

5-2023

THE ASSOCIATION BETWEEN ADVERSE CHILDHOOD EXPERIENCES AND GANG MEMBERSHIP

Johanna Ulloa

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THE ASSOCIATION BETWEEN ADVERSE CHILDHOOD EXPERIENCES
AND GANG MEMBERSHIP

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Johanna Ulloa

May 2023

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Approved by:

Dr. Caroline Lim, Faculty Supervisor, Social Work

Dr. Yawen Li, M.S.W. Research Coordinator

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ABSTRACT

Background and Purpose: Youth gang membership is on the rise and has become a significant problem within communities and has led to serious consequences, such as high degrees of delinquency and homicide. Prior research has proposed that history of exposure to childhood trauma is a significant risk factor. **Objective:** This study examined the association between adverse childhood experiences and gang involvement. **Methods:** This research was a cross-sectional observational study used to gather quantitative data, using a non-random sampling strategy. Participants for this study included adults (i.e., 18 years or older) within the general population, who were literate in English and had access to the internet. A univariate analysis was performed to derive description statistics to summarize participants' demographic characteristics, exposure to adverse childhood events, and gang involvement. Independent-sample t-test and chi-square analyses were performed to test the association between ACEs and various aspects of gang membership participation. Analyses were performed with SPSS using data from participants with complete information. **Results:** Results provided the descriptive statistics for 80 participants. The average age of participants at the time of the survey was 30.9 years ($SD = 9.0$, range=18—53 years). Majority of participants identified as male ($n = 48$, 60.00%). The sample was ethnically and racially diverse comprising participants who identified as mixed-raced, "other," and Asian. About one third of participants ($n = 28$) reported as being involved in a gang. For participants with

gang involvement, the average age at the time of joining a gang was 14.6 years ($SD = 2.7$), (range=10—23) with a duration of 6.2 years ($SD = 4.2$, range=3—24). The mean ACE score for the study participants was 4.0 ($SD=2.5$, range=0-9). There was a significant difference in the average ACE score between participants who had gang involvement ($M=5.0$, $SD=2.3$) and participants who were never involved in a gang ($M=3.5$, $SD=2.5$). Participants with gang involvement reported significantly higher exposures to separation from parent/guardian, domestic violence, household incarceration, and parental substance abuse in comparison to those with no gang involvement.

Conclusions: These findings highlight the importance of assessing children for ACEs and determining whether they should be subsequently screened for potential gang involvement based off the number of ACEs reported. These findings may also encourage organizations to train and educate staff on understanding the potential physical, mental, and behavioral implications of ACE exposure, as well as how to refer youth for further assessments and/or treatment to address trauma or early intervention for potential gang involvement.

DEDICATION

This research study is dedicated to my sisters and my parents, who encouraged me to use my combative nature to stand up and advocate for the ones who can't. And to the young men I've met throughout my career. The ones who shared their stories and offered a different perspective on the act of survival.

To the ones who are still here, and to the ones we lost along the way.

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CHAPTER ONE

ASSESSMENT

Introduction

Chapter one will discuss the identification of a research focus for the proposed study, the association between experiences of childhood trauma and gang membership participation. This is followed by an explanation of the positivist paradigm, the chosen paradigm for this study, and the rationalization of applying the specific paradigm for the problem focus. The next section addresses the theoretical orientation of the study and examines different theories that can support researchers with the problem focus. The final section of this study will examine the potential contribution of the study to micro and macro social work practice.

Research Focus

The research focus of this study is to examine the association between experiences of childhood trauma and gang membership participation. This is an important focus to study because youth gang involvement has become a global concern (Mendez et al., 2020). Youth gang involvement has been defined as belonging to a social group with some level of structure in which children ages 10 to 17 jointly participate in harmful behaviors (Mendez et al., 2020). Youth gang membership is on the rise and has become a significant problem within communities and has led to serious consequences, such as

high degrees of delinquency and homicide (Mendez et al., 2020). In the United States, there are an estimated 29,400 youth gangs and prior research has proposed that history of exposure to childhood trauma is a significant risk factor (Mendez et al., 2020). This focus will seek to understand how adverse childhood experiences impact gang membership, with the hope of identifying appropriate intervention and treatment for gang involved individuals.

Paradigm and Rationale for Chosen Paradigm

The research study was conducted using the positivist paradigm. The positivist paradigm uses the collection of quantitative data, which is gathered in the form of numbers that facilitates the measurement of variables (Morris, 2014). The positivist method assumes that an objective reality occurs outside of the subjective experience that has evident and irreversible laws and mechanisms (Morris, 2014). Researchers of the positivist paradigm work to identify the laws and structure of human behavior and therefore can reveal cause and effect relationships in the study. This idea determines that the goal of positivist research is to discover causes and correlations (Morris, 2014). Finding the correlation between two variables such as examining the association between experiences of childhood trauma and gang membership participation emphasizes that the positivist paradigm was the best approach to address this study.

Literature Review

This literature review will begin by focusing on the prevalence of youth gang members. Next, it will discuss the causes or contributors to youth gang membership. Then, it will examine the impacts or consequences of youth gang involvement. After, it will review existing interventions or prevention measures. Lastly, a summary will be provided of the literature review.

Prevalence of Youth Gang Involvement

Studies in 2014 show that there are more than one million juvenile gang members in the United States, an overall prevalence of 2% for youth aged 5 to 17 (Pyrooz & Sweeten, 2014). About 1% of youth in the United States are affiliated with gangs by the age of 10 (Pyrooz & Sweeten, 2014). Membership then hastily increases during adolescence, resulting in membership peak of 5% of youth at the age of 14 (Pyrooz & Sweeten, 2014). However, the prevalence of gang membership decreases as youth advance to adulthood. There is no accurate system in place that is capable of documenting when youth leave gangs, resulting in many gaps on the scope of youth gang membership (Pyrooz & Sweeten, 2014). Studies, however, recognize that the estimated population of youth gang membership continues to be severely underestimated due to misrepresentations and biases of demographics (i.e., race/ethnicity, gender, socioeconomic status) and a combination of reports pulled from different law enforcement agencies, altering their definitions of

gang membership, thus using a variety of methods for counting gang membership (Pyrooz & Sweeten, 2014).

Causes and Contributions

Although studies show that gang membership can begin as early as the age of 5, the majority of membership participation occurs after the age of 10 (Pyrooz & Sweeten, 2014). The risk of joining a gang is the highest at the age of 13; however, studies show that membership quickly declines as youth enter adulthood (Pyrooz & Sweeten, 2014). These findings suggest that it is fundamentally important to begin identifying risk factors before the age of 12 years, such as negative life events, low parental supervision, anti-social tendencies, delinquent peers, and community violence (Pyrooz & Sweeten, 2014). In an effort to examine the causes and contributions of youth's decision to join a gang, it is essential to utilize Bronfenbrenner's ecological model at the individual, family and community level.

At the individual level, factors such as experiencing negative life events such as trauma and victimization, may result in an individual developing low self-esteem and mental health issues (Rizzo, 2003). Youth who become victims of violence, abuse, or trauma, are more likely to acquire mental health issues (i.e., depressive disorders, post-traumatic stress disorder) (Rizzo, 2003). Youth with cognitive deficits (i.e., attention deficit hyperactivity disorder) can struggle academically, delinquently and have low pro-social skills, resulting in lack of interests, lack of motivation, poor academic achievement,

leading to the development of other mental health disorders (i.e., conduct disorder, antisocial behaviors) (Rizzo, 2003). These factors can lead youth to have low confidence, poor decision-making skills, and impulsivity, resulting in seeking validation, identification, and support from gangs, who allow youth to achieve a sense of status and respect (Rizzo, 2003).

At the family level, variables such as mental illness, abuse, poor parental attachments, and poverty are all factors that would increase the likelihood of why youth would seek gang membership (Rizzo, 2003). Families with a history of mental illness and/or substance abuse are more likely to have weak family structures, such as minimal parent-child interactions and poor communication (Rizzo, 2003). Children who experience abuse or go through multiple caretaker transitions may develop poor attachments to others later in life. Poverty and financial stressors are major contributors as to why a youth would join a gang. Low-income homes and single parent households working multiple jobs can result in minimal parent supervision, minimal family bonding, economic barriers, therefore, making it difficult for youth to adjust socially and economically to their communities (Rizzo, 2003). The structure found in traditional nuclear families are shifted towards the gang. Youth who come from households with a history of gang activity, feel pressure from their families to join a gang, as a way to make money, gain gang status and create security in their neighborhoods (Rizzo, 2003). The influence of gang membership within family units reinforces the cycle of intergenerational gang involvement.

When focusing on the community level, it is important to recognize three sub-level factors: school, peers, and neighborhoods (Rizzo, 2003). School variables include low expectations for success in school and low commitment to school. Schools with poor academic quality, low teacher support and high rates of school sanctions (i.e., school suspensions, school expulsions, juvenile referrals) create a lack of school closeness, thus limiting educational aspirations (Rizzo, 2003).

Along with school factors, peers have a very strong impact on gang membership. Youth who associate with gang members or have peers who are interested in joining a gang, are more likely to join because of peer pressure and gaining peer status (Rizzo, 2003). A vulnerable youth who seeks acceptance, protection, and opportunities for socialization from peers, often turn to gangs to meet those needs. Neighborhoods also play a significant factor to gang membership. Areas where there is community violence and high levels of crime activity, present fewer options of resources and support (Rizzo, 2003). Youth who are witnesses and/or victims of violence are exposed to illegal activities, gain access to firearms and illegal substances, consequently creating small levels of neighborhood attachments (Rizzo, 2003). Neighborhoods that lack community resources struggle to provide adequate gang prevention and intervention services, resulting in the normalization of delinquency and community violence (Rizzo, 2003).

Impacts and Consequences

Incarceration. Research has found that youth who have reported being in a gang during adolescence are more likely to be arrested and incarcerated in adulthood (Gilman et al., 2014). Individuals who attempt to leave the gang struggle to acclimate into society because of the minimal access to community resources and services such as housing, education, and employment opportunities. A lack of formal education affects an individual's ability to find employment, resulting in the decision to engage in illegal activities as a way to earn money, especially if the individual has early exposure of criminal behaviors. This places the individuals at risk to be rearrested and continue the cycle of incarceration (Gilman et al., 2014).

Social Functioning. Joining a gang in adolescence can lead to changes in emotions, attitudes, behaviors, and beliefs as an adult (Gilman et al., 2014). Gang membership as a youth can serve as a turning point, changing the opportunity structure for young adulthood. As gang-involved youth pass through different cycles of socialization, they are less likely to experience pro-social functioning across each stage of development, increasing behavioral problems and reinforcing long term patterns of criminal behavior as they transition into adulthood (Gilman et al., 2014).

Youth who are involved in gangs are more likely to present mental health disorders in adolescence and into adulthood such as depressive disorders, anxiety disorders, post-traumatic stress disorder (PTSD), conduct

disorder and antisocial personality disorder (ASPD) due to high levels of exposure to traumatic and violent events (Macfarlane, 2019). Symptoms of depression and anxiety can be presented in youth from an early age due to adverse childhood experiences and gang membership can exacerbate symptoms through ongoing exposure of violence and criminal activity (Macfarlane, 2019). In fact, gang members are eight more times likely to attempt suicide or engage in suicidal tendencies, than non-violent individuals (Macfarlane, 2019).

Studies show that youth who are exposed to community violence, like gang violence, are more at risk for developing PTSD, which can also be linked with psychotic symptoms. This association is not limited to youth who are a victim of traumatic events but also applies to youth who are perpetrators of violence because of the psychological consequences of harming others (Macfarlane, 2019). Adolescents may react to exposure to violence by externalizing their behaviors (i.e., aggressiveness); however, they can also internalize their experiences of exposure and develop PTSD. PTSD is associated with increasing intrusive thoughts and fear of victimization (Macfarlane, 2019).

Additionally, about 40% of children with conduct disorder go on to develop ASPD and high rates of both disorders are largely found within gangs (Macfarlane, 2019). Youth who display conduct disorder traits are more disposed to join a gang because peers are more likely to reinforce their

behaviors and values. ASPD presents traits of impulsive and aggressive behaviors, which are high predictors of gang membership (Macfarlane, 2019).

Existing Interventions or Prevention Measures

Existing interventions for youth gang membership do not necessarily examine gang involvement but focus on reducing behavioral problems and addressing gang related trauma (Gebo, 2016). Individual factors in gang membership are often difficult to change, however interventions such as identifying children with pre-existing mental health conditions and learning deficits and providing early therapy and treatment have the possibility to redirect youth from gang membership (Gebo, 2016). Trauma focused-cognitive behavioral therapy (TF-CBT), which is an evidence-based practice to treat PTSD and other psychological distress symptoms such as anxiety and depression, is a well-established intervention to treat youth who are gang involved (Cohen et al., 2011). TF-CBT includes interventions such psychoeducation, cognitive techniques, behavioral techniques, stress management, safety plans and exposure therapy (Cohen et al., 2011). Psychoeducation involves providing youth and caregivers basic information, such as education on symptoms associated to their trauma exposure, normalizing reactions and feelings towards their trauma, and exploring options on how to increase safety within their environments (Cohen et al., 2011). This approach provides youth a better understanding of their individual experience of trauma and helps strengthen social support (i.e., family support) in an effort

to reinforce protective factors and limit risk factors that lead youth to gang involvement (Cohen et al., 2011).

Prevention/reduction programs such as Gang Resistance Education and Training program (G.R.E.A.T) and Gang Reduction and Youth Development Foundation (GRYD) are existing prevention measures for youth gang members (Esbensen et al., 2011). These programs focus on positive youth and community development and work towards limiting youth involvement in gangs and juvenile justice system by providing resources to academic services, mentorship programs, case management, crime and violence prevention and mental health services (Esbensen et al., 2011). Other programs, such as The Boys and Girls Clubs' Gang Prevention program is implemented through targeted outreach, to engage youth in pro-social activities and connect them to positive peer and adult support systems (Gebo, 2016). Studies have shown that youth who were participants of the program were less likely to affiliate with gang members, less likely to wear gang colors and have fewer links to the juvenile justice system (Gebo, 2016).

When discussing prevention measures for youth gang involvement, it is important to acknowledge that in order to prevent youth from gang membership, addressing root causes and social issues of gang involvement are vital but somehow not considered in a criminal justice approach (Gebo, 2016). Programs that address the needs of people who are living in distressed neighborhoods and work towards increasing access to quality education,

housing, employment opportunities and adequate resources for health and safety should be primary prevention approaches but are only considered secondary prevention efforts that only target specific population rather than universal policies and programs (Gebo, 2016).

Current policy responses to gang involvement includes aggressive gang suppression programs that are led by law enforcement and lack policies that focus on preventing delinquency before it occurs (Peterson, 2010). Today, effective prevention efforts continue to struggle with implementation and funding because of the United States' capitalization on incarceration and advocating for new jails, longer prison sentences and mandatory prison sentences (Peterson, 2010). Many policymakers implement anti-gang policies without having a realistic understanding of actual gang members and do not understand nor address the backgrounds or environments of youth but believe that preventative efforts of gang involvement can be reduced by encouraging youth to just stay away from gangs, minimizing risk factors that led youth to their decision of joining a gang (Peterson, 2010). It is critical for policymakers to consider that youth are often born into gangs and/or experience traumatic and stressful events as children, that navigate them to gangs and view the gang as their foundation for safety and structure. Examining the factors of why a youth would join a gang could help create a better understanding of greater social issues, rather than just implementing punitive measures on juvenile delinquency.

The literature review examined high numbers of risk factors towards a youth's decision to join a gang, highlighting the importance of addressing these risk factors through effective intervention and prevention efforts. The literature review provides different viewpoints from researchers, mental health workers and policymakers on the contributions and consequences of youth gang membership and offered insight on different measures to reduce gang involvement.

Theoretical Orientation

Bronfenbrenner's ecological systems theory is a framework that analyzes the interconnection of the relationship between an individual and their environment (Fearnley, 2019). Bronfenbrenner states that individuals evolve within each system that are categorized by the interactions they have with their family, home, school, work, community, and society which becomes fundamental to an individual's development (Fearnley, 2019).

Bronfenbrenner ecological approach examines the impact of environment on individual's behaviors and are structured through four systems: microsystem, mesosystem, exosystem and macrosystem (Fearnley, 2019). The microsystem focuses on the individual level, where the individual's immediate surroundings and influences are examined (Fearnley, 2019). In the mesosystem, the interactions between family, social and work environments are assessed (Fearnley, 2019). The exosystem is an external environment in which the individual is not directly involved with but is affected by the

occurrences within the environment. The macrosystem examines the culture and society structures in which the individual lives in and influenced by, without having any direct involvement (Fearnley, 2019).

Per the ecological systems perspective, environmental factors are one of several factors that contribute to gang involvement. Consequently, this study examined exposure to childhood adverse experiences as an environmental risk factor. This theory served as a useful tool to explore different aspects of an individual's environments and experiences, such as childhood trauma, that may have influenced their gang membership participation (Lopez et al., 2021).

Contribution of Study to Micro and/or Macro Social Work Practice

This study has the potential to contribute to both micro and macro social work practice. Examining the association between experiences of childhood trauma and gang membership provides information on the risk factors of an individual's environment and can distinguish whether ACEs is associated with the age for and duration of gang involvement. Understanding this information is important in developing prevention and intervention strategies at the micro and macro levels of social work practice.

At the micro level, this study can provide insight into gang members' realities that may improve sensitivity and competence when working with this specific population (Morris, 2014). This study can also provide further

information on appropriate mental health services that address the aspects of childhood trauma and gang involvement.

At the macro level, this study can further advocate for an increase in funding of gang prevention/reduction programs that focus on positive youth and community development. This study can also further develop a better understanding of the factors that contribute to gang membership involvement such as trauma, violence, and poverty within communities (Esbensen et al., 2011).

Summary

Chapter one covered the research focus and explained the importance of understanding the association between ACEs and gang membership participation. This chapter provided rationale for using positivist paradigm to conduct the study. It also provided literary reviews focused on the prevalence, causes, and impacts of youth gang membership as well as addressing any existing intervention and prevention methods. This chapter provided the theoretical orientation of the study and addressed potential contributions to both micro and macro social work practice when working with gang involved youth.

CHAPTER TWO

ENGAGEMENT

Introduction

Chapter two focuses on the engagement stage of the study. It begins with examining the study site and discussing engagement strategies for gatekeepers and participants. This is followed by a description of the researcher's self-preparation for the study. The next section discusses ethical, diversity and political issues that may occur within the study. Chapter two concludes with the role of technology will play in the study.

Research Site

For this study, the recruitment site included a social service agency serving youths with gang involvement histories and the general population. Additionally, the service agency provided housing within the study site to transitional age youth (ages 18-25) who were transitioning out of the facility and acclimating back into the community.

Engagement Strategies for Gatekeepers at Research Site

Access to the study site was obtained by contacting the Clinical Director and Clinical Program Manager. Researcher prepared an executive summary of the proposed study and provided directors with the opportunity to ask questions in case there were any misinterpretations of the study and/or

concerns about ownership of the study. Researcher offered to produce a deliverable such an infographic or research brief that summarized the main findings in a way that was easy to understand and more useful for the agency than a full research report. Upon the approval of both directors, study logistics were discussed and negotiated. Some issues discussed included information on the culture of the study site, the role of the researcher, the involvement of participants in the study, and protocols such as data gathering, the time frame of the study site's involvement in the research, and any further legal requirements for collaborating with the study site.

Self-Preparation

In efforts to adequately prepare for the research, reviewing the literature on the problem focus was essential. The literature review helped develop an understanding of gang members and the impact of trauma in childhood. This helped the researcher determine whether there were any gaps in research that could be answered through the study as well as inform data collection and interpretation of the data (Morris, 2014).

Diversity Issues

Diversity issues that emerged in the study included issues of stereotyping, socioeconomic class, culture, and race. Stereotyping can be the most significant diversity issue due to the long history of labeling gangs into one group. Assuming that all gangs and gang members are the same can

inhibit research from examining the foundation of youth gang membership, thus further increasing misconceptions of gangs and youth gang involvement (Wood & Alleyne, 2010). There are many definitions of what a gang is, and studies continue to show that the meaning of the term “gang” can change according to cultural, economic, and political diversities (Wood & Alleyne, 2010). Prior research, policy makers, the media, and politicians have reinforced the stereotyping of gangs, resulting in society’s biased views of gang members fitting certain descriptions and not individuals from different cultural and economic backgrounds (Wood & Alleyne, 2010). The more that society continues to focus on defining what a gang is, the more distracted they become from addressing the larger issue of exposure to community violence, trauma, and gang involvement.

A strategy utilized to address this specific diversity issue was to be aware of one own’s cultural lens in order to develop sensitivity and cultural competence (Morris, 2014). It was important to acknowledge the diversity within the participants without being classified or judged. Another strategy that was utilized to avoid stereotyping, was allowing participants to answer the survey questions based off their own perception. Self-reporting can provide researchers with subjective definitions, which can influence objective data collecting, thus expanding the problem focus throughout the study (Wood & Alleyne, 2010).

Ethical Issues

An ethical issue that arose in the study was the data collected about the participants. Addressing the importance of the participants' privacy anonymity and confidentiality is vital (Morris, 2014). A plan that tackled this diversity issue was ensuring that participants' names were not known or needed in the research study, highlighting to participants that personal identifying information was not collected from the survey. The researcher provided participants with information of the study focus, reviewed the outline of survey process, discussed the methods used to protect participants identities, and how the responses from participants were utilized in the study (Morris, 2014). Researcher kept data confidential through digital recording of surveys created from Qualtrics and was the only member to have access to the data once it is collected.

Political Issues

In this research, there were minimal political issues that arose. Should participants have had any questions or concerns regarding the political matters of their involvement in this survey, they were provided the researcher's email and encouraged to contact the researcher with inquiries regarding their participation.

The Role of Technology in Engagement

The role of technology was utilized to enhance engagement activities (Morris, 2014). The initial role of technology began with creating a recruitment email via computer, to send out to plausible participants. Within the recruitment email, a QR code was created for individuals to scan with their phones if they were interested in participating. The QR code provided individuals with the link to the survey and informed consent. The subsequent role of technology was used through phones via text message. As part of recruiting participants, the researcher provided their social network with a text message, that included the link to the survey and informed consent. To increase engagement, the researcher encouraged participants within their social network to distribute the link via text message to their social network, creating a snowball effect of data collection.

Summary

Chapter two discussed the engagement phase of the research. Chapter two provided information on the study site, strategies of engagement for the gatekeepers and discussed the self-preparation needed for the research. Chapter two also examined the diversity, ethical and political issues that occurred during the study and identified different strategies that addressed each issue. Lastly, the chapter discussed the role of technology in the engagement process.

CHAPTER THREE

IMPLEMENTATION

Introduction

Chapter three examines the implementation phases of the research study. This chapter begins with discussions of the study participants and the selection process. They are followed by sections on data gathering and phases of data collection. This chapter also includes sections describing data recording and the data analysis conducted in the study. This chapter concludes with the termination and follow up of the study.

Study Design

The study design of this research was a cross-sectional observational study used to gather quantitative data.

Study Participants

Participants for this study included adults (i.e., 18 years or older) within the general population. Adults who identified as male, female, and other gender identities were eligible to participate in this study. Study participants needed to be fluent in English and be able to read in English in order to partake in this research. For this study, participants were not compensated for their time.

Recruitment of Participants

The sampling strategy that was utilized in this study was non-random sampling, also known as non-probability. Non-random sampling is a sampling method that selects samples that are based off factors such as convenience. Snowball sampling is a non-random sampling technique that is an effective outreach strategy, that can be utilized to connect with hard-to-reach target groups in a more practical and culturally competent way (Sadler et al., 2010). An individual uses their own social network to recruit other individuals to participate, and then encourages those individuals to continue to recruiting others within their own social network, generating a snowball effect (Sandler et al., 2010). In this study, the survey was provided to participants in the researcher's social network and encouraged to be distributed by the participants to others within their social network, thus creating a snowball sampling of participants.

In order to recruit participants, a recruitment email was created. The recruitment email contained a simple description of the research study's goal and how individuals could become possible participants in the study. The email provided prospective participants information on participant eligibility, what participants' involvement would entail and terms of confidentiality for individuals who chose to participate. The email highlighted that participation in the study was completely voluntary and emphasized that participants could withdraw their involvement at any time. The recruitment email provided

participants a QR code to the survey and the researcher's email, should participants have questions regarding their participation in the study.

An online survey was created on Qualtrics and a link to the survey was shared with prospective participants (e.g., people in the researcher's social network that included family members, co-workers, peers, friends, etc.). The researcher's social network comprised of individuals with and without gang membership participation. In addition, the researcher works at an agency that serves an adult population with a history of gang membership. The link to the survey was sent directly to these participants in order to increase the likelihood of participants, with a history gang membership, to complete the survey. Although this method did not guarantee the sample, the relation to the agency and population increased the likelihood of reaching this specific population. The researcher also invited their social network to share the link with others within their social network.

Study Procedures

Prior to starting the survey, participants were invited to read the informed consent and needed to provide consent (by placing an X) in order to participate in the study. Once consent was given, participants were directed to the survey page. To protect participants' anonymity, the researcher invited participants to place an X rather than indicating their initials on the consent form.

Participants were invited to complete a survey that included three subsections. One subsection focused on the demographic characteristics of participants (i.e., gender [*male, female, other*], age, and race [*White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, and Other*]). The second subsection emphasized on gang involvement history, if it were applicable to the individual participant. Participants were asked if they had a history of participation in gang membership, and if participants answered “Yes”, questions of the participant’s age of their gang involvement, the age of when participants departed from the gang (if this was applicable) and the duration of their gang involvement would follow. If participants answered “No” to having a history of gang membership, they would automatically be taken to the last subsection of the survey. The last subsection examined the nine domains of adverse childhood experiences (ACEs), namely, physical abuse, emotional abuse, sexual abuse, household mental illness, household substance use, household domestic violence, incarcerated household member, separation of child from parent, and parental separation/divorce). Participants were invited to indicate whether they experienced any of the abovementioned ACEs before the age of 18 years old.

Due to the sensitive nature of the questions regarding gang involvement history and ACEs, there was a possibility of potential psychological discomfort for participants upon completing the survey. Prospective participants were made aware during the informed consent

process that participation was completely voluntary and that they had the option to skip questions or discontinue their participation at any time. The researcher provided a list of crisis hotlines at the end of the survey for participants, in the event that a participant should become distressed and need to seek support. The safety and well-being of participants was very important and no personal identifiable information was collected in this research.

Phases of Data Collection

Reviewing research ethics was essential to prepare for data collection. From reviewing research ethics, it was imperative for the researcher to understand the importance of obtaining informed consent prior to the study and reviewing confidentiality and the limits of confidentiality with participants (Morris, 2014).

The study survey on Qualtrics was self-administered and easily distributed among the researcher's social network and the social networks of the participants involved in the survey. The link to the survey was distributed through smart phones and email, using a recruitment email explaining the study and the role of participants within the study. Information such as confidentiality and the risks of involvement were clarified in the recruitment email.

The researcher initially distributed the recruitment email and survey link to their social network, including the adult population at the researcher's employment site, with a formal letter approval from the Director the agency.

Each plausible participant was encouraged to send the link to their own social network to collect data for the survey. Every two weeks, the researcher would distribute the survey link to their external social networks and would circle back to plausible participants to confirm the completion of the survey and extending the survey to others in their social networks.

Data Recording

Data was collected through a digital recording of surveys created from Qualtrics. The data that collected, was reported in group format only. The data that was downloaded from Qualtrics was saved on a password-protected computer, and the files had a protected password that only the researcher knew. The researcher was the only member to have access to the data. All the data that was downloaded to the computer will erase three years after the study is completed.

Data Analysis

The research study was a cross-sectional study that investigated whether higher numbers of ACEs would be associated to gang involvement participation, age for gang involvement, and the duration of gang involvement. Once the data was collected, the researcher performed a univariate analysis to derive description statistics to summarize participants' demographic characteristics, exposure to adverse childhood events, and gang involvement (frequencies, percentages, mean, standard deviation, and range).

The researcher also performed a bivariate analysis (i.e., chi-squared test and one-sample independent t-test) that tested the association between ACEs and various aspects of gang membership participation. Analyses were performed with Statistical Package for the Social Sciences (SPSS) software using data from participants with complete information. Statistical significance was determined at p-value <0.05.

Termination and Follow Up

The termination of the study at the study site was commenced with the presentation of its findings. By using a positivist approach, the researcher reported the findings of the study during a conference at the study site. The methods included a presentation in the form of executive summaries and infographics. (Morris, 2014).

Communication of Findings and Dissemination Plan

The study has been published at the university scholar works website and the School of Social Work Research Symposium. Researcher reported the findings of the study during a conference at the study site and included a presentation in the form of executive summaries and infographics. Researcher also offered a PowerPoint presentation of the key findings and summary to the agency to present to clinical staff and direct care staff during mandatory staff trainings.

Summary

This chapter examined the study participants and the approach used for the selection of study participants. Additionally, information was provided on the process of data gathering, phases of data collection and procedures for data recording. This chapter then provided information on the data analysis that will be conducted for this specific study. Lastly, this chapter discussed dissemination methods and the termination process of the research within the study site and participant.

CHAPTER FOUR

EVALUATION

Introduction

Chapter four presents the findings of analyses performed on the data gathered. It will examine the data that was collected from the study.

Results

Descriptive Statistics

Demographic Characteristics. Table 1 provides the descriptive statistics for the 80 study participants. The average age of participants at the time of the survey was 30.9 years ($SD = 9.0$, range=18—53 years). Majority of participants identified as male ($n = 48$, 60.00%). Close to half of the participants identified “other” as race (43.75%, $n=35$), and one in four identified as Asian ($n=21$, 26.25%). Participants who identified as multirace formed the minority ($n=2$, 2.50%).

Adverse Childhood Experiences. The mean ACE score for the study participants is 4.0 ($SD=2.5$, range=0-9). The most common ACE experienced was verbal abuse ($n = 59$, 74.68%), and the least common was sexual abuse ($n=18$, 22.78%) for all study participants.

Gang Involvement History. About one third of participants ($n = 28$) reported as being involved in gang. Although there were 28 participants that identified have gang involvement, there was missing data for age at the time of

joining a gang ($n = 1$) and duration of gang involvement ($n = 3$). For participants with gang involvement, the average age at the time of joining a gang was 14.6 years ($SD = 2.7$), range 10—23) with a duration of 6.2 years ($SD = 4.2$, range=3—24) as displayed in Table 1.

Table 1. Demographic Descriptions of Participants

Variables	
Age/Years, $M (SD)$	
Age at time of survey ^a	30.9 (9.0)
Age at the time joined gang ^{b,c}	14.6 (2.7)
Years actively involved in gang ^{b,d}	6.2 (4.2)
Gender, $n (%)$	
Male	48 (60.00)
Female	32 (40.00)
Race, $n (%)$	
Race Other ^e	35 (43.75)
Asian	21 (26.25)
White	12 (15.00)
Black	7 (8.75)
Native Hawaiian	3 (3.75)
Multiracial ^f	2 (2.50)
Gang Involvement, $n (%)$	
No	52 (65.00)
Yes	28 (35.00)

Notes: ($N=80$).

^aNine participants excluded due to missing data

^bOnly includes participants with gang involvement ($n=28$)

^cOne participant excluded due to missing data.

^dThree participants excluded due to missing data.

^eRace Other includes Hispanic Ethnicity.

^fMultiracial defined as two or more races.

Bivariate Analysis

To determine whether participants with a history of gang involvement and participants who were never involved in a gang differed in their ACEs score, an independent samples *t*-test was performed. As indicated in Table 2, there was a significant difference in the average ACE score between participants who stated they were involved in a gang ($M=5.0$, $SD=2.3$) and participants who stated they were never involved in a gang ($M=3.5$, $SD=2.5$); $t(78)=2.7$, $p=.008$. This finding suggests that the mean ACEs score for gang involved participants is significantly higher than the mean for the nongang involved participants, thus indicating that there is a significant association between experiences of childhood trauma and gang member participation. To test the assumption of homogeneity, the researcher used Levene's F Test for Equality of Variances. Because the significance value was greater than an alpha of .05 ($p=.47$), we conclude that there is not a significance difference between the two group's variances. Thus, the assumption of homogeneity is met and equal variances assumed.

A chi-square analysis was done to determine whether those with a history of gang involvement and those without differed in their exposure to different adverse childhood events. The results are displayed in Table 2. Gang involved youth had significantly higher percentages of substance abuse, domestic violence, household incarceration, separation from parent/guardian ($p<0.05$) than the no gang involvement group.

Table 2. Comparing Gang Involvement and No Gang Involvement on Individual ACEs

ACEs	Gang Involvement (N=28)	No Gang Involvement (N=51)	Significance
	<i>n (%)</i>	<i>n (%)</i>	<i>p-value</i>
Physical Abuse	18 (64.29)	33 (64.71)	.970
Emotional Abuse	21(75.00)	38 (74.51)	.962
Sexual Abuse	6 (21.43)	12 (23.53)	.831
Parental Mental Illness	10 (35.71)	21 (41.18)	.634
Parental Substance Abuse	14 (50.00)	13 (25.49)	.028*
Domestic Violence	18 (64.29)	20 (39.22)	.033*
Household Incarceration	17 (60.71)	15 (29.41)	.007*
Separation from Parent/Guardian	22 (78.57)	13 (25.49)	<.001**
Parent Divorce	15 (53.57)	17 (33.33)	.080

Notes: Values indicate column percentages for "yes" answers to ACEs

*Indicates significance $p < .05$

**Indicates significance $p < .001$

CHAPTER FIVE

TERMINATION AND FOLLOW UP

Introduction

Chapter five discusses the findings of this study. It begins with the discussion of the research. The next section examines the limitations within the research. Chapter five ends with a conclusion synopsis of the research.

Discussion

This study examined the association between experiences of childhood trauma and gang membership participation using cross-sectional design. The study examined whether there was a relationship between ACEs and gang involvement using data gathered from 80 participants within the general population (i.e., 18 years or older, fluent in English and access to the internet). The findings indicate that participants with gang involvement reported significantly higher exposures to four of the nine ACEs in comparison to those with no gang involvement, which supports the researcher's hypothesis. More specifically, the majority of those with gang involvement reported separation from parent/guardian (78.57%) followed by domestic violence (63.29%), household incarceration (60.71%), and parental substance abuse (50.00%).

These findings are consistent with previous research that has found significant association between ACEs and gang involvement. In a study examining gang-involved youth in the juvenile justice system, researchers found

high reports of adverse experiences within family settings such as absence of parent or lack of child-parent relationships (Wolff et al., 2020). In a 2014 article, research indicated that poor family structures caused by the absence of biological parents, was vastly associated with gang membership in adolescence. Poor child-parent attachments due to consistent removal of child from parents was also associated to gang involvement (Goldman et al., 2014). In a 2017 study on gang membership, research indicated that youth gang members reported significant exposure to domestic violence, parental substance use and separation from their parent due to parental incarceration. Participants reported that exposure to these four childhood adversities were major factors to their involvement in adolescent gang involvement (Quinn et al., 2017).

However, the study findings are inconsistent with research that has indicated differences among ACE exposures and gang involvement. In Petering's article, the researchers examined homeless youth gang members and found that exposure to physical abuse, that coincided with high levels of sexual abuse, were the significant factors to gang membership. Research, however, determined that separation of parent or poor parent attachments were not noteworthy factors in youth gang membership (Petering, 2016). Another study that was done in England through accessing administrative datasets, research indicated that gang involvement and delinquency were not associated to the frequency of ACEs within the family and individual level, but were linked more to societal adversities, such as poverty and economic deprivation instead (Lewer et al., 2019). The

participants and methods of data collecting of these past studies significantly differ from this research study, where only adults were asked to partake through participating in a survey.

Study Limitations

Participants may have been resistant to disclosing certain ACEs, such as sexual trauma, thus resulting in possibly underreporting of ACE in this sample. The possibility of underreporting sexual trauma may have prevented further exploration on whether exposure to sexual abuse is a predictive factor to participants' involvement or noninvolvement in gang membership. Research indicates that many survivors of sexual trauma continue to experience overwhelming barriers in their decision to disclose sexual abuse or assault, causing many to wait a long time to report, or deciding not to disclose their experiences at all (Ullman et al., 2010). Participants could have also been resistant to disclosing gang involvement due to their own safety and/or allegiance to their gang membership. The legitimacy of self-disclosure within gang members varies by offense seriousness, with more serious offenses (i.e., history of illegal behavior, criminal acts, and gang involvement) being disclosed at a lower rate than lesser offenses (Webb et al., 2006).

Only allowing participants who had access to the internet to partake in the study, excluded participants without access to internet thus, limiting the data collection. Seeking participants who were only literate in English also limited the participant sample.

Data that could have strengthened findings include collecting data on other factors, such as socioeconomic status and participants' education level, thus, stratifying results by gang involvement (i.e., involved vs non-involved) and further stratifying by socioeconomic status and education level. Research indicates that poverty and poor academic performance are major contributors to gang involvement (Rizzo, 2003). It is important to acknowledge we do not have control over the differences between gang-involved participants without a history of involvement. These individuals may be different in other ways beyond their experience of ACEs. They may differ in their family size, the neighborhood they lived in, or their family socioeconomic status. When conducting bivariate analyses, we do not have control for these differences.

Conclusion

This study examined the association between ACEs in childhood and gang involvement. The findings that more reported ACEs in childhood are associated with gang involvement can highlight the importance of assessing children for ACEs and determining whether they should be subsequently screened for potential gang involvement based off the number of ACEs reported during an assessment. That is, screening for ACEs can be used as a pre-screening for gang involvement. These findings may also encourage organizations (i.e., schools, mental health facilities, Short-Term Residential Therapeutic Placements) to train and educate staff on understanding the potential physical, mental, and behavioral implications of ACE exposure, as well

as how to refer youth for further assessments and/or treatment to address trauma or early intervention for potential gang involvement.

Given the study's small sample size, the findings should be considered preliminary; thus replication with a larger sample will strengthen this study's conclusion. Future research can include identifying if one ACE is a predictive factor for another ACE, meaning, if one participant has exposure to one particular ACE, will they have exposure to more ACEs. Another recommendation may include examining the correlation between two or more ACEs; if a participant has identified one ACE, will it lead to exposure to another ACE (i.e., having exposure to substance use in childhood is always linked with exposure to mental illness in childhood). Additionally, research proposes that history of exposure to childhood trauma is a significant risk factor that leads to serious consequences, such as high degrees of delinquency and homicide (Mendez et al., 2020). Furthermore, youth gang membership continues to be on the rise in the United States, with an estimated 29,400 youth gangs (Mendez et al., 2020).

APPENDIX A
IRB APPLICATION APPROVAL



CSUSB INSTITUTIONAL REVIEW BOARD
Administrative/Exempt Review Determination
Status: Determined Exempt
IRB-FY2022-186

Caroline Lim Johanna Ulloa
CSBS - Social Work
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Caroline Lim Johanna Ulloa:

Your application to use human subjects, titled "Childhood trauma and gang membership" has been reviewed and determined exempt by the Chair of the Institutional Review Board (IRB) of CSU, San Bernardino. An exempt determination means your study had met the federal requirements for exempt status under 45 CFR 46.104. The CSUSB IRB has weighed the risks and benefits of the study to ensure the protection of human participants.

This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses. Investigators should consider the changing COVID-19 circumstances based on current CDC, California Department of Public Health, and campus guidance and submit appropriate protocol modifications to the IRB as needed. CSUSB campus and affiliate health screenings should be completed for all campus human research related activities. Human research activities conducted at off-campus sites should follow CDC, California Department of Public Health, and local guidance. See CSUSB's [COVID-19 Prevention Plan](#) for more information regarding campus requirements.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections (OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy. The forms (modification, renewal, unanticipated/adverse event, study closure) are located in the Cayuse IRB System with instructions provided on the IRB Applications, Forms, and Submission webpage. Failure to notify the IRB of the following requirements may result in disciplinary action. The Cayuse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Cayuse IRB system to keep your protocol current and active unless you have completed your study.

- **Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.**
- **Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implemented in your study.**
- **Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.**
- **Submit a study closure through the Cayuse IRB submission system once your study has ended.**

If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval number IRB-FY2022-186 in all correspondence. Any complaints you receive from participants and/or others related to your research may be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

Nicole Dabbs

Nicole Dabbs, Ph.D., IRB Chair
CSUSB Institutional Review Board

ND/IMG

APPENDIX B
INFORMED CONSENT

INFORMED CONSENT

The study in which you are being asked to participate is designed to examine the association between the experience of childhood trauma and gang membership participation. This study is being conducted by Johanna Ulloa under the supervision of Dr. Caroline Lim Sheng Foong, PhD, School of Social Work California State University, San Bernardino. This study has been approved by the Institutional Review Board, California State University, San Bernardino.

PURPOSE: This study involves surveying the general population to examine the association between the experience of childhood trauma and gang membership participation.

DESCRIPTION: You will be participating in a survey. The survey is comprised of questions that will ask you about your demographic characteristics (age, gender, and race), gang involvement (if applicable) and about your own adverse childhood experiences.

PARTICIPATION: Your participation is voluntary. You can skip questions and discontinue your participation at any time.

CONFIDENTIAL: This research understands that any information about childhood trauma and gang membership is a sensitive matter. This study will be confidential meaning that it will not ask you to identify yourself or ask for your name. The researcher will be the only member to have access to the data. All the information that is collected throughout the study will be destroyed 3 years after the project has ended.

DURATION: The survey should not take you longer than 10 minutes. This will include reviewing the informed consent and the debriefing after the survey has been completed.

RISKS: The survey will focus on sensitive questions regarding gang involvement history and Adverse Childhood Experiences, which may result in psychological discomfort. Your safety and well-being are always the most important. Emergency and crisis hotlines will be provided at the end of the survey for you in event that you become distressed and need to seek support. Your participation is completely voluntary, and you can skip questions.

BENEFITS: There are no direct benefits for taking part in this study. However, findings can help develop a better understanding of the factors that contribute to gang membership involvement.

CONTACT: If you have any questions that are related to the research, including your rights and treatment as a participant, please contact:

Research Supervisor: Dr. Caroline Lim Sheng Foong, PhD.
School of Social Work California State University, San Bernardino
Address: 5500 University Pkwy, San Bernardino, CA 92407
Phone number: (909) 537 5584
Email: Caroline.Lim@csusb.edu

RESULTS: After the completion and publication of the study, results can be found at California State University, San Bernardino Pfau Library ScholarWorks database.

CONFIRMATION OF PARTICIPATION:

I have read the information above and agree to participate in this study.

APPENDIX C
QUALTRICS SURVEY

Research Project Final (Developed by Johanna Ulloa)

Start of Survey

Consent Form Please click on the link to view the consent form before completing the survey. Thank you.

[Informed Consent.docx](#)

Consent Form I have read the Informed Consent and agree to participate in this study.

Yes

Q1 Age

Q2 Gender

Male

Female

Other

Q3 Race

White

Black or African American

American Indian or Alaska Native

Asian

Native Hawaiian or Pacific Islander

Other

Q4 A gang is defined as an organization or group of three or more persons, who identify themselves by adopting a group identity, which they use to create an atmosphere of fear or intimidation, whose purpose is to engage in criminal activity. Are you in a gang or have ever been in a gang?

Yes

No

Skip To: Q7 If A gang is defined as an organization or group of three or more persons, who identify themselves b... = No

Q5 How old were you when you joined a gang?

Q6 How long have you been actively in a gang? (ex: 3 months, 5 months, 2 years, etc.)

If less than a year, how many months?

If one year or more, how many years?

Q7 As a child (before the age of 18), did you ever experience physical abuse (ex: being hit with hands or objects, punched, slapped, burned, choked, kicked)

Yes

No

Q8 As a child (before the age of 18), did you ever experience emotional abuse (ex: verbal abuse, verbal threats, name calling, swearing, screaming, being humiliated, ignored, isolated)?

Yes

No

Q9 As a child (before the age of 18), did you ever experience sexual abuse (ex: being forced to listen to or watch explicit content, physically touched inappropriately)?

Yes

No

Q10 As a child (before the age of 18), did you ever experience some form of mental illness or exposed to someone who was experiencing some form of mental illness?

Yes

No

Q11 As a child (before the age of 18), were you exposed to substance use in your household?

Yes

No

Q12 As a child (before the age of 18), did you witness domestic violence in your household?

Yes

No

Q13 When you were a child (before the age of 18), was anyone in your household incarcerated (e.g., parents, siblings, guardians, etc).

Yes

No

Q14 As a child (before the age of 18), did you ever experience being separated from your parent/guardian?

Yes

No

Q15 As a child (before the age of 18), did you ever experience your parents/guardians separate/divorce?

Yes

No

End of Survey

Thank you for your time spent in taking this survey.
Your response has been recorded.

If you are experiencing any distress by the questions of this study, emergency hotline numbers are available below.

**Substance Abuse and Mental Health Service Administration (SAMHSA)
National Hotline
1-800-622-4357**

or

Text HOME to 741741 to connect with a crisis counselor

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