P
PROPERTYCRIME	<---	COMMRESOURCES	2.616	0.159	0.836	***
VIOLENTCRIME	<---	COMMRESOURCES	0.573	0.061	0.812	***
JOB	<---	COMMRESOURCES	1		0.846	N/A
REC	<---	COMMRESOURCES	0.975	0.057	0.839	***
ADV	<---	COMMRESOURCES	1.224	0.059	0.932	***
MH	<---	COMMRESOURCES	1.318	0.065	0.918	***
SS	<---	COMMRESOURCES	0.722	0.053	0.727	***
LAW	<---	COMMRESOURCES	1.25	0.064	0.897	***
MURD	<---	VIOLENTCRIME	1		0.613	N/A
RAP	<---	VIOLENTCRIME	2.606	0.25	0.836	***
ROBB	<---	VIOLENTCRIME	2.542	0.244	0.835	***
ASSA	<---	VIOLENTCRIME	3.896	0.356	0.904	***
BURG	<---	PROPERTYCRIME	1		0.977	N/A
LARC	<---	PROPERTYCRIME	1.044	0.023	0.972	***
AUTO	<---	PROPERTYCRIME	0.857	0.027	0.915	***
ARS	<---	PROPERTYCRIME	0.386	0.027	0.683	***

$\chi^2(75) = 545.320$, $p < .001$. b = unstandardized regression estimate, β = standardized regression estimate, SE = standardized error, *** = $p < .001$.

As shown in Figure 5-12, the error terms for the latent factors were freed. Change in Chi Square between the constrained and non-constrained model was significant, $\chi^2(48) = 103.879$, $p < .001$ showing a less than acceptable model. Other goodness of fit indices were then assessed with the following results: GFI = .948, AGFI = .886, CFI = .986, RMSEA = .066. Due to the significant improvement in the overall model fit obtained by freeing the error terms in the model, the constrained model was considered to be the better than the non-constrained model.

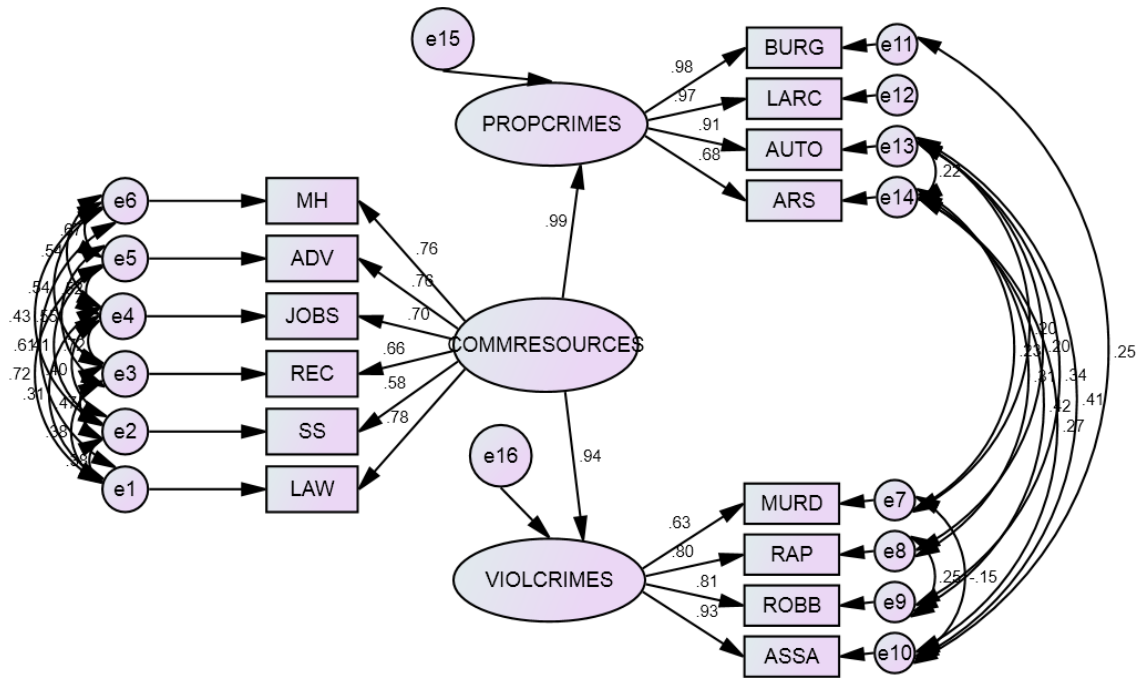


Figure 5-6 The Resource Model of Violent and Property Crimes

Table 5-12 Unstandardized and Standardized Loadings, Probability Value, Standardized Error of the Structural Model, after Modifications

Dependent Factors		Independent Factors	b	S.E.	β	P
PROPERTYCRIME	<---	COMMRESOURCES	3.741	0.263	0.987	***
VIOLENTCRIME	<---	COMMRESOURCES	0.803	0.088	0.947	***
JOBS	<---	COMMRESOURCES	1		0.699	N/A
REC	<---	COMMRESOURCES	0.929	0.049	0.66	***
ADV	<---	COMMRESOURCES	1.212	0.072	0.763	***
MH	<---	COMMRESOURCES	1.327	0.078	0.764	***
SS	<---	COMMRESOURCES	0.705	0.061	0.586	***
LAW	<---	COMMRESOURCES	1.313	0.092	0.778	***
MURD	<---	VIOLENTCRIME	1		0.608	N/A
RAP	<---	VIOLENTCRIME	2.518	0.247	0.802	***
ROBB	<---	VIOLENTCRIME	2.464	0.242	0.803	***
ASSA	<---	VIOLENTCRIME	4.022	0.361	0.926	***
BURG	<---	PROPERTYCRIME	1		0.977	N/A
LARC	<---	PROPERTYCRIME	1.044	0.023	0.972	***
AUTO	<---	PROPERTYCRIME	0.855	0.027	0.913	***
ARS	<---	PROPERTYCRIME	0.383	0.027	0.679	***

$\chi^2(48) = 103.879$, $p < .001$. b = unstandardized regression estimate, β = standardized regression estimate, SE = standardized error, *** = $p < .001$.

I further tested to see the relationships between community resources and violent and property crimes, controlling for percentage of youth below 18, unemployment rate and the location of each county (metropolitan versus non-metropolitan). Findings showed that the model did not yield good model fits, GFI = .749, CFI = .849, RMSEA = .150. Of note, however is that non-metropolitan counties were negatively related to decreased prevalence of both violent (-.271) and property crimes (-.112).

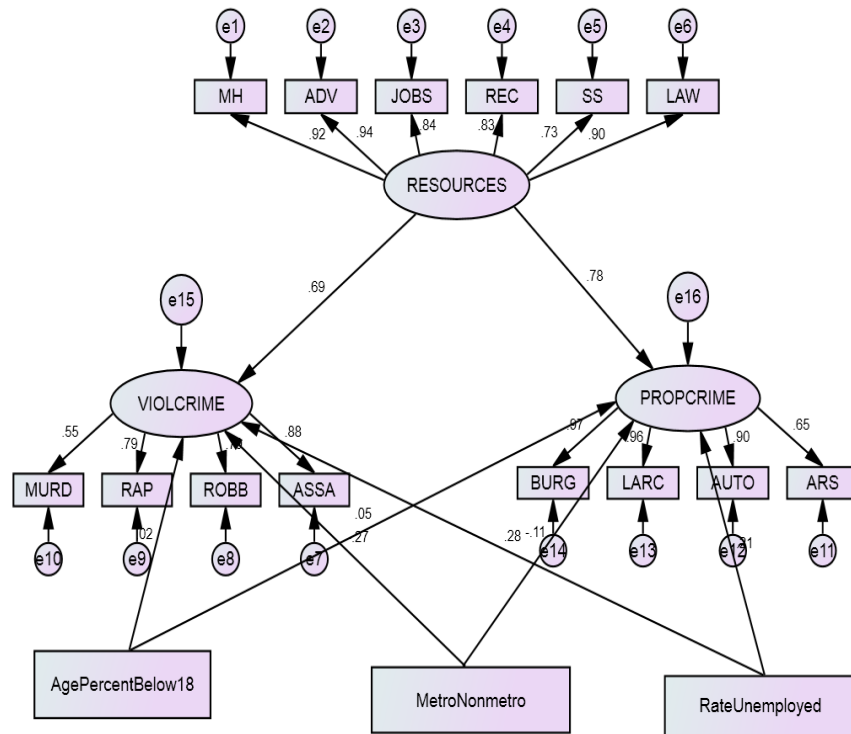


Figure 5-7 The Resource Model of Violent and Property Crimes with Control Variables

Summary of Results/Conclusion

This study assessed how different community resources relate to violent and property crimes in Texas. Throughout the analyses, positive relationships were observed between community resources and violent and property crimes. The first hypothesis (1a) which postulated that prevalence of community resources will be related to prevalence of violent and property crimes was supported. The second part of the first hypothesis (1b), which postulated that there will be inverse relationships between prevalence of community resources (treated as one construct) and the prevalence of violent crimes (treated as one

construct), and property crimes (treated as one construct) was not supported. The second hypothesis (2a-f) which postulated that the greater the prevalence of each of the community resources (social services and parenting resources, mental health and substance abuse treatment resources, vocational/job resources, recreational programs, advocacy resources, and law enforcement services) the lower the prevalence of homicide/murder, aggravated assault, rape, robbery, and larceny theft, burglary, and auto theft was not supported.

Specifically, findings show that prevalence of community resources was associated with prevalence of violent and property crimes. A test of the measurement model for community resources and violent and property crimes yielded acceptable congeneric sets. Further, the structural model also showed positive relationships between violent and property crimes. Overall, both the measurement model and the structural models had acceptable fit. However, an additional step in the data analysis which controlled for percentage of youth below age 18, rural versus urban county, and unemployment rate did not yield a good model of how community resources impact violent and property crimes. A logical explanation to the above findings suffices. It is possible that more resources are placed in areas where with high crime. It is possible that community resources are positively related to violent and property crimes, especially because the occurrence of crime attracts resources. So, it is not that these resources lead to increased violent and property crimes.

Chapter 6

Discussion

This exploratory study is the first to examine the relationships between mental health and substance abuse resources, social services and parenting resources, advocacy resources, law enforcement resources, jobs and vocational training resources, recreational facilities and violent and property crimes in all counties in Texas. Several interesting findings emerged from this study. In this chapter, I present a summary of the discussion of the finding beginning from the non-directional hypothesis 1a, followed by discussions of findings from the directional hypotheses (from 1b to 3), and the confirmatory factor analyses (CFA), to the structural equation model (SEM). Given that findings from this study focuses on the non-directional and directional hypotheses, I discuss both of them in the same sections. I discuss finding of the third hypothesis under a separate section. Finally, I discuss the study's limitations and implications on social work theory, policy, practice, and research.

Summary of Discussion

First, treating community resources as one construct, I hypothesized that the prevalence of community resources will be related to prevalence of violent and property crimes. Findings from this study support this hypothesis. In fact, all of the associations were positive and statistically significant. But in addition to the above non-directional hypothesis, I had also hypothesized that there would be inverse relationships between prevalence of each of the community resources and the prevalence of violent crimes and property crimes. Findings from this study did not support this hypothesis as all of the community resources were positively associated with violent and property crimes.

Additionally, I postulated that greater prevalence of each of the community resources (social services and parenting resources, mental health and substance abuse

treatment resources, faith-based resources, vocational/job resources, recreational programs, advocacy resources, and law enforcement services, the lower prevalence of homicide/murder, aggravated assault, rape, robbery, and larceny theft, burglary, and auto theft. This hypothesis was not supported. In fact, each of the community resources was positively associated with violent and property crimes.

Discussion

The non-directional hypotheses

Several interesting findings emerged from this study. The association between total property crimes and total violent crimes was very strong and statistically significant. It is not surprising, that both property crimes and violent crimes occur in the same community and are both criminal offenses (FBI, 2014). In this study, I was interested in knowing if community resources had different impact on violent crimes and property crimes. It was necessary to separate violent crimes and property crimes in this study, using the official classification by the FBI as a guide. This is because violent crimes usually involve aggression against another individual or individuals, while property crimes are usually crimes against property.

I reasoned that combining violent and property crimes into one measurement construct will amount to testing constructs that are conceptually , practically, and consequentially distinct at least, as exemplified by the FBI classification. For example, some property crimes such as larceny may have a total cost of \$2 while homicide is as costly as human life. So, the range of costs and consequences that are involved in violent and property crimes provides additional reasons to assess them as different subscales within the dependent variable. I also wanted to include violent and property crimes differently due to the differences in their prevalence between 2011 and 2012. The rate of violent crimes (nationwide in 2012) was approximately, 386.9 per 100,000 residents

compared to property crime rates (2,859.2 per 100,000 residents) (FBI, 2014). Violent crimes increased 0.7% between 2011 and 2012 and occurred every 26 seconds while property crimes declined by 0.9% and occurred every 3.5 seconds in the same year. With the above differences in the prevalence of both violent and property crimes prevalence (one was declining while one was increasing), I wanted to see how they relate to the prevalence of community resources in Texas.

The directional hypotheses

Contrary to studies showing negative associations between some community resources and both property and crimes (Molnar, Cerda, Roberts and Buka, 2008; Sampson, Peterson, & Krivo, 2001; Gorman-Smith & Henry, 2004; Steenbeck, Volker, Flap & Oort, 2012; Washington State Institute for Public Policy, 2004), this study found positive association between community resources (as a construct) violent crimes (as a construct) and property crimes (as constructs). Findings from this study go further to suggest that the prevalence of community resources is related to increased crime. Additionally, the study found that all individual resources were also positively associated with both violent and property crimes. Some possible reasons for this may include those community resources may require mediating variables in order for them to be effective. These mediating variables may include collective self-efficacy (Messner & Zimmerman, 2012; Morenoff, Sampson & Raudenbush, 2001), residential turnover and ethnic heterogeneity (Willits, Broidy, & Denman, 2013; Willits, Broidy & Bhence, & Denman, 2013), and history of mental illness and substance use (Messner and Zimmerman, 2012), among others. These possible mediating variables are discussed in more details later on in the discussion.

Discussion of the Results

Mental Health and Substance Abuse Resources

Mental health and substance abuse resources (MH) and violent and property crimes were positively associated. Although this finding is in agreement with some existing (Nielssen, Malhi, McGorry & Large, 2012; Elbogen & Johnson, 2009; Voller & Long, 2009), it contradicts other studies that have found negative associations between community resources and crime (Washington State Institute for Policy, 2001; Treatment Advocacy Center, 2015). Hoagwood et al. (2001) had argued that some resources are “widely used but empirically unjustified services” (p.1185). Hence, in light of the current findings, one wonders whether the studied community resources, at the county level, in Texas.

To explain this further, this study points to a need to explore further whether counties with limitations such as access barriers mobility, eligibility barriers (Gardner & Brooks-Gunn, 2009), family dysfunction (including single parent household) (McGee et al., 2005; Holtzman & Roberts, 2012), and mental health and substance abuse history (Nielssen, Malhi, & Large, 2012; Elbogen, & Johnson, 2009; Richmond & McDonald, 2008; DuRant et al., 2000) among its residents plays a role in the observed relationship between mental health and substance abuse resources and violent and property crimes. With regards to counties whose residents have access barriers, many individuals with substance abuse issues and mental health have been found to not be willing to engage in treatment (Fiorentine, Nakashima, and Anglin, 1999). To some of these county residents, their views on the utility of the treatment impacted their participation in the programs or use of the resources. Also, transportation costs have been found to be associated with lack of participation in among mentally-ill people (Mojtabai, Olfson, & Sampson, 2011).

As mental illness is prevalent among poor people, most of whom depend on public transportation, getting to these programs may be a hindrance to their participation. Also, eligibility barriers have been underscored as an important reason for lack of or poor use of mental health and substance use resources. For example, the high cost of insurance and eligibility requirements seem to add additional stress to community members who may be willing to engage in the programs if they were accessible. But the high cost of insurance and eligibility requirements have been found to some individuals resolve to self-medication, which may result in exacerbation of their problems. Folsom et al.'s (2005) study showed that lack of medical insurance was associated with risk factors such as poor functioning. Where these problems persist, it may not be easy to find negative associations between mental health and substance abuse resources and violent and property crimes. Also, the level of dysfunctional families in the counties may also play a role in these findings (Gorman-Smith, Henry & Tolan, 2010; Holtzman & Roberts, 2012) and living in a single parent households (McGee et al. (2005) have consequences for individual functioning and use of community resources.

Families with single parents often face challenges such as balancing work time with caring for their children. This may make it difficult for some of these families and individuals to count participating in programs as more costly than staying back and dealing with their daily lives the way they know. In such situations, things will likely get worse and may increase the likelihood of their involvement in violence and crimes, thereby resulting in high prevalence of violence and crimes in the counties, despite the existence of mental health and substance abuse resources.

Social Services and Parenting Resources and Violent and Property Crimes

Positive associations were found between social services and parenting resources (SS) and violent and property crimes There are no existing studies known to

the author that have examined the relationships between social services and parenting resources at the county level and violent and property crimes. A closer study is a cost-benefit analysis conducted by the Washington State Institute of Public Policy (2001), which found negative associations between different forms of therapy and support resources and criminal recidivism. Still, its unit of analysis and the variables that were explored by the study (early childhood programs, middle childhood and adolescence programs, juvenile programs, and adult offender programs) were not exactly the same as explored by this study.

In this study, access to resources may have mediated the relationship community resources and crime. Even though social service and parenting resources may be available in a county, it is no guarantee that they will be used by those that need them most. In some cases, travel costs, eligibility barriers such as requiring proof of identity and immigration documents, language barriers such as not being able to communicate in a familiar language or mother tongue, program stigma such as feeling ashamed for being a situation of need, lack of transportation or reliance on a second or third party in order to get from one place to the other, fear of deportation due to illegal immigrant status are factor that may prevent families from utilizing resources despite their presence in a community (Kurtz, Surratt, Kiley, & Inciardi, 2005; Scheppers, 2006).

Advocacy Resources and Violent and Property Crimes

Advocacy services (ADV) also showed a positive relationship with violent and property crime. It was further expected that higher advocacy outlets will be related to less violent and property crimes. There are no existing studies to compare the findings from this study with, given that no studies known to the author has explored the relationship between advocacy resources and violence and crime. However, Goodman, Bennett, and Duttons' (2004) findings suggest some reasons as to why advocacy

resources at the county level may be positively associated with violent and property crimes.

County residents with substance abuse history may be reluctant to use services for many reasons including fear of being judged by service providers, or fear of risking apprehension by law enforcement. Also, high cost of legal services may also pose a barrier to them seeking legal ways to resolve their issues with other individuals or groups (Hoefler & Chigbu, 2015). As a consequence, counties with high levels of risks may experience high level of resident re-offenders (National Institute of Justice, 2015). Further, there is also a possibility that the finding of a positive association between advocacy resources and violent and property crime is because variables such as collective self-efficacy defined as the level of cohesiveness among community members (Messner & Zimmerman, 2012), was not accounted for in this study. Collective self-efficacy, according to Messner and Zimmerman (2012) is the relationships between community social cohesion and members' aspirations and desires for their general wellbeing. Thus, collective efficacy is a function of trust and mutual assistance, and can be a force for unity and mutual engagement for advocacy.

Also, another variable that may relate to collective self-efficacy and which may affect the relationship between advocacy resources and violent and property crimes is population heterogeneity, which occurs when the residents of a community are not homogeneous in terms of their ethnic or racial backgrounds (Willits, Broidy & Denman, 2013). Hence, Sampson and Groves (1987) highlighted the absence of these factors as increasing "the inability of a community structure to realize the common values of its residents and maintain effective social controls" (p.777). So, in communities where members do not have close social ties with each other, and where there is high population heterogeneity, there may tend to be less collective self-efficacy which may

result in lack of mutuality and trust and increased violent and property crimes (Sampson, Morenoff and Earls, 1999; Morenoff, Sampson & Raudenbush, 2001; Messner & Zimmerman, 2012). So, looking at how collective self-efficacy and population heterogeneity may moderate or mediate the relationship between property and violent crimes may be useful.

Jobs and Vocational Training Resources and Violent and Property Crimes

Findings showed that jobs and vocational training resources as positively associated with violent and property crimes. This finding is also surprising because literature suggests that jobs and vocational resources are related to lower rates of violent and property crime (Washington State Institute for Policy, 2001). A possible explanation for the positive associations found between jobs and vocational training resources and violent and property crimes is that the prevalence of jobs and vocational training resources.

Morgenstern, McCrady, Blanchard, Veigh, Riordan and Irwin (2003) identified substance abuse, domestic violence, mental illness, legal challenges, child welfare investigations, and lack of job skills as barriers. Hence, it may be possible that counties with residents with these problems may feel less motivated to seek to acquire additional skills, unless they are motivated and programmed in a way that does appeal to their current physical, financial and mental health needs or circumstances (Hoefer & Chigbu, 2015). Also, the current finding from this study may be as a result of policies related to jobs and vocational training resources including those that relate to absorbing individuals with high violent and criminal propensities.

For example, Harris and Keller (2005) found that legal barriers hinder ex-offenders from being retrained and re-joining the workforce. So, despite the established high risk of recidivism in this population (NIJ, 2015), many employees and vocational

training institutions may be reluctant to accept or enroll them, due to their criminal history. When left with nothing to do, they may resort to violence and crime. So, despite the availability of jobs and vocational training resources, individuals with criminal history, people with psychiatric or other disabilities may remain less likely to be employed or get the opportunity to train for jobs (Graffam, Shinkfield & Hardcastle, 2007); yet, they are among the group with the highest level of violent and crime recidivism in communities (NIJ, 2015). Another possible explanation is that available jobs have to match the skills of potential employees. It could also be that all kinds of jobs do not help with crime, especially the low-paying/dead-end ones, and consequently may not be able to prevent violent and property crimes, despite their existence in such counties.

Recreational Resources and Violent and Property Crimes

The association between recreational resources and violent crimes and property crimes was also positive. The finding of a positive relationship between recreational resources and property and violence crimes is contrary to Peterson, Krivo and Harris' (2000) findings. The researchers found that communities without a recreation center had 17.4 versus 15.1 crime rates per 1,000 populations, and that adding a recreational center in a community reduced violent crimes by 2.3 per 1,000 population. The differences in the current findings and this study may be due to the following reasons: First, Peterson, Krivo and Harris' (2000) study applied social disorganization theory in their study, thereby accounting for variables such as collective self-efficacy, heterogeneity, and population mobility. Secondly, they did not hypothesize direct associations between resources and crime. Rather, they proposed that community resources provide a mechanism through which residential fluctuations and economic deprivation relate to violent crimes. In the study, libraries and recreation centers were negatively associated with crime, and retail

and employment resources (institutions) had negative correlations with all types of violence.

Given the expositions from Peterson, Krivo and Harris (2000) a possible explanation for the current finding could be that recreational facilities is mediated by other factors such heterogeneity, residential mobility or turnover, and economic deprivation, as well as the proximity of recreational resources to community members and access to such facilities. It is possible that recreational facilities may be situated in locations that are not easily accessible to community members. Some of the recreational facilities require money and tickets in order for individuals to make use of them; some require monthly memberships. These issues may prevent community members from using the resources irrespective of their availability. Thus, it is important to consider how access to recreational facilities may impact the relationship between recreational facilities and violent and property crimes.

Law Enforcement Resources and Violent and Property Crimes

Findings from the current study showed positive associations between law enforcement resources and violent and property crimes. Literature suggests no consensus on the notion that law enforcement resources may lead to reduced violent and property crimes (Eck & Maguire, 2000; Koper, 2006; Levitt, 2002; MacDonald, Klick & Grunwald, 2012; Draca, Mirko, Machin, Stephen, Witt & Robert, 2011; Berk & MacDonald, 2010). For example, in studying the impact of law enforcement resource on crime, Eck and Maguire (2000) concluded that most claims associating police presence with reduced crime are overstated. In fact, the authors noted that the idea that “the police have a substantial, broad and independent impact on the nation’s crime rate” is a myth (p.249). MacDonald (2002) also found minimal effects of law enforcement resources on

crime. Findings from this study support studies finding that more police presence are associated with more crimes.

It is important to note that none of the previous studies that do not agree with the current findings used the county as its unit of analysis. They primarily relied on census blocks as their units of analysis. Thus, an equal comparison of the current study with the previous studies may not be necessarily appropriate. But a possible explanation to the current finding is that, maybe counties are more reactive to crime and violence than proactive. In other words, it may be that counties increase police presence after crime has occurred. Or, as with the case of the other variables examined in this study, there may be possible mediating factors between law enforcement resources and violent and property crimes that are also worth exploring. Counties having more police may not automatically translate to more police on the street or stationed in areas that are identified as hot spots. Thus, possible a mediating factors between police resources and violent and property crimes may include the types of policing applied in the county.

The findings that controlling unemployment rate, percentage of youth below 18 and metropolitan versus non-metropolitan counties did not affect how community resources impact violent and property crimes was surprising. This is because, the goal of adding the control variables was to hold the community resources (as independent variables) constant. This process helps to eliminate confounding findings in a study (Rubie & Barbie, 2009). Given the positive relationships found between community resources and violent and property crimes as shown in the findings, there was a suspicion as to whether some variables may have played some confounding roles in the relationship between community resources and violent and property crimes. That was the reason for adding the three control variables – percentage of youth below 18 years, rural versus urban county, and unemployment rate in the counties. The fact that the model

containing the control variables had poor fit suggests that, the control variables are influencing the relationships between community resources and violent and property crimes. Future research will look into exploring the nature of these relationships, in addition to other possible mediators as earlier discussed.

Also, it is the first known study to have applied resource dependency theory in the study of violent and property crimes. The structural model also yielded a good congeneric set for measuring the impact of community resources on violent and property crimes. Findings from this study also arouses our curiosity to ask addition questions about how negative associations could be fostered between community resources and violent and property crimes.

Limitations

This study is an exploratory secondary data analysis of the relationships between community resources on violent and property crimes. In fact, it appears to be the first research done on this topic, using these variables, using the same approach, in Texas, and from a social work standpoint. In such a research method, there are obvious advantages and constraints (Clarke & Cossette, 2000). In this study, I relied on different secondary datasets from different sources. Hence, as is with secondary data analysis, only the available data was used. But secondary data analysis has become prominent in studies of this nature (Johnston, 2014). This is because, available data increases the possibility of examining important phenomenon (Magee, Lee, Giuliano, & Munro, 2006) such as the impact of community resources on violent and property crimes. Due to the sensitive nature of the topic, participants may not feel very open to respond to questions, if asked via a survey or face to face interview, hence, secondary data analysis became the feasible choice for the study. The cost-effectiveness of secondary data analysis is also of note as echoed by other scholars (Dale et al., 1988; Smith et al., 2011). But

despite its advantages, secondary data analysis has inherent disadvantages that are not too far from this study.

Some of the limitations of secondary data analysis include that the data was collected for another reason, and may not reflect exactly the variables the researcher is interested in exploring (Boslaugh, 2007, p.4). This is true of this current study, as the researcher relied on existing information on community resources and violent and property crimes. Data for community resources was collected for other reasons, by the Census Bureau. Hence, its use in this study serves a proxy purpose more than an absolute reflection of community resources. The data for violent and property crimes came from the Federal Bureau of Investigations, and only reflects reports submitted by reporting agencies. As such, it may not reflect the exact total of violent and property crimes in Texas. Also, in secondary data analysis, the researcher is not a participant in the data collection process. This factor also affected this study in that, the dataset used for this study did not allow the researcher the opportunity to collect the data. Heaton (2008) also underscored some further limitations that may be linked to the above problem, including that the participants may not be contacted directly for follow-up. Where the data was missing, multiple imputation was used for its replacement. This replacement method, although preferred among many scholars, may have affected the reality of the findings of the study (Rubin & Babbie, 2009).

Also, some of the counties had higher prevalence of community resources and violent and property crimes, compared to other counties. These otherwise 'different counties' were not differently analyzed to assess how their removal from the analysis (sensitivity analysis) may affect the findings. Hence, future research will consider this possibility. Further, although the variance inflation factors (VIFs), an indication of multicollinearity were less than 10, following several attenuation of the variables, there is

also a reason to suspect that multicollinearity may have posed a problem in the study, especially, given that the directional hypotheses (1b to 3) all went in the opposite direction. Although the independent variables were grouped based on their frequency distribution and transformed to log 10, their correlations remained mostly in the upper 70% and above, which may have posed a multicollinearity problem under the current study. Multicollinearity problems are high correlations among independent variables. According to O'Brien (2010), multicollinearity problems can lead to obtaining opposite results from what was hypothesized in a study. This research reflects the problem highlighted by Heaton (2008), exactly. For example, the researcher in this study was unable to follow-up with the counties that had missing data or that were outliers in one or more variables to cross-check or follow up on the reasons behind such. However, in cases where these arose, the researcher relied on theoretical explanations such as population and income variances among the counties.

Future Research

This study yielded a structural model (the resource model of violence and crime prevention) depicting the relationship between violent and property crimes. This study may serve as a foundational contribution to interventions premised in assisting communities and families cultivate and appropriately implement protective factors through community resources, thereby contributing to the knowledge and practice base of barriers to the ill effects of crime and violence in the family and community settings.

Results from this study suggest positive associations between community resources and violent and property crimes. Future research may benefit from further exploring the reasons behind these findings in an attempt to begin to address ways to reverse the observed resource-crime relationships. This can be achieved by by expanding and refining the resource model of crime and violence prevention by incorporating individual-

level measures including family functioning and mental health/substance abuse, and other factors such as heterogeneity, economic deprivation, residential turnover, among other things. This will add a social work perspective to the existing body of knowledge on the ecology of crime and violence (Messner & Zimmerman, 2012; Krivo & Peterson, 2000). Future research may also benefit from assessing how political or government structures, and the kind of policing that are implemented may relate to prevalence of community resources at the county level. Future research may also benefit from examining the larger counties differently so as to assess their influence on the overall relationships between community resources and violent and property crimes in Texas.

Implications for Theory

This is the first study known to have used the resource dependency theory in explaining the relationship between community resources and violent and property crimes. Resource dependency theory is most often used in studying organizational level issues (Davis & Cobb, 2010). It is for this reason that this study remains exploratory. Based on the resource dependency theory, it was assumed that more community resources will be related to decreased violent and property crimes. The findings proved otherwise, indicating that, maybe, resources alone cannot explain the nature of crime in the counties that were studied. It also suggests that resource dependency theory may need to be further enhanced by adding other aspects of theories of crime in assessing the relationships between community resources and violent and property crimes.

This additional step may also be necessary in light of several criticisms that the theory has received. For example, according to Davis and Cobb (2010) and Hillman, Withers, and Collins (2009), some of the tests done on RDT are in the form of narratives. Further, findings from studies using RDT have remained inconsistent. For example, while some studies show that dependence between organizations results in alliance formation

among organizations (Dussauge, Garrette, & Mitchell, 2000; Park, Chen, & Gallagher, 2002; Peng, 2004), other studies find that not all resources yield good outcomes as the RDT hypothesizes (Koka & Prescott, 2008; Paruchuri, Nerkar, & Hambrick, 2006; Vermeulen & Barkema, 2001). Other variables such as collective self-efficacy, ethnic heterogeneity, socio-economic status, and social capital, when included, may reveal more about the relationships between violence and crime and community resources (Messner & Zimmerman, 2010). Maybe, a step forward will be to include these variables in assessing the relationships between community resources on violent and property crimes.

Implications for Policy

This study indicates that community resources are positively and statistically significantly related to violent and property crimes. Hence, to further assess how the political structures as well as the kind of policing practiced by the counties and their policies towards resource allocation may be impacting the prevalence of violent and property crimes. In order to assist in accomplishing this goal, counties must examine aspects of the community resources that may be enhancing the prevalence of violent and property crimes. It is essential for both counties and the state of Texas to be aware that the existing community resources are not achieving the goals for which they were established. This may be due to the overreliance on traditional approaches to violence and crime prevention such as arrests, rather than resource-based approaches. It is important for counties to understand the process of program evaluations mainly focusing on how each community resources are impacting violent and crimes within its jurisdiction. If counties are aware of how each community resource is related to violent and property crimes over time, it will be more likely to make adjustments and address programing and policy issues that may be impacting the outcome of such resources.

Violence and crime have been highlighted as public health problems in the US. From a social work perspective, the inclusion of community resources as a social control tool in the larger discussion of violence and crime prevention, and is in line with the suggested policy direction of the National Council of State Legislatures which has called for healthy communities including making sports and recreational facilities available to residents. Another example of policies that align with the findings from this study is the Community Reinvestment Act. The Community Reinvestment Act encourages depository institutions to assist in meeting the credit needs of the communities in which they conduct business, as well as low- and moderate-income neighborhoods, in adherence to safe and sound procedures. The Act was enacted by the Congress in 1977 (12 U.S.C. 2901) and is implemented by Regulation BB (12 CFR 228). The regulation was substantially revised in May 1995 and updated again in August 2005.

Implications for the Profession of Social Work

The National Association of Social Workers (2008) maintains that the primary mission of the social work profession is to enhance human well-being and help meet the basic human needs of all people. To accomplish this mission, social workers often emphasize the need to empower and equip individuals and communities with resources and opportunities to enhance their wellbeing. These resources in most cases serve as opportunities and interventions which are critical processes used to enhance human wellbeing. But resource constraints often times pull social workers away from the other critical component of social work: prevention. Concerted attention to prevention in the form of identifying aspects of community resources that compromise prevention of violent and property crimes may enhance social work's impact by complimenting intervention and treatment efforts.

The findings from this study suggests that community resources are positively related to violent and property crimes. This finding is very interesting and as such, it is essential for social workers to continue to explore first, the contextual and programing aspects of community resources that enhance violent and property crimes, with the goal of understanding the reasons behind the positive correlations, as well as aspects of the resources that may prevent and reduce violent and property crimes in communities. The outcome of focusing on the above goals could be not only a reduction of violent and property crimes but also increase in community member's awareness about aspects of resources that may be adversarial to violent and property crime prevention and/or reduction.

If the aspects of community resources that have negative associations with violent and property crimes are well explored and understood, the overarching goal will be to enhance such aspects thereby changing the social norms that currently associates positively with violent and property crimes. Consequently, the impact of community resources on violent and property crimes could be to inverse, and may in the long run, lead to elimination of certain factors that maintain the observed positive associations between community resources and violent and property crimes. Social workers need to also engage in some kind of evaluation of services to know which ones are effective. [Perhaps, we need to examine the different community resources assessed in this study to know if they are effective at what they say they will do. There is also a need for the profession of social work to become actively involved in the larger discussion on violence and crime prevention and reduction, thereby contributing to the re-shaping of the current ecological model of crime. Social work professionals grapple with victims of violence and crime and do provide interventions that are mostly at the individual/micro level. It is time

to expand this reach by being actively involved in the systemic-level efforts geared towards crime and violence prevention and intervention.

Implications for Social Work Education

Prevention of violent and property crimes is a goal that resonates with social work education. But for prevention to be effective, it ought to be a significant aspect of social work education. Previous scholars had called for the field of social work to get active in the aspect of prevention (Bloom, 1981; Bowker, 1983; Meyer 1974). Particularly, the importance of prevention has also been called for, as it relates to schools (Levine, Allen,-Meares, & Easton, 1987). But as observed by previous scholars, schools of social work have yet to incorporate key preventive concepts into the curriculum (Siefert, Jayaratne, & Martin, 1992).

It is important for social work education to explore further and consider the inclusion of factors that may enhance community resources as preventive approaches to community crime and violence in answer to the call by Diaz and Kelly (1991) who alluded to the fact that social work education was slow in its inclusion of prevention in its curriculum. Although it is now not an unusual practice for Social work educators to incorporate treatment and intervention services into their coursework, the area of prevention, especially covering both the micro and macro levels seems to still be evolving. So, in order for future social workers to be conscious of the importance of community resources as preventive aspects of violent and property crimes, social work educators ought to incorporate same in their coursework. According to Woody (2006), the inclusion of prevention information in the social work programs (graduate and undergraduate) is essential in meeting the expectation of having students' future practice to include prevention. Hence, social work educators should allocate more time and commitment to teaching strategies for effective community resource allocation and

situation, as an intervention mechanisms, especially, given the increased incidences of violence and crime that is being experienced in Texas. Numerous courses in the social work curriculum can lend themselves to community resource as possible preventive avenues for assessing the mechanisms for violent and property crimes prevention. For example, to specifically focus on teaching social work students about violent and crime prevention, it will be important to incorporate community violence and crime prevention strategies (one of which is community resources) and theories (including the resource dependency) electives that address community and individual level crimes in the social work curriculum. This content can be incorporated into courses focusing on policy, child welfare, mental health and substance abuse, human rights, and field practice, among others. By so doing, social work education will be contributing the larger discussion and the urgent need to prevent and mitigate the consequences of violent and property crimes.

Implications for Social Work Practice

This discussion concludes with some highlights on the implications of the current study for social work practice.

This study may also assist social workers and others who plan to develop and implement community resources as prevention and intervention programs within communities to pay attention to specific aspects of programming that allow for violent and property crimes prevention to be fully incorporated. Hopefully, social workers who practice at the micro and macro settings will use findings from this study as a wake-up call in placing more emphasis on appropriate violent and property crimes prevention based on resource allocation. When allocating and implementing community resources programs, it is critical that social workers and administrators ensure that such programs are spreading their message to the target audience, and in manners that are user-friendly. Sometimes good resources exist but eligibility issues then discourages those

who need such services from participating. In such circumstances, problems will persist despite the availability of community resources in such communities. Professionals who work in community and private settings, administrators, police officers and counselors, may also benefit from this study as it allows them to specifically consider ways to address the positive associations between community resources and violent and property crimes. They may also benefit from learning more about community resources and violent and property crimes.

Conclusion

In discussing these findings, care must also be taken in highlighting that the literature on the causal and relational paths between community resources and violent and property crimes are scarce. Even where studied, Steenbeek, Volker, Flap, and Oort (2012), the variables the authors measured or their conceptualization of community resources are different from the independent variables used in this study. Overall, the findings from this study may indicate that the community resources under study are more likely to be available where violent and property crimes occur compared to the counties where such incidences do not occur. A clear indication of this possibility is the fact that law enforcement, emergency health and fire departments are usually dispatched when calls for help occur. These resources are not necessarily stationed at potential crime scenes; rather, they are called into effect after the fact. However, not all of the resources are designed for emergencies. In addition to the non-directional hypothesis that was tested in this study, resources assessed were hypothesized to have negative relationships with violent and property crimes, but this was not the case. So, additional exploration is warranted to examine possible factors such as ethnic heterogeneity, lack of collective self-efficacy, and other indicators of community disadvantage (Peterson, Harris & Krivo, 2000), and how they may relate to the mechanisms that are associated

with community resources and violent and property crimes. A major strength of this study is the development of the community resources and violent and property crime scales. Both scales, after adjustments proved to be good congeneric sets of their respective constructs – community resources and violent and property crimes.

The current study explored how community resources are related to violent and property crimes in Texas. Findings from this study, overall, showed strong and statistically significant positive associations between community resources and violent and property crimes. This study does lend itself as a social work contribution to the larger problem of violence and crime prevention, at the systemic level. It adds a new way of considering community resources within the context of the ecological discussion on crime prevention and intervention. Findings from this study may also open up discussions and considerations to evaluate aspects of community resources that may play important roles in crime and violence prevention and intervention.

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Biographical Information

Dr. Kingsley Chigbu was born in Aba, Abia State, Nigeria, to parents Elder Robert Onyendi Chigbu (of blessed memory) and Mrs. Margaret Obidiya Chigbu. He graduated upper 1% of his class in the International Law and Diplomacy (Bachelor's degree) program at Babcock University, Nigeria, and served as President of International Law and Diplomacy Student Association in the two years leading to his graduation in 2006. He enrolled into the Master of Social Work program at the University of St Thomas/College of St Catherine in St Paul, Minnesota in 2007. At his graduation in 2009, he was presented with the Annual MSW Student Leadership Award for representing academic excellence, engendered respect through his ethic of caring, commitment to social justice, sense of integrity, modeling of hospitality, and outstanding commitment and service to his fellow classmates, the School of Social Work, and the larger social work community.

Dr. Chigbu worked at several settings including the Interprofessional Center for Counseling and Legal Services and was with the University of Minnesota Medical Center, Psychiatry, as Clinical Treatment Coordinator in 2011 when he received a full scholarship to pursue his Ph.D. at the University of Texas at Arlington (UTA). While at UTA, Dr. Chigbu served as adjunct professor and taught numerous graduate and undergraduate courses including research and evaluation, social policy, and generalist and advanced clinical practice. Dr. Chigbu's research focuses on violence prevention and intervention with emphasis on human and assets security, and has maintained a very good research productivity as evidenced by his academic publication record. Throughout his education and career, Dr. Chigbu has maintained commitment to international organizations serving the most vulnerable people across the globe. He obtained his doctorate degree on November 18, 2015.