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The Role of Problem Behaviors in the Pathway from Abuse to Prostitution

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Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Research has suggested that behaviors beginning in childhood or adolescence may play a mediating role in the relationship between childhood maltreatment and involvement in prostitution. It is currently unknown how poor self-concept and low self-efficacy play a mediating relationship in this association. The primary purpose of this correlational study was to evaluate early youth problem behaviors such as poor self-concept and reduced self-efficacy as possible mediators in the association between childhood abuse/neglect and participation in prostitution during young adulthood. The central research questions explored the association between childhood maltreatment and involvement in prostitution, as well as how self-concept and self-efficacy mediate the association between childhood maltreatment and engagement in prostitution in young adulthood. The Eco-developmental theory provided the theoretical framework for the study. Data consisted of 4,882 adolescents in Grades 7–12 in the United States during the 1994–1995 school year from the National Longitudinal Study of Adolescent Health, 61 of whom self-reported activity in prostitution. Results from Pearson correlations and Structural Equation Models indicated a relationship between childhood maltreatment and prostitution during young adulthood; self-efficacy and self-concept did not mediate this relationship. Childhood abuse was not a significant predictor of self-efficacy and self-efficacy was not significantly related to prostitution. Childhood maltreatment was a significant, negative predictor of positive self-concept. By demonstrating that childhood maltreatment is linked to prostitution in young adulthood, this research can foster positive social change, by showing the value of creating intervention programs that target childhood abuse in order to reduce involvement in prostitution in young adulthood.

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Dedication

I dedicate my dissertation work to my family and many friends. A special feeling of gratitude to my loving parents whose words of encouragement ring in my ears. I also dedicate this dissertation to my many friends and church family who have supported me throughout the process. I will always appreciate all they have done, especially Nokuthula Sibanda for never allowing me to give up. I dedicate this work and give special thanks to my husband Deshawn Marks and my wonderful daughter Brooklyn for being there for me throughout the entire doctorate program. Both of you have been my best cheerleaders.

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I wish to thank my committee members who were more than generous with their expertise and precious time. A special thanks to Dr. Joshua Ozymy, my committee chairman and Dr. Tracy Jackson, my committee member for their countless hours of reflecting, reading, encouraging, and most of all patience throughout the entire process.

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Chapter 1: Introduction

Literature has suggested that childhood maltreatment increases the risk for

individuals becoming involved in prostitution at a later point in life (Alavi, 2011;

Burnette et al., 2008; Clarke, Clarke, Roe-Sepowitz, & Fey, 2012; Heilemann &

Santhiveeran, 2011; McNaughton, 2007; Wilson & Widom, 2010). According to

Homma, Wang, Saewyc, E., and Kishor (2012), the link between child abuse and the

ultimate involvement of maltreated individuals in prostitution is not fully understood.

Raj, Silverman, and Amaro (2000) denoted that this lack of understanding is as a result of

a dearth of studies that have evaluated early problem behaviors, which may perpetuate

this association. Several scholarly works have explicitly demonstrated the link between

childhood abuse and later participation in prostitution during the crucial transitional stage

of adolescence to young adulthood (Wilson & Widom, 2008, 2010; Burnette et al., 2008;

Currie & Tekin, 2012; Clarke et al., 2012; Choi et al., 2009).

According to findings of a cohort study conducted by Wilson and Widom (2010),

individuals who suffered abuse and neglect during childhood have a higher likelihood of

implication in prostitution by the time they are young adults than the control populace

that has not been abused or neglected. Further findings from Wilson and Widom's study

suggested that the connection between child abuse/neglect and practicing prostitution

during early adulthood is fostered by early behaviors such as early initiation into sex,

runaway, early use of drugs, involvement in juvenile criminal activity, and frequent

problems at school (Wilson & Widom, 2010). Wilson and Widom emphasized that these

behavioral tendencies constitute distinctive problems within adolescence and must not be

mistaken for a single behavior construct, as they can solely be classified on the basis of

the specific behavior type. In addition, that particular deed could have significant implications for behavioral results later on in a person's life. For example, Wilson and Widom found that individuals' early introduction to the act of sex made up the greatest risk factor for their engagement in prostitution.

Contrastingly, Turner, Finkelhor, and Ormrod (2007) found from their study that runaways were at a higher risk of practicing prostitution than individuals suffering from other forms of abuse or neglect, making escape from home a significant prostitution risk factor. From these two studies, the principal implication is that other problem behaviors that characterize youths could be linked to young adults practicing prostitution. It is, therefore, necessary to examine how other potential youth problem behaviors may mediate the risk of abused children engaging in the practice of prostitution later on in life.

The principal objective of the current study was to examine an alternate set of youth problem behaviors (poor self-concept and low self-efficacy) as potential mediators in the link between childhood abuse/neglect and participation in prostitution of young male and female adults in the 18 to 26 years of age bracket. The results of this study will contribute to positive social change by helping to develop interventions that focus on reducing risk factors that culminate in health and social problems such as prostitution when the abused child reaches young adulthood.

Background of the Study

For the last 2 decades, focus has increased on the association between maltreatment of children and their practice of prostitution during young adulthood. Studies involving prostitute participants have reported high prevalence rates of experiencing childhood maltreatment among their samples (Turneret al., 2007). The

majority of these studies, therefore, draw the logical conclusion that child neglect and abuse is a key contributor to young adults engaging in prostitution, among other social vices (Turner et al., 2007).

One of the most prominent recent studies examining the link between maltreatment during childhood and prostitution during adulthood was by Stoltz et al. (2007). The study, which took place between 2005 and 2006, involved 361 drug using youths, who engage in sex work. These study participants, recruited using sampling and widespread outreach programs, answered a set of questions posed to them using the Childhood Trauma Questionnaire (CQT). Results from the study, which were evaluated using logistic regression and univariate analysis, showed that prevalence of various forms of maltreatment and each form's relation to sex work was high. For instance, the rate for physical abuse stood at 73%, sexual abuse at 32.4%, emotional abuse at 86.8%, physical neglect at 84.5%, and emotional neglect at 93%. Stoltz et al.'s (2007) study clearly demonstrated that physical, sexual, and emotional abuse is associated with prostitution.

In addition, extensive research seeks to show that problem behavioral patterns following abuse can persist, if not make things worse, with time. For example, a study by Reid (2011) showed how child abuse is linked to risk-elevating behavioral tendencies or sexual deprecation of oneself or others. These factors, the researcher found, enhanced participants' susceptibility to prostitution or sexual exploitation at a commercial level. Findings from Reid's study, which involved 174 predominantly African American females, showed that 34% of the participants experienced child abuse. They attributed their behavior pattern of running away, early substance abuse, and later involvement in commercial sex to the maltreatment they suffered as kids.

Further research shows that family environments also play a significant role in aggravating behavioral patterns linked to risky sexual behavior such as prostitution. For example, research carried out by Klein, Elifson and Sterk (2007) showed that involvement in risky sexual behavior was largely linked to experiences of child abuse and abandonment that lowered victims' self-esteem. Another study by Ahrens, Katon, McCarty, Richardson, and Courtney (2010) involved 574 participants and sought to show the connection between a past of sexual molestation to engaging in transactional sex among youths. In the study, 27% of the participants reported sexual abuse when approximately 18% indicated that they had been raped in the past. In most of these reported cases of sexual abuse, participants indicated that perpetrators were people known to them; including family members and close friends they considered family. Of these individuals, a many reported engaging in transactional sex, hence showing a direct correlation between childhood sex abuse (CSA) and prostitution.

Similarly, a comprehensive meta-analysis by Lalor (2010) examined the connection between sexual abuse during childhood and risk-taking sexual behavior. The study denoted that CSA can result in a wide array of psychological consequences such as reduced self-esteem, low self-confidence, heightened anxiety, and acute depression. The analysis also drew attention to scholarly studies that have emphasized the possibility of abused victims undergoing similar sexual exploitation later in life, particularly during early and mid-adulthood. Lalor (2010) further emphasized that victims of sexual abuse at a young age have a high likelihood of engaging in risky sexual behavior. For instance, these CSA survivors are likely to engage with numerous sexual partners and practice prostitution or commercial sex.

These implications of sexual abuse invoke several mediating variables of prostitution involvement including reduced self-esteem, damaged sexual development, and even posttraumatic stress disorder (PTSD), all of which have been explored extensively in literature.

An investigative study conducted by Currie and Tekin (2012) examined the long-term effects of early childhood abuse. The scholars drew a clear distinction between physical maltreatment, sexual mistreatment, and neglect. Outcomes from the study showed that mistreatment or abandonment at a young age increased the victims' risks of arrest during adolescence and adulthood. Statistical findings of the study indicated that 53% of abused juveniles are likely to be arrested for deviant behavior and 38% of adults have the likelihood to be arrested for the same. The primary conclusion from these literary sources is that problem behaviors stem from being sexually victimized during childhood can be ingrained into an individual and carried on throughout this critical growth stage, only to be expressed during adulthood and in the form of addiction to sex or prostitution.

In existing literature, there has been extensive focus on the connection between childhood sexual abuse and engagement in prostitution at different stages in life (Wilson & Widom, 2008, 2010). However, there has not been equally considerable attention paid to alternative forms of child neglect and abuse, among other risk factors, which occur after young children are subjected to abuse and are capable of mediating this association (Wilson & Widom, 2010). The current study examined poor self-concept and low self-efficacy as possible mediating factors in the association between childhood maltreatment and prostitution using a nationally representative secondary data set. This study also

evaluated the consequences of physical maltreatment, neglect, and sexual abuse and how they mediate victims' tendencies to practice prostitution once they reach young adulthood.

A wide array of potential problem behaviors exists, which are capable of explaining the link between childhood maltreatment and prostitution; however, the current study pointed primarily to two behaviors that have been attributed independently to both child abuse and prostitution, yet they have not been examined jointly, as mediating variables in this relationship, in the past. It was important to conduct this proposed research, because an extensive body of literature proposes a link between poor self-concept and low self-efficacy and both childhood maltreatment and prostitution. A limited number of scholars have attempted to analyze these literary sources for the purpose of describing measures through which maltreated children engage in prostitution during young adulthood.

Problem Statement

While numerous studies have sought to provide a clearer understanding of the high rates of individuals involved in prostitution, it is unknown how poor self-concept and low self-efficacy play a mediating relationship in the association between childhood maltreatment and involvement in prostitution. The literature provides evidence of such involvement resulting in physical, emotional, sexual, and social harm (Heilemann & Santhiveeran, 2011). For example, in a study conducted by Burnette et al., (2008) the authors found that among participants entering a treatment program for substance use 41% of the women participants reported engaging in prostitution work at some point in their life and 11% of the men they interviewed reported the same. Valera et al (2001)

conducted a study involving street prostitutes in Washington DC. In this study, the authors found that 66% of participants reported experiencing homelessness, 50% had been raped in the past, 57% had drug use issues, 12% were HIV positive, and 42% suffered from PTSD, thus showing that individuals who engage in sex work are at risk of suffering from various forms of harm.

Given this risk, questions regarding what factors are responsible for individuals engaging in prostitution and how they interact with each other are often asked (Abramovich, 2005). Studies have shown that there is a relationship between childhood maltreatment and prostitution. For example, Roe-Sepowitz, Hickle, Loubert, and Egan (2011) in their study involving 448 former female prostitutes found that the majority of their subjects reported coming from abusive childhood backgrounds and as a result of the abuse they experienced, decided to enter into the sex trade field. Heilemann and Santhiveeran (2011) in their examination of 31 studies involving female prostitutes found that this population of women reported suffering from child abuse and neglect as young children. Nonetheless, the questions still remain regarding the specific mechanisms that lead from abuse to prostitution (Wilson & Widom, 2010). According to Abramovich (2005) there is a lack of research that examines the mechanisms that have the potential to mediate the relationship between abuse and prostitution.

In an attempt to provide a clear understanding of the path from abuse to prostitution, Wilson and Widom (2010) in their study developed a unifying developmental model in which they examined early sexual initiation, school problems, juvenile crime, run away and drug use as potential mediators in the relationship between abuse and prostitution. Findings from Wilson and Widom study indicated early sexual

initiation as the only significant mechanism to mediate this relationship. Despite the author's findings that only early sexual initiation serves as a full mediator of abuse and involvement in prostitution, there is evidence in the literature that prostitution is related to low self- efficacy (Adelson, 2008; Finkelhor et al., 2007; Gilbert et al., 2009) and having poor self- concept (Clarke et al., 2012; Sachs-Ericsson, Verona, Joiner, & Preacher, 2006). Therefore, the relationship between childhood maltreatment, low self- efficacy and poor self- concept and prostitution deserves further investigation. A quantitative correlational research design will be utilized in this proposed study to address this problem.

Purpose of the Study

The primary purpose of this quantitative correlational study is to evaluate early youth problem behaviors such as poor self-concept and reduced self-efficacy as possible mediators in the association between childhood abuse/neglect and participation in prostitution during young adulthood. Moreover, this study seeks to identify the relationship of poor self- concept and low self-efficacy to childhood abuse and neglect. This study is also focused on identifying the relationship of poor self- concept and low self-efficacy to involvement in prostitution during young adulthood. Through examining the relationships between the variables considered in this study, interventions could be developed to help children improve self- concept and increase self-efficacy in order to reduce the risks of engaging in prostitution despite being exposed to maltreatment during their early childhood years.

Significance of the Study

This study seeks to provide a clearer understanding of the high rates of individuals involved in prostitution and how poor self- concept and low self- efficacy mediate the relationship between child maltreatment and prostitution. Moreover, this study intends to extend the scope of information to identify whether the behaviors focused upon actually mediate abused victims' resultant tendency to engage in prostitution by the time they develop into young adults. By conducting the study, the findings will help to show that with the development of interventions that are primarily focused on preventing problem behaviors among maltreated and abandoned children. Such intervening measures could, consequently, reduce the risk of child maltreated survivors from engaging in prostitution by the time they grow up and reach young adulthood. Rather, than waiting until abused and neglected children develop problem behaviors, providing them with interventions before adolescence, which is the transitional stage between childhood and adulthood, may help these youths to reduce high-risk behavior. As a result, timely interventions could play a significant role in reducing any health and social problems, like involvement in prostitution. Intervention could also bring about social change for all abused and neglected children later in life (Wilson & Widom, 2010).

Nature of Study

The nature of this quantitative correlational study, using secondary data, is to determine if poor self-concept and low self-efficacy are mediating aspects in the association between childhood maltreatment and involvement in prostitution. A correlational study was the most appropriate methodology as opposed to other

methodologies because the focus of this study is on examining relationships between identified variables. Several critical factors guided the selection of the research design for this study. Though a qualitative design provides the opportunity to gain in-depth understanding of a phenomenon for which little empirical or theoretical knowledge exists (Creswell, 2013), a quantitative design, specifically a correlational research study, provides the opportunity to examine the relationship between variables based on existing theory.

As noted by Simon (2006), "a correlational study is a suitable line of inquiry when the primary purpose is to determine relationships between variables" (p. 43). Correlational design was the most appropriate methodology to examine the independent variables and their connection to the principal dependent variables (child abuse, child neglect and resultant prostitution).

The secondary data set will be drawn from the National Longitudinal Study of Adolescent Health (NLSAH) (Harris, Halpern, Whitsel, Hussey, Tabor, Entzel, & Udry, 2009) which will be downloaded from the Interuniversity Consortium for Political and Social Research (ICPSR) website which provides access to an extensive collection of downloadable data. NLSAH refers to a longitudinal analysis of a sample of children in the 7th to 12th grade, who adequately represented the entire United States populace. The randomly selected population sample was keenly examined as they grew into young adulthood characterized by the age bracket of 18 to 26 years (Harris et al., 2009). Data on this age group was chosen for its relevance to the age progressive nature of the research. The relevancy of this age progressive nature is that it indicates significant advancement of individuals from childhood to adulthood hence can be used to illustrate the changes

that take place as an individual advances from one age group to another. NLSAH creates

a comprehensive combination of data from the longitudinal survey on participants'

physical, economic, psychological, and social welfare with related data on the

individuals' family connections, community, school affiliations, neighborhood, romantic

associations, friendships, and peer groups (Harris et al., 2009).

The NLSAH or Add Health survey was carried out in four different waves consisting of

chain interviews conducted at the home of participants in the years of 1994-1996, 2001-

2002 and 2007-2008 for the purpose of evaluating how social environments and

behavioral tendencies characteristic of adolescence are related to wellbeing and

accomplishment outcomes during young adulthood (Harris et al, 2009). In the third wave

of the progressive survey, participants responded to questions regarding the manner in

which their parents and other caregivers that catered to their well-being treated them

before they entered the 6th grade. They were specifically asked whether there were

incidents (and the number) where their guardians had failed to cater to their needs, left

them home alone, physically abused them by slapping, or kicking them, and abused them

sexually by touching them in an inappropriate manner. Preceding studies of childhood

maltreatment have taken note of the difficulty associated with finding a clear,

unmistakable and generally acceptable delineation of the concept of childhood abuse

(Britt & Weisburd, 2010). However, the manner in which queries are phrased in the Add

Health survey shows increasingly growing consensus regarding the diverse definitions of

childhood maltreatment. This is shown for instance, from government platforms like the

Child Abuse and Prevention Treatment Act (CAPTA). Therefore, for this proposed study

childhood maltreatment or abuse refers to a parent's or guardian's act or lack thereof,

which causes emotional pain, physical harm, results in sexual exploitation and abuse or even culminates in death.

The NLSAH survey poses numerous questions that relate to delinquency and criminal deeds. The crime questions in this survey bear immense similarity to those found in other surveys and the definition of crimes and criminal activities also resemble conventional definitions in government platforms like the Bureau of Justice Statistics (Currie and Tekin, 2012). This study focuses on questions within Add Health that are related to involvement in sex work, as the crime that is examined in this study is prostitution. Prostitution in this case, refers to a practice whereby individuals engage in immoral sexual relations in exchange for money (Abramovich, 2005; Wilson & Widom, 2010). There are also many questions that Add Health employed to assess self- concept and self-efficacy. In regards to self- efficacy, the questions that are in Add Health are similar to the questions from the Pearlin Mastery Scale like: you have limited power over the experiences that you encounter or your experiences in the future largely depend on you (Pearlin & Schooler, 1978). This measurement scale is considered to be widely utilized to weigh self-efficacy in research revolving around health subjects (Britt & Weisburd, 2010).

For this study, self- efficacy will be measured by the question as to whether or not respondents feel embarrassed about their level of self- efficacy since it is delineated as the tendency to believe in one's own ability to achieve a certain goal or outcome (Reid & Sullivan, 2009). The question for measuring self-concept within Add Health will be similar to questions in the Global Self- Worth subscale from the Self Perception Profile for Children. The Global Self-Worth subscale assess the following: the extent to which a

child likes oneself as a person, is happy the way their life is going and who is generally happy with the way one is. For this study, however, the main question that will be used to examine self-worth is whether or not participants are generally happy with who they are as self- concept is defined as how one thinks about themselves (Reyes, 2008).

Data gathered from the NLSAH survey will be analyzed through inferential statistics to test the hypotheses posed in this study and to address the research questions. Correlational analysis as well as structural equation modeling (SEM) will be utilized to assess the relationship between variables as well as the mediating effect of self-concept and self-efficacy on the association between child abuse and abandonment on prostitution in young adulthood. For the purpose of this study, self-concept and self-efficacy will be referred to as mediating variables as the aim of these two variables is to estimate the way a variable Z affects the impact of X on Y. Specifically, mediating variables are variables that lie intermediate between independent casual factors and final outcomes. Thus, they are viewed as intervening factors that can change the impact of X on Y (MacKinnon, Lockwood, Lockwood, West, and Sheets, 2002).

Theoretical Framework

Ecodevelopmental theory provides a theoretical framework for this study as there are multiple, interacting problem behaviors that are likely to lead from childhood maltreatment to involvement in prostitution later in life (Prado, Huang, Maldonado-Molina, Bandiera, Schwartz, & De la Vega, 2010). This theoretical concept encompasses three integrated conceptual elements including the social-ecological theory, social interactions and developmental theory. The socio-ecological theory suggests that a person's social ecology comprises of a set of five interrelating systems consisting of

micro, macro, meso, exo, and chrono systems. Ecodevelopmental theory places involvement in prostitution within a dynamic of interlinked processes, that is, family, peers, biology, neighborhood, school, and the greater socio-cultural setting (Wilson & Widom, 2010). In the said structure, the family surrounding a child is considered to be the closest hence the most influential element as he or she develops. This construct also acknowledges that family has a direct and highly significant part to play in molding a child's development process, in addition to affecting other developmental social aspects, like school, self-concept as well as the group of friends with whom the child interacts. The deviance of the familial structure, therefore contributes extensively to the adoption of equally unusual behavior on the child's part (Wilson & Widom, 2010). This further implies that, childhood maltreatment could bring about a surge of negative impacts across numerous facets of the growing child's social and psychological functioning; conditions that may aggravate the chances of a child engaging in prostitution during young adulthood.

For example, Reid and Sullivan, (2009) suggested that the neurological development of a child becomes affected as a result of physiological changes due to stress which not only effects the social and emotional development of a child, but it completely alters all systems that are related to stress response. In turn, because the neurological development has been affected, the likelihood of a child engaging in deviant behavior will increase as such an affect has the potential to impact any social relationships that may be developed (Wilson & Widom, 2010).

Consequently, having self-damaging behavior like poor self-perception and low self-efficiency may create a setting where transactional sexual practices are considered

the best approach for meeting one's needs. Further, the Ecodevelopmental theoretical concept proposes that if only one risk factor is evaluated, then the results of that evaluation may be invalid, since when examining a single factor it causes an over estimation of its perceived effects (Raj, Silverman, & Amaro, 2000). This study evaluated a model suggesting that two behaviors (poor self-concept and low self-efficacy) evident in adolescence mediate the association between child maltreatment and prostitution in young adulthood.

Self- efficacy theory, considered as a potential framework for this study, was however, not selected because the theory was not suited to the purpose of the broad analyses involved. Self- efficacy theory would have been considered to be suitable if the objective of the study was to utilize an individually focused approach that provided an understanding of the motivational influences that affect individual behavior. While, this theory does help to provide better comprehension of decision making on matters concerning healthy or harmful behaviors, it does not however, provide a systematic approach that focuses on the compound social-ecological frameworks within which a person resides, thus providing a useful basis upon which problem behaviors can be analyzed, which is the objective of this proposed study (Prado et al., 2007).

Research Questions and Hypotheses

This quantitative correlational study will examine whether or not poor self-concept and low self- efficacy mediate the relationship between childhood abuse and neglect and involvement in prostitution. The independent variables are poor self-concept and low self-efficacy. The dependent variables are childhood abuse and neglect and prostitution. The research questions that guide the proposed study are as follows:

RQ1: What is the association between childhood maltreatment (characterized by risk factors such as abandonment at a young age, negative family environment, running away or substance abuse) and involvement in prostitution?

H_{01}: There is no significant association between childhood maltreatment and engagement in prostitution.

Ha_1: There is a significant association between childhood maltreatment and engagement in prostitution.

RQ2: How do problem behaviors such as self-concept and self-efficacy mediate the association between childhood maltreatment and engagement in prostitution in young adulthood?

H_{02}: Problem behaviors such as self-concept and self-efficacy do not intercede in the association between childhood maltreatment and engagement in prostitution in young adulthood?

Ha_2: Problem behaviors such as self- concept and self- efficacy intercede in the association between childhood maltreatment and engagement in prostitution in young adulthood.

Definition of Terms

Throughout this study, several terms and phrases are used repetitively. Because some terms are abstract and might convey various meanings, it is necessary to outline what the terms mean in the context of this study.

Child physical abuse: It is delineated as a non-accidental injury that is inflicted upon a kid through physical aggression (CAPTA Reauthorization Act of 2003).

Child sexual abuse (*CSA*): Refers to the sexual molestation, statutory rape, forcing a child into sex trade, or sexual exploitation of children, and even inter-familial incest with children perpetuated by a guardian or caretaker (CAPTA Reauthorization Act of 2003).

Child neglect: It is defined as the instance in which the parent or the caregiver fails or refuses to provide the necessities of the child (CAPTA Reauthorization Act of 2003).

Childhood maltreatment: Is the general term used to describe all forms of child abuse and neglect during a person's childhood (CAPTA Reauthorization Act of 2003).

Mediate: It refers to the relation between a behavior predictor and its measurement criteria. Mediation explains the manner in which events are manifested outward owing to internal mental or emotional aspects (Hayes, 2009).

Problem behaviors: Behaviors, principally negative, beginning in childhood or adolescence (Wilson & Widom, 2010).

Self-efficacy: As the propensity to believe in one's own aptitude to achieve a certain goal or outcome (Reyes, 2008).

Self-concept: How one thinks about themselves (Reyes, 2008).

Assumptions

The design of this study included several assumptions as a result of utilizing secondary data. The first assumption is that participants provided honest responses because of the voluntary and anonymous nature in which the data sets were collected. The second assumption is that the inclusion of participants from a wide range of neighborhoods and communities would yield the degree of variation in the data sets that were necessary to

achieve in-depth emergent concepts and themes. The third assumption is that only participants who met the inclusion criteria completed the survey. The fourth assumption is that potential study participants received an e-mail explaining the study purpose, while listing the criteria for participation. The final assumption included a secondary assumption that individuals read the criteria and completed the survey only if they met the requirements.

Scope and Limitations

First, this study does not evaluate all of the socio-ecological contexts capable of contributing to the risk of child abuse and abandonment and victims' engagement in prostitution.

A second limitation of this study was in the nature of its design. Correlational research involves a search to identify and measure relationships among variables and lacks the necessary criteria for making causal inferences. Reyes (2008) cautioned that when there is a correlation between two variables, such a correlation must not be misunderstood to mean that one of the variables caused the other one. Finally, this study is examining youth problem behaviors that are reported by participants who are in young adulthood only.

Organization of the Study

Chapter 2 contains analyses and synthesis of research studies on childhood maltreatment, prostitution and problem behaviors that inform the understanding of the association between childhood maltreatment and abandonment and the consequent involvement in prostitution and how problem behaviors mediate this relationship. The chapter includes an explication of the rationale for selecting the study variables and

builds on the Ecodevelopmental theoretical framework introduced in chapter 1. As explained in the literature review, the Ecodevelopmental theory and the empirical research studies contextualize the relationship problem behaviors share between childhood maltreatment and involvement in prostitution

Chapter 3 outlines the justification for utilizing the chosen study approach, that is, correlational design. The chapter further provides a description of the methodology applied to develop answers for stipulated research questions and further for testing the hypotheses. The chapter also addresses information included in the survey instrument, the procedures followed during data collection and evaluation, as well as, the measures adopted to ensure the ethical protection of research participants is provided. The chapter explains how the study variables were operationalized.

Chapter 4 provides a presentation of the results and the interpretation generated from descriptive and inferential statistics. The results provided in Chapter 4 will be used to develop the discussion, conclusions, and recommendations in Chapter 5. Chapter 5 provides a comprehensive explanation of the findings acquired from the research. The chapter also elucidates the inferences for social transformation, further offering potent recommendations or suggestions for action, while identifying areas warranting future research. Unexpected findings are also discussed.

Chapter 2: Literature Review

Research consistently documents that maltreated children and youths are at increased risk of becoming involved in prostitution during young adulthood (Alavi, 2011; Burnette et al., 2008; Clarke et al., 2012; Heilemann & Santhiveeran, 2011; McNaughton, 2007; Wilson & Widom, 2010). Studies have indicated that maltreated youth, compared with nonmaltreated youth, initiate problem behaviors early (Wilson & Widom, 2010), are more likely to be arrested in adulthood (Wilson & Widom, 2008), and are at increased risk for engaging in sex work (Alavi, 2011; Wilson & Widom, 2010). A widespread body of literature has implied that individuals involved in sex work usually report having experienced some form of abuse during childhood. Yet, mechanisms explaining how maltreated youth become involved in prostitution remain unclear, largely because few studies have attempted to examine problem behaviors capable of mediating the denoted relationship (Wilson & Widom, 2010).

Prior literature has paid limited attention to mediating factors mainly because much of the prior research on child abuse does not go beyond bivariate analysis (Burnette et al., 2008). Conclusions based on bivariate analysis essentially assume that the effects of child abuse are directly conductive to adult well-being across populations regardless of their life patterns. The life course perspectives argue that it is imperative to examine mediating factors that presumably affect the relationship between childhood abuse and involvement in prostitution, because such perspectives argue that lives are interdependent; thus, each life transition is experienced through shared social relationships. Only a few studies have considered such mediators in the relationship between child abuse and involvement in prostitution. For example, Wilson and Widom

(2010) examined childhood maltreatment and a set of behavioral tendencies beginning in childhood or adolescence as mediating factors on the long-term consequences of child maltreatment on involvement in prostitution during young adulthood. Wilson and Widom's results indicated that this association becomes almost negligible after considering the mediators. Thus, further investigation is necessary to examine other problem behaviors that intercede in this connection as well.

Development of interventions that effectively prevent involvement in prostitution among maltreated youth requires a clear understanding of the problem behaviors youth face in the pathway from maltreatment to prostitution. To this end, the primary objective of the current study was to evaluate problem behaviors, (a) poor self-concept and (b) low self-efficacy, as potential mediators linking childhood maltreatment and practicing prostitution as young adults.

This literature review provides relevant information about the previous research concerning the factors that influence people to enter prostitution, specifically focusing on the influence of child abuse. The first part of this literary analysis discusses the definition of prostitution. The subsequent section provides a general review of whom this issue effects and the factors related to entry of an individual to prostitution. The third section presents literature on potential mediators including self-concept and self-efficacy, which have both been connected independently to childhood maltreatment and to prostitution but have not been evaluated together in an intricate and mutually contributing model. Following that discussion is a section on Ecodevelopmental theory. Last is a summary of the chapter.

Literature Search Strategy

I used recent peer-reviewed journal articles to provide information relevant to my topic and that would help me support the findings. I used various keywords that are significant to the proposed study, including *prostitution, prostitution+definition, factors that influence entry to prostitution, child abuse, child abuse+definition, child abuse+prostitution, problem behaviors, self-efficacy, self-efficacy+definition, self-efficacy+ child abuse, self-efficacy+ prostitution, self-efficacy+ child abuse+ prostitution, low self-efficacy+ child abuse, low self-efficacy+ child abuse+ prostitution, self-concept, self-concept+definition, self-concept+ child abuse, self-concept+ prostitution, poor self-concept+ child abuse, poor self-concept+ prostitution, self-concept+ child abuse+ prostitution, poor self-concept+ child abuse+ prostitution, self-concept+ self-efficacy+ child abuse+ prostitution, poor self-concept+ low self-efficacy+ child abuse+ prostitution, ecodevelopmental theory, ecodevelopmental theory+ prostitution, ecodevelopmental theory+ child abuse,* and *ecodevelopmental theory+ prostitution+ child abuse.*

After refining and searching for key words, I also filtered the journal articles. My goal was to obtain information only from studies conducted within the last 5 years. However, I found that only a few studies specifically about child abuse and prostitution were performed in the last 5 years. There were, however, many studies conducted in the past decade on child abuse and prostitution, but most are not comprehensive. Most of the studies also focused on factors other than child abuse. Further, the information available about the relationship among prostitution, child abuse, self-concept, and self-efficacy was limited in such a way that no research was found investigating all these factors together.

Some studies focused on child abuse, low self-esteem, and prostitution, but the relationships were not discussed in a comprehensive manner.

With regard to the database and search engines consulted, the following sources were used: EBSCO, JSTOR, Project MUSE, ProQuest, PsycArticles, SAGE Journals Online, Science Direct, Taylor & Francis Journals, U.S. National Library of Medicine, and Wiley Online Library.

Definition of *Prostitution*

To understand the connection between childhood maltreatment and prostitution, it is significant to define what *prostitution* is in the context of this proposed study. There are different ways in which a person may enter prostitution. For instance, individuals may enter escort services, brothels, massage parlors, through a pimp, street prostitution, and via the Internet (Walters, 2011). Hence, prostitution can be a complicated behavior to study because of the different avenues through which an individual can enter into this field.

It would be difficult to have one sampling population as there are different ways in which individuals can engage in prostitution. There are studies that focus only on defining what prostitution really is (Ribeiro & Dias, 2008), since even its definition has been debated. Ribeiro and Dias (2008) indicate that prostitution refers to a process which entails a business deal between a buyer and a seller of sex or sexual service. Walters (2011) states that prostitution is the offering, agreeing and eventually engaging in sex for hire.

Conversely, the U.S. Department of Justice does not list prostitution as a crime. Instead, the term human sex trafficking is used. Thus, suggesting that the U.S.

Department of Justice focuses on the victimhood of the individuals who become

prostitutes. This is an assumption that people who enter prostitution are victims, as some

individuals engage in commercial sex because they were forced to. Banks and

Kyckelhahn (2011) asserted that commercial sex involving fraud, force, and coercion

happens in prostitution.

Other authors have also recognized that some individuals used prostitution as a

means of survival. In addition, such individuals not only exchange sex for money, but

also for drugs, shelter, and food (Tyler & Johnson, 2006). This definition can be found

among studies of homeless or runaway youth (Tyler & Johnson, 2006). Ribeiro & Dias,

(2008) define a prostitute as someone who avails sex or sexual acts in exchange for

payment, which could be currency, drugs and other commodities he or she deems

desirable. To avoid limiting the definition of prostitution in this proposed study, the

definition of prostitution will be an individual engaging in the process of exchanging sex

for money. In this definition, there will be a larger audience of the youth population, as

they can use prostitution both for economic gain and as a means for survival. According

to the literature and public opinion, there are many reasons why people enter into the

world of prostitution. In the case of the current proposed study, childhood maltreatment is

said to be one of the factors that would lead to future delinquency.

Existing Research on the Link Between Childhood Maltreatment and Prostitution

Although experts do not agree on a single definition of childhood maltreatment,

some of the most widely used definitions of this negative act can be found in the Child

Abuse and Prevention Treatment Act (CAPTA) reauthorization of 2003. Following the

reauthorization of CAPTA, childhood maltreatment is defined as: a parent's or guardian's

act or failure to act resulting in aggravated bodily harm, emotional harm, sexual exploitation or abuse and even death in worst case scenarios (CAPTA Reauthorization Act of 2003).

Major forms of maltreatment under CAPTA include: neglect (physical, educational, emotional), physical abuse, and sexual abuse (P.L.111-320). CAPTA reauthorization was part of the federal legislation, Keeping Children Safe Act (PL 108–36), whose goal was to expand research programs on child maltreatment, create relationships between child welfare service agencies and other organizations that strive to avail direct services to children and familial units that experience abuse, as well as mandate states to provide early intervention services to young children who suffered any form of abuse.

The literature identifies several forms of child maltreatment. The first form of abuse is physical abuse which is defined as a nonaccidental injury to a child (Mash, 2010). This definition is a vague definition as it fails to define the degree of injury to a child. However, according to the National Child abuse and Neglect Data System (NCANDS), the physical injury suffered by a child is that resulting from being punched, beaten, kicked, bitten, and burned among other causes of physical harm. The second type of abuse is known as sexual abuse. Sexual abuse is described as the statutory rape, sexual molestation, coercion into prostitution, being forced to perform an incestuous act, among other forms of sexual mistreatment.

The meaning of childhood neglect, as with physical abuse, is also vague. Neglect is more difficult to identify because the consequences are not as visible as in the case of physical mistreatment (U.S. Department of Health and Human Services, 2007). Neglect

as a category of abuse includes educational, physical, medical, environment or emotional abuse, as well as inadequate supervision (Ribeiro & Dias, 2008). The CAPTA amendment defines childhood neglect as the instance in which the parent or caretaker fails or refuses to provide the necessities of the child (CAPTA Reauthorization Act of 2003). Childhood neglect is considered the most prevalent form of child mistreatment in the United States (Sedlak, Mettenberg, Baseba, Petta, McPherson, Greene & Spencer, 2010; U.S. Department of Health and Human Services, 2011). In the year 2010, there was an estimated 695, 000 victims of child cruelty with 75% of the children suffering from neglect. Neglect accounted for 30% of maltreatment fatalities (U.S. Department of Health and Human Services, 2011). In consideration of child neglect, the majority of reported incidents involved failure of parents or guardians to provide their children with basic necessities, such as food, clothes, and a home (U.S. Department of Health and Human Services, 2011).

Following child neglect, physical abuse takes up position two as the second most predominant form of child maltreatment in America (Sedlak et al., 2010). In 2010, more than 15% of all maltreatment investigations were because of suspicion of physical abuse (U.S. Department of Health and Human Services, 2011). Sexual abuse ranks third, with statistics showing that approximately 5% of the boy's populace in the U.S. and 10% of girls suffer penetrative sexual molestation during childhood, while three times of these respective proportions suffer other forms of sexual mistreatment (U.S. Department of Health and Human Services, 2011).

Childhood maltreatment is not only a major social problem, but it is a problem that has many long term consequences for survivors. For instance, childhood abuse has

been found to be linked to a heightened likelihood of venturing into prostitution (Currie & Tekin, 2012). In Clarke, Clarke, Roe-Sepowitz, & Fey (2012) study, which involved 389 women who had been detained by law enforcement at some point for practicing prostitution and who had attended an exit or rehabilitation program, the authors discovered that incidents of childhood maltreatment and rejection were widely reported in the backgrounds of women involved in prostitution (Clarke et al., 2012). By utilizing survey data collected from a population sample of 46 women working as prostitutes on Korean streets, Choi, Klein, Shin and Lee (2009) extensively analyzed the reason as to why young females venture into commercial sex. The scholars found out that about 76% of study participants reported a past whereby they were sexually abused, consequently suffering PTSDs and other forms of distress, which extensively diminished their self-worth and efficacy, later propelling them to practice prostitution. These individuals also depicted a higher tendency to adopt high-risk sexual practices like being with multiple partners and abusing drugs, compared to the control non-prostitute group of study participants.

Similarly, Tsutsumi, Izutsu, Matsumoto (2011) conducted a study to determine why young people turn into prostitutes or engage in delinquent sexual behavior. The study, involved 251 youthful participants held in a detention facility, with 221 being males and 31 were females. The control group comprised of 367 students from a local high school and these were classified as non-delinquent participants. The participants filled Impact of Event Scale-Revised (IESR) questionnaire and the Adolescent Dissociative Experience Scale (ADES) was utilized to measure study subjects' abuse history and sexual risk behaviors among other characteristics of deviant behavior.

Overall, the study showed that a history of physical and sexual abuse was significantly linked to having numerous sex partners and engaging in transactional sex.

Likewise, Roe-Sepowitz, Hickle, Loubert and Egan (2011) found a more than 50% rate of physical mistreatment, childhood sexual abuse and early drug abuse among their study populace of 448 former female prostitutes, who had recently fallen back to the practice of sex trade. This majority percentage of study subjects had suffered abuse when young, ranging from sexual victimization to physical mistreatment, most of which was wrought by family members familiar to them. The respondents also reported that maltreatment made them feel insecure and largely contributed to their decision to engage in prostitution. Most of these participants also pointed out that they not only felt unworthy, but they were also unable to portray assertiveness and in their search for acceptance and affection, they could barely resist sexual advances from many individuals.

Research conducted by Roe-Sepowitz (In press) involved a sample of 71 females in adulthood attending a residential prostitution exiting program. Majority of the respondents reported that they ventured into prostitution as adolescents. This shows that problem behaviors adopted at this juvenile stage including running away from home, suffering rejection and consequent emotional abuse, contribute immensely to youths' practicing prostitution. After controlling for sexual and physical abuse, as well as, racial disparities during childhood, a hierarchical regression revealed childhood emotional abuse to explain an earlier age at entry into prostitution (Roe-Sepowitz, in press).

Another study carried out by Klein, Elifson and Sterk (2007) further emphasizes the link between child neglect and abuse to prostitution. The scholars collected data from

250 women from the metropolitan region in Atlanta, Georgia, considered to be at risk of

engaging in unhealthy sexual behavior and prostitution. They obtained data from the

largely African-American study populace through interviews for the period between the

years 1997 and 2000. The study applied the multiple regression design to evaluate the

association between childhood experiences of neglect, attitudes toward safe sex, self-

esteem issues and participation in HIV-risky behaviors like having multiple partners and

engaging in sex for money. Results showed that childhood rejection resulted in reduced

self-esteem. Further rejection was linked to worsened attitude toward safe sex, hence

heightened involvement in risk behaviors predisposing them to HIV. The study,

therefore, serves to emphasize that rejection of a child at a tender age, or subjection to

emotional abuse is a significant risk factor for young people to participate in prostitution

or get involved with multiple sexual partners while searching for validation and love that

was not availed during childhood.

Simmons (2000) investigated the link between CSA and victims decision to practice

prostitution. The investigative analysis involved 122 females living in provisional

detention facilities or who were under incarceration and it also aimed at examining the

link between CSA and victims' decision to practice prostitution. In the attempt to keenly

evaluate the relationship, Simmons (2000) held interviews that sought answers to

questions like respondents' histories of trauma, physical, psychological and sexual abuse,

using the Child Maltreatment Interview Schedule (CMIS). The researcher also made

significant efforts to link participants' histories of abuse to their performance on the

MMPI- PTSD Scale, Vocational Preference Inventory, The Bem Sex Role Inventory, The

Rosenberg Self Esteem Inventory, The Drug Usage Scale, and the Prostitution Scale.

Results of the study by Simmons (2000) showed that females that had practiced prostitution had a high likelihood of having been molested physically, emotionally and sexually as children, than women who had not been mistreated as youngsters. Most of the studies referenced above provide evidence that a relationship exists between child abuse and prostitution, many of the studies nonetheless, focused mainly on examining the association between childhood sexual abuse (CSA) and later engagement in prostitution. As a result, such conceptualizations ignore the risks associated with the other types of childhood mistreatment and rejection. The projected study will make a concerted attempt to examine the other prostitution risk factors linked to childhood abuse, hence contributing towards filling the literature void.

<p align="center">**Female and Male Prostitutes**</p>

Most research on child maltreatment focuses on the abuse women experience as children ignoring the male experience (Paluzzi & Kahn, 2007). However, according to Paluzzi and Kahn (2007) both females and males experience abuse as a child, but males tend to report the abuse less often than female victims one reason being because of the gendered socialization that males undergo (Paluzzi & Kahn, 2007). According to the gendered socialization perspective, boys and young men are looked at as if they should not fall prey to victimization because as a male you should be able to protect yourself from harm (Paluzzi & Kahn, 2007). Nonetheless, according to the World Health Organization (2002) males worldwide are usually victims of physical abuse and in America; they are often forced to participate in non-penetrative sex acts (Raj, Silverman, & Amaro, 2000).

Paluzzi and Khan (2007) in their study found that males are in most cases the victims of physical punishment and beatings while females frequently report cases of sexual abuse. This study shows that lack of disclosure for the maltreatment among males mask the problems associated with the abuse among men and permits individuals to have the perception that males are the main perpetrators and females are the survivors of violence.

Differences between male and female victims also exist with respect to sexual identity, the victim's relationship to the abuser, age of the abuser, the setting, and type of abuse. In terms of sexual identity, for both male and female victims, the abuser is usually reported as being a male. However, according to Cashmore and Shackel (2014) boys are more likely to have a female abuser, but fail to acknowledge the act as abuse due to the different sex element that they exhibit. For example, when the abuser is reported as being male, the same sex element of the abuse tends to bring about a meaning of homosexuality, which results in feelings of shame and confusion regarding sexuality (Dorahy & Clearwater, 2012). However, where the abuser is female for the male victim, it brings about a meaning of rite to passage, rather than abuse (Cashmore & Shackel, 2014) thereby, resulting in failure of disclosure regarding the abuse.

With regard to the victim's relationship to the abuser, while girls are more likely to experience abuse at the hands of their fathers and other male relatives, boys are more likely to experience abuse by trusted members of their family or trusted members of the church or other institutions (Richards, 2011). Another important aspect regarding the differences among male and female victims concerns the age of the abuser. According to Cashmore and Shackel (2014) boys are more likely to be sexually abused by their peers

or other individuals close to their age group than female victims. Furthermore, the majority of sexual abuse against boy victims and girl victims occur when the victims are between the ages of 7 to 10 (Fanslow, Robinson, Crengle, & Perese, 2007). In terms of the various forms of abuse, boys tend to experience more violent and physical abuse than girl victims where girl victims are more prone to sexual abuse (Maikovich-Fong & Jaffee, 2010).

Although, male and female victims exhibit various differences in the abuse they experience, the long-term effects and consequences of the abuse are the same as research has shown that past experiences with childhood maltreatment increase the risk of a person engaging in prostitution. For instance, Blinders (2005) in his examination of studies with flawed theories and methods involving subjects who engage in prostitution, the author reviewed a 1998 study conducted by Farley and Barkan. In this study, Farley and Barkan examined the prevalence and history of violence and PTSD among both male and female street-based sex workers. Participants in the study consisted of 130 prostitutes in the San Francisco area; seventy-five percent of the total sample was comprised of female participants, 13% were males, and 12% were transgendered. The authors found that 57% of the participants had been sexually abused as a child and 49% of those who responded reported that as children, they had been physically abused. However, with this study comparisons were more often conducted with control participants, rather than the target sample.

On the contrary, Blinder (2005) reviewed an earlier study conducted in 1990 by Earls and David. In this study, unlike many prostitution studies, these authors were able to achieve equal sample sizes of both males and females. The authors conducted a study

comparing the family background and early sexual experiences of 100 male and female prostitutes to 100 male and female non-prostitutes. Thirty percent of the male prostitutes and 26% of the female prostitutes reported having sexual contact with a family member early in their childhoods. In the control group, however, only 12% of males and 6% of females reported having sexual contact with a family member during their adolescent years.

Aside from males and females being at risk of engaging in sex work as a result of abuse, there are various populations that are at risk as well. Such populations include homosexual men, men and women who deal with drug issues, and male and female adolescents. In observing studies regarding men who have sex with other men, such studies on homosexual or bisexual males show that the occurrence of CSA is virtually equal to the prevalence of sexual abuse of girls in mainstream American populace. According to (Raj, Silverman, & Amaro, 2000), male youths who survive sexual abuse as children have a high likelihood of engaging in risky sexual behavior like having more sexual partners and avoiding condom use, than males who were not molested when young. It is also these male abuse survivors that tend to venture into prostitution usually after escaping their homes and abusing alcohol or other substances.

Similarly, Parsons, Bimbi, and Halkitis (2001) studied a sample comprising of 50 homosexual and bisexual males practicing prostitution over the internet, for risky sexual behavior and sexual spontaneity. The scholars found out that 13 participants out of the initial 50 study subjects, a number amounting to 26%, reported about having suffered sexual molestation during childhood (Parsons, Bimbi, and Halkitis, 2001). Even though the sample size was relatively small and barely representative of the entire male prostitute

population, it clearly shows that sexual abuse contributes significantly to people's decision to venture into commercial sex.

Another study focusing on males was carried out by Dilorio, Hartwell, and Hansen (2002). In their research, which focused on a sample of 2,676 homosexual and bisexual Hispanic and African-American males, the scholars sought to evaluate the association of CSA with risky sexual behaviors. Results showed that 25% of the study population had suffered some form of sexual maltreatment during childhood. The partisans, who had suffered sexual abuse, depicted twice the tendency to offer sex to numerous partners in exchange for money, food, shelter or drugs, compared to those that had not been abused. These sexually maltreated and emotionally pained males also reported more cases of unsafe sex.

In focusing on studies that examine adult male and female prostitute populations who have issues with drug use, Boles, Joshi, Grella, and Wellisch (2005) conducted a drug treatment outcome study to examine the effects of sexual and physical abuse on various behaviors. The authors used a national sample consisting of 2,434 substance abusing men and women. A history of CSA was reported by 27.2% of the women and 9.2% of the men. Controlling for gender, compared to patients without CSA, patients reporting CSA were younger at entry into the current drug treatment, were more likely to be White, were more likely to have a mental disorder, be alcohol or cocaine dependent, had higher levels of criminal activities such as engaging in sex work in exchange for money, had a higher level of problem recognition, and had a more negative peer influence.

Kudrati, Plummer, and Yousif (2008) in their study involving female and male adolescents examined the daily lives of children residing on the streets in Khartoum, Sudan. The purpose of this study was to recommend ways to improve the conditions of the children and to successfully assist them off the streets. Findings indicated that half of the children were 14 years old or younger when they started living on the streets and that many of them left home as a result of sexual and physical abuse. Boy participants engaged in odd jobs, and sometimes theft, begging, or sex work. While girl participants had fewer work opportunities and primarily obtained money through begging and engaging in prostitution.

The studies discussed within this section all provide extensive literary proof that individuals who experience childhood abuse are also likely to develop problem behaviors and engage in sex work as a result of the abuse they experience regardless of what population they come from. However, the authors in these studies failed to examine whether or not such behaviors mediated the relationship between a person being abused in childhood and engaging in prostitution by young adulthood. Therefore, the projected study will examine whether or not problem behaviors mediate this relationship.

Factors Related to Entry Into Prostitution

Although, studies on both male and female prostitutes report having experienced childhood abuse, there is also evidence of behavioral patterns developing as a result of the abuse. According to Culhane and Taussig (2009), young people who have been abused are at an elevated risk for having problem behaviors. Introductory findings depicted that abused adolescents are more probable than non-abused youths to take part in numerous problematic behaviors at a very early age and with superior occurrence

(Culhane & Taussig, 2009). In Heilemann and Santhiveeran (2011) study the authors found that female adolescents who engaged in prostitution, suffered from child maltreatment in addition to substance abuse, health problems, PTSD, social embarrassment and segregation; all of which in some instance contributed to their decision to engage in prostitution. Wilson and Widom (2010) suggest that adults who make the decision to engage in sex work often have backgrounds that include higher than average rates of childhood abuse and neglect, are homeless or have been homeless in the past, and often report having a history of alcoholism.

Initial sexual intercourse is also considered a risk factor as to the reason why individuals engage in prostitution. According to Tyler and Johnson (2006) in comparing participants that had been abused in childhood to non- abused participants, the abused subjects reported engaging in sexual behavior earlier than their peers. Furthermore, Wilson and Widom (2008) found that in comparing individuals with substantiated cases of child abuse to a control group, individuals with backgrounds of abuse were more likely to engage in sex before the age of 15. In 2010, Wilson and Widom conducted a second study using the same sample, but controlling for gender and race. With this study, the authors examined whether or not early sexual initiation along with several other risk factors mediated the relationship between abuse and prostitution. Findings from this study indicated that early sexual initiation was a significant mediator in this relationship. Similarly, Dunlap, Golub, and Johnson (2003) found in their study regarding a sample of 98 inner-city female participants that 61% reported having sexual contact by the age of 13.

Drug abuse is another factor that has been noted as responsible for the development of prostitution behavior among children. Substance abuse normally causes children to develop immoral behaviors that cause them to embark on immoral activities that include prostitution. For women, it has been noted that the desire to have money for purchasing the drugs leads them to enter prostitution. Drug use normally leads to addiction among children and this makes them to find ways of getting money that they can use to purchase the drugs. As a result many adolescents including men enter prostitution as a means of generating money aimed at purchasing the drugs. Other reasons that can cause individuals to enter prostitutions include juvenile crime, run away and poverty. Run away and homeless youth who left their homes as a result of abuse, compared to youth who live in shelters and on the streets are more likely to engage in prostitution as they see it as a means for survival (Tyler & Johnson, 2006). Because this particular population is forced to find a means for survival they are also more likely to engage in criminal behavior thus, making juvenile crime a risk factor of prostitution (Tyler & Johnson, 2006).

Sharpe (1998) found that 82% of the prostitute women in his study reported having a history of criminal offense including shoplifting, violent crimes and drug offenses. Chen et al (2004) in their sample of female runaway and homeless youth, provided evidence that child abuse and prostitution behavior were related to youths using drugs and engaging in criminal activities. Furthermore, Kaufman and Widom (1999) findings indicated that when controlling from demographic characteristics, juvenile crime increased for individuals who had been abused compared to individuals who had not been

abused. Other risk factors for individuals with abusive backgrounds include peer pressure, social change, family influence, and age abandonment.

There are a variety of psychological as well as social risk factors that maltreated children are at risk of developing as well (Wilson & Widom, 2010; Culhane & Taussig, 2009). However, the risk factors that are most often reported by maltreated youth which eventually lead them to a life of prostitution consist of developing risky sexual behaviors at a young age, becoming involved with drugs and/or alcohol and running away from home. Although the present proposed study does not discuss all the many risk factors that may play a role in the pathways from child maltreatment to engaging in prostitution later in life, the overall goal of this proposed study is to provide a better understanding of the bridge between risky family environments and mediating risk factors that lead to engaging in sex work.

Age of Abandonment

Age does not necessarily establish whether an individual will enter prostitution, but it is a factor that is related to it (Miller, Decker, Silverman, & Raj, 2007). Many studies have recognized that most prostitutes who are adults began their professions in their early to mid-teen years as there is a great claim for adolescent prostitutes among clients (Miller, Decker, Silverman, & Raj, 2007). According to Miller, Decker, Silverman, and Raj (2007) many clients desire young prostitutes, as they are considered to be weak, less harmful and are seen as less likely to have sexually transmitted diseases. Unfortunately, such a demand for young prostitutes has and continues to generate a negative effect worldwide mainly because individuals who are looking to make easy money tend to enter this field of work more often than any other field and families who

are faced with economic hardship are more likely to sell their daughters as sex slaves in order to gain financial stability (Miller, Decker, Silverman, & Raj, 2007).

Running Away

When a child leaves home during their childhood years and under negative circumstances within the family, it is considered a strong predictor of teenage prostitution (Boyer, 2008; Clark, Caldwell Power & Stansfeld, 2010). Research also indicates that backgrounds of family problems, drug addiction, assault, and sexual abuse cause individuals to leave the house, usually at a young age. These children run away because it is how they respond to harassment or abandonment inside the house.

Numerous studies have depicted that a link between adolescents that run away from home and their participation in prostitution, as well as, trading for sex for survival needs. In a study of 200 women (juveniles and adults) who were currently and formerly involved in prostitution, Clark, Caldwell, Power & Stansfeld (2010) found that 94% of the juveniles were runaways. Bagley and Young (1987), in their study of 45 women formerly involved in prostitution, found nearly half of the women to have reported leaving home because of sexual abuse.

Runaway adolescents, lack employment as well as financial resources, and might resort to prostitution, shelter, drugs or for other purposes (Brawn & Roe-Sepowitz, 2008). Additionally, in the streets, the culture supports nonstandard activities like trading sex (Chen, Tyler, Whitbeck, & Hoyt, 2004). Running away might be a retort of an abusive or neglectful home environment for some adolescents (Finkelhor, Ormrod, & Turner, 2007), as evidenced by findings that victims of childhood maltreat as well as neglect are more likely to run away from their home than comparison groups (Kaufman & Widom, 1999;

Yoder, Whitbeck, & Hoyt, 2001). Moreover, a variety of studies have shown that runaway and homeless young people with histories of childhood maltreatment and neglect are in many cases going to engage in prostitution in order to get money to survive (Chen et al., 2004; McCarthy & Hagan, 1992; Tyler, Hoyt, & Whitbeck, 2000; Tyler & Johnson, 2006).

Substance Abuse

Alcohol and crack cocaine appear to be the most commonly abused substances among women involved in prostitution (Kuhns, Heide, and Silverman, 1992), whereas the prevalence of heroin use appears to vary by region (Surratt, Kurtz, Weaver, & Inciardi, 2005; Gossop, Powis, and Griffiths, 1994). One of four women engaging in prostitution in Lalor & McElvaney, (2010) reportedly drank alcohol on a daily basis, with some drinking at dangerously high levels. Kuhns et al. (1992) discovered that early drug/alcohol use posed a greater risk for involvement in prostitution. On average, women arrested for prostitution had an earlier age at first alcohol intoxication beginning at 14.6 versus 16.6 for the other arrestees Banks, & Kyckelhahn, (2011). However, the severity and frequency of drug use among this population were not accounted for.

The type of substances women involved in prostitution use may be related to the type of prostitution in which they become involved (Cusick & Hickman, 2005). Involvement in street prostitution was found to present a greater risk of using hard drugs when compared with indoor prostitution (Cusick & Hickman, 2005), and most ladies that are involved in prostitution reportedly entered to support an existing drug habit (Lalor & McElvaney, 2010). Women that take part in both street and indoor prostitution showed that the drug use helped to improve their sexual performance; however, women involved in street

prostitution also indicated that drugs were used to numb and cope with fears of violence (Cusick, 2002).

Women involved in indoor prostitution tended to look negatively upon the sex-for-drug exchanges that were more commonly seen in street prostitution (Steinberg, 2007). These findings indicate different degrees of drug abuse and dependence based on the mode of prostitution which many ladies are involved in addition to group differences regarding what constitutes acceptable drug use. In their study of 237 women involved in prostitution, Lalor & McElvaney (2010) found that ninety four percent of those involved in indoor prostitution consisted of mostly Caucasians, therefore, suggesting the possible role of race in influencing the type of prostitution in which women become involved. Hard drug use and frequent drug use appear to have close time links with entry into prostitution among both juveniles and adults (Lubman, Yücel, & Hall, 2007; Arata, Langhinrichsen-Rohling, Bowers, & O'Brien, 2007).

Adolescence is a time when important social relationships are formed and goals are set but is also a time of higher-level brain development (Steinberg, 2007). Because of the rapid changes occurring in the adolescent brain, substance use during this period makes the brain more vulnerable to long term adverse effects (Lubman, Yücel, & Hall, 2007). The literature on the relationship between juvenile entry into prostitution and drug use suggests multiple risks and pathways to entry. Brawn and Roe-Sepowitz (2008) conducted a study of 128 juveniles arrested for prostitution and discovered 57% to be using drugs or alcohol, with most beginning substance use 1 year prior to entry into prostitution. Similar to the results of Kramer and Berg (2003), significantly more

Caucasian juveniles involved in prostitution were using drugs than non-Whites, reiterating the importance of considering race (Brawn & Roe-Sepowitz, 2008).

Among juveniles arrested for prostitution, those who used drugs were found to have less parental supervision at home, elevated rates of childhood maltreatment and neglect, more negative peer influences, and prior occurrences of delinquency and/or conduct problems at school than those who did not use drugs (Brawn & Roe-Sepowitz, 2008). Most drug-using juveniles had backgrounds with more severe dysfunction than non–drug using juveniles; however, it was less clear how non–drug using juveniles entered prostitution and whether continued involvement would lead to drug use in the future. The timing of first drug use and age at entry into prostitution is a topic of research that has yet to yield consistent results.

In Finkelhor, Ormrod, & Turner (2007), the average age at first heroin use is around 18.9, correlated highly with age at entry into prostitution (average, 19.15). Of those who entered prostitution prior to heroin use, the average entry was less than 1 year prior to first heroin use, and women who started using heroin prior to prostitution continued using for about 2 years before involvement in prostitution (Finkelhor et al., 2007). Women who entered prostitution prior to using heroin were more likely to say they would continue to prostitute if they were not using drugs, whereas those who used heroin prior to prostitution were more likely to say they would stop prostituting if they were not using drugs (Lalor & McElvaney, 2010). The findings of Gossop et al. (1994) are implicative of different motivations for entry into prostitution based on the sequence of entry into prostitution and drug use (heroin in particular).

Family Environment

Research also indicates how possible family environments can act as moderating variables by either intensifying the behavioral patterns or shortening those (Finkelhor et al., 2007). Specifically, much of the literature on child abuse supports the argument that the family is a significant contextual variable in the development of an individual that either leads to compliance to the rules or to future delinquency. For instances, some researchers (e. g. Afifi, Boman, Fleisher & Sareen, 2009; Clark, Caldwell, Power & Stansfeld, 2010; Bender, 2010) shows that juvenile prostitutes in have a very high rate of running away from their homes. Additionally, the studies shows reports that numerous of the adolescents come from ineffectual families characterized by family conflict, abuse of alcohol, neglect and physical abuse. Such families are characterized of poor parental supervision as well as care giving and sexual victimization. Young, Deardorff, Ozer and Lahiff (2011), found out that only a single prostitute out of fourteen interviewed had were sexually abused. However, half of the number admitted to have run away from their homes up to six times. Nevertheless, non-prostitute groups compared to them had comparable history of runaway behavior. On the other hand, the target, as well as, comparison groups reported to have had negative relationships with siblings and parents while growing up and this was a major reason for leaving home.

In the Afifi, Boman, Fleisher & Sareen (2009) study, adolescents that run away were significantly more extrapolative to be involved in prostitution compared to those that came from sexual abuse backgrounds because, since this is the only means of survival for underage people lacking sufficient education and work experience. In the study, young prostitutes were appreciably more likely compared to non-prostitutes to

have run away from their home with the main reason being family disruption. Nonetheless, there were no specific family variables, including sexual abuse, found to be unswervingly linked to prostitution involvement.

Further, the forthcoming cohort study by Finkelhor, Ormrod & Turner (2007), showed that sexually abused kids as well as those that had been neglected were appreciably more likely than non-neglected and non-abused to engage in prostitution as an adolescent young adulthood. The findings depicted that neglect was a principal predictor of prostitution regardless of sexual abuse suggesting a general dysfunctional family environment could be more predictive of prostitution compared to any other form of abuse. The study also investigated the mediating aspects of running away on prostitution and childhood trauma. The study also found out that when run ways behaviour was controlled, there were less cases of prostitution in the streets. The findings show that despite the fact that sexual abuse is a crucial predictor of prostitution, runaway behavior is probable to contain intervening effects. Alternatively, in another study the study of 1,240 female inmates that was conducted by Feiring, Miller-Johnson & Cleland (2007), showed that sexual abuse was found to be a direct factor related to prostitution involvement in spite of running away history.

In Maniglio (2012), study about seventy five of the prostitutes, compared to none control group, said that they had left their homes before they reached the age of sixteen. These people's families were characterized by alcohol abuse, dysfunction, and abuse. The principal reason that the participants provided for running away from their homes was sexual abuse. In the Finkelhor, Ormrod, & Turner (2007), study it showed that male prostitutes in many cases came from broken homes and violent backgrounds, compared

to their non-prostitute counterparts. In addition, female prostitutes are more likely to come from families where they were physical abused compared to non-prostitute counterparts. Generally, both female and male prostitutes have a more negative discernment in regard to their families- of-origin and left their homes at a very young age compared to the non-prostitute group. However, there are no uniform combinations of family variables or patterns of interaction identified as prognostic of prostitution. In fact, Finkelhor, Ormrod, & Turner (2007) adds that that leaving home when very young and finding a means for survival usually have early exposure to sexual experiences.

Some researchers have stated that the kind of delinquent conduct that an individual will exhibit corresponds to the kind of child abuse the individual experienced during his or her younger years. This would result in what is called homotypic continuity (Lalor & McElvaney, 2010). Social learning concept indicates that maltreatment during the childhood of an individual occurs due to bad role models that the child has when he or she was young and because the child may see this bad role model as a foundation of their future actions. Children mimic the way adult's act, as proven in many scientific studies (Lalor & McElvaney, 2010). When the question of delinquency is weighed against the theory of "nature versus nurture," the nurture side would say that the family is the first place where a child is exposed to other people. As such, the family is also the place where the child learns appropriate behavior (Miller-Perrin & Perrin, 2007). For this reason, particular kinds of maltreatment during their childhood years may generate specific characteristics. For example, if the child is exposed to physical abuse, it might be the case that the child could exhibit violent actions or have the tendency to become violent (Roe-Sepowitz, Hickle, & Cimino, 2012).

On the other hand, some studies would assert that child maltreatment is not a predictive factor for future characteristics of an individual, but rather the effects of the maltreatment are more general. This type of effect is known as heterotypic continuity (Lalor & McElvaney, 2010) meaning that the effects of the maltreatment on the behavior of individuals would come later in their lives. This debate is very much alive, especially in the discussion of the factors that lead child abuse victims to enter into prostitution and the contribution of sexual maltreatment and incest as a child that leads to prostitution.

The terms sequences of maltreatment and intergenerational transmitting of aggression point to the significance of early encounters of the child in the formative years in forecasting future actions (Lalor & McElvaney, 2010). The basic undertaking is that maltreatment during the childhood years has negative long-term repercussions. This could lead the individual victimized as a child to become aggressive or harassing as an adult. For example, victims of child sexual abuse are highly correlated to individuals who enter into prostitution (Heilemann & Santhiveeran, 2011). Meaning that the victimization of children who were sexually abused will result in them entering prostitution, which could be an effect of the sexual exploitation experienced when they were young.

Although these early sex-related encounters may perhaps be deliberate, sexual maturity might also suggest a gap in parent guidance and care, as well as some degree of neglect and abandonment, which may lead to prostitution. Child maltreatment forecasting participation in prostitution may thus involve childhood sex-related abuse, teenage sex-related precociousness, or all of these aspects combined.

Findings from different studies with regard to the kind of maltreatment and kinds of upcoming challenging actions, however, did not offer reliable proof of a connection, or

proof of the character of the association between the two. For example, Arata, Langhinrichsen-Rohling, Bowers, & O'Brien (2007) established that violent delinquents have a high affinity of having an abusive history. Miller & Mullins (2009), established that people that participated were rejected by their parents had had a high rate of indulging in delinquent actions compared to those that were loved. Schreck, Stewart & Osgood (2008), concluded that maltreated kids had higher rate of delinquency behaviour compared to children that were well treated and those that did not necessarily have high rates of violence as they were growing up.

Although, risky sexual behaviors at a young age, becoming involved with drugs and/or alcohol and running away are behaviors that are more often reported by maltreated youth, in addition to family influence there are also a range of other social and psychological factors as well that may link childhood maltreatment as well as neglect to prostitution (Wilson & Widom, 2010). This proposed study will examine two other potential psychological factors such as self- concept and self- efficacy that were not mentioned to establish if they mediate the association between maltreatment and prostitution.

<div align="center">**Mediating Mechanisms**</div>

Self-concept and Self-efficacy

Documenting a link between childhood maltreatment and abandonment, as well as, involvement in prostitution does little to help provide an understanding of how this association exits (Whiting, Simmons, Havens, Smith, & Oka, 2009). For this reason, in a literature review by Wilson & Widom (2010), it highlighted that there is the need to have more research which examines the composition of behavioral problem among abused

youths, as there are psychological mechanisms, ranging of different social aspects associated with engagement in prostitution as well as potential to mediate their relationship. Having poor self- concept and low self- efficacy are two psychological mechanisms that show this potential. For example, Wilson and Widom (2010) in their study argue that sexual and romantic relationships are what might be the principal context that causes individuals to engage in prostitution from childhood abuse amid other issues and behaviors like as running away and having educational issues problems. Even as this may be the case, according to Albanese (2007) all young people have complicatedness when negotiating sexual issues, but young people who come from abusive and neglectful backgrounds are prone to experience these difficulties because of difficulty in family relationships which may have strong and experienced desires in maintaining intimacy as well as avoiding conflict with partners. Simultaneously, childhood abuse victims are at a risk of feeling that they have poor self-concept as well as low self efficacy (Albanese, 2007).

Self-efficacy is a central constituent of Bandura's social learning theory. The component describes an individual's belief on their capability of exerting control over their own functioning and other events which affect their lives (Sanci, Coffey, Olsson, Reid, Carlin, & Patton, 2008). Self-efficacy is also referred to as self-mastery by Steinberg (2010), which is related to numerous aspects of self-concept including self-liking, self-control, self-esteem and self-perceived abilities (Graham, English, Litrownik, Thompson, Briggs, & Bangdiwala, 2010). Such a relation occurs because in order to understand how a person's self- efficacy is affected, it is necessary to first understand the development of self and how parents have a strong influence on the self-concept of a

child which in turn leads to affecting the self- efficacy of that child. For example, sociologists argue that while self-concept changes over time, early life stages are among the most important periods for the development of a person's self (Jonson-Reid, Kohl & Drake, 2012; McQueen, Itzin, Kennedy, Sinason, & Maxted, 2009; Bromfield, Gillingham & Higgins, 2007).

Gillingham & Higgins (2007) argued that a child develops his/her self through imitating the roles of others, and acquires general social attitudes through participating in games with rules. Steinberg (2010) more specifically, discusses the process of the development of self. An infant first develops an aspect of self ("I"), then s/he starts to think using symbolic terms, and view themselves as objects ("Me") in the early part of their childhood. After starting to use symbolic terms, a child comes to perceive his/her positive and negative qualities. A child then, in later childhood, improves the ability for inductive reasoning and advanced classification, and considers multiple causes for his/her behavior. The process of development continues onto adolescence (Steinberg, 2010). Thus, child maltreatment occurs during the life stages where a child is progressively developing his/her self/self-concept.

According to Turner, Finkelhor, & Ormrod (2007), there is an increasing tendency among researchers to recognize the importance of context for such socialization to occur. Zahn, Agnew, Fishbein, Miller, Winn, Dakoff &Chesney-Lind (2010) in their extensive review study of self-efficacy, argues that for the development of self-efficacy, family is the most important context. Because abusing a child presumably is far from supporting a child, child maltreatment would hinder the development of an effective sense of self. In fact, a few studies examining the effects of child abuse on the child's

sense of competence show that a child from an abusive family tend to exhibit a lower sense of cognitive and physical competence (Norman, Byambaa, Butchart, Scott & Vos, 2012).

The idea that our self-evaluation is formed through the (perceived) appraisals of others is predominant in sociology. Later research on reflected appraisals favors the modification of Cooley's "looking-glass self" to the extent that *perceived* others' views on us rather than actual others' views on us affect our self- evaluation (Arata, Langhinrichsen-Rohling, Bowers, & O'Brien, 2007). Widom, White, Czaja & Marmorstein, 2007). For example, a child's perceived parental responses affect his/her self-evaluation such as perceived physical attractiveness and self-esteem (Sugaya, Hasin, Olfson, Lin, Grant, & Blanco, 2012). While the interaction with others and their responsiveness are the key for the development of self (Widom, Czaja & Dutton, 2008), the notion of reflected appraisals clarifies the sources of self-evaluation. Because abused children presumably would not perceive their parental appraisals as positive, their perceived reflected appraisals of their guardians could have a negative effect on their self-concepts. Therefore, for these two reasons (i.e., childhood as a significant period of developing of self, and parents as the major source of a child's self-concept), it is reasonable to assume that the consequences of parental abuse on a child's self-concept are substantial; hence, parental abuse would have a long term direct negative impact on self-efficacy.

Self- efficacy

Past research has depicted that disclosure to some life stressors, like childhood abuse, may negatively affect social-psychological resources such as self-efficacy Gilbert,

Spatz, Browne, Fergusson, Webb & Janson (2009) which, might increase the

vulnerability of risks which could threaten their health status (Adelson, 2008). Evidence

of associations between indices of self-efficacy as well as childhood abuse may

negatively influence people's cognitions regarding themselves (Sachs-Ericsson, Verona,

Joiner, & Preacher, 2006). Self-efficacy is therefore, instilled in the attachment

relationship with the principal caregiver. According to Finkelhor et al., (2007) the quality

of the attachment gives a "safe-base" where children gain mastery experience. It has been

emphasized as the principal source of efficacy beliefs.

Children that have secure attachments gain knowledge of fulfilled needs through their

own efforts.

In contrast, abused or neglected children, have insecure attachments and they

develop believing that their efforts are unproductive or lack personal control, and that

they are supposed to rely on other people who could or not meet their needs (Saewyc &

Edinburgh, 2009). For example, in a study conducted by Ghimire, Smith, Teijlingen,

Dahal and Luitel (2011) it authors assessed Nepal's non usage of condoms by sex

workers with intimate partners. Numerous female sex workers in this research disclosed

that they did not use condoms because of client's refusal in that condoms did not pleasure

them as much as not using condoms did. Further, in cases of client refusal, the female sex

workers disclosed that they never disagreed or tried to use force when dealing with their

clients to use condoms since they feared losing the client if they denied them sex.

Results from this study indicated that the major risk factor recognized for the non-

usage of condoms with intimate partners as well as regular clients was because of low

self- efficacy.

Ghimire et al (2011) study not only illustrates the lack of self- efficacy that many sex workers deal with, but it also points out another possible ecological factor that might affect the pathway to prostitution which is economic hardship. For instance, a recent report conducted by the Bahamas Urban Youth Development Centre investigated the habits of 236 sex workers living in Nassau and revealed that more than 60% of prostitutes in Nassau earned approximately $450 to $550 a week, while the remaining percentage claimed that they made more than $500 (Bahamas Urban Youth Development Centre, 2013). Many of the participants reported they entered into prostitution because they needed money. Seventy percent of the participants entered into prostitution because they wanted to buy food for their family, while 90% said that paying the household bills was the main reason why they engaged in prostitution. The report also noted that 85% of participants said that if there was an opportunity to have another job, they would happily choose another field.

Currie & Tekin (2012) conducted a study which suggested that self-efficacy theory can be used for safer sex behavior examination and HIV prevention from a social-cognitive theory perspective. In sexual risk behavior context, Gilbert, Spatz, Browne, Fergusson, Webb & Janson, (2009) suggested sexual risk reduction can be analyzed from a social-cognitive angle, skill and knowledge as well as exercising self-protective behavior that is essential but not adequate. According to Sachs-Ericsson, Cromer, Hernandez & Kendall-Tackett (2009), behavior cannot be associated directly with skills or knowledge; instead, it is mediated by a procedure of cognitive appraisal by which individuals integrate knowledge and result expectancies from judgment of people's ability in mastering difficult situation.

Family dysfunction may block adolescent's opportunities of exploring as well as

and the developing mastery (Springer, Sheridan, Kuo & Carnes, 2007). The family might

not assist in modeling practical coping in general, and they might be extremely negative

as well as discouraging and his might affect self-efficacy (Saewyc & Edinburgh, 2009).

Contrarily, family support may be related to strong self-efficacy beliefs among young

people, as well as, self-efficacy related to strong persistence of intentions and indirect

relationship to better health (Currie & Tekin, 2012).

Psychological Explanations in the Link From Childhood Maltreatment to

Prostitution

There are several theoretical perspectives such as Social-Psychological Strain

Theory, Social Learning Theory, as well as, Social Control Theory that provide

psychological explanations regarding to why childhood victims of neglect and abuse

often engage in sex work (Currie & Tekin, 2012; Wilson & Widom, 2010). These

psychological explanations play an instrumental role in attempting to address the first

research question, which sought to study the relationship between various forms of

neglect and child abuse to later engagement in prostitution. The Social control theory

makes the assumption that people usually have an innate propensity to criminal activities

that are controlled by social connections (Rohde, Ichikawa, Simon, Ludman, Linde,

Jeffreyet al., 2008). By scrutinizing such bonds, it is evident that the kind of abuse that is

inflicted by caregivers usually makes people to be offensive (Widom, DuMont & Czaja,

2007). However, the social learning theory has established that maltreatment victims

learn and at the same time adopt delinquent behavior patterns through modeling and

imitation processes. The behaviors are maintained by kids in order to have positive

outcomes (Feiring, Simon & Cleland, 2009).

The Social-Psychological Strain Theory focuses on abuse as a basis of heightened

stress (Reid & Sullivan, 2009). Numerous studies scrutinize the links between abuses, as

well as, outcomes like behavioral problems, delays in development, as well as, changing

in brain functionality that might eternally alter the way people respond to environmental

stimulus (Mitchell, Finkelhor & Wolak, 2009; Cannon, E. A., Bonomi, Anderson, Rivara,

& Thompson, 2010). The studies propose that abuse could incline a kid to indulge into

risky, aggressive behaviors and might also become self destructive (Currie & Tekin,

2012). Springer, Sheridan, Kuo & Carnes (2007), have documented posttraumatic stress

syndrome rates among kids that have undergone abusive relationships. On the other hand

Saewyc & Edinburgh (2009), states that stress that takes place during critical periods can

have a crucial impact on aggressive behavior development in adolescents.

Adolescence describes a stage when the youths begin developing strong sense

about themselves, as well as, directing their behaviors and lives based on their beliefs

(Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008). Contextual fields like family,

peers and school are continually exerting strong influences on development in adolescent

(Adelson, 2008). Additionally, adolescence also describes a time when kids depressive

and externalizing are extremely high. For instance, delinquency increases in the children

as they continue to develop (Britt & Weisburd, 2010). There is study that demonstrates

that adolescent externalizing and depressive symptoms are linked to how young people

look at themselves as well as the relative aspects like family, peers and school (Gilbert,

Spatz, Browne, Fergusson, Webb & Janson, 2009). While the above described theories

provide their analogues in psychological thinking about involvement in prostitution, recognizing that there are numerous and risk factors of interacting, likely to be developed from a neglectful or abusive childhood environment. This might lead to prostitution in the future and this study will utilize Ecodevelopmental theory Richmond, Elliot, Pierce, Aspelmeier & Alexander (2009) as a structure for the study.

Ecodevelopmental theory suggests that a full comprehension of adolescent risk aspects should include cautious consideration regarding social systems where development takes place in the social systems referring to specific contexts which young people function like school, family, and peers. Particularly, Ecodevelopmental theory give a complete framework for comprehending risk aspects in adolescents by using a social developmental and ecological framework, as well as, social interactions which mainly focus on the principal roles that families also play a huge role in kids socialization and the different social fields beyond family which influences development, interrelations contexts, as well as, changing nature of the environments and relations over a given period of time. Thus, the adolescent is impacted by the multiple layers of contexts (Wegman & Stetler, 2009; Sachs-Ericsson, Cromer, Hernandez & Kendall-Tackett, 2009).

Ecodevelopmental Theory

According to (Ghimire et al., 2011) Ecodevelopmental theory is depicted from three integrated aspects: (a) social-ecological theory, (b) developmental theory, as well as (c) prominence on social interactions. Essentially, it contemplates that comprehending protective aspects and risk for adolescent behavioral issue requiring thorough examination of the ordinary developmental processes variants and careful deliberation of

social structures within which the behaviors takes place (Bahamas Urban Youth Development Centre, 2013).

The theory has been utilized in describing risks on several adolescent issues which includes taking risks in sexual behaviour Reid & Sullivan (2009), adolescent criminal activities and school issues (Wilson & Widom, 2010). Additionally, it is reliable with literature that suggests that taking part in prostitution is as a result of different developmental factors like abuse or neglect by parents, as well as, situational aspects, like unemployment or luck of shelter (Turner, Finkelhor, & Ormrod, 2007; Wilson & Widom, 2010). The first constituent of Ecodevelopmental and social ecological theories is based on social ecological model. Bronfenbrenner's theory covers social ecology of a person individual based on a set five interacting structures. This is represented in different series of concentric circles, and adolescent take up a principal area. These five systems are: microsystems, macrosystem, exosystem, chronosystem and mesosystem.

The Microsystem. Microsystems refers to the first level where Ecodevelopmental framework which deal with the young people's immediate social aspects that comprises of peers, family and school, as well as, the links between adolescents in this context (Kail & Cavanaugh, 2010). Despite the fact that there are several imperative contexts in the system, the framework has highlighted family as one of the most fundamental and proximal structure that influences human development. Therefore, the quality of interactions and family structure in families is particularly powerful in influencing children's development (Homma, Wang, Saewyc, E., & Kishor, 2012).

Outcomes from numerous experimental studies demonstrate the links between microsystem family process and structural variables, as well as, adolescent behavioral

issues For instance, constructive family support efficient communication between parents and adolescents sex issues Reid & Sullivan (2009), as well as, strong connectedness between parents and adolescents (Feiring, Simon & Cleland, 2009; Prado et al., 2007) are protective aspects that are linked to a decreased in the likelihood that adolescents will take part in perilous sexual behaviors. The outcomes depicts that a family context, which is characterized by a supportive and positive relationship between parents and children might enhance development of children's well-being, as well as, serve as a protective aspect in the development of their problematic behaviors

Conversely, young people that come from non-supportive households who are allowed by the parents to be associated with sexually active friends or those that hold sexual sponsoring attitudes have a high risk of engaging in risky sexual behavior. For that reason, it is evident that the quality of the relationship between parents and children is crucial. A relationship with high levels of conflict and abuses will lead a child to start expressing more internalized and externalized symptoms (Finkelhor et al., 2007).

The Mesosystem. This is usually the next level in the social ecology framework. Mesosystem level represents different developmental effects that are beyond Microsystems. Mesosystems examples are usually the overlaps between the school and family Microsystems like parents getting involved in schools activities. Additionally, the peer and family Microsystems like monitoring of peers by parents. The mesosystem is also characterized by additional sources of risks, as well as, protection processes for developmental results. For instance, young people whose parents have knowledge on their peers' communication aspects with the parents, and are monitored in regard to their

activities and behavior, are usually less vulnerable to deviant behaviour and are less likely to take part in risky sexual behaviors (Currie & Tekin, 2012).

The Exosystem. This is another level of social ecology is the in which adolescent do not participate in directly but members of the adolescent's microsystems like parents take part. The level impacts imperative factors of the in the life of the adolescent. For instance, parents usually encounter challenges in the exosystem level, like highly stressful workplaces, as well as, limiting social service networks and this might lead to less engagement with their children or effective monitoring of the peer groups (Feiring, Simon & Cleland, 2009). This means that the adolescents might be at a greater risk of engaging unsafe sexual behavior, as well as, other problematic issues.

The Macrosystem. Macrosystem describes the outer level of people's social ecology. The level is defined as the social and philosophical ideologies which describe a certain culture or subculture (Ghimire et al., 2011)). For instance, in a study that was conducted by Feiring, Simon & Cleland (2009) it examines cultural dissimilarities of Hispanic immigrant families that reside in American. By utilizing the Ecodevelopmental theory, the authors found that Hispanic immigrant families are the ones facing difficulties at the macrosystem. Distinctively, the Hispanic immigrants are faced by numerous obstacles to being acculturated into the U.S culture.

The overarching theoretical framework in the proposed study involve assumptions that risky family environments especially where children are abused as well as neglected usually lead to a cascade of negative aspects on other contexts like Poor self-concept, as well as, Low self- efficacy through disruptions of psychological and physiological processes. These mediating issues scrutinized represent maladaptive behavior models that

result from the effects on multiple contexts of the kid's development. From the above

perspective, the theory gives a framework that will assist in understanding how different

family links affect other social contexts. For instance, poor self-concept, as well as, low

self- efficacy, that form some of the principal contributors to the development of deviant

behavior such as prostitution.

The Chronosystem. This is the final level of the social ecology which describes

patterning of environmental events as well as transitions over the life course, and

sociohistorical circumstances that take place. For instance, when parents decide in get a

divorce this is a huge factor in considering the transition. Research by Kail & Cavanaugh

(2010) has found that there are negative effects of divorce on children. However, the

second year after the divorce, the family members start interacting less disruptive and

become less stable (Kail & Cavanaugh, 2010).

<div align="center">Social Change</div>

Child abuse and neglect, as described above is a major social problem that has the

ability to cause long- term effects on victims such as engaging in prostitution later on in

life. Various studies have shown a significant relationship between abuse and prostitution

(Raj et al., 2006, Wilson & Widom, 2008, 2010). For example, studies that compared

people with substantiated cases of child maltreatment with a control group found that

there was a relationship between abuse and prostitution (Wilson & Widom, 2010;

Abramovich, 2005; Raj et al., 2006; Heilemann & Santhiveeran, 2011). Involvement in

prostitution arises from problem behaviors developed in childhood and or adolescence.

As stated in the proposed study, individuals who engage in sex work often report coming

from abusive backgrounds where they experienced physical and sexual abuse as a child

and often report a history of drug use issues, juvenile crime, runaway, poor self- concept and substance abuse. The relationship between child abuse and prostitution has been proven even when examining different populations, such as incarcerated women (Raj et al., 2006), homosexual men (Dilorio et al., 2002), and adolescent males and females (Kudrati et al., 2008).

Child maltreatment is a serious problem that leads to many negative outcomes. Therefore, the primary goal of this proposed study is to bring about a positive social change to this complex problem that will not only help in the development of effective prevention programs, but will reduce risk- taking behaviors, thereby reducing social and health problems, such as involvement in prostitution, later in life. The implications for social change that the proposed study offers begins with influencing individual behavior by developing programs that focus on preventing problem behaviors, particularly increasing victims of abuse low self- efficacy and improving their poor self-concept.

Secondly, at the community level the proposed study will enhance the community's knowledge regarding the long-term effects of child maltreatment by providing evidence that victims of abuse are at risk for developing problem behaviors such as low self- efficacy and poor self- concept and that these behaviors may mediate the pathway to involvement in prostitution later on in young adulthood. With the community enhancing its knowledge regarding this issue, the community will be able to develop guidelines on what to do when they suspect child mistreatment or abuse among families within the community. The proposed study will help the community develop evidence-based programs that are based on the needs of individuals and families. According to Tyler et al. (2006) when communities are aware and able to identify

families who are at high risk for abusing their children, having such an awareness helps to develop prevention goals that consist of increasing the availability of services for families in need and that focus on their specific needs.

Lastly, the proposed study may contribute to changes in public policy. More specifically, at this level the proposed study will add to a growing literature that indicates the need for public policy in order to support the creation of early prevention programs with children who are victims of abuse. In addition, prevention programs can make it their policy to deliver components of evidence-based programs, such as the current proposed study as their standard of care.

Summary

There is a rising concern in regards to the high pervasiveness of prostitutes on the streets. Numerous reports depict that experiencing childhood abuse may lead to involvement in sex work. Evidently, related research that has been conducted over the years shows that engaging in prostitution is not an intentional act; instead it is as a result of coming from abusive homes (Kail & Cavanaugh, 2010). Even though there are possible precursors about prostitution activities, numerous characteristics of prostitutes have been documented in recent empirical literature. For instance, literature on the history of childhood sexual abuse, childhood neglect, and physical abuse, as well as, people that run away from their homes when young (Finkelhor et al., 2007). Additionally, there are numerous researchers that have suggested that one of the long-term effects of sexual abuse is engagement in prostitution (Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008). Childhood sexual abuse victims have formed some of the high population samples of prostitution. For instance, Finkelhor et al., (2007) showed that

60% of the prostitutes in their study had experienced childhood sexual abuse. In another survey from Canada, 73% of the participants showed that most of the prostitutes had been sexually victimized as children. Feiring, Simon & Cleland (2009) found out that 38% of people participating in their study were female prostitutes, and 60% of them were male prostitutes, that had come from abusive homes.

In another sample involving incarcerated women, Ahrens, Katon, McCarty, Richardson, and Courtney, (2012) found that their participants were mostly sexually abused during early childhood and were twice as likely to engage in prostitution compared to the non-abused detainees. These rates were in marked contrast to prevalence studies in the general population with figures ranging from 19% to 50% (Bagley & Ramsey, 1985; Feiring, Simon & Cleland, 2009).

Other characteristics that have been identified as contributors to prostitution include coming from a dysfunctional families (Lalor & McElvaney, 2010), parental alcohol abuse, drug use (McIntyre & Widom, 2011), as well as, poor self-confidence and low self- efficacy (Ahrens, Katon, McCarty, Richardson, & Courtney, 2012). Research showed that dysfunctional family environments could lead to children leaving their homes and subsequently engaged in prostitution activity. It is evident that family backgrounds of prostitution are usually marked by chaos, as well as, defective parenting (Bahamas Urban Youth Development Centre, 2013). Some people participate in such actions because of alienation from the family as well as, lack of strong family ties. Therefore, the children end up becoming linked to juvenile prostitution and delinquency. Negative relationships by the parents also contribute highly to both prostitute and non-prostitute runaway's (Ghimire et al., 2011). 81% of prostitutes that participated in the

study conducted by McIntyre and Widom (2011) highlighted negligence by parents as one of the aspects that led them to participate in prostitution.

A large population of people that participate in prostitution show that drug abuse is one of the major contributors of prostitution. The general prostitute population is extremely high as indicated by Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan (2008). Homma, Wang, Saewyc, and Kishor (2012), carefully noted that almost half the number of prostitutes in their study became addicted to drug use prior to their first prostitution encounter. Additionally, there is substantial evidence showing that poor self-image is a contributing factor among juvenile prostitutes (Bahamas Urban Youth Development Centre, 2013). Some researchers suggest that prostitution alone is evidence of an individual having poor self-esteem (Lalor & McElvaney, 2010); despite the fact that McIntyre and Widom (2011) argue that poor self-concept is as a result of one becoming a prostitute.

Despite the current findings in dissimilar studies which constitute a momentous contribution to the area under study, as well as, results which have significant implications for service delivery to abuse survivors there still remains gaps in the literature as much of the early literature focused on mechanisms that might link childhood sexual abuse to involvement in prostitution (Homma, Wang, Saewyc, E., & Kishor, 2012). Further, the mechanisms that lead from childhood abuse and neglect to involvement in prostitution are misunderstood because there are few studies that examine early behaviors which may mediate their relationship (Abramovich, 2005).

There are serious methodological flaws in previous research. The flaws mainly include failure in examining mediating effects of potential problem behaviors in the

pathway to prostitution from child abuse and neglect. Utilization of measures that have no established psychometric aspects, use of exclusively institutionalized or incarcerated subjects, as well as, retrospective reporting by older adult prostitutes. In addition, prostitution studies have either failed in inclusion of a comparison group (Bahamas Urban Youth Development Centre, 2013) or had comparison groups that significantly differed from prostitution samples with respect to age (Lalor & McElvaney, 2010) or socioeconomic factors (Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008).

The present proposed study was designed to address the above methodological flaws by utilizing secondary data that conducted in- home interviews with individuals who have been involved in prostitution, from a variety of settings who were young adults 18 years of age to 26. This secondary data set was selected as its population affords a suitable non-prostitute comparison group for the prostitute sample for the reason that according to Ahrens, Katon, McCarty, Richardson, and Courtney (2012), the absence of suitable comparison groups for prostitute samples constitutes a serious problem in the current literature. Further, an exceptional feature of the investigation is the inclusion of comparing non-prostitute young adults similar to the race, age, as well as, socioeconomic status in the family or participating prostitutes as Ghimire et al. (2011) argue that prostitutes have inappropriately been compared to members of the general population who often differ from prostitutes in regard to their status, age and socioeconomic, among various other variables. In addition, this proposed study will examine 2 potential mediators: self- concept and self- efficacy. In conclusion, whenever possible, measures with established psychometric properties will be reported

Chapter 3: Methodology

The purpose of this quantitative correlational study was to examine early youth problem behaviors, such as low self-efficacy and poor self-concept, as potential mediators in the relationship of childhood abuse and neglect to the involvement of individuals in prostitution during young adulthood. Chapter 3 describes the (a) research design and justification, (b) questions and hypotheses, (c) population sample plan, (d) data collection and instrumentation, (e) data breakdown procedures, and (f) ethical consideration of the participants. The chapter explains the validation for using a correlational plan to answer research questions and the procedures used to support or reject the null hypotheses followed by a chapter summary.

Research Design

The study utilized a quantitative, correlational research design. Correlational design is a descriptive mode of quantitative research which involves examination of possible links among variables (Leedy & Ormrod, 2010). Specifically, correlation analysis refers to an interest to determine whether there exists a significant positive or negative linear relationship among two or more variables (Burns & Grove, 2005). The approach aligns with a postpositivist worldview that supports scientific methods to gain an understanding of complex social phenomena by numerically measuring constructs and testing hypotheses (Creswell, 2013). This study included statistical procedures to analyze data and support or reject the hypotheses. Simon (2006) noted that "correlational studies examine variables in their natural environments and do not include researcher-imposed treatments" (p. 43). Thus, this correlation research sought to determine any statistically

noteworthy relationships or differences among variables of concern. Specifically, the main purpose of the study was to investigate the link between child neglect and abuse as well as involvement in prostitution in adolescents. Further, the study sought to determine whether a mediating effect of self-efficacy and self-concept existed in relation to childhood neglect and abuse participation in prostitution. I expected these links depend on childhood neglect, physical abuse, and sexual abuse.

I used secondary data from the National Longitudinal Study of Adolescent Health (Harris et al., 2009) and the measures for the variables were numerical, which allowed for the quantification of the results and for data analysis using statistical tests. The study variables were classified as independent variable, dependent variable, and mediator variable only. The outcome variables of this study were childhood neglect and abuse, as well as prostitution involvement. Self-efficacy and self-concept were considered as independent variables in rRQ2 and mediator variables to the association between childhood neglect and abuse and association in prostitution in rRQ2. As mediator variables, low self-efficacy and poor self-concept were viewed as intermediate between independent causal factors and a final outcome. Persons who have low self-efficacy and poor self-concept were considered to have low ratings in the data. Low self-efficacy is the extent to which every individual, regardless of their life chances as under own control in disparity to being ruled (Reyes, 2008). Poor self-concept is defined as how a person perceives oneself to be as a person (Reyes, 2008). I did not seek to ascertain causality between the variables in question, but rather to explore whether a relationship exists.

Appropriateness of Design

Correlation is the most appropriate design because the rationale of the research is in regards to the examination of possible links among known variables within an existing theoretical framework. Specifically, the intention of the quantitative correlational research is examining whether links exist among neglect and childhood abuse, poor self -concept, low self -efficacy, as well as, involvement in prostitution. Correlational design is a mode of quantitative research, which examines a problem as is. It does not consist of altering the research problem that is being studied and its aim is not to determine the cause and effect of relationships between variables (Leedy & Ormrod, 2010). Methodological experts (Corbin & Strauss, 2008; Creswell, 2012; Simon, 2006) agree that research questions or topics of investigation should guide the selection of a suitable method of inquiry. Simon (2006) suggests that, only the most suitable approach available should be selected when investigating a research problem. This principle guided the selection of an appropriate research design for this study.

A qualitative phenomenological design was considered as a potential methodology, however, was not selected because the approach was not suited for the rationale of the existing investigative study. A phenomenological approach would have been considered to be suitable if the objective of the research was gaining a comprehension of a social phenomenon by describing the lived experiences of individuals who have experienced the phenomenon (Creswell, 2012). Although, the phenomenological approach legitimizes the value of the lived experiences of all persons who have experienced a phenomenon such as childhood abuse and neglect, it does not however, answer the question as to whether or not relationships exist among variables.

A case study design also received consideration for the current study, but was not appropriate as a case study is more suitable for investigating a phenomenon within the structural constructs of a bounded system. Simon (2006) described a case study as being a form of descriptive research that focuses on researching real-life situations or problems that have restrictions the researcher must follow. Distinctively, the case study design is appropriate for research problems or issues where the researcher has cases with boundaries and whose purpose is to provide an understanding of the case or compare several cases together (Creswell, 2012). Case study research is also an appropriate approach for gaining an in-depth understanding of various dimensions of a specific property of a case. Simon (2006) noted case study research is often used when the questions are how and why, rather than what and how many. The questions delineated in the current study were oriented toward answering what the relationship between variables is (if any relationship exits) and not how or why the relationships exist.

The grounded theory approach received consideration, but also was not appropriate for this study. Corbin and Strauss (2008) defined grounded theory as the method that develops theory from the data that is being researched in a study. Grounded theory is an appropriate method of design when little data exist; dimensions of a phenomenon require further exploration; or existing theories are inadequate, biased, or incorrect (Corbin & Strauss, 2008). According to Simon (2006) grounded theory varies from other research methods because it allows the researcher to determine what theory accounts for the research problem that is being investigated. Thus, the common purpose of this qualitative approach is to expand theory beached in data in explaining specific dimension of a phenomenon (Creswell, 2012). The grounded theory approach would not

be best suited for this study as its main focus is not to examine the relationships that exist between variables, if a relationship exits.

Quantitative designs are oriented toward predicting, controlling, confirming, and testing hypotheses, whereas qualitative designs involved an attempt to understand, describe, and generate theories or hypotheses (Crewell, 2012; Simon, 2006). Although qualitative designs provide an opportunity to gain in-depth understanding of a phenomenon for which little empirical or theoretical knowledge exists (Creswell, 2013), time, geographic, and economic factors might constrain the number of study participants. In contrast, a quantitative approach, using an online survey, could reach a large geographically dispersed population and result in time and cost savings (Singleton & Straits, 2005). The target population for this study was geographically dispersed across the United States.

For these reasons, this study used a Likert scale to test the hypotheses and answer the research questions. Statistical analyses will be performed to measure the relationships between the variables and assess their significance. Simon (2006) noted that a correlational study is a suitable line of inquiry when the primary purpose is to "determine relationships between variables, and if a relationship exists, to determine a regression equation that could be used to make predictions about a population" (p. 43). Of the approaches considered, correlational design was the most appropriate methodology for this study

The research questions that will guide this proposed study are as follows:

RQ1: What is the association between childhood maltreatment (characterized by risk factors like abandonment at a young age, negative family environment, running away or substance abuse) and involvement in prostitution?

H_{01a}: There is no significant association between childhood maltreatment and engagement in prostitution.

H_{1a}: There is a significant association between childhood maltreatment and engagement in prostitution.

RQ2: How do problem behaviors such as self-concept and self-efficacy mediate the association between childhood maltreatment and engagement in prostitution in young adulthood?

H_{02}: Problem behaviors such as self-concept and self-efficacy do not intercede in the association between childhood maltreatment and engagement in prostitution in young adulthood?

H_2: Problem behaviors such as self- concept and self- efficacy intercede in the association between childhood maltreatment and engagement in prostitution in young adulthood

Operationalized Definitions

The aspects considered in the study were operationalized on the following basis: Childhood neglect and abuse is identified to be one of the dependent variables in this study. This will be operationalized based on secondary data accessible from the National Longitudinal Study of Adolescent Health Study (NLSAHS) considering the number of young adults abused as kids. This variable is identified as a continuous variable.

Involvement in prostitution is identified as a dependent variable in this study. This will be

operationalized as the crime type for which young adults have engaged in. This variable

is identified as a dichotomous variable.

Self-efficacy is identified as a continuous independent variable which determines the

number of young adults who had low self- efficacy during adolescence.

Self-efficacy is also identified as a mediator variable which determines the association

between childhood abuse and neglect and involvement in prostitution.

Self-concept is identified as a continuous independent variable which determines the

number of young adults who had poor self-concept during adolescence.

Self- concept is also identified as a mediator variable which determines the association

between childhood neglect and abuse as well as involvement in prostitution.

Population, Sample Size, and Sampling Procedure

The populations from which the sample was drawn are from a secondary data

source consisting of young adults who are from neglectful and abusive childhood settings

and that have been involved in prostitution as young adults. The study will not include

children that were exposed to other forms of violence aside from abuse and neglect. The

sample of young adults will include those that have data in the NLSAHS.

Due to the fact that when trying to determine an adequate sample size for multiple

regression analyses has the potential to yield misleading results, a power analysis will be

performed to determine an adequate sample size for the study (Cohen, 2013; J. Miles &

Shevlin, 2007). A power analysis requires (a) the significance level, (b) the number of

independent variables, (c) the effect size, and (d) the appropriate level of power. Miles

and Shevlin (2007) noted, when calculating the power analysis to determine s sample

size, because it is extremely complex, such an analysis is rarely calculated by hand. For this reason, a power examination utilizing G*Power 3.1 software will be conducted so as to determine the sample size needed for this study. This software allows for a calculation of the minimum sample size necessary for the types of statistical tests to be conducted (Faul, Erdfelder, Buchner, & Lang, 2009). When the calculation of the sample size in the study was taking place, three elements were taken into consideration. The first factor was the test power measuring the probability of rejecting a false null hypothesis (Lalor & McElvaney, 2010). For the rationale of the research, a power of eighty percent will be selected to adequately reject false null hypotheses (Lalor & McElvaney, 2010). A power of 80% ensures that the statistical analyses could provide valid conclusions regarding the total population, which provides 80% strength in terms of assessing the validity of the statistical tests to be conducted.

The other imperative element is the effect size that measures the strength of the association between various variables in the study conducted by Cohen (2013). Cohen (2013) categorized the effect size for different tests as small effect, medium effect and large effect. For the rationale of the study, a small effect size of $(r=.10)$ was selected because of the availability of resources. The set of data contains figures on 4,542 to 6,446 valid cases of participants. The final factor is the level of significance. The level of significance can be referred as the probability of declining a true null hypothesis and is usually defined as being equal to 5% (Miles, & Shevlin, 2007). A level of significance of 5% will be utilized.

The size of the sample depends on the mode of investigation conducted. The computation of the required sample size will consider using a correlation analysis. The

required number of participants for the regression analysis is 1,289 samples of data using 0.80 power with an alpha level of .05, small effect size (r=.10), and a confidence level of .95. It is necessary to gather at least 1,289 samples from the NLSAH to achieve 80% power for the statistical tests. If the collected samples have fewer than 1,289 data points, the strength of the analysis will decrease and the validity and the generalizability of the findings from the statistical tests will also decrease. Figure 1 provides an illustration of the sample size required for the aforementioned parameters.

In order to draw a sample for the present study, a method of purposive sampling will be employed. The purposeful sampling technique allows the researcher to choose only individuals who can be reached, surveyed, and tested randomly but within the specific targeted population that meets the criteria for inclusion (Coolican, 2014). This means that all data will be coming from young adults that have experienced child abuse and involvement in prostitution which are the inclusion criteria for this study. If necessary, screening of the data available on the NLSAH will be conducted so as to exclude samples that did not meet the inclusion criteria.

Instrumentation

This study did not involve creation or use of instruments such as surveys. The variables required for the analysis all came from secondary data of previously constructed datasets that were included in the NLSAH which was designed to investigate health and risk behaviors of adolescents. Data used in the study will be extracted using the process detailed in the NLSAH and then uploaded into SPSS. All data that will be used in the research study is public domain and permission was not needed to conduct the study. Secondary data are those data readily available in historical records, database, and

documents. Since the study variables are past historical data, it is the aim of this study to incorporate this variability.

Data Collection Procedures

Raw data was downloaded from the Institute of Social Research's Inter-university Consortium for Political and Social Research (ICPSR). The sample of adolescents will include those that have data in the NLSAH. The variables of interest in the proposed study will be extracted from two data sets. Specifically, the two data sets will be sorted by their case identification numbers and then merged. As the files are merged, the variables of interest will be retained for analysis and matched by their case identification numbers.

Data Analysis

SPSS statistical tool was used to run the statistical analyses involving the demographic information and correlation analysis. Data was entered into the statistical tool SPSS. The demographic information was analyzed to generate clear descriptions about the sample. Frequencies and percentages were calculated for nominal data. Descriptive statistics was conducted to summarize the study variables of self-concept, self-efficacy, childhood maltreatment, as well as involvement in prostitution in adolescents. Means values as well as standard deviations will be computed to get continuous data.

Point biserial correlation will investigate research question one/hypotheses 1a-1c. Point biserial correlation is the appropriate statistical test when examining the relationship between two variables when one variable is continuous and the other variable dichotomous. For H_{02}, self-efficacy will be a continuous variable ranging from 1-5. The

question in the secondary data set is as follows: *What topics did the respondent appear*

embarrassed about? Self Efficacy. Involvement in prostitution will be a dichotomous

variable (yes = 1, no = 0). For H_2, self-concept will be a continuous variable computed by

summing two Likert items. The question is: *In general, are you happy?* For H1c,

childhood abuse will be computed by summing the following four Likert items: (a) *By the*

time you began your 6th grade, how often had your parents or other adult care-givers slapped,

hit, or kicked you (b) *By the time you began your 6th grade, how often had your parents or*

other adult care-givers not taken care of your basic needs, such as keeping you clean or

providing food or clothing? (c) *By the time you began your 6th grade, how frequently did*

your parents or care-giver leave you home alone without supervision? (d) *By the time*

you began your 6th grade, how often had one of your parents or other adult care-givers

touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to

have sexual relations?

Research question 2, as well as, hypothesis 2 will be investigated with structural

equation modeling using AMOS 17.0. In research question 2 and hypothesis 2, the

mediating variables will be self- concept and self-efficacy. Structural Equation Modeling

(SEM) will be employed in testing a path model that will include all arbitrating variables,

as well as, controlling for gender and ethnicity /race. SEM is a confirmatory technique

which can determine if the representation is suitable or those that needed further

clarification, and is ideal for analyzing overall models with multiple dependent variables,

error terms, and mediating variables (Miles & Shevlin, 2007). The primary goal of SEM

is to determine a proposed causal process and/or model.

SEM was appropriate for this study because of this study's interest in linear

relationships between the childhood maltreatment, as well as, involvement in prostitution

during adolescence and also the impact of the mediating variables (self-efficacy and self-concept). By using SEM, amount of variance of the mediating impact of the mediating variables to the association between dependent and independent variables, and the reliability of each measured variables will be reported.

The SEM analysis covered the analysis of the (a) model fit statistics of CFI, TLI, RMSEA, Chi-Squared; (b) parameter estimates (STD Standardization); and (c) R-squares from the latent variables to investigate whether self-efficacy and self-concept mediates the association between childhood maltreatment and being involved in prostitution in adolescents or not. The Path diagram and the analysis of SEM will be built in AMOS software. For the model fit, the chi-square should be significant for the SEM model to have a good fit. The CFI and TLI indices should have value of $>.05$ indicating an excellent fit, .90 and above indicates good model fit, as well as, a root mean square error of approximation (RMSEA) of a value less than or equal to .05 is a close fit and $< .08$ is an adequate fit (Barrett, 2007).

The next analysis investigated the standardized regression weights (parameter estimates) to determine the mediating effect of self-efficacy and self-concept. The standardized parameter estimates and the p-value of significance of the weights will be investigated. Level of significance of 0.05 will be used in the analysis. Lastly, the r-square will be used to measure the effect sizes of the latent factors. This will be used to investigate the variances or the effects whether the latent factors were significant in the SEM model. Table 1 gives a review of the variables of interest, their location in the data sets, and the scales of measurement.

Table 1 Variables of Interest, Location in Data Set, Scales of Measurement, and

Questions

Variable	Location in Data Set	Scale of Measurement	Questions
Self-efficacy	H1IR22I - Wave I	Ordinal	What topics did the respondent appear embarrassed about? Self Efficacy
Self-concept	PA20- Wave I	Interval	In general, are you happy?
Childhood abuse	1. Child physical abuse- H3MA3- Wave III	Interval	By the time you began your 6th grade, how often had your parents or other adult care-givers slapped, hit, or kicked you?
	2. Sexual abuse- H3MA4- Wave III		By the time you began your 6th grade, how often had your parents or other adult care-givers not taken care of your basic needs, such as keeping you clean or providing food or clothing?
	3. Child neglect- H3MA2- Wave III		By the time you began your 6th grade, how often had one of your parents or other adult care-givers touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to have sexual relations?
Involvement in prostitution	H3SE18- Wave III	Nominal	In the past 12 months, how many times have you had sex with someone who paid you to do so?

Ethical Procedures

This study will be conducted in accordance with recognized ethical standards that

pertain to research with human subjects, including the protection of subject identities and

other confidential information to ensure the protection of human subjects (Sheehan,

2005). The researcher will complete the Institutional Review Board process for acquiring

formal permission to conduct the research. Since this study makes use of de-identified

archival records from the NLSAH, potential harm to participants has already been mitigated since the National Longitudinal Study (NLS) made the data on of young people's health available to the public. The researcher has no access to identifiers that may compromise anonymity and therefore minimization of potential harm to the adolescents is easily satisfied. Ethical assurances of confidentiality and subject's right to privacy will not be an issue. Informed consent will not be required since secondary data will be used. There will be no contact with any of the sample. The IRB process and acceptance of the terms of use of the database of the National Longitudinal Study will ensure the protection of data of adolescents. Only information drawn from that made publicly available in the database of the National Longitudinal Study will be collected and included in the study. The data will not reveal any other demographic data that could in any way compromise the confidentiality and safety of the adolescents.

The SPSS spreadsheet containing the study data will only be accessed by the researcher, or by persons deemed to have satisfied the criteria for data access, as outlined in the terms of use statement. Access to the file will require a login username and password. After the completion and publication of the research, should any information be found to directly identify the study respondents, it shall be removed immediately so the data can still be used for future research. The hard and paper duplicates of the de-identified information will be piled up in a locked file filing cabinet and soft copies will be password protected in a hard-drive desktop computer in the secured researcher's office. All hard-copied data and files will be shredded after three years. Electronic data will be systematically erased after three years.

Summary

Chapter 3 demonstrated the research study methodology, to examine whether early youth problem behaviors such as poor self-concept and low self-efficacy as probable mediators in the association of childhood maltreatment as well as neglect to the participation of individuals in prostitution during adolescence and the relationship of low self-efficacy and poor self-concept to childhood abuse and neglect. The following areas were discussed: population and sampling, instrumentation, operationalization of variables, data collection procedures, and data analysis. Correlation analysis and SEM were determined to be the best method to test the research questions. The subsequent chapter will present the outcomes of data analysis and Chapter 5 will discuss those findings with respect to relevant literature.

Chapter 4: Results

Introduction

The purpose of this chapter is to present the results of the data analysis. The data were

collected and then processed in response to the problems posed in Chapter 1 of this

dissertation. One essential goal drove the collection of the data and subsequent data

analysis. That goal was to contribute to the knowledge of the long-term implications of

childhood maltreatment, by providing a better understanding of the bridge between risky

family environments and mediating risk factors that lead to engaging in sex work. I

intended to add to this knowledge by examining whether two risk behaviors, low self-

efficacy and poor self-concept, mediated the relationship between childhood

maltreatment and involvement in prostitution during young adulthood amongst both men

and women. I used secondary data from the 2008 National Longitudinal Study of

Adolescent Health (NLSAH) as this data set provided the opportunity to study how social

environments and behaviors in adolescence are linked to health and achievement

outcomes during young adulthood. Data used in the study consisted of a sample of 4,882

participants and were extracted using the process detailed in the NLSAH and then

uploaded into SPSS. All data used in the research study were public domain and

permission was not needed to conduct the study.

Description of Sample

The National Longitudinal Study of Adolescent to Adult Health (Add Health), 1994–2008, was a longitudinal study of a nationally representative sample of adolescents in Grades 7–12 in the United States during the 1994–1995 school year. The Add Health cohort has been followed into young adulthood with four in-home interviews (also referred to as Waves I, II, III, and IV), the most recent in 2008. For the purpose of this study, only two waves were used, Waves I and II.

Wave I, Stage I, consisted of a stratified, random sample of all high schools in the United States. A school was eligible for the sample if it included an 11th grade and had a minimum enrollment of 30 students. A feeder school, or a school that sent graduates to the high school and that included a 7th grade, was also recruited from the community. In Wave I, Stage 2, an in-home sample of 27,000 adolescents both male and females was drawn consisting of a core sample from each community. In addition, parents were asked to complete a questionnaire about family and relationships. During Wave III, the in-home interview sample consists of Wave I respondents who could be located and re-interviewed 6 years later. Wave III also collected high school transcript release forms, as well as samples of urine and saliva.

Using SPSS, the data from Waves I and III were merged. The merged data set consisted of 4,882 cases, of which 48.4% ($n = 2,363$) were males and 51.6% ($n = 2,518$) were females. Regarding race, 45.1% ($n = 106$) were white; 28.1% ($n = 66$) were Black/African American; 11.9% ($n = 28$) were American Indian/Native American; 7.2% (n= 17) were Asian/Pacific Islander and; 7.7 (n=18) were other as presented in Table 1.

Table 1

Race: Single Category

	Race	*n*	%	Valid %
	White	106	2.2	45.1
	Black/African American	66	1.4	28.1
	American Indian/Native American	28	0.6	11.9
	Asian/Pacific Islander	17	0.3	7.2
	Other	18	0.4	7.7
	Total	235	4.8	100.0
Not	Answered	4,647	95.2	
Total		4,882	100.0	

Child Physical Abuse

Respondents were asked how often their parents or other adult caregivers slapped, hit, or kicked them by grade six. For 73.2% (*n* = 3,392) of respondents, this never happened to them. However, for 7.5% (*n* = 346) of respondents, it occurred one time, 5.2% (n = 241), it occurred two times, 6% (*n* = 280), it occurred 3-5 times, 2.3% (n =108), it occurred 6-10 times and for 5.7% (n = 266), it occurred more than 10 times. See Table 2.

Table 2

Times Hit/Kicked

Physical abuse	*n*	%	Valid %
One time	346	7.1	7.5
Two times	241	4.9	5.2
3–5 times	280	5.7	6.0
6–10 times	108	2.2	2.3
More than 10 times	266	5.4	5.7
This has never happened	3,392	69.5	73.2
Total	4,633	94.9	100.0
Not Answered	249	5.1	
Total	4,882	100.0	

Sexual Abuse

Participants were asked how often one of their parents or other adult caregivers had

touched them in a sexual way, forced them to touch him or her in a sexual way, or forced

them to have sexual relations by grade six. Approximately 95.7% (*n* = 4,477) of the

participants, this never happened. For 2.2% (*n* = 105), sexual abuse occurred one time;

.5% (*n*=22), sexual abuse occurred two times; .6% (*n*=29), sexual abuse occurred 3-5

times; .3% (*n*=15), sexual abuse occurred 6-10 times; and for .6% (*n*=29), sexual abuse

occurred more than 10 times as indicated in Table 3.

Table 3

Times Touched in Sexual Way

Sexual abuse		*n*	%	Valid %
	One time	105	2.2	2.2
	Two times	22	.5	.5
	3–5 times	29	.6	.6
	6–10 times	15	.3	.3
	More than 10 times	29	.6	.6
	This has never happened	4,477	91.7	95.7
	Total	4,677	95.8	100.0
Not	Answered	205	4.2	
Total		4,882	100.0	

Child Neglect

Respondents were asked how often their parents had or other adult caregivers neglected

their basic needs, such as keeping them clean or providing food or clothing by grade six.

For approximately 90% (*n* = 4157), this never happened. However, for 4.1% *(n* = 189),

this happened one time; 1.8% (*n*=82) this happened two times; 1.2% (*n*=58) this

happened 3-5 times; 0.8% (*n*=36) this happened 6-10 times; and for 2.7% (*n* = 125), this

occurred more than 10 times as indicated in Table 4.

Table 4

Basic Needs Neglected

Frequency of Neglect		n	%	Valid %
	One time	189	3.9	4.1
	Two times	82	1.7	1.8
	3-5 times	58	1.2	1.2
	6-10 times	36	0.7	0.8
	More than 10 times	125	2.6	2.7
	This has never happened	4,157	85.1	89.5
	Total	4,647	95.2	100.0
Not	Answered	235	4.8	
Total		4,882	100.0	

Prostitution

Respondents were asked, in the past 12 months, how many times had they been paid to have sex with someone. Of those who answered the question ($n = 130$), 53.1% ($n = 69$) indicated that they had never been paid for sex; 33.1% ($n = 43$) were paid 1-2 times; 10% ($n=13$) were paid 3-10 times; 0.8% ($n=1$) were paid 11-25 times; and 3.1% ($n = 4$) were paid 26 or more times. See Table 5.

Table 5

Frequency of Being Paid for Sex in Last 12 Months

Frequency of Payment		n	%	Valid %	Cumulative %
	None	69	1.4	53.1	53.1
	1 or 2 times	43	0.9	33.1	86.2
	3-10 times	13	0.3	10.0	96.2
	11-25 times	1	.0	0.8	96.9
	26 or more times	4	0.1	3.1	100.0
	Total	130	2.7	100.0	
Not	Answered	4,752	97.3		

| Total | 4,882 | 100.0 |

Self-Efficacy

For this study, self- efficacy was measured by whether or not respondents believed they had little control over things that happened to them. Of those who answered the question, 0.9% ($n = 43$) strongly agreed that they had little control over things that happened to them, 5.3% ($n = 256$) agreed; 12.6 (n=611) neither agree nor disagree; 62.6% (n=3,044) disagree; and 18.7% (n=910) strongly disagree. See Table 6

Table 6

Self-Efficacy

	Self-Efficacy	*n*	*%*	*Valid %*	*Cumulative %*
	Strongly agree	43	.9	0.9	0.9
	Agree	256	5.2	5.3	6.1
	Neither agree nor disagree	611	12.5	12.6	18.7
	Disagree	3,044	62.4	62.6	81.3
	Strongly disagree	910	18.6	18.7	100.0
	Total	4,864	99.6	100.0	
Not	Answered	18	0.4		
Total		4,882	100.0		

Self-Concept

For the study, self- concept was examined by whether or not participants were generally happy with who they were as self-concept is defined as how one thinks about themselves. Of those who answered the question, 96.5% ($n = 4,052$) indicated that they were happy, whereas 3.5% ($n = 147$) indicated that they were not happy. See Table 7.

Table 7

Happiness

	Self-Efficacy	*n*	*%*	*Valid %*
	No	147	3.0	3.5
	Yes	4,052	83.0	96.5
	Total	4,199	86.0	100.0
Not	Answered	683	14.0	
Total		4,882	100.0	

Table 8 provides a list of the variables, their location in the data sets, the corresponding questions and their scales of measurement. As presented in the table, there were seven variables of interest.

Table 8

Variables and Location in Data Sets, and Scales of Measurement

Variable	Location	Question/Statement	Scale of Measurement
Child Physical Abuse	DS: 12, Wave 3, H3MA3	How often had your parents or other adult care-givers slapped, hit, or kicked you?	Ordinal
Sexual Abuse	DS:12, Wave 3, H3MA4	How often had one of your parents or other adult care-givers touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to have sexual relations?	Ordinal
Neglect	DS12, Wave 3, H3MA2	How often had your parents or other adult care-givers not taken care of your basic needs, such as keeping you clean or providing food or clothing?	Ordinal
Prostitution	DS12, Wave 3,-H3SE18	In the past 12 months, how many times have you had sex with someone who paid you to do so?	Ordinal
Self-Efficacy	DS23, Wave IV, H4PE40	I have little control over the things that happen to me.	Ordinal
Self-Concept	DS1, Wave I,PA20	In general, are you happy?	Nominal

Descriptive Statistics

Childhood Maltreatment

Childhood maltreatment was a derivative variable. It was computed by first recoding the variables for child physical abuse, sexual abuse, and neglect so that higher values represented more abuse or neglect. Next, the items were summed to obtain a total score. Thus, scores for childhood maltreatment ranged from 0-15 ($M = 1.09$, $SD = 2.03$).

Research Questions and Hypotheses

Two research questions and two related hypotheses were formulated for investigation. They were as follows:

RQ1: What is the association between childhood maltreatment (characterized by physical abuse, sexual abuse, and neglect during childhood) and involvement in prostitution?

H_{01a}: There is no significant association between childhood maltreatment as defined by childhood physical abuse and engagement in prostitution.

H_{1a}: There is a significant association between childhood maltreatment as defined by childhood physical abuse and engagement in prostitution.

H_{01b}: There is no significant association between childhood maltreatment as defined by childhood sexual abuse and engagement in prostitution.

H_{1b}: There is a significant association between childhood maltreatment as defined by childhood sexual abuse and engagement in prostitution.

H_{01c}: There is no significant association between childhood maltreatment as defined by neglect during childhood and engagement in prostitution.

H_{1c}: There is a significant association between childhood maltreatment as defined by neglect during childhood and engagement in prostitution.

H_{01d}: There is no significant association between childhood maltreatment as defined by the cumulative incidences of physical abuse, sexual abuse, and neglect and engagement in prostitution.

H_{1d}: There is a significant association between childhood maltreatment as defined by the cumulative incidences of physical abuse, sexual abuse, and neglect and engagement in prostitution

RQ2: How do problem behaviors such as self-concept and self-efficacy mediate the association between childhood maltreatment and engagement in prostitution in young adulthood?

H_{02a}: Self-concept does not mediate the association between childhood maltreatment and engagement in prostitution in young adulthood.

H_{2a}: Self-concept mediates the association between childhood maltreatment and engagement in prostitution in young adulthood.

H_{02b}: Self-efficacy does not mediate the association between childhood maltreatment and engagement in prostitution in young adulthood.

H_{2b}: Self-efficacy mediates the association between childhood maltreatment and engagement in prostitution in young adulthood.

Research Question 1

RQ1: What is the association between childhood maltreatment (characterized by physical abuse, sexual abuse, and neglect during childhood) and involvement in prostitution?

Pearson *r*. Four relationships were tested; one for each aspect of childhood maltreatment and one for the computed variable of childhood maltreatment. There was no significant relationship between childhood maltreatment (as characterized by physical abuse) and prostitution, r (112) = -.083, p = .382, two-tails. There was no significant relationship between childhood maltreatment (as characterized by sexual abuse) and prostitution, r (112) = .004, p = .970, two-tails. There was no significant relationship between childhood maltreatment (as characterized by neglect) and prostitution, r (111) = -.093, p = .326, two-tails. However, when the responses to the questions for physical abuse, sexual abuse, and neglect were added together to compute a summary variable for childhood maltreatment, there was a significant, positive relationship between childhood maltreatment and prostitution, r(117) = .286, p = .002, two-tails. As childhood maltreatment increased, there was a corresponding increase in prostitution. The coefficient of determination (r^2) = .0818, which means that 8.18% of the variance in prostitution can be explained by childhood maltreatment.

Hypothesis 1

H_{01a} null hypothesis stated that there was no significant association between childhood maltreatment as defined by childhood physical abuse and engagement in prostitution. There was no significant relationship between childhood maltreatment (as characterized by physical abuse) and prostitution, r (112) = -.083, p = .382, two-tails. Therefore, H_{01a} was not rejected.

H_{1a} alternative hypothesis stated that there was a significant association between childhood maltreatment as defined by childhood physical abuse and engagement in prostitution. There was no significant relationship between childhood maltreatment (as

characterized by physical abuse) and prostitution, r (112) = -.083, p = .382, two-tails. Therefore, H_{1a} was not supported.

H_{01b} null hypothesis stated that there was no significant association between childhood maltreatment as defined by childhood sexual abuse and engagement in prostitution. There was no significant relationship between childhood maltreatment (as characterized by sexual abuse) and prostitution, r (112) = .004, p = .970, two-tails. Therefore, H_{01b} was not rejected.

H_{1b} alternative hypothesis stated that there was a significant association between childhood maltreatment as defined by childhood sexual abuse and engagement in prostitution. There was no significant relationship between childhood maltreatment (as characterized by sexual abuse) and prostitution, r (112) = .004, p = .970, two-tails. Therefore H_{1b} was not supported.

H_{01c} null hypothesis stated that there was no significant association between childhood maltreatment as defined by neglect during childhood and engagement in prostitution. There was no significant relationship between childhood maltreatment (as characterized by neglect) and prostitution, r (111) = -.093, p = .326, two-tails. Therefore, H_{01c} was not rejected.

H_{1c} alternative hypothesis stated that there was a significant association between childhood maltreatment as defined by neglect during childhood and engagement in prostitution. There was no significant relationship between childhood maltreatment (as characterized by neglect) and prostitution, r (111) = -.093, p = .326, two-tails. Therefore, H_{1c} was not supported.

H_{01d} null hypothesis stated that there was no significant association between childhood maltreatment as defined by the cumulative incidences of physical abuse, sexual abuse, and neglect and engagement in prostitution. There was a significant, positive relationship between childhood maltreatment and prostitution, $r(117) = .286$, $p = .002$, two-tails. Therefore, H_{01d} was rejected.

H_{1d} alternative hypothesis stated that there was no significant association between childhood maltreatment as defined by the cumulative incidences of physical abuse, sexual abuse, and neglect and engagement in prostitution. There was a significant, positive relationship between childhood maltreatment and prostitution, $r(117) = .286$, $p = .002$, two-tails. Therefore, H_1 was supported.

Data summary for research question 1.

Data summary

Hypothesis	Statistical Test	Significance	Outcome
H_{1a}: There is a significant association between childhood maltreatment as defined by childhood physical abuse and engagement in prostitution.	Pearson r	$p = .382$	Not Supported
H_{1b}: There is a significant association between childhood maltreatment as defined by childhood sexual abuse and engagement in prostitution.	Pearson r	$p = .970$	Not Supported
H_{1c}: There is a significant association between childhood maltreatment as defined by neglect during childhood and engagement in prostitution.	Pearson r	$p = .326$	Not Supported
H_{1d}: There is a significant association between childhood maltreatment as defined by the cumulative incidences of physical abuse, sexual abuse, and neglect and engagement in prostitution	Pearson r	$p = .002$	Supported

Research Question Two

RQ2: How do problem behaviors such as self-concept and self-efficacy mediate the association between childhood maltreatment and engagement in prostitution in young adulthood?

Regression Analysis Using Structural Equation Modeling with AMOS 17.0.

Gender and race was added to the model as control variables. According to Baron and Kenny (1986), four steps are involved in establishing mediation.

Step 1

Using regression analysis, show that the causal variable is correlated with the outcome. The causal variable is childhood maltreatment. The outcome variable is prostitution. Childhood maltreatment is a significant predictor of prostitution, according to the path analysis, $p = .014$. The model explains 70% of the variance in prostitution. This step establishes that there is an effect that may be mediated. The path diagram is presented in Figure 2.
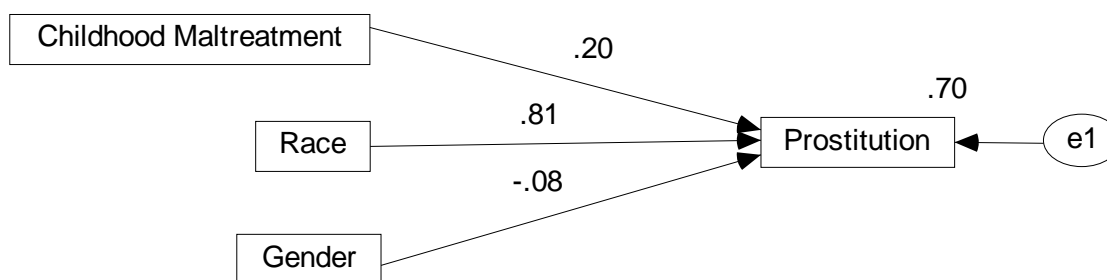

Figure 2. Childhood Maltreatment and Prostitution

Race was also significantly related to prostitution, $p < .001$. Based on the variable codings, participants who engaged in prostitution were more likely to be white than non-white. Gender was not significantly related to prostitution, $p = .301$. Regression weights and significant levels for Step 1 are presented in Table 9.

Table 9

Regression Weights for Step 1

			Estimate	S.E.	C.R.	*P*
Prostitution	<---	Childhood Maltreatment	.089	.036	2.454	.014
Prostitution	<---	Gender	-.147	.142	-1.034	.301
Prostitution	<---	Race	1.420	.183	7.744	***

Note. Race: 1 = White, 0 = Non-White; Gender: 1= Female, 0 = Male; ***p* < .001.

Step 2

Using regression, show that the causal variable is correlated with the mediator. This step

involves treating the mediator as though it were the outcome variable. The mediator is

self-concept, which was used as the outcome variable for step 2. Childhood maltreatment

was significantly, and negatively related to positive self-concept *p* = .029. However,

childhood maltreatment was not significantly related to self-efficacy, *p* = .087. See Figure
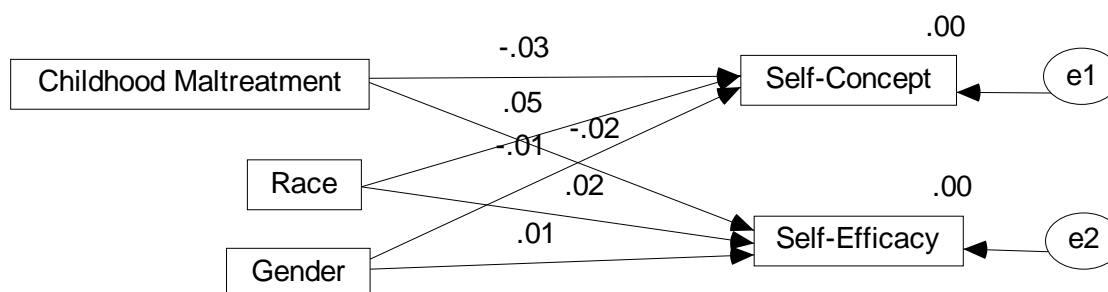
3.

Figure 3. Childhood Maltreatment, Self-Concept, and Self-Efficacy

Race was not significantly related to self-concept, *p* = .466. Race was not significantly

related to self-efficacy, *p* = .704. Gender was not significantly related to self-concept, *p* =

.592. Gender was not significantly related to self-efficacy, *p* = .392.

Regression coefficients and significance levels for Step 2 are presented in Table 10.

Table 10

Regression Weights for Step 2

			Estimate	S.E.	C.R.	*P*
Self-Concept	<---	Childhood Maltreatment	-.003	.001	-2.181	.029

			Estimate	S.E.	C.R.	P
Self-Efficacy	<---	Childhood Maltreatment	-.009	.006	-1.710	.087
Self-Concept	<---	Race	.018	.025	.728	.466
Self-Efficacy	<---	Race	.038	.099	.381	.704
Self-Concept	<---	Gender	-.003	.006	-.535	.592
Self-Efficacy	<---	Gender	.019	.022	.856	.392

Note. Race: 1 = White, 0 = Non-White; Gender: 1= Female, 0 = Male.

Step 3

Using multiple regression, show that the mediator affects the outcome variable by using

both the causal and mediator variables as predictor variables for the outcome variable.

The outcome variable is prostitution. The predictor variables are childhood maltreatment,

self-concept, and self-efficacy. In this step, the causal variable is controlled in

establishing the effect of the mediator on the outcome. The model explains 85% of the

variance in prostitution. However, self-concept was not significantly related to

prostitution, $p = .401$. Childhood maltreatment was significantly related to prostitution, p

$= .018$. Childhood maltreatment was significantly and negatively related to self-concept,

$p =.032$. Self-efficacy was not significantly related to prostitution, $p = .178$. The

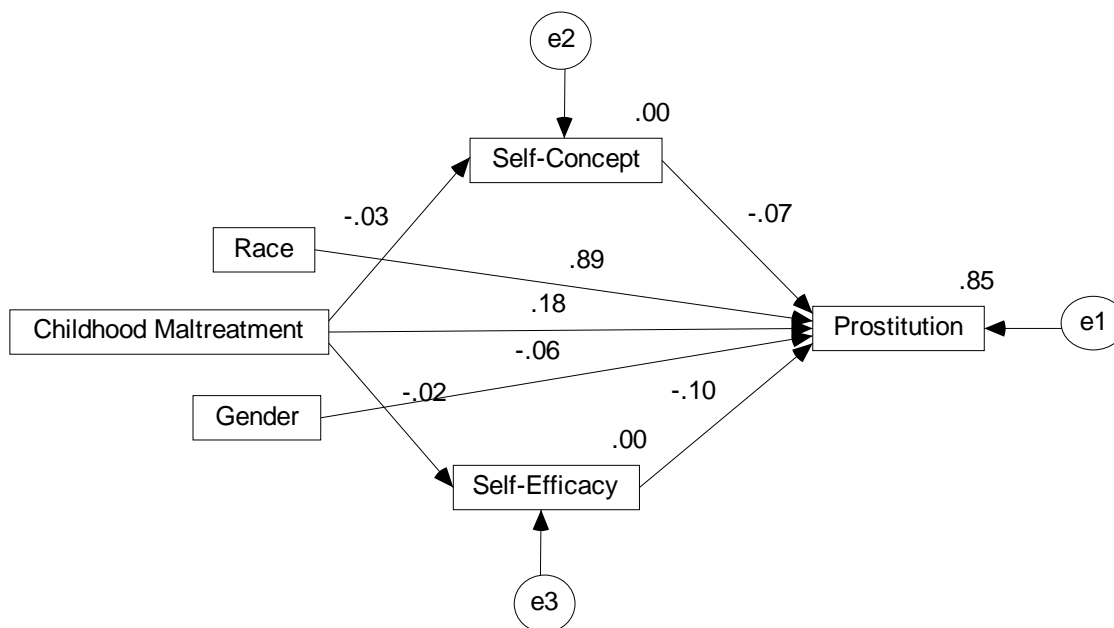mediators did not affect the outcome variable. See Figure 4.

Figure 4. Childhood Maltreatment, Self-Concept, Self-Efficacy, and Prostitution

Step 4

To establish that self-concept and self-efficacy completely mediate the relationship

between childhood maltreatment and prostitution, the effect of childhood maltreatment

on prostitution, controlling for self-concept and self-efficacy should be zero. Steps 3 and

4 are estimated in the same equation. The essential steps in establishing mediation are

steps 2 and 3. Since self-concept was not related to prostitution, it did not mediate the

relationship between childhood maltreatment and prostitution. Since self-efficacy was

related to prostitution, it did not mediate the relationship between childhood maltreatment

and prostitution. Regression coefficients are presented in Table 11.

Table 11

Regression Weights for Steps 3 and 4

	Estimate	S.E.	C.R.	*P*

			Estimate	S.E.	C.R.	*P*
Self-Efficacy	<---	Childhood Maltreatment	-.009	.006	-1.703	.089
Self-Concept	<---	Childhood Maltreatment	-.003	.001	-2.139	.032
Prostitution	<---	Self-Concept	-.320	.381	-.840	.401
Prostitution	<---	Race	1.544	.130	11.915	***
Prostitution	<---	Childhood Maltreatment	.078	.033	2.366	.018
Prostitution	<---	Gender	-.105	.130	-.806	.420
Prostitution	<---	Self-Efficacy	-.114	.084	-1.347	.178

Note. Race: 1 = White, 0 = Non-White; Gender: 1= Female, 0 = Male; ***$p < .001$.

Hypothesis Two

H_{02a} stated that self-concept does not mediate the association between childhood maltreatment and engagement in prostitution in young adulthood. Self-concept was not significantly related to prostitution, $p = .401$. Therefore, H_{02a} was not rejected.

H_{02a} stated that self-concept mediates the association between childhood maltreatment and engagement in prostitution in young adulthood. Self-concept was not significantly related to prostitution, $p = .401$. Therefore, H_{02a} was not supported.

H_{02b} stated that self-efficacy does not mediate the association between childhood maltreatment and engagement in prostitution in young adulthood. Self-efficacy was not significantly related to prostitution, $p = .178$. Therefore, H_{02b} was not rejected.

H_{2b} stated that self-efficacy mediates the association between childhood maltreatment and engagement in prostitution in young adulthood. Self-efficacy was not significantly related to prostitution, $p = .178$. Therefore, H_{2b} was not supported. Table 12 provides a data summary for research question 2.

Table 12

Data summary

Hypothesis	Statistical Test	Significance	Outcome
H_{2a}: Self-concept mediates the association between childhood maltreatment and engagement in prostitution in young adulthood.	Structural Equation Modeling	$p = .401$	Not Supported
H_{2b}: Self-efficacy mediates the association between childhood maltreatment and engagement in prostitution in young adulthood.	Structural Equation Modeling	$p = .178$	Not Supported

Conclusions

Two primary research questions and two primary related hypotheses were originated for investigation. The outcome of the study was mixed. There was a significant, positive relationship between childhood maltreatment and prostitution. As childhood maltreatment increased, there was a corresponding increase in prostitution.

Four steps are involved in establishing mediation. Self-efficacy was tested as a mediator between childhood maltreatment and prostitution while controlling for gender and race. Childhood maltreatment was not a significant predictor of self-efficacy; and self-efficacy was not significantly related to prostitution. Therefore, self-efficacy did not mediate the relationship between childhood maltreatment and prostitution.

Self-concept was also tested as a mediator between childhood maltreatment and prostitution. Childhood maltreatment was a significant, negative predictor of positive self-concept. However, it was determined that self-concept did not mediate the relationship between childhood maltreatment and prostitution because the relationship between self-concept and prostitution was not statistically significant. Race was

significantly and positively related to prostitution. Those who engaged in prostitution were more likely to be white young adults than non-white young adults. Implications of these findings will be discussed in Chapter Five.

Chapter 5: Discussions, Conclusions, and Recommendations

The purpose of this quantitative study was to evaluate early youth problem behaviors such as poor self-concept and reduced self-efficacy as possible mediators in the association between childhood abuse/neglect and participation in prostitution during young adulthood. The study utilized secondary data from the National Longitudinal Study of Adolescent Health (NLSAH), as this data set provided the opportunity to study how social environments and behaviors in adolescence are linked to health and achievement outcomes during young adulthood (Harris, Halpern, Whitsel, Hussey, Tabor, Entzel, & Udry, 2009).

A total of 4,882 cases were examined comprising of men and women of different races. SPSS was utilized to examine the relationship between key variables. Point biserial correlation was used to model the relationship posed by research question one: What is the association between childhood maltreatment (characterized by risk factors such as abandonment at a young age, negative family environment, running away or substance abuse) and involvement in prostitution? Alternatively, Structural Equation Modeling (SEM) was employed to address research question two: How do problem behaviors such as poor self-concept and low self-efficacy mediate the association between childhood maltreatment and engagement in prostitution in young adulthood?

Accordingly, the summary of findings was presented in this chapter. Discussions of the findings, conclusions of the study, and clinical implications were also discussed. In addition, the limitation and recommendations for future studies were also tackled. Finally, the chapter was concluded by a summary of the key points discussed.

Summary of Findings

All data were collected from young adults (age bracket of 18 to 26 years) that have experienced child abuse and involvement in prostitution which are the inclusion criteria for this study. Of the 4,882 cases, 48.4% (n = 2,363) were males and 51.6% (n = 2,518) were females. In terms of race variable, 45.1% (n = 106) were white; 28.1% (n = 66) were Black/African American; 11.9% (n = 28) were American Indian/Native American, 7. 2% (n = 17) were Asian/Pacific Islander, 7.7% (n = 18) were participants who chose other considered themselves none of the above races.

The dependent variables measured in this study are the following: child abuse, child neglect, and prostitution. Child abuse was categorized into two types: child physical abuse and sexual abuse. For the child physical abuse variable, 73.2% (n = 3,392) of respondents reported that there were no instances that their parents or other adult care-givers slapped, hit, or kicked them by grade six. Moreover, 7.5% (n = 346) of respondents reported that it occurred one time while 6% (n = 280) reported that it occurred 3-5 times. For sexual abuse, 96% (n = 4,477) of the respondents reported that there were no instances that one of their parents or other adult care-givers had touched them in a sexual way, forced them to touch him or her in a sexual way, or forced them to have sexual relations by grade six. However, 2.2% (n = 105) of the respondents reported that sexual abuse occurred one time. For child neglect variable, approximately 90% (n = 4,157) of the respondents reported that there were no instances that their parents or other adult care-givers not taken care of their basic needs, such as keeping them clean or providing food or clothing by grade six. However, for 4.1% (n = 189), this happened one time while 2.7% (n = 125) reported that this occurred more than 10 times.

For the engagement to prostitution variable, respondents were asked if in the past 12 months, how many times they had been paid to have sex with someone. Of those who answered the question ($n = 130$), 53.1% ($n = 69$) indicated that they had never been paid for sex; 33.1% ($n = 43$) were paid 1-2 times and 3.1% ($n = 4$) were paid 26 or more times. Self-efficacy and self-concept are independent variables for addressing question number one, but are considered as mediator variables, which determine the association between childhood abuse and neglect and involvement in prostitution. For this study, self- efficacy was measured by the question as to whether or not respondents believed they had little control over things that happened to them. Of those who answered the question, 6.1% ($n = 299$) agreed or strongly agreed that they had little control over things that happened to them, 12.6% ($n = 611$) neither agreed nor disagreed and 81.3 % ($n = 3,954$) either disagreed or disagreed strongly

For this study, the main question that was used to examine self-concept was whether or not participants were generally happy with who they were as self-concept is defined as how one thinks about themselves (Reyes, 2008). Of those who answered the question, 96.5% ($n = 4,052$) indicated that they were happy, whereas 3.5% ($n = 147$) indicated that they were not happy. It is also essential to note that childhood maltreatment was a derivative variable. It was computed by first recoding the variables for child physical abuse, sexual abuse, and neglect so that higher values represented more abuse or neglect. Next, the items were summed to obtain a total score. Thus, scores for childhood maltreatment ranged from 0-15 ($M = 1.09$, $SD = 2.03$).

To determine the association between childhood maltreatment and engagement to prostitution, Pearson r was used. Rejecting the H_{01}, it was found that there was a

significant, positive relationship between childhood maltreatment and prostitution, r

$(117) = .286$, $p = .002$, two-tails. This means that as childhood maltreatment increases,

there was a corresponding increase in prostitution. The coefficient of determination $(r^2) =$

.082, which means that 8.18% of the variance in prostitution can be explained by

childhood maltreatment. On the other hand, in order to determine how poor self-concept

and low self-efficacy mediate the relationship between childhood maltreatment and

prostitution, structural equation modeling with AMOS 17.0 was utilized. Gender and race

was added to the model as control variables.

Using regression analysis, the causal variable is correlated with the outcome. The

causal variable is childhood maltreatment. The outcome variable is prostitution.

Childhood maltreatment is a significant predictor of prostitution, according to the path

analysis, $p = .014$. Race was also significantly related to prostitution, $p < .001$. Based on

the variable coding, participants who engaged in prostitution were more likely to be white

than non-white. Gender was not significantly related to prostitution, $p = .301$.

Accordingly, the mediator variables, self-concept and self-efficacy, was also

considered as the outcome variables. Childhood maltreatment was significantly, and

negatively related to positive self-concept $p = .029$. However, childhood maltreatment

was not significantly related to self-efficacy, $p = .087$.Race was not significantly related

to self-concept, $p = .466$. Race was not significantly related to self-efficacy, $p = .704$.

Gender was not significantly related to self-concept, $p = .592$. Gender was not

significantly related to self-efficacy, $p = .392$.

Moreover, it was also found that self-concept was not significantly related to

prostitution, $p = .401$. Childhood maltreatment was significantly related to prostitution, p

= .018. Childhood maltreatment was significantly and negatively related to self-concept, p =.032. Self-efficacy was not significantly related to prostitution, p = .178. Thus, since self-concept was not related to prostitution, it did not mediate the relationship between childhood maltreatment and prostitution. Since self-efficacy was not related to prostitution, it did not mediate the relationship between childhood maltreatment and prostitution.

Discussion of Findings

As indicated in the results, it was found that most of the participants reported that there were no instances that their parent or other adult care-givers abused them physically and sexually. Moreover, a majority of the participants reported that there were no instances that their parent or other adult care-givers neglected them. This result is not aligned with the findings of previous literature (Sedlak et al., 2010; U.S. Department of Health and Human Services, 2011). According to the U.S. Department of Health and Human Services (2011), childhood neglect is considered the most prevalent form of child mistreatment in the United States. About 75 % of the estimated 695,000 victims of child cruelty suffered neglect (U.S. Department of Health and Human Services, 2011). Moreover, neglect counted for 30% of maltreatment fatalities (U.S. Department of Health and Human Services, 2011). Specifically, incidence of neglect includes failure of parents or guardians to provide their children with basic necessities, such as food, clothes, and a home (U.S. Department of Health and Human Services, 2011).

On the other hand, physical abuse was considered the second most predominant form of child maltreatment in America (Sedlak et al., 2010). In 2010, more than 15% of all maltreatment investigations were because of suspicion of physical abuse (U.S.

Department of Health and Human Services, 2011). These findings are in opposition to the results of the current study about physical abuse. Based on the secondary data from the NLSAH utilized in this study, majority of the participants reported that their parents or other adult care-givers physically abused them.

Accordingly, as opposed to the results of the current study, sexual abuse among children was prevalent. In 2010, sexual abuse ranked third most prevalent children mistreatment in America (U.S. Department of Health and Human Services, 2011). Specifically, it was found that approximately 5% of the boy's populace in the U.S. and 10% of girls suffer penetrative sexual molestation during childhood, while three times of these respective proportions suffer other forms of sexual mistreatment (U.S. Department of Health and Human Services, 2011).

Since the previously conducted research about child abuse, child neglect and sexual abuse used primary data, utilizing secondary data from the NLSAH may have an impact to the current findings. According to Johnson and Nelson (2013), the uses of secondary data are limited to the scope of the source of data. Thus, the validity of the results generated from the current research may be put at risk because of this data gathering methodology. Therefore, the misalignment of the current data (generated from secondary source) and the data from previous literature (generated from primary data source) can be addressed by this limitation.

Despite these findings, it was then found that there was a significant, positive relationship between childhood maltreatment and prostitution. This finding is supported by the study of Currie and Tekin (2012). According to Currie and Tekin (2012), childhood abuse has been found to be linked to a heightened likelihood of venturing into

prostitution. Moreover, the study conducted by Clarke et al. (2012) asserted that incidents of childhood maltreatment and rejection were widely reported in the backgrounds of women involved in prostitution. Another study conducted in Korea found that about 76% of study participants who were involved in prostitution reported to have a past experience of sexual abuse (Choi, Klein, Shin, & Lee, 2009). It was also found that these participants consequently suffered posttraumatic stress disorders which extensively diminished their self-worth and efficacy (Choi et al., 2009). Furthermore, the study of Tsutsumi, Izutsu, and Matsumoto (2011) found that a history of physical and sexual abuse was significantly linked to having numerous sex partners and engaging in transactional sex.

Roe-Sepowitz, Hickle, Loubert and Egan (2011) added that more than 50% of the participants of their study reported to have experienced physical mistreatment and childhood sexual abuse. Klein, Elifson and Sterk (2007) posited that rejection of a child at a tender age, or subjection to emotional abuse is a significant risk factor for young people to participate in prostitution or get involved with multiple sexual partners while searching for validation and love that was not availed during childhood. Furthermore, it was also concluded by Simmons (2000) that females that had practiced prostitution had a high likelihood of having been molested physically, emotionally and sexually as children, as compared to women who had not been mistreated as youngsters.

Another major finding in this study is that poor self-concept as well as low self-efficacy has no significant effect on the tendency of the child to get involved in prostitution. However, it was found in the regression analysis that childhood maltreatment was significantly and negatively related to self-concept. This finding is supported by the study conducted by Zahn, Agnew, Fishbein, Miller, Winn, Dakoff &

Chesney-Lind (2010). Zahn et al. (2010) highlighted the importance of family in

developing self-concept. Because abusing a child presumably is far from supporting a

child, child maltreatment would hinder the development of an effective sense of self.

While self-efficacy was considered constant in this study, it was found by Ghimire et al.

(2011) that women who get involved in prostitution have low self-efficacy. Furthermore,

based on Ecodevelopmental theory, taking part in prostitution is as a result of different

developmental factors like abuse or neglect by parents, as well as, situational aspects, like

unemployment or lack of shelter (Turner, Finkelhor, & Ormrod, 2007; Wilson & Widom,

2010).

The current research is guided by eco-developmental theory. This theory

explained that involvement in prostitution involves dynamic interlinked processes

between family, peers, biology, neighborhood, school, and the greater socio-cultural

setting (Wilson &Widom, 2010). As reflected in the findings of existing literature, the

family is considered closest hence the most influential element as he or she develops.

Moreover, family also has a direct and highly significant part to play in molding a child's

development process, in addition to affecting other developmental social aspects, like

school, self-concept as well as the group of friends with whom the child interacts.

Essentially, any deviance of the familial structure, therefore contributes extensively to the

adoption of equally unusual behavior on the child's part (Wilson &Widom, 2010).

The contribution of the current study into the body of knowledge is the

insignificant effect of poor self-concept and low self-efficacy to the relationship between

childhood maltreatment and prostitution. This finding can further contribute to theory

development by supporting the claim that while childhood maltreatment increases the

chances of engaging in prostitution, personality variables such as self-concept and self-efficacy do not have any effect on those chances. Given this, it can be inferred that personal factors have an insignificant impact on engagement in prostitution. This conclusion does not align with the theoretical framework that guided this study, namely, Ecodevelopmental theory. Thus, it may be the case that other factors are affecting or mediating the relationship.

Conclusions

It can be concluded with these findings that physical abuse, sexual abuse and childhood neglect are not prevalent among children based on the secondary data from the NLSAH. However, it was also found that the link between childhood maltreatment and involvement to prostitution has been established in the past studies (Clarke et al., 2012; Choi et al., 2009; Currie &Tekin, 2012; Ghimire et al., 2011; Tsutsumi, Izutsu, & Matsumoto, 2011). It was found that childhood maltreatment can influence the tendency of a child to get involved to prostitution later in life (Currie &Tekin, 2012). These claims were supported by the finding of the current study about the significant relationship between childhood maltreatment and involvement to prostitution. This finding resulted in the acceptance of the null hypothesis: There is a significant association between childhood maltreatment and engagement in prostitution. Therefore, this finding led to the rejection of the alternative hypothesis: There is no significant association between childhood maltreatment and engagement in prostitution.

Another significant conclusion established in this study is the effect of mediator variables: self-concept and self-efficacy. It was initially hypothesized that problem behaviors such as poor self- concept and low self-efficacy mediate in the association

between childhood maltreatment and engagement in prostitution in young adulthood. However, it was found that both poor self-concept and low self-efficacy have no significant effect on the relationship between childhood maltreatment and involvement to prostitution. Thus, this finding led to the rejection of the null hypothesis and acceptance of the alternative hypothesis: Problem behaviors such as poor self-concept and low self-efficacy do not intercede in the association between childhood maltreatment and engagement in prostitution in young adulthood.

Implications

The primary implication of this proposed study is to bring about a positive social change to this complex problem that will not only help in the development of effective prevention programs, but will reduce risk-taking behaviors, thereby reducing social and health problems, such as involvement in prostitution, later in life. Moreover, the findings of the current study may influence individual behavior by influencing policy makers to develop programs that focus on self- efficacy and self-concept.

Another implication to social change is that at the community level, the findings of the current study may enhance the community's knowledge regarding the long-term effects of child maltreatment by providing evidence that victims of abuse are at risk for developing problem behaviors such as low self- efficacy and poor self- concept and that these behaviors may mediate the pathway to involvement in prostitution later on in young adulthood. Furthermore, the findings of the current study may have implications to practice in policy making. More specifically, at this level the proposed study will add to a growing literature that indicates the need for public policy in order to support the creation of early prevention programs with children who are victims of abuse. In relation to this,

policy makers may have the knowledge about the effect of childhood maltreatment to future engagement to prostitution.

In terms of the changes, the findings may contribute to the awareness of educators about the effect of childhood maltreatment and how negative consequences may affect their perception towards how they handle situations in the classroom. Moreover, educators may inform parents on how maltreatment of the child affects their future behavior. Also, the findings of the current study may affect medical practitioners taking care of the population being studied. Through these findings, medical practitioners will have better an understanding about the vulnerability of their patients, which may lead to better care. Furthermore, these findings may have an implication for research; other scholars may conduct future research regarding how self-concept and self-efficacy influences engagement in prostitution in various contexts. In this manner, better understanding on the impact of childhood experiences to relationship in adulthood may be generated.

Limitations

There are several limitations in this study. Initially, the current study does not evaluate all of the socio-ecological contexts capable of contributing to the risk of child abuse and abandonment and victims' engagement in prostitution. A second limitation of this study was in the nature of its design. Correlational research involves a search to identify and measure relationships among variables and lacks the necessary criteria for making causal inferences. Reyes (2008) cautioned that when there is a correlation between two variables, such a correlation must not be misunderstood to mean that one of

the variables caused the other one. Finally, this study is examining youth problem behaviors that are reported by participants who are in young adulthood only.

Recommendations

The researcher of the current study recommended future studies to modify the research methodology in order to establish more concrete conclusions about the influence of self-concept and self-efficacy in mediating in the relationship between childhood maltreatment and involvement in prostitution. Moreover, it is also recommended by the researcher that future studies utilize a mixed research design consisting of qualitative and quantitative methodology in order to dig deeper on the experiences of the participants. Specifically, the researcher recommends future studies to replicate the current study using a phenomenological research design. Using face-to-face interviews as opposed to secondary data will enable future studies to have deeper knowledge about the perceptions of participants about the impact of self-concept and self-efficacy on the link between childhood maltreatment and involvement to prostitution. Furthermore, widening the scope of the research is recommended by the researcher. Since the sample of the study focused on men and women, inclusion of (Lesbian, Gay, Bisexual, Transgender, Queer) LGBTQ community to the sample is recommended.

Summary

In this chapter, a summary of findings of the current study were discussed. Also, the alignment of the findings with the existing body of literature is discussed in this chapter. Through careful analysis, it was found that childhood maltreatment is linked to involvement to prostitution. However, the significant mediation effect of poor self-concept and low self-efficacy was not established. It was found that the poor self-concept

as well as the low self-efficacy of respondents does not affect their involvement in prostitution later in life.

These findings are, in general, not aligned with the existing literature. Essentially, the primary implication of the current study is to bring about positive social change that can lead to the development of effective prevention programs on reducing social and health problems, such as involvement in prostitution later in life. Moreover, it was revealed by the researcher that the nature of the design is one of the limitations of the current study. With this in mind, it was recommended by the researcher that the research methodology be modified in order to establish more concrete conclusions about the influence of poor self-concept and low self-efficacy in mediating the relationship between childhood maltreatment and involvement in prostitution.

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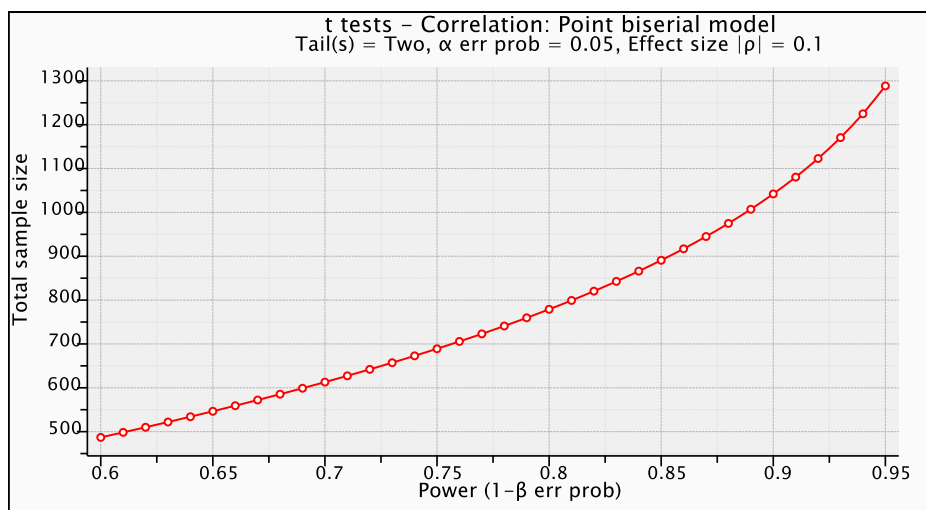
Appendix A

G*Power Sample Size Computation

Figure 1. Power analysis.