Syracuse University
SURFACE

Syracuse University Honors Program Capstone Projects
Syracuse University Honors Program Capstone Projects

Spring 5-2016

Formative Research for Case Management Protocol Addressing Neighborhood Trauma Due to Violence

Azada Wan

Follow this and additional works at: https://surface.syr.edu/honors_capstone

Part of the Public Health Commons

Recommended Citation
Wan, Azada, "Formative Research for Case Management Protocol Addressing Neighborhood Trauma Due to Violence" (2016). *Syracuse University Honors Program Capstone Projects*. 928.
https://surface.syr.edu/honors_capstone/928

This Honors Capstone Project is brought to you for free and open access by the Syracuse University Honors Program Capstone Projects at SURFACE. It has been accepted for inclusion in Syracuse University Honors Program Capstone Projects by an authorized administrator of SURFACE. For more information, please contact surface@syr.edu.

Formative Research for Case Management Protocol
Addressing Neighborhood Trauma Due to Violence

A Capstone Project Submitted in Partial Fulfillment of the
Requirements of the Renée Crown University Honors Program at
Syracuse University

Azada T. Wan
Candidate for B.S. Degree
and Renée Crown University Honors
May 2016

Honors Capstone Project in Public Health

Capstone Project Advisor: ______________________________
Maureen Thompson
Associate Professor and
Undergraduate Director of Public
Health

Capstone Project Reader: ______________________________
Sandra Lane
Laura J. and L. Douglas Meredith
Professor of Public Health and
Anthropology

Honors Director: ______________________________
Stephen Kuusisto, Director

Date: May 6, 2016

© Azada Wan 2016

Abstract

My capstone project is focused on conducting formative research for developing a case management protocol to reduce recidivism in youths aged 13 to 16. This formative research will serve as a basis for Street Addiction Institute Inc.'s request for proposal (RFP) to Onondaga County Department of Justice. As Street Addiction Institute Inc. is currently in the process of applying for funding at the federal and county levels, the formative research I conducted by integrating knowledge obtained from literature, expertise of community leaders and professionals, and understanding of youth's specific characteristics, needs, and risks, will inform the development of a case management protocol executed by Street Addiction Institute Inc. This case management program will seek to reduce youth recidivism rate by 20% in Syracuse, New York. In doing so, we hope to affect change concerning gang and neighborhood violence by ameliorating traumatic stress for individuals and communities.

Executive Summary

Deaths and injuries resulting from youth violence constitute a major public health problem in the United States. Though there are many viable prevention and intervention strategies, multiple service approaches are most effective in reducing the burden of youth violence (Krug et al., 2002). Additionally, it is important that prevention programs widen their scope by addressing not only the cognitive, behavioral, and social factors but also affecting the environmental factors that facilitate the development of violent behaviors. In my capstone project, I will conduct formative research in order for future development of a public health program that aims to significantly reduce the young individual's relapse into criminal behavior. Formative research, or the evidence-based research serving as a basis for developing effective programs and interventions for influencing behavior change, will inform the program planning, implementation, and evaluation processes.

In my capstone paper, I will cover the different domains that influence evidence-based decision making in a transdisciplinary model- present state of knowledge, population characteristics, recommendations from community leaders, and environmental and organizational context. The literature review section will include a discussion of juvenile violence, risk and protective factors, and best practice individual and community level programs. In the following section, I will introduce the street addiction model framework suggesting that being "addicted to the streets" is important to consider for recidivism in the criminal justice system (Bergen-Cico et al., 2012). Lastly, I will describe the formative research process used in this capstone project and the input received from community leaders. The formative research will provide the foundation from which to develop effective programs to reduce youth violence and recidivism.

The problem of juvenile violence contributes greatly to premature death, injury, and disability. If unaddressed, its widespread effects extend to include diminished quality of life, economic devastation, family disruption, and unaddressed traumatic stress (Krug et al., 2002; Lane et al., 2015). Youth violence has severe consequences for the individual including mental problems, poor academic performance, harmful use of drugs and alcohol, lack of positive social relationships, and a pattern of involvement with criminal activity into adulthood (Office of the Surgeon General et al., 2001). It also harms the community by instilling feelings of fear and anxiety and lack of social connectedness (World Health Organization, 2015).

Based on an understanding that criminal involvement and gang association can be addictive and difficult to discontinue, we must consider relevant implications for our criminal justice system in terms of effective means of treatment and prevention for offenders. It is important to target juvenile offenders aged 13 to 16 because research shows that a majority of young individuals who participate in criminal activities at an early age will continue to reoffend into adulthood. Through a multiple services approach such as case management, young offenders can improve personal and mental health, interpersonal skills, academic performance and receive mentorship and counseling. Additionally, this program is designed to gain better understanding of the social and environmental context to change the narrative of neighborhood violence more broadly.

Table of Contents

Abstract……………………………………………………………………………………… iv

Executive Summary……………………………………………………………………….. v

Acknowledgements…………………………………………………………………………… viii

Chapter 1: Introduction………………………………………………………………………... 1

Chapter 2: Literature Review……………………………………………………………… 4

Juvenile Violence…………………………………………………………………………. 4

Risk Factors for Juvenile Violence…………………………………………………….... 5

Protective Factors for Juvenile Violence………………………………………………... 11

Best-Practice Public Health Interventions for Juvenile Violence……………………… 16

Chapter 3: Theory…………………………………………………………………………….. 26

Chapter 4: Methods…………………………………………………………………………….. 27

Formative Research Process…………………………………………………………… 27

Setting and Collaborators……………………………………………………………… 27

Seeking Input from Community Leaders……………………………………………….. 28

Chapter 5: Solution…………………………………………………………………………..... 34

Chapter 6: Conclusion and Future Work……………………………………………………. 36

References……………………………………………………………………………………..… 38

Appendices……………………………………………………………………………………... 50

Acknowledgements

I would like to express my deepest gratitude to my advisors, research team, community members, family and friends who have supported me to the completion of this capstone project. Dr. Maureen Thompson and Dr. Lane, thank you for sharing your wisdom and giving me continual support. Timothy "Noble" Jennings-Bey and Arnett Haygood-El, thank you for your commitment to our Syracuse community. Olivia Sage, Alyssa Stapper, and Deborah Adelakun, thanks for being a team I could always count on. To all the community leaders we met with, I'm humbled and encouraged by your dedication to make a lasting change in our communities. Lastly, thank you to my family and friends who have made this all possible. I couldn't be more thankful for the people that God has placed in my life.

Chapter 1: Introduction

In the United States, authorities report an overall decrease in the occurrence of violent crime. Violent crimes include murder, negligent manslaughter, rape, robbery, and aggravated assault. In 2013, an estimated 1,163,146 violent crimes were reported, a decrease of 4.4% from the 2012 estimate (Federal Bureau of Investigation, n.d.). Refer to Figure 1 (Appendix X) for Nationwide Violent Crime Offense Figures. In this paper, I will exclude individual-level violent crimes including rape and any form of domestic or sexual violence from my discussion of juvenile violence.

Though violent crimes have steadily decreased, juvenile violence, the fourth leading cause of death in young individuals worldwide, continues to demand the health sector to play an increasingly active role in prevention and response. In 2000, there was an estimated 199,000 youth homicides (9.2 per 100,000) that occurred globally. In other words, approximately 565 adolescents and young adults die each day as a result of violent crimes. At 11.0 per 100,000, the United States is one of the few developed countries with youth homicide rates higher than 10.0 per 100,000, more commonly seen in developing countries or those experiencing rapid social and economic changes (Krug et al., 2002). Both the victims and perpetrators of violence are mostly adolescents and young adults aged 10 to 29, with high rates of offending and victimization until ages 30 to 35 (Reza, 2001). Longitudinal studies report that aggression in childhood can continue to escalate during adolescence and adulthood creating a pattern of persistent offending throughout one's development. In fact, 20% to 45% of boys and 47% to 69% of girls who are serious violent offenders at ages 16 and 17 are on a "life-course persistent developmental pathway" (Office of the Surgeon General, 2001). There is also evidence demonstrating a continuity in aggressive behavior from adolescence to adulthood. A study conducted in

Columbus, OH, United States, found that 59% of youths arrested for violent offenses before age 18 were rearrested as adults and 42% of those rearrested were charged with at least one serious violent offense including homicide, aggravated assault or rape (Hamparian et al., 1985).

Youth violence harms not only individuals immediately involved but also their families, friends, and communities. Its far-reaching detrimental effects have demonstrated that high rates of neighborhood violence may be indicators for other coexisting public health concerns such as severe emotional distress, health disparities, and school failure (Bergen-Cico et al., 2012; Lane et al., 2008; Lane et al., 2015). The social and monetary costs resulting from these violent crimes must also be considered when discussing the impact of juvenile violence on the community. Annually, violent crime costs Americans at least $42 billion in direct costs including costs associated with police, courts, and correctional institutions; medical expenses spent by victims; and lost earnings by victims and perpetrators of crime (Shapiro & Hassett, 2012). Violent crimes also inflict intangible costs on individuals and communities including unaddressed stress and reduced quality of life.

This capstone project will examine the violent crime trends in a medium size, urban city in Upstate New York and report on individual and community level impacts. Using a formative research approach, the case management protocol will be proposed to reduce recidivism in juvenile crime offenders aged 13 to 16. This initial research will serve as a basis for developing effective programs and interventions used by Street Addiction Institute to influence behavior change and reduce neighborhood violence and unaddressed trauma in Syracuse, New York. In this capstone paper, I will discuss the (1) risk factors of juvenile violence, (2) protective factors against juvenile violence, (3) best practice individual and community level interventions for juvenile violence, and (4) input from community leaders in order to frame the issue of juvenile

violence as a public health concern. Through an evidence-based research process, I am seeking to address the multifaceted nature of juvenile violence and change the narrative of juvenile violence within our communities.

Chapter 2: Literature Review

Juvenile Violence

Since the early 1990s, youth violence has increasingly been recognized as a public health issue and some would even say "epidemic." Several trends have led to the recognition of violence as a public health issue. First, causes of mortality in the United States have shifted in the the past few decades from communicable diseases like tuberculosis and malaria to non-communicable diseases resulting from unhealthy lifestyles consisting of poor diets, physical inactivity, exposure to tobacco smoke, and alcohol overuse (Hoyert, 2012). In 2014, violence-related crimes has consistently been among the leading fifteen causes of death in the United States and among the leading five causes of death for individuals aged 1 to 44. With homicides comprising about one-tenth of all injury-related deaths in 2014, researchers predict that homicide and other violence-related mortality rates will continue to rise in rank by 2030 (World Health Organization, n.d.). Second, violence came to the forefront of public health in the late 20th century because of increased rates of homicide in youth and among minority groups (Dahlberg and Mercy, 2009). Lastly, researchers have emphasized the behavioral factors in understanding the etiology and prevention of disease. These developments in the field of public health have led practitioners to consider the underlying causes for youth violence and how to effectively address this national and global concern.

Violent behaviors, as other patterns of behavior, change over the course of one's development. Statistics and relevant research suggest that adolescence and early adulthood is a period of time when violence is heightened (World Health Organization, 2009). Some children who are exposed to risk factors and possess few protective factors may eventually be involved with more serious forms of aggression and violence during adolescence. Research states that 20-

45% of boys and 47-69% of girls who are serious offenders at age 16 to 17 are on a "life-course persistent developmental pathway" (Office of the Surgeon General, 2001).

Evidence of long-term criminal involvement leads us to ponder questions concerning the factors that underly the behavior, cost-effective treatment for youth involved in violent crimes, and long-term consequences for the neighborhood including traumatic stress.

By seeking to address the systemic and multifaceted problems that facilitate youth violence through evidence-based case management, we can contribute our work to change the narrative of young individuals' lives and ameliorate larger public health concerns including health disparities, emotional distress, family disruption, and economic devastation.

The public health approach to addressing juvenile violence includes identifying potential risk and protective factors, determining various factors and their influence on behavior, and designing interventions that effectively influence behavior change in order to improve the health and wellbeing for everyone.

Risk Factors for Juvenile Violence

In order to effectively address this public health concern, the first step to developing a case management protocol for reducing recidivism in juvenile crime offenders is identifying the risk factors and protective factors for perpetration of youth violence.

A risk factor is defined as "anything that increases the probability that a person will suffer harm" (Office of the Surgeon General et al., 2001). Risk factors are "characteristics, variables, or hazards that, if present for a given individual, make it more likely that this individual, rather than someone selected from the general population, will develop a disorder" (Shader, n.d.). Those who possess risk factors for juvenile violence will increase his or her likelihood to be involved in violent crime. However, it is important to note that risk factors

demonstrate some degree of association, not necessarily causation (Office of the Surgeon General et al., 2001; Shader, n.d.; Centers for Disease Control and Prevention, 2015).

Risk factors may be found wtihin the individual, family, school, peer group, and community (Office of the Surgeon General et al., 2001). A complete listing of risk factors is reported in Figure 4 (Appendix X). The interaction between the individual and his or her environment is key to understanding risk factors that may potentially lead to violent behaviors in youth. Risk factors and their predictive value for juvenile violence are highly contingent on when they occur in the stages of development and what specific circumstances they occur in (Office of the Surgeon General et al., 2001). Refer to Figure 5 for early and late risk factors for violence in youths aged 15 to 18 (Appendix X).

Individual risk factors. Individual risk factors for juvenile violence include physical and psychological characteristics that may affect one's vulnerability to negative social and environmental influences (Farrington & Loeber, 1999; Herrenkohl et al., 2000; Centers for Disease Control and Prevention, 2015). These potential risk factors happen developmentally, beginning at birth (Farrington & Loeber, 1999). The physical risk factors that have demonstrated ability to predict violent behavior in youth are prenatal and early postnatal complications that interfere with biological development, low resting heart rate associated with fearlessness or stimulation seeking characteristics, and low IQ slowing the ability to learn (Farrington & Loeber, 2000; Lösel & Farrington, 2012; Office of the Surgeon General et al., 2001). Findings also suggest that being male is a risk factor due to a biological-environmental type of interaction (Office of the Surgeon General et al., 2001). Boys are more likely than girls to be involved in violent behaviors and influenced by hyperactivity (Office of the Surgeon General et al., 2001).

One of the most significant precursors of youth aggression and criminal involvement is a history of early aggressive behavior (Dahlberg, 1998). Early aggression, linked with antisocial behavior, has shown increased levels of physical aggression, spousal abuse, criminal convictions, and involvement in criminal activities found in longitudinal studies (Centers for Disease Control and Prevention, 2015). Moreover, the early onset of violent behaviors is associated with more chronic, serious forms of violent crime in the future ("Youth Violence: Risk and Protective Factors," 2015). The cyclical patterns of violent behavior and delinquency demonstrate that over half of the juvenile crime offenders were re-arrested as adults, in which 42% were charged with a violent offense (Centers for Disease Control and Prevention, 2015). Researchers have also found empirical data linking aggression and hostile attributional biases, including beliefs supporting violent behaviors and deficits in social cognitive or information-processing. Youth dealing with cognitive impairments often have difficulty interpreting social situations and managing conflicts in a non-aggressive manner (Dahlberg, 1998). The effects of children's exposure to media violence have also been studied, demonstrating a weak predictive effect on future violence (Ferguson, San Miguel, & Hartley, 2009; Office of the Surgeon General et al., 2001). Other individual risk factors may include history of violent victimization, illegal alcohol and substance use in childhood, and emotional problems (Centers for Disease Control and Prevention, 2015).

Family risk factors. Individual risk factors, however, do not typically exist in isolation from other social and environmental influences. Family risk factors, primarily those relating to parental behavior and family environment, play a significant role in the development of children and adolescents. Having low socioeconomic status and having antisocial parents are moderate risk factors. Families with limited resources are more likely to live in violent neighborhoods negatively impacting both children and parents (Office of the Surgeon General et al., 2001). In

addition, antisocial parents, or parents engaged in violent or criminal behaviors themselves, model these negative behaviors to their children (Dahlberg, 1998; Herrenkohl et al., 2000; Office of the Surgeon General et al., 2001; Centers for Disease Control and Prevention, 2015). Children, raised in families where violence or antisocial behaviors seem normative, are more likely to become involved in violence themselves (Dahlberg, 1998; Herrenkohl et al., 2000). Parental influence has more predictive value in childhood than in adolescence when peer influence becomes increasingly influential (Office of the Surgeon General et al, 2001).

Other familial risk factors can be categorized into issues concerning attachment, parental behaviors (i.e. crime, alcohol or substance abuse), discipline practices, and overall family environment (Dahlberg, 1998).). Low emotional attachment to parents have been linked with juvenile crime offenders (Dahlberg, 1998). Regarding parent-child relationships, poor family management practices such as "harsh, lax, or inconsistent discipline" can somewhat indicate potential for later violence (Dahlberg, 1998; Farrington & Loeber, 1999; Farrington & Loeber, 2000; Office of the Surgeon General et al., 2001). Children need effective discipline in order to learn the boundaries of acceptable and unacceptable behavior (Office of the Surgeon General et al., 2001; Centers for Disease Control and Prevention, 2015). However, children who are punished harshly may view inappropriate treatment as acceptable, children who are not disciplined by their parents will do whatever they please, and children who are disciplined inconsistently will not understand the concepts of discipline or be able to differentiate acceptable and unacceptable behaviors ("A Review of Predictors of Youth Violence, 1999; Office of the Surgeon General et al., 2001). Research findings also show that other predictors of later violence with small effect sizes are broken homes, abusive parenting, and childhood neglect (Office of the Surgeon General et al., 2001; "Youth Violence: Risk and Protective Factors," 2015). Child abuse

and neglect, however, have shown lasting effects on mental health problems, substance abuse, and poor academic performance (Office of the Surgeon General et al., 2001).

School risk factors. In the school domain, risk factors for juvenile involvement in crime are poor attitudes toward school and low academic performance (Office of the Surgeon General et al., 2001). Children who demonstrate little interest in school and perform poorly are at higher risk of truancy and dropping out of school, associating with delinquent peers, and engaging in violent behaviors (Office of the Surgeon General et al., 2001; Centers for Disease Control and Prevention, 2015). Poor academic achievement is a predictor of later delinquent behaviors, especially in female students. Social control theories have also studied low bonding or commitment to schooling as a risk factor, though there is no clear consensus among studies (Farrington & Loeber, 1999). Additionally, students exposed to violence in schools often result in avoiding the threat or bringing weapons to defend themselves (Office of the Surgeon General et al., 2001). These school settings and practices may reinforce disruptive behavior and aggression through undisciplined classroom settings, restrained physical spaces, and conformity to certain behaviors (Dahlberg, 1998). School risk factors are somewhat predictive of an increased risk of violent behaviors even though poor attitudes and low academic performance may be influenced by other external factors including family and peer relationships (Office of the Surgeon General et al., 2001).

Peer group risk factors. Throughout development, peer influences become increasingly significant in predicting later violence (Office of the Surgeon General et al., 2001). The need to be accepted by others and to have a support system is extremely important for development. Peer groups are, described by developmental experts, to be “instrumental in shaping interpersonal development, and emotional and social competence.” Similarly, adolescents who have weak

social ties are likely to associate with delinquent peers are more likely to engage in risky behaviors especially when those behaviors are stressed by peer pressure. Additionally, research on delinquency has consistently shown negative peer influences to be an important risk factor for other negative health outcomes including teenage pregnancy and alcohol and substance abuse in adolescence and early adulthood (Dahlberg, 1998). Close association with delinquent peers increases the risk of delinquency and criminal involvement significantly (Centers for Disease Control and Prevention, 2015; Dahlberg, 1998; Farrington & Loeber, 1999; Farrington & Loeber, 2000; Ferguson et al, 2009; Herrenkohl et al., 2000; Office of the Surgeon General et al., 2001; Shader, n.d.). Gang membership is also a risk factor increasing likelihood of crime victimization and perpetration (Centers for Disease Control and Prevention, 2015; Farrington & Loeber, 1999; Farrington & Loeber, 2000; Lane et al., 2015). Youth may be drawn to gang membership strengthening their personal sense of belonging, independence from parents, and self-esteem (Office of the Surgeon General et al., 2001).

Community risk factors. In the community context, social disorganization and the strong presence of criminal activity and drug use affect youth living in the neighborhood (Centers for Disease Control and Prevention, 2015; Office of the Surgeon General et al. 2001). Social disorganization in communities is often characterized by economic and social flux, constant turnover of residents, and family disruption resulting in limited adult supervision of youth involvement in delinquent behaviors and crime (Office of the Surgeon General et al. 2001).

Earlier research states that social disorganization stems from three structural factors: poverty, ethnic heterogeneity, and residential mobility ("A Review of Predictors of Youth Violence, 1999). We now understand that poverty plays a less important role in rural

communities to predict youth violence than other indicators of social disorganization such as residential instability and broken homes (Dahlberg, 1998; Office of the Surgeon General et al. 2001). The interplay between poverty with social disorganization and family disruption is associated with violence for those residing in cities (Office of the Surgeon General et al. 2001). Socially disorganized communities also have diminished economic and employment opportunities, increasing the likelihood of young people to be involved with drug dealing (Centers for Disease Control and Prevention, 2015; Dahlberg, 1998; Office of the Surgeon General et al. 2001). Easy access to drugs continues to perpetuate high rates of criminal offending and extensive crime involvement among youth (Office of the Surgeon General et al. 2001).

Youth, exposed to violence in their neighborhoods, often experience feelings of fear, hopelessness, and overwhelming stress (Lane et al. 2015). These feelings may be underlying factors for young people resorting to violence in order to assert control over their environment and other behavioral issues in school (Lane et al., 2015; Office of the Surgeon General et al. 2001). The availability of weapons and drugs are important risk factors for juvenile crime (Farrington & Loeber, 2000).

Protective Factors for Juvenile Violence

In addition to risk factors, understanding the protective factors for juvenile violence has implications for early prevention and intervention. A protective factor is defined as “something that decreases the potential harmful effect of a risk factor” (Office of the Surgeon General et al., 2001). In other words, a protective factor minimizes or buffers the negative effects of a risk factor.

Similarly to risk factors, protective factors can be categorized into individual, family, school, peer group, and community domains. Refer to Figure 6 for proposed protective factors and its ability to buffer against presented risks and affect outcome (Appendix X). To date, protective factors have been less studied than risk factors in the context of juvenile violence. Protective factors allow us to better understand how some individuals abstain from violence despite having a high-risk background (Lösel & Farrington, 2012). Research about protective factors is largely focused on the concept of resilience in developmental psychopathology to describe the process and outcome of adapting to stressors and difficult circumstances (Lösel & Farrington, 2012). Further studies are needed to clarify when protective factors throughout the course of development are most effective to moderate the negative effects of risk factors (Office of the Surgeon General et al., 2001).

Individual protective factors. Individual protective factors can be categorized into biological and psychological characteristics. Of all proposed protective factors, youth having intolerant attitudes towards violent behavior are most unlikely to become involved in activities that could potentially lead to violence or associate with delinquent peers (Office of the Surgeon General et al., 2001).

Biological factors interact closely with the environment to bring both risk and protective outcomes. On the genetic level, normal neurotransmitter functioning seems to have a buffering effect against juvenile violence (Lösel & Farrington, 2012). Children with highly functional polymorphism in the promoter region of the monoamine oxidase (MAO-A) were seen to show less negative outcomes in the event of childhood maltreatment (Lösel & Farrington, 2012). Other biological protective factors are high arousal in the presence of family and risk factors, higher heart rate level, higher skin conductance arousal, better skin conductance conditioning, and

enhanced feelings of anxiety and shyness (Lösel & Farrington, 2012). Hormonal functioning may also have buffering protective effects but they are unclear (Lösel & Farrington, 2012).

Individual psychological factors that may decrease an at-risk youth's involvement in crime include high IQ, ability to understand social situations and consider alternative solutions, and mild temperament (Centers for Disease Control and Prevention, 2015; Lösel & Farrington, 2012). Above-average or high intelligence may function as a buffer against the presence of risk factors through increased self-control, social competence, and practical planning. In high-risk migrant populations, language abilities demonstrate a comparable protective effect. Social and self-related cognitions can also have both risk and protective effects. Studies have shown that perceived risk of negative consequences, like detection of crime, can deter children who are likely to be involved in criminal activities. Additionally, the importance of social information processing, or the ability to "perceive, interpret, and evaluate situations and action themselves," seem to help moderate risk factors (Lösel & Farrington, 2012). Researchers have also studied the relationship between violence and beliefs in self-efficacy and low feelings of helplessness. Though these characteristics related to self-esteem and its link to youth violence are somewhat unclear, these social cognitions may enable individuals to find meaning and purpose in life (Centers for Disease Control and Prevention, 2015; Lösel & Farrington, 2012). Mild temperament, like positive outlook, low irritability, and low impulsivity, seems to have a protective function. Studies of preschool children found that mild or difficult temperament in childhood may be predisposed genetically. Therefore, ego resilience, or the ability to adapt to different environmental stressors, protected children of disadvantaged backgrounds against development of antisocial or deviant behaviors and later criminality (Lösel & Farrington, 2012).

Family protective factors. The role of supportive relationships, especially in family dynamics, is an essential aspect of child development according to Bronfenbrenner's Ecological Systems Theory of Development (Centers for Disease Control and Prevention, 2015; Jain et al., 2012; Lösel & Farrington, 2012; Office of the Surgeon General et al., 2001). Characteristics of the parent-child relationship, parenting behavior, and family environment can affect the child's predisposition to behavior both positively or negatively. Close relationships and emotional support from parents serve to be a protective factor against the development of violent behaviors in youth (Lösel & Farrington, 2012; Office of the Surgeon General et al., 2001; "Youth Violence: Risk and Protective Factors," 2015). Particularly, parental figures who are involved in their children's lives by offering healthy supervision, consistent discipline, and low physical punishment were less likely to become delinquent youths (Lösel & Farrington, 2012). Parental involvement in supervision and parenting generally improved the behavioral outcomes in children (Lösel & Farrington, 2012; Office of the Surgeon General et al., 2001). Low parental stress also had positive impact on their children by teaching them to deal with problems constructively (Lösel & Farrington, 2012; "Youth Violence: Risk and Protective Factors," 2015).

School protective factors. Commitment to school seen in academic achievement, motivation, school bonding, and learning environment is an important protective factor for adolescents (Centers for Disease Control and Prevention, 2015; Herrenkohl et al., 2000; Lösel & Farrington, 2012; Office of the Surgeon General, 2001). High academic achievement has a buffering protective effect against violent and deviant behaviors in the presence of risk factors (Lösel & Farrington, 2012). Such students are unlikely to engage in risky behaviors because they understand acceptable behaviors and are unwilling to risk their academic achievement and reputation. The encouragement from teachers also increases the young person's self-esteem,

necessary for healthy development especially at-risk youth (Office of the Surgeon General et al., 2001). Having academic and professional goals, good work behavior, and job stability are protective factors influencing desistance from criminal activity (Lösel & Farrington, 2012). Studies have also found that engaging in meaningful activities such as extracurricular activities, sports, and arts have a protective effect by means of developing emotional resilience and improving overall health outcomes in youth (Jain et al., 2012).

Peer group protective factors. Having deviant peers is associated with delinquent behaviors in youth. Conversely, children who have friends or are in a peer group who disapprove of violence has a protective effect against delinquent behaviors. Close relationships to nondeviant peers or involvement in religious groups can also protect youth against involvement and encourage desistance in the presence of risks (Centers for Disease Control and Prevention, 2015; Lösel & Farrington, 2012). Social isolation has also shown to have protective buffering effects, though its poor mental health implications may potentially lead to later antisocial behavior (Lösel & Farrington, 2012).

Community protective factors. The protective effects of community factors are extremely complex due to the varying multilevel relationships. Additionally, protective factors are only applicable to specific subgroups in a community. For example, some studies demonstrated that living in a nondeprived neighborhood buffered against impulsivity leading to juvenile crime. Other studies showed that by moving to a good neighborhood, children of disadvantaged backgrounds often experienced rejection possibly leading to future violence. It can be somewhat generalized to state that living in a good neighborhood has protective buffering effects when compared to living in socially disorganized communities (Lösel & Farrington,

2012). It is important to note that community protective factors in addition to desirable factors on the other domains are most likely to protect against juvenile crime and delinquent behaviors.

Best-Practice Public Health Interventions for Juvenile Violence

Identifying the factors that influence juvenile violence on the individual, family, school, peer group, and community domains is the first step to being able to address the public health issue. However, the complexity of this issue is clearly demonstrated in its multifactorial causation. The ecological model can serve as a guiding framework to suggest that comprehensive intervention programs should address individual beliefs, attitudes, and behaviors; improve positive relationships; and reinforce community-based efforts in order to address (Krug et al., 2002). Though these interventions are generally designed to reduce juvenile violence by decreasing the risks and increasing the protective buffering effects in a specific domain, some types of intervention programs have been found to be more effective than others.

According to Lipsey and Wilson (2000), effective programs are integral in diminishing the rates of juvenile delinquency and crime, especially for high-risk juvenile offenders. However, researchers have also studied the overall effectiveness of intervention programs for juvenile crime offenders at large. Researchers have developed intervention programs for juvenile violence primarily aimed to influence behavior change and to improve interaction with peers and family. In addition to individual, peer, and family-oriented approaches, efforts to influence attitudes, beliefs, and behavior relating to schools and neighborhoods have been developed in hopes of reducing youth violence (Dahlberg, 1998).

In this section, I will discuss best practices of juvenile violence intervention programs, defined as “elements and activities of intervention design, planning, and implementation that are recommended on the basis of the best knowledge currently available” (Thornton, 1999).

Identifying the best practices for reducing youth violence will lead to cost-effective and significant results for reducing youth violence on a larger scale. Refer to Figure 10 for individual and community-based interventions for youth violence prevention in terms of effectiveness (Appendix X). The two approaches used in this process of identifying best practices emphasize both a quantitative approach to summarize program evaluation evidence based on statistical tests and a less empirical approach to draw helpful conclusions about shared characteristics among effective strategies (Office of the Surgeon General, 2001). Intervention programs found to be effective are later characterized as 'model programs', defined as having very high standards of demonstrated effectiveness and 'promising programs', having met the minimum standard. Best practice interventions on the individual- and community-levels will be further discussed. It is important to note that the intervention philosophies described are not comprehensive of all juvenile violence programs, but ones which have been empirically tested.

Individual level interventions. Most intervention programs to date focus on changing an individual's attitudes, beliefs, and behaviors (Dahlberg, 1998). Cognitive behavioral therapy approaches have been commonly used in the criminal justice system, assuming that most people can become aware of their thoughts and behaviors and then make positive changes to them (Clark, 2010). In Lipsey's review, he analyzes data from a meta-analysis by testing intervention factors for the general principles and specific intervention approaches leading to diminished recidivism rates (Lipsey, 2009).

Of the individual-level interventions, skill-building programs including cognitive-behavior, behavior modification, social-skills training, challenge programs, academic and vocational training are some of the more common approaches to addressing the public health concern (Dahlberg, 1998; Lipsey, 2009). Researchers have linked a lack of social skills,

including social cognitive or information processing skills, problem solving, critical reasoning, self-control, impulse management, and self-efficacy, to youth violence (Centers of Disease Control and Prevention, 2015; Clark, 2010; Thornton et al., 2002). Social-cognitive interventions to reduce violence and recidivism aim to help individuals effectively deal with difficult situations by becoming more conscious of one's own thoughts and behaviors and making positive changes to them (Clark, 2010). By incorporating modeling, role-playing, and didactic teaching, social-cognitive interventions integrating Pavlov's work in classical conditioning, Skinner's operant conditioning model and Bandura's social cognitive theory, help develop positive social interactions, teach effective methods for communicating and resolving conflict, and emphasize nonviolent beliefs and attitudes in youth (Milkman & Wanberg, 2007; Thornton et al., 2002).

In response, behavior modification programs, similar to cognitive-behavior approaches, seek to eliminate problematic behaviors like substance abuse, anti-social, aggressive, or delinquent criminal behaviors (Clark, 2010). For criminal offenders, cognitive behavioral approaches have an added emphasis on developing skills for living in community and contributing positively by engaging in healthy behaviors. Some commonly used cognitive-behavioral programs are Aggression Replacement Training, Criminal Conduct and Substance Abuse Treatment: Strategies for Self-Improvement and Change, Moral Reconation Therapy, Reasoning and Rehabilitation, Relapse Prevention Therapy, and Thinking for a Change (Milkman & Wanberg, 2007). Additionally, Pearson et al.'s meta-analysis studying the effects of behavioral and cognitive behavioral programs on recidivism has found both programs to be effective but cognitive behavioral programs to reduce recidivism by 30 percent for treated offenders (Pearson et al., 2002).

In addition to cognitive-behavioral programs, Lipsey's meta-analysis shows that interpersonal skills training programs reduce recidivism outcomes for noninstitutionalized offenders (Lipsey, 2009). Skill building programs, consisting of challenge programs, academic training, and job-related interventions, engage youth by developing skills for meaningful occupations and conventional activities (Lipsey, 2009). Interpersonal skills programs shift focus to developing social skills and learning to manage anger to help at-risk youth participate in normative behaviors (Lipsey, 2009). Though employment-related and academic programs have shown inconsistent effects on decreasing deviant behaviors in young individuals, interpersonal skills programs.

Community level interventions. At the community-level, most intervention programs to reduce juvenile violence and recidivism aim to enhance the nature of home and school environments. Understanding human behavior through a lens of developmental psychology offers insight into the relationship between person and the environment. The ecological paradigm, derived from Kurt Lewin's classical formula, can be translated by stating "the characteristics of the person at a given time in his or her life are a joint function of the characteristics of the person and of the environment over the course of that person's life up to that time" (Bronfenbrenner, 2005). Given the influence of person-environment interaction on one's development, many youth violence interventions are intentionally designed to reduce the effect of risk factors and increase that of protective factors within the youth's immediate context (Hawkins et al., 1998).

As previously discussed in the sections about risk and protective factors, many community-level programs address factors in the family, school, peer group, and community. Particularly, three successful strategies that alter the individual behavior of the child by changing

the family dynamics include home visiting, parent training, and family therapy programs (Mihailic et al., 2004). In the school environment, “school ecology” programs focus on enhancing the school climate in order to create a positive learning environment for the youth (Felner et al., 2001). These program designs seek to improve both the home and school environments by supporting the healthy development of youth.

Home visits improve overall family functioning by promoting social relations between parent and child, improving behavior management, and most importantly, interrupting the youth’s negative trajectory if early onset of behavioral problems are unaddressed (Mihailic et al., 2004). Home visiting and early education intervention programs have been particularly effective in high-risk populations such as poor, broken families (Gomby, Culross, and Behrman, 1999).

According to Mihailic et al.’s meta-analysis, Nurse-Family Partnership is considered as a model program for home visiting and early childhood education programs. This evidence-based model program, developed by Dr. David Olds, is focused on helping high-risk, low income women improve their prenatal health and pregnancy outcomes, promote children’s health and overall development, and strengthen families’ economic self-sufficiency. With home visits by trained nurses throughout the course of pregnancy, the Nurse-Family Partnership seeks to help young women learn to better care for themselves and their children. Results from the Elmira, NY and Memphis, Tennessee trials suggest that the Nurse-Family Partnership is most effective for families at highest risk and cannot be generalized to a broader population. The program helped lower rates of childhood injuries later linked to child abuse and neglect and quick successive pregnancies, enabling women to work and become economically self-sufficient. Additionally, children at age 15 were less likely to be involved in criminal activity, heavy drinking or smoking,

and sex with multiple partners (Olds et al., 1999). Refer to Figure 10 for Nurse-Family Partnership Model.

Parent training programs help address other risk factors including harsh or ineffective parenting, poor discipline, lack of warmth and attachment that may potentially lead to aggressive and violent behaviors in youth (Dahlberg, 1998). These interventions allow parents to learn effective means of overcoming issues in the home through healthy discipline and positive reinforcement (Mihailic et al., 2004).

One of the promising programs is the Syracuse Family Development Research Program (FDRP), a comprehensive early childhood program for improving overall child and family functioning achieved through home visitation, parent training, and day care services (Syracuse Family Development Research Program, n.d.). The targeted population is largely young, African American, disadvantaged families. Participants in this study received individualized training and support from Child Development Trainers (CDTs), home visits from before childbirth until the child turned five years old, and child care. The FDRP program emphasized parental involvement as the primary intervention based on a theoretical notion that strengthening the parents' role will have lasting impact on the child's development and allow families to overcome everyday challenges (Lally et al., 1998). Lally et al.'s longitudinal study found positive improvements in academic achievement, school attendance, and juvenile delinquency. In terms of juvenile delinquency, 6 percent of FDRP participants had a criminal record by age 15 compared to 22 percent in the control group. Recidivism rates also significantly decreased.

Lastly, Functional Family Therapy is a short-term family-based prevention and intervention program consisting of five major components: engagement, motivation, relational assessment, behavior change, and generalization. This program is designed for youth aged 11 to

18 to overcome emotional and behavioral problems, conduct disorder, substance abuse, and delinquency. This clinical model involves a therapist working closely with the youth and his or her family to help facilitate the behavior change and generalization processes (Functional Family Therapy, n.d.). Various program evaluations have found significant reductions in reoffending for violent crimes and combined misdemeanor and felony crimes (Sexton and Alexander, 2000). Refer to Figure 12 for Functional Family Therapy Model (Appendix X).

Changing the school environment is extremely crucial to reinforce what is taught and learnt in a positive home environment. Based on a recent systematic review, universal, school-based programs have significantly decreased rates of violence in children and youth of all grade levels from pre-kindergarten to high school (Hahn et al., 2007). These programs designed for implementation in the classroom for schools of high-risk neighborhoods, marked by low socioeconomic status and high crime, have relevance to violence-related objectives in Healthy People 2010 including injury prevention and violence and abuse prevention. In addition to addressing youth violence, school-based programs can suggest influence on social behavior more broadly, including lowered rates of substance abuse and delinquency (Flannery et al., 2003).

Moreover, some researchers suggest that the effectiveness of prevention and intervention programs are contingent upon their ability to improve the overall school learning environment in which issues such as academic failure and antisocial behavior are present (McEvoy and Welker, 2000). This theory that the school climate, environment, and structure can perpetuate students' unresolved behavioral problems lends itself to school ecology programs to facilitate systemic changes within the school itself. School ecology programs influence factors including discipline methods, behavioral norms, administrative policies, and attitudes and practices of educators and administrators. Programs with demonstrated effectiveness in relation to changing the school

environment include the School Transitional Environment Program (STEP) and Families and Schools Together (FAST) program.

The STEP program is an initiative towards school organizational change by decreasing student anonymity, increasing accountability, and improving students' abilities to understand school rules and expectations. Targeting students transitioning from elementary and middle schools to high schools, the program seeks to eliminate barriers to academic success by increasing students' availability and accessibility of support and increasing their sense of belonging and familiarity with teachers. The reorganization of the school, creating smaller learning environments in homeroom periods and various academic subjects, allows for students to focus their attention on learning in a stable environment with close interaction between students and teachers. The STEP program is associated with improved student behavior and conduct, higher grade point average, less transitional-related stress, and lower levels of psychological distress for STEP participants when compared to the control group (Felner et al., 1993).

The Families and Schools Together (FAST) program is an early intervention school-based and parent involvement program for strengthening young individuals and their families to reduce academic failure, substance abuse, child abuse, and behavioral issues. This 8-week program includes research-based activities in which the whole family gathers together to participate in. Based on theories of organizational learning and behavior change, activities in the FAST program stimulate positive interactions between the at-risk youth and his or her family and school environment. After the conclusion of the FAST program, FASTWORKS, a two-year program, provides opportunities for monthly family-oriented activities similar to that of the FAST program. This program has shown improvements in children's behavior at home and at

school, self-esteem, family unity, parental involvement, and social interaction (Hernandez, 2000).

Lastly, there are multifaceted programs that intervene at the community level, often influencing both families and schools. Based on the ecological approach, neighborhoods that are disorganized and lacking resources and opportunities are not conducive to healthy development for younger generations. However, community-based programs are often challenging to implement and evaluate because there are many issues within a community that need to be addressed and many community-based efforts happening simultaneously (Mihailic et al., 2004). Few community-based programs have been identified as best practices except CASASTART or Children at Risk (CAR) program and Adolescent Diversion Program.

Formerly known as the Children At Risk (CAR) program, this program seeks to reduce exposure to drugs and other criminal activities for youth living in severely distressed neighborhoods. Through case management services, family services, afterschool and summer programs, educational services, and increased police presence, CASASTART aims to decrease risk factors on the individual, peer group, family, and community levels. Case management was particularly effective for the CASASTART program in helping families meet their service needs, develop relationships, and receive help through crisis intervention. Youth participating in the CASASTART program were less likely to use drugs, sell drugs, be antisocial or delinquent, or be involved in criminal activities (Harrell et al., 1999). Children and families also increased their participation in various services and prosocial activities.

The Adolescent Diversion Program (ADP) is a university-led program that seeks to divert youth from formal treatment in the juvenile justice system. Developed in 1976 through a collaborative effort with Michigan State University and Ingham County Juvenile Court, the ADP

program is premised on three major theoretical perspectives- social control and bonding, social learning, and social-interactionist theories (Smith et al., 2004). Therefore, ADP "seeks to strengthen bonds and attachment to family and prosocial others (social control theory); to help families establish clear behavioral standards, monitoring, and contingencies (social learning theory); and to divert youth from potentially stigmatizing social contexts, such as the juvenile justice system, and build support within their natural communities" (Mendel, 2000). In this intervention, case managers work one-on-one with young offenders to provide them services tailored to their needs (Adolescent Diversion Program (Michigan State University), n.d.). Evaluation outcomes show that there were significant decreases in delinquency for juveniles that participated in the Adolescent Diversion Program compared to those individuals who were in the traditional justice system (Davidson et al.,1987; Smith et al., 2004). The more recent study shows that youth who received services through ADP had a 22 percent recidivism rate compared to a 34 percent recidivism rate for those who didn't (Smith et al., 2004).

Chapter 3: Theory

By understanding the cycle of gang involvement, crime, and violence through a behavioral addictions lens, a new framework has emerged suggesting that "street addiction," or the draw of action to street crime and gang association, is addictive and difficult to withdraw from. This qualitative study based on an anaylsis of semi-structured interviews with men previously involved with gangs and street crime demonstrated that themes for "street addiction" parallel closely with those of behavioral addictions. Based on the proposed DSM-V's criteria characterizing gambling as a behavioral addiction, the narratives of men with histories of gang affiliation and street involvement suggest similar characteristics including preoccupation with behavior, tolerance or progression, loss of control, urge to be involved, experience withdrawal, used to avoid problems, chasing losses, lying to conceal behavior, experiencing negative consequences but continuing behavior, and reliance on others to relieve financial desperation. The thematic elements of street addiction are significant in understanding factors contributing to recidivism in the criminal justice system. The practical and theoretical implications may allow for improved approaches to rehabilitation, recovery, and prevention of recidivism.

Chapter 4: Methods

Formative Research Process

In order to address the issues of youth violence and recidivism, I adopted the formative research process to inform future program development. Formative research is the evidence-based research serving as a basis for developing effective programs and interventions for influencing behavior change. The domains that contribute to the development of evidence-based programs and interventions are best available research evidence; population characteristics, needs, values, and preferences; resources including practitioner expertise; and environmental and organizational context (Satterfield et al., 2009). Collectively, a better understanding of how these factors influence behavior change may allow for the development of model and promising program designs.

Setting and Collaborators

To develop an evidence-based case management seeking to reduce violence and recidivism in juvenile crime offenders aged 13 to 16, I worked closely with a research team of Syracuse University students and faculty and experienced community members, Arnett Haygood-El, Vice President of Street Addiction Institute Inc. and Timothy “Noble” Jennings-Bey, CEO of Street Addiction Institute Inc. Street Addiction Institute Inc. (SAII) is a non-profit 501(c)(3) organization founded for the purpose of conducting research in areas of trauma, grief, loss, addiction, education, and violence prevention. Their research and community-based programs aim to change the narrative surrounding gang and neighborhood violence. By understanding street addiction through a behavioral addictions lens, SAII seeks to address this public health and mental health issue by formulating practical soultions to reduce the trauma

caused by neighborhood violence and improve the overall health and wellbeing of traumatized individuals and communities.

Currently, there is a university-community collaboration between David B. Falk College of Sport and Human Dynamics and SAII. Research findings demonstrate that street addiction, or the draw of action to street crime and gang association, is best understood through a framework of behavioral addictions and trauma (Bergen-Cico et al., 2012; Lane et al., 2015). This understanding of behavioral addictions continues to inform the development of a case management program for at-risk youth. During my internship, I've contributed my work to help conduct formative research for program development and implementation. The program will include a thorough assessment and goal planning process, individual and family counseling through Department of Marriage and Family Therapy, one-on-one mentoring by community leaders, and other resources tailored to the individual. SAII is currently working with the Onondaga Judicial System to reduce recidivism by 20% for juvenile crime offenders aged 13 to 16.

Seeking Input from Community Leaders

Evidence-based formative research requires the expertise from community leaders in addition to a comprehensive literature review about juvenile violence and relevant best practice programs. To complete my public health coursework, I did my internship with Street Addiction Institute Inc. in the fall semester of 2015. My work with Street Addiction Institute Inc. included a research team of undergraduate and graduate students, faculty, and community members working collaboratively to develop a case management program for juvenile crime offenders from aged 13 to 16 in the Syracuse, New York area. One of my core responsibilities was to meet with local community leaders including The Salvation Army, Center of Community Alternatives,

Onondaga County Probation Department, and Department of Marriage and Family Therapy to gain a better understanding of case management programs for youth violence within this specific environmental context.

The Salvation Army, Syracuse Chapter. The Salvation Army is an international charitable organization purposed to "preach the gospel of Jesus Christ and to meet human needs in His name without discrimination" (The Salvation Army, n.d.). In July 1865, William and Catherine Booth began their ministerial career in East London and the movement eventually spread to the United States and around the world. The Salvation Army serves many individuals seeking the basic necessities of life including food, shelter, and warmth. Some of their programs include adult rehabilitation, veteran affairs services, hunger relief, homeless services, and emergency disaster relief.

To gain a better understanding of case management programs in Syracuse, we met with Linda Wright, Executive Director for Professional and Community Services at The Salvation Army Syracuse. She redefined case management as an individualized program that directs services to help maneuver individuals to work their plan. From a thorough assessment of the individual's personal history, needs, and goals, the program allows the individual to attain personal goals in terms of behavior change with planning and guidance. The role of The Salvation Army- Syracuse is to develop sustained relationships with the youth in order to provide case management programs for youth and their families experiencing various challenges. Their work relating to youth violence is primarily through The Preventive Services Program, a partnership between The Salvation Army and the Onondaga County Department of Social Services. Case planning, case coordination, and counseling services are informed by the Strengthening Families Model and Functional Family Therapy (FFT) Model. Specifically, the

Functional Family Therapy (FFT) Model is an Office of Juvenile Justice and Delinquency Prevention (OJJDP) blueprint model of therapeutic intervention for juvenile offenders and their families (The Salvation Army | Syracuse, NY - Child & Family Services, n.d.). Wright also provided input on the importance of the evaluating a case management program through outcome measurement and goal attainment.

Center of Community Alternatives. The Center of Community Alternatives (CCA) is a prominent leader in addressing issues of neighborhood violence with an emphasis on "community-based alternatives to incarceration" (Center for Community Alternatives - Innovative Solutions for Justice, n.d.). Their mission is to "promote reintegrative justice and a reduced reliance on incarceration through advocacy, services, and public policy development in pursuit of civil and human rights." This lens informs their diverse array of programs serving court-involved adults and at-risk youth intended to prevent the harmful effects of crime and incarceration for individuals and the community at large. Many of the individuals that CCA is involved with would otherwise be incarcerated, costing New York State taxpayers at least $32,000 in annual state prison costs (Porter et al., 2011). Honorable Jack B. Weinstein, U.S. District Court Judge, commends CCA by stating that "the work of Center of Community Alternatives has been extraordinarily helpful to the courts, defendants, probation and the United States in providing alternatives hat protect the public while reducing unnecessary costs to the taxpayers and harm to the defendants and their families (Center for Community Alternatives - Innovative Solutions for Justice, n.d.). By working with these populations, CCA seeks to empower them by upholding a commitment to provide unconditional care and commitment in helping them to live increasingly productive and meaningful lives.

In youth violence, Marsha Weissman, Founder and Executive Director of Center of Community Alternatives, believes that a case management program functions to build a realistic plan to avoid recidivism and change his or her life. Weissman's experience working with at-risk youth has led her to believe that reducing recidivism requires a deep understanding of healing, forgiveness, and respect to stop revenge killing and a need for expanding the individual's healthy support system. The program for at-risk youth in Syracuse, New York, and New York City jurisdictions begin when referrals are made by parental guardians, defense counsel, and the courts. CCA serves the youth by working closely with the individual, his or her family, and the court to develop plans that balance the needs of justice given the youth's life circumstances. Additionally, CCA is committed to providing unconditional care and commitment to their youth, becoming advocates for the individual in court by focusing on their compliance, and providing positive reporting to their parents.

For at-risk youth in Syracuse, CCA provides comprehensive programming to enable the youth to become "change agents" in their communities through academic support, youth development activities, mentoring, peer education, leadership opportunities, and family involvement in its Youth Services program. They work with students in the 7th to 12th grade placed in the Syracuse City School District's alternative schools due to a history of violent and delinquent behavior. With 15 to 20 percent of youth participating in the program who recidivate annually, this community-based program has been effective in significantly decreasing reoffending and court involvement for youth (Center for Community Alternatives - Innovative Solutions for Justice, n.d.).

Onondaga County Probation Department. At the Onondaga County Probation Department, we spoke with Phil Galuppi, Probation Supervisor and Jim Czarniak, Director of

Juvenile Justice. Probation is an alternative to incarceration, allowing many individuals to live within the community as long as they comply with the requirements and restrictions given by the court. The Onondaga Probation Department has a twofold responsibility of ensuring public safety through supervision, treatment, and prevention while helping facilitate the rehabilitation process of the offender (Onondaga County- Department of Probation, n.d.). The overarching goal of probation is to provide public safety and reduce future victimization and reoffending.

Czarniak discussed the importance of effectively deterring young individuals from crime in order to avoid long-term consequences of being involved with the criminal justice system and change the trajectory of their lives. In the state of New York, youth aged 16 are no longer treated as children under the juvenile system but adults in the criminal justice system. Therefore, the years leading up to the youth's 16th birthday becomes extremely important in terms of intervention. Additionally, we discussed issues of compliance in youth populations under probation supervision. I learned that most youths are able to be compliant with the terms of probation yet they often recidivate within 6 months. Both Czarniak and Galuppi state that about 70% of young individuals recidivate shortly after they have met the terms of probation. Learning about the current situation about juvenile violence caused me to question how we can be more effective in reducing crime and recidivism among our younger populations.

Falk College Department of Marriage and Family Therapy. Falk College Department of Marriage and Family Therapy is currently working on an Adolescent Diversion Program, adopted from Michigan State University's Adolescent Diversion Program. In New York state, the Adolescent Diversion Program is a collaborative effort involving the youth and his or her family, judges, prosecution and defense counsel, probation officers, and other professionals in the fields of rehabilitation, counseling, social services, and education. By fully

assessing the youth defendant's circumstantial and rehabilitative needs, the program emphasizes family involvement in the process of mending the youth's behavior to resist criminal involvement and advocate for public safety.

To learn about this diversion program in the context of Syracuse, NY, we met with Tracey Reickhert-Schimpff, Director of Clinical Services at Department of Marriage and Family Therapy. Her clinical background allowed me to realize that without an effective case management program, the individual and family counseling piece would also be affected. For many youth violence programs, there is an emphasis on either rehabilitative counseling or case management. Few programs integrate both crucial aspects in program development. Reickhert-Schimpff explained the need to couple counseling with case management in her example of a young individual going through counseling and rehabilitation without his or her practical needs being met. Without having daily necessities including food, shelter, and warmth, counseling and therapy becomes less effective or even ineffective to mee the needs of the individual and family.

We also discussed the increased need to provide emotional and mental support for individuals working with these traumatized populations including teachers, counselors, and individuals working with community-based organizations. Many of these individuals working in these disadvantaged neighborhoods experience secondary traumatization in the forms of compassion fatigue and burnout, inhibiting their effectiveness in fully being present with the youth.

Chapter 5: Solution

The formative research is the initial step in developing effective public health programs. In my honors capstone project, I helped conduct the formative research that will provide the evidence-based research supporting the development of a case management protocol. To reduce recidivism in a traumatized neighborhood such as Syracuse, New York, we must address the diverse needs of youths and families in order to facilitate individual behavior change and affect the community.

Though I haven't fully developed the formal case management protocol in my capstone project, this formative research will serve as a basis for the future development of the case management program. Having met with community leaders about youth violence in Syracuse, New York, I have gained from their experiences working with this traumatized population. In addition, they've provided helpful instruments and assessment tools that we can include in our research process. Their understanding of the Syracuse community is significant to take into consideration during the planning process because another's program's success may not necessarily be the same depending on the specific population and factors influencing the behavior.

In addition, future work can be done in translating best practice individual and community level interventions to fit the nature of juvenile violence in Syracuse, New York. SAII can also collaborate with other community-based organizations to provide an increasingly comprehensive case management program to meet the diverse needs of our targeted population. The next step to addressing recidivism for youths aged 13 to 16 in Syracuse, New York is the development of a case management protocol that will be continually evaluated during the course

of implementation. This protocol should include assessment, goal planning, personalized services, counseling and mentorship, and evaluation.

Chapter 6: Conclusion and Future Work

With high rates of crime and recidivism in youth aged 13 to 16, the negative consequences of violence are overwhelming. The multifaceted nature of juvenile violence further complicates the problem. Our goal is to reduce recidivism by 20% from the benchmark of 86% of youths that recidivate within 6 months in Syracuse, New York. Based on the formative research process, I learned that a multiple services program such as case management would be most effective in influencing behavior change and reducing recidivism in youth. I've also learned about the importance of improving health and wellness of individuals and populations by developing public health interventions informed by evidence-based research. This research process, though often lengthy and strenuous, is important for the success of the program intended to bring about change in the individual and the community.

Because my work this past few semesters focused on formative research, the program development and implementation process will be executed by the Street Addiction Institute Inc. team. SAII is currently working to obtain funding for their work in reducing recidivism for juvenile crime offenders from ages 13 to 16. Dependent on when they are able to receive funding, SAII will likely begin their case management program in the near future. They will be working with Onondaga County Probation Department to provide services for youth involved with the juvenile justice system. They will use our packets consisting of Key References, information about Street Addiction Institute Inc., Youth Assessment and Screening Instrument (YASI), goal sheet, open assessment, parent inventory, Civilian PTSD Checklist, and list of referral sources, in their case management. Additionally, we've provided our Powerpoint presentations for their use in providing formative research for the case management. Though I believe that these tools and formative research will be helpful in guiding the process of program

development and implementation, the challenge for implementation is changing the narrative and stigma surrounding neighborhood violence to allow evidence-based programs to penetrate and influence behavior. This process must involve the community and leaders committed to advocacy and public policy development in the juvenile justice system.

In order to change the narrative of neighborhood violence, we must continue addressing the systemic problem of juvenile violence to develop an evidence-based program that meets the needs of targeted population and the context in which they live. This can best be achieved by integrating the various domains of evidence-based decision making throughout the course of public health research from program planning, implementing, and evaluating a public health intervention. Additionally, community based organizations must work collaboratively to change the trajectory of these young individuals' lives through personal empowerment and concern for one's community. There is a lot of work to be done in reducing recidivism and making improvements to our criminal justice system. Based on a model of street addiction, there are many future implications in terms of helping the individual living in a traumatized neighborhood but also helping the traumatized community to thrive despite its many challenges and limitations.

References

A primer on school violence prevention. (1994). *The Journal of School Health, 64*(8), 309. Retrieved from http://search.proquest.com.libezproxy2.syr.edu/docview/215682624?accountid=14214

A Review of Predictors of Youth Violence. (1999). In D. Farrington & R. Loeber (Eds.), *Serious & Violent Juvenile Offenders: Risk Factors and Successful Interventions* (1st ed., pp. 106-146). Thousand Oaks, California: SAGE Publications.

Aber, J. L., Jones, S. M., Brown, J. L., Chaudry, N., & Samples, F. (1998). Resolving conflict creatively: Evaluating the developmental effects of a school-based violence prevention program in neighborhood and classroom context.*Development and Psychopathology,10*(2), 187-213. doi:10.1017/S0954579498001576

Adolescent Diversion Project (Michigan State University). (n.d.). Retrieved April 16, 2016, from https://www.crimesolutions.gov/ProgramDetails.aspx?ID=332

Bergen-Cico, D. K., Haygood-El, A., Jennings-Bey, T. N., Lane, S. D. (2012). Street addiction: A proposed theoretical model for understanding the draw of street life and gang activity. *Addiction Research and Theory*, 1-12.

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks: Sage Publications.

Center for Community Alternatives - Innovative Solutions for Justice. (n.d.). Retrieved April 15, 2016, from http://www.communityalternatives.org/

Clark, P. (2010, April). Preventing Future Crime With Cognitive Behavioral Therapy. Retrieved November 9, 2015, from http://www.nij.gov/journals/265/pages/therapy.aspx

Comprehensive Community- and School-Based Interventions to Prevent Antisocial Behavior. (1999). In D. Farrington & R. Loeber (Eds.), (1st ed., pp. 248-283). Thousand Oaks, California: SAGE Publications.

Dahlberg, L. (1998). Youth Violence in the United States Major Trends, Risk Factors, and Prevention Approaches. *American Journal of Preventive Medicine, 14*(4), 259-272. Retrieved October 31, 2015.

Dahlberg, LL., Mercy, JA. History of violence as a public health issue. (2009, February). AMA Virtual Mentor. Volume 11, No. 2: 167-172. Available on-line at http://virtualmentor.ama-assn.org/2009/02/mhst1-0902.html.

Davidson, W. S., Robin Redner, Craig H. Blakely, James G. Ernshoff, and Christina M. Mitchell. 1987. “Diversion of Juvenile Offenders: An Experimental Comparison.” *Journal of Consulting and Clinical Psychology* 55(1):68–75.

Effective Intervention for Serious Juvenile Offenders: A Synthesis of Research. (1999). In D. Farrington & R. Loeber (Eds.), *Serious & Violent Juvenile Offenders: Risk Factors and Successful Interventions* (1st ed., pp. 313-345). Thousand Oaks, California: SAGE Publications.

Farrington, D., & Loeber, R. (2000). Epidemiology of Juvenile Violence. *Child and Adolescent Psychiatric Clinics of North America, 9*(4), 733-748. Retrieved November 2, 2015.

Felner, Robert D., Stephen Brand, Angela M. Adan, Peter F. Mulhall, Nancy Flowers, Barbara Sartain, and David L. DuBois. 1993. "Restructuring the Ecology of the School as an Approach to Prevention During School Transitions: Longitudinal Follow-Ups and Extensions of the School Transitional Environment Project." *Prevention in Human Services* 10(2):103–36.

Felner, R., Favazza, A., Shim, M., Brand, S., Gu, K., and Noonan, N. 2001. Whole school improvement and restructuring as prevention and promotion: Lessons from STEP and the Project on High Performance Learning Communities. Journal of School Psychology 39:177–202.

Ferguson, C., San Miguel, C., & Hartley, R. (2009). A Multivariate Analysis Of Youth Violence And Aggression: The Influence Of Family, Peers, Depression, And Media Violence. *The Journal of Pediatrics, 155*(6), 904-908.e3. Retrieved November 1, 2015.

Flannery, D. J., Vazsonyi, A. T., Liau, A. K., Guo, S., Powell, K. E., Atha, H., . . . Embry, D. (2003). Initial behavior outcomes for the PeaceBuilders universal school-based violence

prevention program. *Developmental Psychology, 39*(2), 292-308. doi:10.1037/0012-1649.39.2.292

Functional Family Therapy (FFT). (n.d.). Retrieved April 13, 2016, from https://www.crimesolutions.gov/ProgramDetails.aspx?ID=122

Glick, B. (2006). *Cognitive behavioral interventions for at-risk youth* (Vol. 2). Kingston, New Jersey: Civic Research Institute.

Gomby, D., Culross, P., and Behrman, R. 1999. Home visiting: Recent program evaluations. The Future of Children 9:4–26.

Hahn, R., Fuqua-Whitley, D., Wethington, H., Lowy, J., Crosby, A., Fullilove, M., . . . Dahlberg, L. (2007). Effectiveness of Universal School-Based Programs to Prevent Violent and Aggressive Behavior. *American Journal of Preventive Medicine, 33*(2). doi:10.1016/j.amepre.2007.04.012

Harrell, A., Cavanagh, S., & Sridharan, S. (1999). Evaluation of the Children at Risk Program: Results 1 Year After the End of the Program. *PsycEXTRA Dataset*. doi:10.1037/e604052007-001

Hawkins, J.D., Herrenkohl, T., Farrington, D.P., Brewer, D., Catalano, R.F., and Harachi, T.W. 1998. A review of predictors of youth violence. In Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions, edited by R. Loeber and D.P. Farrington. Thousand Oaks, CA: Sage Publications.

Hernandez, L. (2000). Families and Schools Together Building Organizational Capacity for Family-School Partnerships. *Harvard Research Family Project*. Retrieved from http://www.hfrp.org/var/hfrp/storage/fckeditor/File/families_and_schools_together.pdf

Herrenkohl, T., Maguin, E., Hill, K., Hawkins, J., Abbott, R., & Catalano, R. (2000). Developmental Risk Factors for Youth Violence. *Journal of Adolescent Health, 26*, 176-186. Retrieved October 31, 2015.

Howell, J.C. (1997). *Juvenile justice & youth violence.* Thousand Oaks, CA: SAGE Publications, Inc. doi: http://dx.doi.org.libezproxy2.syr.edu/10.4135/9781483328003

Hamparian, D. M., Davis, J. M., Jacobson, J. M., & McGraw, R. E. (n.d.). Young Criminal Years of the Violent Few. *Office of Juvenile Justice and Delinquency Prevention*. Retrieved April 18, 2016.

Hoyert, D. L. (2012). 75 Years of Mortality in the United States, 1935–2010. *NCHS Data Brief*.

Injuries and Violence: The Facts. (n.d.). Retrieved April 16, 2016, from http://www.who.int/violence_injury_prevention/key_facts/en/

Jain, S., Buka, S., Subramanian, S., & Molnar, B. (2012). Protective Factors for Youth Exposed to Violence: Role of Developmental Assets in Building Emotional Resilience. *Youth Violence and Juvenile Justice, 10*(1), 107-129. doi:10.1177/1541204011424735

Krug, E., Mercy, J., Dahlberg, L., & Zwi, A. (2002). The World Report on Violence and Health. *The Lancet, 360*, 1083-1088. Retrieved November 9, 2015, from http://www.ayamm.org/english/Violence against women 4.pdf

Lally, J. Ronald, Peter L. Mangione, and Alice Sterling Honig. 1988. "The Syracuse University Family Development Research Program: Long-Range Impact on an Early Intervention with Low-Income Children and Their Families." In Douglas R. Powell and Irving E. Sigel (eds.) *Parent Education as Early Childhood Intervention: Emerging Directions in Theory, Research, and Practice: Annual Advances in Applied Developmental Psychology, Vol. 3.* Norwood, N.J.: Ablex Publishing Corporation.

Lane S.D., Webster N.J., Levandowski B.A., Rubinstein R.A., Keefe R.H., Wojtowcycz M.A., et al. Environmental Injustice: Childhood Lead Poisoning, Teen Pregnancy, and Tobacco. Journal of Adolescent Health. 2008; 42:43-9.

Lane, S. D., Rubinstein, R. A., Bergen-Cico, D., Jennings-Bey, T., Haygood-El, A., Stonefish, L., …Byrd-El, T. (2015). Neighborhood Trauma due to Violence: A multilevel analysis.

Lipsey, M. (2009). The Primary Factors That Characterize Effective Interventions With Juvenile Offenders: A Meta-Analytic Overview. *Victims & Offenders, 4*, 124-147. doi:10.1080/15564880802612573

Lösel, F., & Farrington, D. (2012). Direct Protective and Buffering Protective Factors in the Development of Youth Violence. *American Journal of Preventive Medicine, 43*(2S1), S8-S23. Retrieved October 31, 2015.

McEvoy, A., & Welker, R. (2000). Antisocial Behavior, Academic Failure, and School Climate: A Critical Review. *Journal of Emotional and Behavioral Disorders, 8*(3), 130-140. doi:10.1177/106342660000800301

McFall Torbet, P. (1996). Juvenile Probation: The Workhorse of the Juvenile Justice System. *OJJDP Juvenile Justice Bulletin*.

Mendel, R. (2000). Less Hype, More Help: Reducing Juvenile Crime- What Works and What Doesn't. Retrieved November 9, 2015, from http://www.aypf.org/publications/mendel/MendelRep.pdf

Mihailic, S., Fagan, A., Irwin, K., Ballard, D., & Elliott, D. (2004). Blueprints for Violence Prevention. Retrieved November 9, 2015.

Milkman, H., & Wanberg, K. (2007). Cognitive-behavioral Treatment: A Review and Discussion for Corrections Professionals. *PsycEXTRA Dataset*.

Morrison, C. R., & Ramsay, N. A. (2010). *Youth Violence and Juvenile Justice: Causes, Intervention and Treatment Programs*. Hauppauge, N.Y.: Nova Science Publishers, Inc.

Office of the Surgeon General (US); National Center for Injury Prevention and Control (US); National Institute of Mental Health (US); Center for Mental Health Services (US). Youth Violence: A Report of the Surgeon General. Rockville (MD): Office of the Surgeon General (US); 2001. Available from: http://www.ncbi.nlm.nih.gov/books/NBK44294/

Olds, D.L., Henderson, C.R., Kitzman, H.J., Eckenrode, J.J., Cole, R.E., and Tatelbaum, R.C. 1999. Prenatal and infancy home visitation by nurses: Recent findings. The Future of Children 9:44–65.

Onondaga County - Department of Probation. (n.d.). Retrieved April 15, 2016, from http://www.ongov.net/probation/index.html

Pearson, F., Lipton, D., Cleland, C., & Yee, D. (2002). The Effects of Behavioral/Cognitive-Behavioral Programs on Recidivism. *Crime & Delinquency, 48*(3), 476-496.

Predictors of Violent or Serious Delinquency in Adolescence and Early Adulthood: A Synthesis of Longitudinal Research. (1999). In D. Farrington & R. Loeber (Eds.), *Serious & Violent Juvenile Offenders: Risk Factors and Successful Interventions* (1st ed., pp. 86-105). Thousand Oaks, California: SAGE Publications.

Porter, R., Lee, S., & Lutz, M. (2011). Balancing Punishment and Treatment: Alternatives to Incarceration in New York City. *Federal Sentencing Reporter, 24*(1), 26-29. doi:10.1525/fsr.2011.24.1.26

Promising Programs for Youth Gang Violence Prevention and Intervention. (1999). In D. Farrington & R. Loeber (Eds.), *Serious & Violent Juvenile Offenders: Risk Factors and Successful Interventions* (1st ed., pp. 284-312). Thousand Oaks, California: SAGE Publications.

Redding, R. E., Goldstein, N. S., & Heilbrun, K. (2005). *Juvenile Delinquency : Prevention, Assessment, and Intervention*. New York: Oxford University Press.

Reza, A. (2001). Epidemiology of violent deaths in the world. *Injury Prevention, 7*(2), 104-111. doi:10.1136/ip.7.2.104

Ryan, J. P., Abrams, L. S., & Huang, H. (2014). First-time violent juvenile offenders: Probation, placement, and recidivism. *Social Work Research, 38*(1), 7-18. doi:10.1093/swr/svu004

Sampson, R. J. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* 277 (1997): 918-24. Print.

Satterfield, J.M., Spring, B., Brownson, R.C., Mullen, E.J., Newhouse, R.P., Walker, B.B., et al. (2009) Toward a transdisciplinary model of evidence-based practice. Milbank Quarterly, 87(2): 368-90.

Sexton, T. L., & Alexander, J. F. (2000). Functional Family Therapy. *Juvenile Justice Bulletin*.

Shader, M. (n.d.). Risk Factors for Delinquency: An Overview. Retrieved October 31, 2015, from https://www.ncjrs.gov/pdffiles1/ojjdp/frd030127.pdf

Shapiro, R., & Hassett, K. (2012). The Economic Benefits of Reducing Violent Crime. Retrieved October 27, 2015, from https://www.americanprogress.org/wp-content/uploads/issues/2012/06/pdf/violent_crime.pdf

Sherman, L., Gottfredson, D., Mackenzie, D., Eck, J., Reuter, P., & Bushway, S. (1998). Preventing Crime: What Works, What Doesn't, What's Promising. *PsycEXTRA Dataset*. Retrieved November 9, 2015.

Smith, E. P., Wolf, A. M., Cantillon, D. M., Thomas, O., & Davidson, W. S. (2004). The Adolescent Diversion Project. *Journal of Prevention & Intervention in the Community, 27*(2), 29-47. doi:10.1300/j005v27n02_03

Sturtz, K. (2015a, January 1). Syracuse police solved less than half of city's homicides in 2014. *Syracuse.com*.

Sturtz, K. (2015b, February 22). Syracuse follows national trend as crime drops; burglaries, violent crime at 25-year low. *Syracuse.com*. Retrieved October 26, 2015.

Syracuse Family Development Research Program (FDRP). (n.d.). Retrieved April 12, 2016, from https://www.crimesolutions.gov/ProgramDetails.aspx?ID=310

The Salvation Army. (n.d.). Retrieved April 14, 2016, from http://www.salvationarmyusa.org/

The Salvation Army | Syracuse, NY - Child & Family Services. (n.d.). Retrieved April 15, 2016, from http://syracuseny.salvationarmy.org/SyracuseNY/Children-Families

Thornton, T., Craft, C., Dahlberg, L., Lynch, B., Baer, K., Potter, L., & Mercy, J. (2002). Best Practices of Youth Violence Prevention: A Sourcebook For Community Action. *PsycEXTRA Dataset*.

U.S. Department of Health and Human Services Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2011.

United States. Office of Juvenile Justice and Delinquency Prevention. (1995). *Guide for implementing the comprehensive strategy for serious, violent, and chronic juvenile offenders*. Washington, D.C.: U.S. Dept. of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Violence Prevention: The Evidence. (2009). *World Health Organization*.

Violent Crime. (2014, September 8). Retrieved October 25, 2015, from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/violent-crime/violent-crime-topic-page/violentcrimemain_final

Walker, H. M., Kavanagh, K., Stiller, B., Golly, A., & al, e. (1998). First step to success: An early intervention approach for preventing school antisocial behavior. *Journal of Emotional and Behavioral Disorders, 6*(2), 66. Retrieved from http://search.proquest.com.libezproxy2.syr.edu/docview/214911946?accountid=14214

Wasserman, G., & Miller, L. (2000). The Prevention of Serious and Violent Juvenile Offending. *Juvenile Justice Bulletin,* 197-247. Retrieved November 9, 2015.

Weiner, M. (2015, March 30). Syracuse has 8th highest violent crime rate in New York. *Syracuse.com*. Retrieved October 26, 2015.

Youth Violence: Risk and Protective Factors. (2015, February 12). Retrieved October 31, 2015, from http://www.cdc.gov/violenceprevention/youthviolence/riskprotectivefactors.html

Appendices

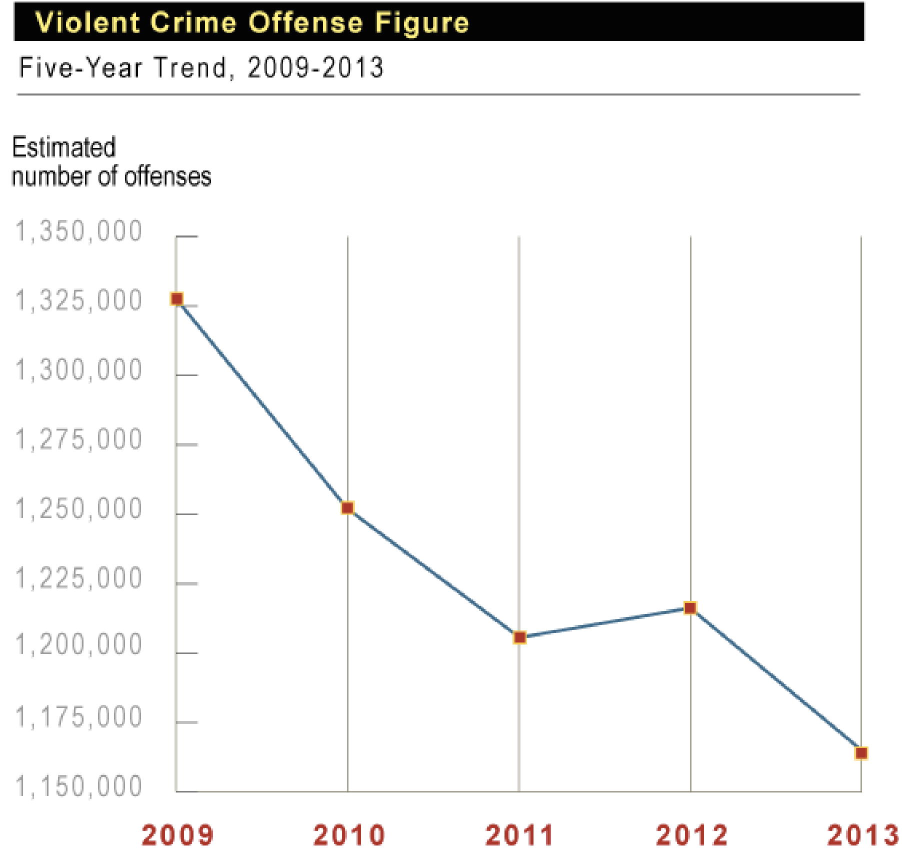


Figure 1. Nationwide Violent Crime Offense Figures from 2009-2013 (“Violent Crime,” 2014).

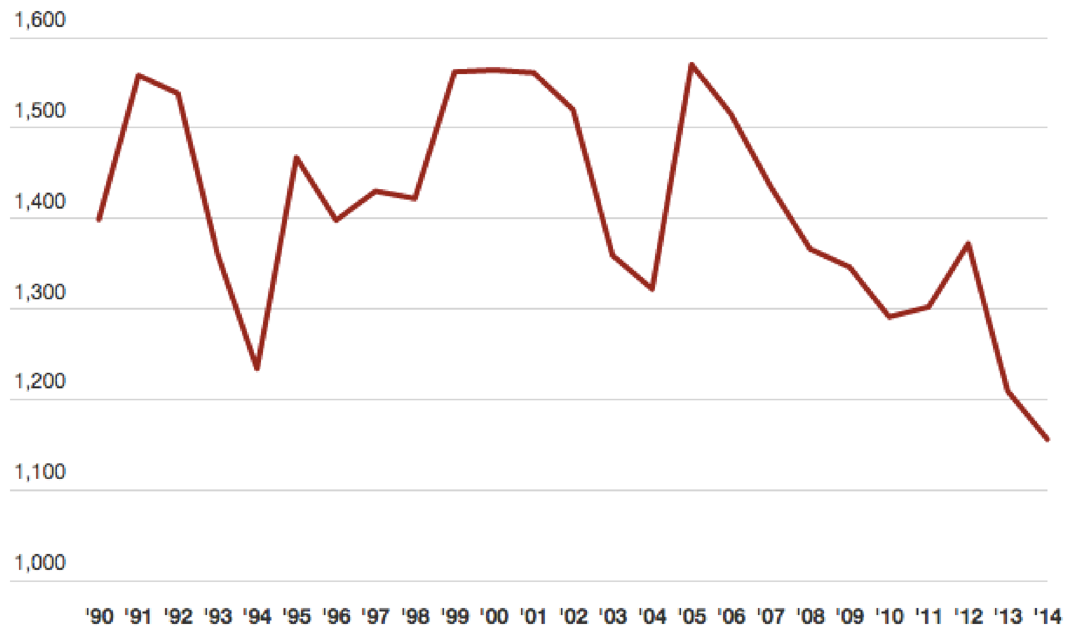


Figure 2. Violent Crime Offenses in Syracuse, New York from 1990- 2014 (Sturtz, 2015b).

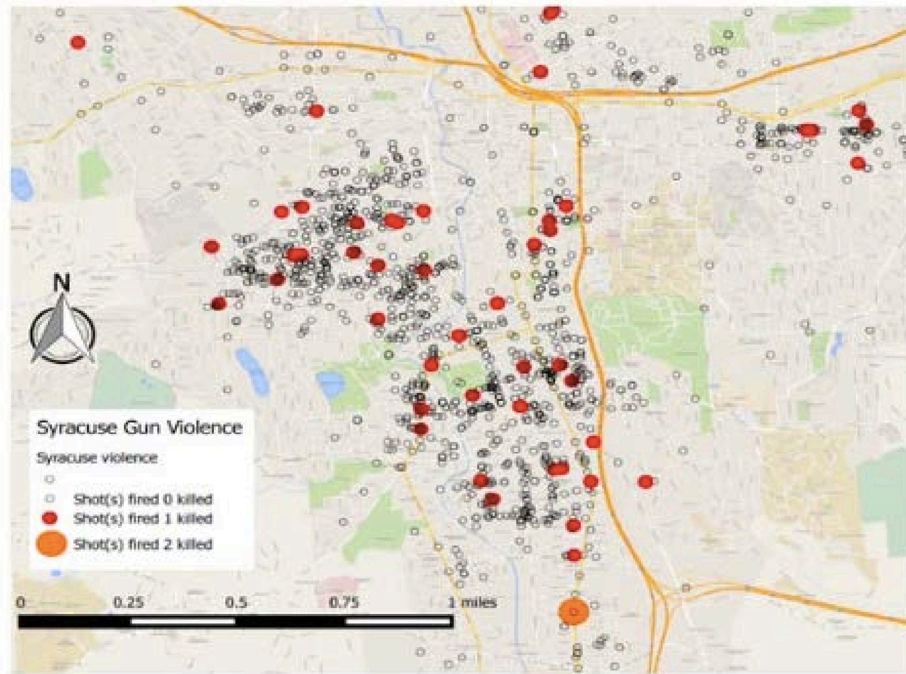


Figure 3. Gunshots and Gunshot Fatalities in Syracuse, New York from 2009 to 2014 (Lane et al., 2015).

Domain	Risk Factor		Protective Factor *
	Early Onset (age 6-11)	Late Onset (age 12-14)	
Individual	General offenses	General offenses	Intolerant attitude toward deviance
	Substance use	Psychological condition	
	Being male	Restlessness	High IQ
	Aggression **	Difficulty concentrating **	Being female
	Psychological condition	Risk taking	Positive social orientation
	Hyperactivity	Aggression **	Perceived sanctions for transgressions
	Problem (antisocial) behavior	Being male	
		Physical violence	
	Exposure to television violence	Antisocial attitudes, beliefs	
		Crimes against persons	
	Medical, physical	Problem (antisocial) behavior	
	Low IQ	Low IQ	
	Antisocial attitudes, beliefs Dishonesty **	Substance use	
Family	Low socioeconomic status/poverty	Poor parent-child relations	Warm, supportive relationships with parents or other adults
		Harsh, lax discipline; poor monitoring, supervision	
	Antisocial parents		
	Poor parent-child relations	Low parental involvement	Parents' positive evaluation of peers
	Harsh, lax, or inconsistent discipline	Antisocial parents	
		Broken home	Parental monitoring
	Broken home	Low socioeconomic status/poverty	
	Separation from parents		
	Other conditions	Abusive parents	
	Abusive parents	Other conditions	
	Neglect	Family conflict **	
School	Poor attitude, performance	Poor attitude, performance	Commitment to school
		Academic failure	Recognition for involvement in conventional activities
Peer Group	Weak social ties	Weak social ties	Friends who engage in conventional behavior
	Antisocial peers	Antisocial, delinquent peers	
		Gang membership	
Community		Neighborhood crime, drugs	
		Neighborhood disorganization	

* Age of onset not known.

** Males only.

Figure 4. Risk Factors and Protective Factors for Juvenile Violence in Youth Aged 15 to 18 (Office of the Surgeon General et al., 2001).

Early Risk Factors (age 6-11)	**Effect Size (*r* =)**	**Late Risk Factors (age 12-14)**	**Effect Size (*r* =)**
		Large Effect Size (*r*> .30)	
General offenses	***.38***	Weak social ties	***.39***
Substance use	***.30***	Antisocial, delinquent peers	***.37***
		Gang membership	.31
		Moderate Effect Size (*r* = .20 - .29)	
Being male	***.26***	General offenses	***.26***
Low family socioeconomic status/poverty	***.24***		
Antisocial parents	***.23***		
Aggression[**]	***.21***		
		Small Effect Size (*r* < .20)	
Psychological condition	***.15***	Psychological condition	***.19***
Hyperactivity	***.13***	Restlessness	.20
Poor parent-child relations	***.15***	Difficulty concentrating[**]	.18
Harsh, lax, or inconsistent discipline	.13	Risk taking	.09
Weak social ties	***.15***	Poor parent-child relations	***.19***
Problem (antisocial) behavior	***.13***	Harsh, lax discipline; poor monitoring, supervision	.08
Exposure to television violence	***.13***	Low parental involvement	.11
Poor attitude toward, performance in school	***.13***	Aggression[**]	***.19***
Medical, physical	***.13***	Being male	***.19***
Low IQ	***.12***	Poor attitude toward, performance in school	***.19***
Other family conditions	***.12***	Academic failure	.14
Broken home	***.09***	Physical violence	***.18***
Separation from parents	.09	Neighborhood crime, drugs[§]	.17
Antisocial attitudes, beliefs		Neighborhood disorganization[§]	.17
Dishonesty[**]	.12	Antisocial parents	***.16***
Abusive parents	***.07***	Antisocial attitudes, beliefs	.16
Neglect	***.07***	Crimes against persons	***.14***
Antisocial peers	***.04***	Problem (antisocial) behavior	***.12***
		Low IQ	***.11***
		Broken home	***.10***
		Low family socioeconomic status/poverty	***.10***
		Abusive parents	***.09***
		Other family conditions	***.08***
		Family conflict[**]	.13
		Substance use	.06

Figure 5. Early and Late Risk Factors for Violence in Ages 15-18 (Office of the Surgeon General et al, 2001).

Domain	Prosposed Protective Factor	Buffers Risk	Outcome
Individual	Intolerant attitude toward deviance	Yes	Violence, problem behavior
	High IQ	Yes	Antisocial behavior
	Being female	No	Antisocial behavior
	Positive social orientation	Yes	Antisocial behavior
	Perceived sanctions for transgressions	Not significant	Violence, antisocial behavior
Family	Warm, supportive relationships with parents or other adults	No	Violence, antisocial behavior
	Parents' positive evaluation of peers	No	Serious delinquent behavior
	Parental monitoring	No	Serious delinquent behavior, antisocial behavior
School	Commitment to school	Yes	Violence, problem behavior
	Recognition for, involvement in conventional activities	No	Violence, antisocial behavior
Peer Group	Friends who engage inconventional behavior	No	Violence, antisocial behavior

Figure 6. Proposed Protective Factors with Buffering Risk and Outcome Affected (Office of the Surgeon General et al., 2001).

	B[a]	β[b]	Q-Added[c]
Constant	–.1393		
Method controls			51.4 (df = 6) p < .001
Arrest frequency recidivism	–.0443*	–.08	
Sample size	–.0001*	–.12	
Design: Matched control	.0018	.01	
Design: Unmatched control	.0369*	.11	
Design: Randomized[d]			
Initial differences	.5985*	.16	
Journal/book publication	.0344*	.10	
Juvenile samples			98.6 (df = 5) p < .001
Mean age	.0046	.05	
Gender mix	–.0152†	–.07	
Ethnicity	.0062	.03	
Delinquency risk	.0434*	.41	
Aggressive history	–.0358*	–.12	
Juvenile justice supervision			5.4 (df = 3) p = .14
No supervision[d]			
Diversion	.0195	.06	
Probation/parole	.0020	.01	
Incarceration	–.0314	–.08	
Intervention philosophy			15.6 (df = 7) p < .03
Surveillance	–.0207	–.03	
Deterrence	–.0619	–.06	
Discipline	–.0932*	–.11	
Restorative	–.0030	–.01	
Counseling	.0132	.04	
Skill building	.0072	.02	
Multiple services	.0093	.03	

†p < .10, *p < .05
(a) Unstandardized regression coefficients. (b) Standardized regression coefficients. (c) Q-test for the variance added by each group of variables. (d) Omitted as the reference category in a group of dummy codes.

Figure 7. Regression for Prediction for Recidivism Effect Sizes from Major Moderator Variables (Lipsey, 2009).

Table 2: Covariate adjusted mean recidivism effect sizes for the different intervention philosophies.

Intervention Philosophy	Mean Phi Coefficient[a]	Recidivism Rate[b]	Percentage Difference[c]
Counseling	.066	.43	−13%
Multiple services	.062	.44	−12%
Skill building	.060	.44	−12%
Restorative	.050	.45	−10%
Surveillance	.032	.47	−6%
Deterrence	−.009	.51	+2%
Discipline	−.040	.54	+8%

(a) Covariate adjusted as described in the text. (b) Recidivism rate for the intervention group that corresponds to the effect of the given phi coefficient on a control recidivism rate of .50. (c) Recidivism reduction (or increase) for the intervention group compared to a control group with a .50 recidivism rate.

Figure 8. Covariate Adjusted Mean Recidivism Effect Sizes for Different Intervention Philosophies (Lipsey, 2009).

Figure 9. Framework for Program Evaluation in Public Health (Introduction to program evaluation for public health programs: A self-study guide, 2011).

Effectiveness of youth violence prevention strategies, by context

Context	Strategy	Rating
Parenting and early childhood development strategies	Home visiting programmes	?
	Parenting programmes	+
	Early childhood development programmes	+
School-based academic and social skills development strategies	Life and social skills development	+
	Bullying prevention	+
	Academic enrichment programmes	?
	Dating violence prevention programmes	+/-
	Financial incentives for adolescents to attend school	?
	Peer mediation	+/-
	After-school and other structured leisure time activities	?
Strategies for young people at higher risk of, or already involved in, violence	Therapeutic approaches	+
	Vocational training	?
	Mentoring	?
	Gang and street violence prevention programmes	?
Community- and society-level strategies	Hotspots policing	+
	Community- and problem-orientated policing	+
	Reducing access to and the harmful use of alcohol	+
	Drug control programmes	+
	Reducing access to and misuse of firearms	+
	Spatial modification and urban upgrading	+
	Poverty de-concentration	+

KEY

+ Promising (strategies that include one or more programmes supported by at least one well-designed study showing prevention of perpetration and/or experiencing of youth violence, or at least two studies showing positive changes in key risk or protective factors for youth violence).

? Unclear because of insufficient evidence (strategies that include one or more programmes of unclear effectiveness).

+/- Unclear because of mixed results (strategies for which the evidence is mixed – some programmes have a significant positive and others a significant negative effect on youth violence).

Figure 10. Effectiveness of Youth Violence Prevention Strategies: Individual- and Community-Based Interventions (Krug, 2002).

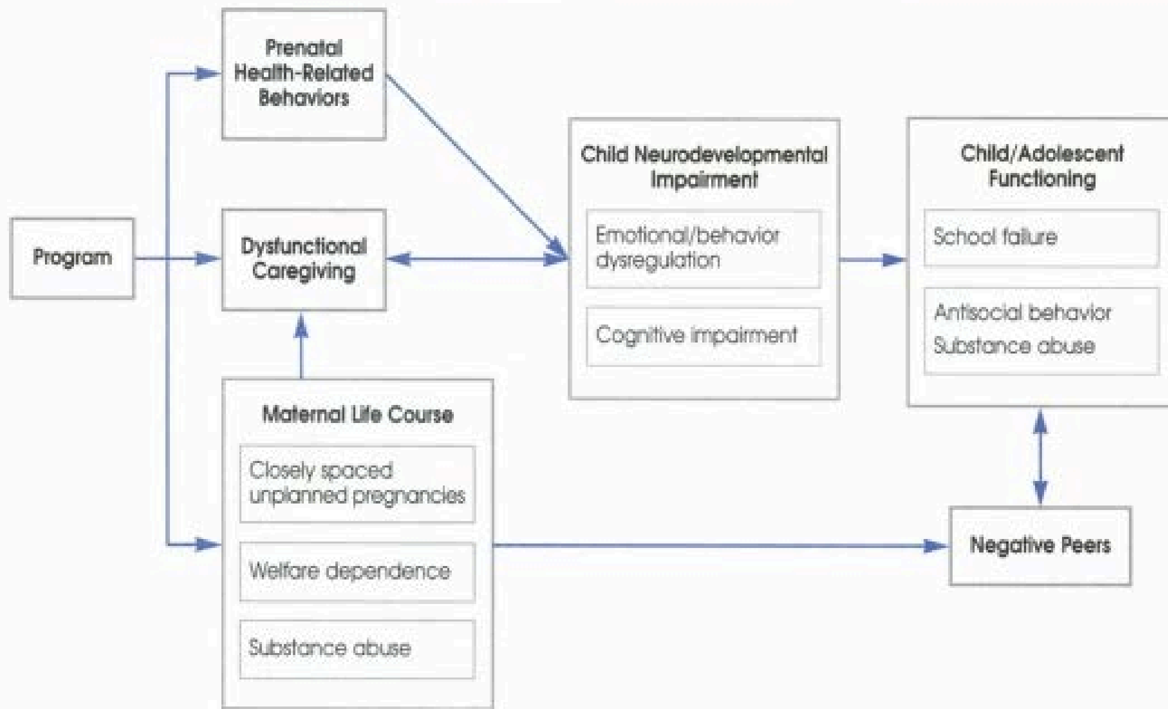
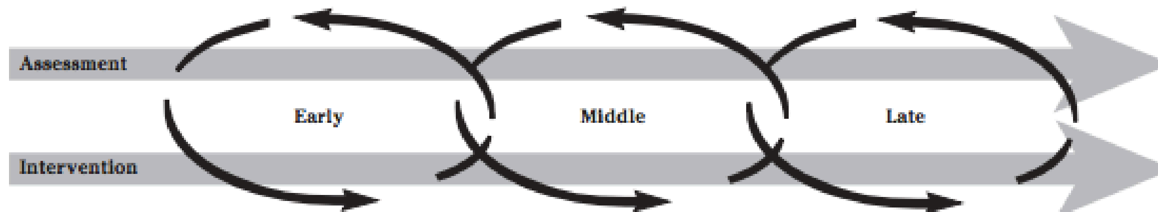


Figure 11. Nurse-Family Partnership Model (Olds et al., 1999).

Functional Family Therapy Clinical Model: Intervention Phases Across Time



	Engagement and Motivation	Behavior Change	Generalization
Phase goals	Develop alliances. Reduce negativity, resistance. Improve communication. Minimize hopelessness. Reduce dropout potential. Develop family focus. Increase motivation for change.	Develop and implement individualized change plans. Change presenting delinquency behavior. Build relational skills (e.g., communication and parenting).	Maintain/generalize change. Prevent relapses. Provide community resources necessary to support change.
Risk and protective factors addressed	Negativity and blaming (risk). Hopelessness (risk). Lack of motivation (risk). Credibility (protective). Alliance (protective). Treatment availability (protective).	Poor parenting skills (risk). Negativity and blaming (risk). Poor communication (risk). Positive parenting skills (protective). Supportive communication (protective). Interpersonal needs (depends on context). Parental pathology (depends on context). Developmental level (depends on context).	Poor relationships with school/ community (risk). Low level of social support (risk). Positive relationships with school/community (protective).
Assessment focus	Behavior (e.g., presenting problem and risk and protective factors). Relational problems sequence (e.g., needs/functions). Context (risk and protective factors).	Quality of relational skills (communication, parenting). Compliance with behavior change plan. Relational problem sequence.	Identification of community resources needed. Maintenance of change.
Therapist/ Interventionist skills	Interpersonal skills (validation, positive interpretation, reattribution, reframing, and sequencing). High availability to provide services.	Structure (session focusing). Change plan implementation. Modeling/focusing/directing/ training.	Family case manager. Resource help. Relapse prevention interventions.

Figure 12. Functional Family Therapy Model (Sexton and Alexander, 2000).

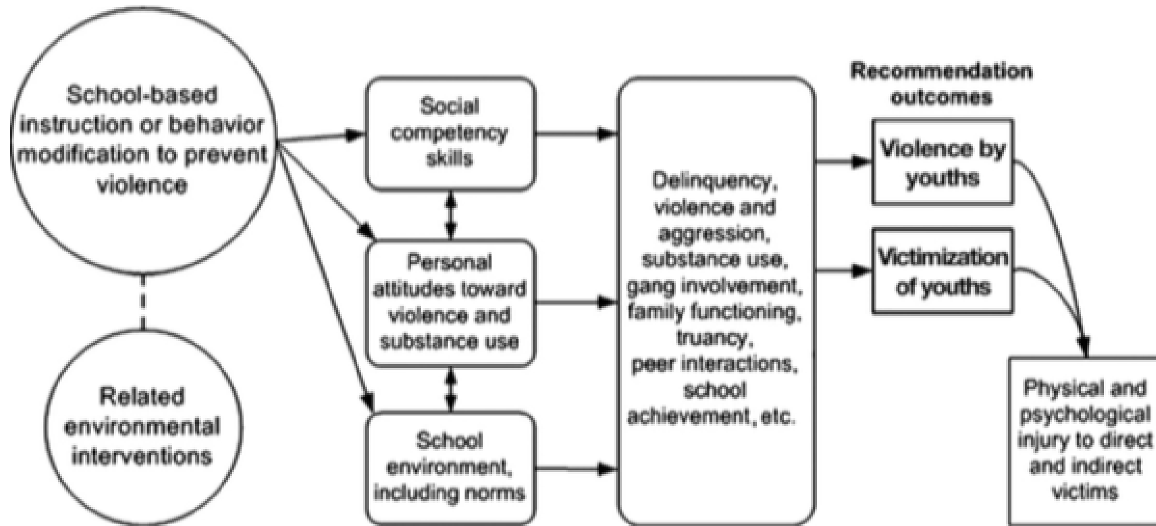


Figure 13. Framework for School-Based Programs for Violence Prevention (Hahn et al., 2007).