

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Sociology Theses, Dissertations, & Student
Research

Sociology, Department of

5-2015

A Model for Understanding Structure Versus Agency in the Participation of Minors in the Commercial Sex Market

Courtney Thrash

University of Nebraska-Lincoln, courtney.thrash15@gmail.com

Follow this and additional works at: <http://digitalcommons.unl.edu/sociologydiss>



Part of the [Criminology Commons](#), and the [Social Control, Law, Crime, and Deviance Commons](#)

Thrash, Courtney, "A Model for Understanding Structure Versus Agency in the Participation of Minors in the Commercial Sex Market" (2015). *Sociology Theses, Dissertations, & Student Research*. 35.

<http://digitalcommons.unl.edu/sociologydiss/35>

This Article is brought to you for free and open access by the Sociology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Sociology Theses, Dissertations, & Student Research by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

A MODEL FOR UNDERSTANDING STRUCTURE VERSUS AGENCY IN THE
PARTICIPATION OF MINORS IN THE COMMERCIAL SEX MARKET

by

Courtney Thrash

A THESIS

Presented to the Faculty of
The Graduate College at the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Master of Arts

Major: Sociology

Under the Supervision of Professor Kirk Dombrowski

University of Nebraska

May, 2015

A MODEL FOR UNDERSTANDING STRUCTURE VERSUS AGENCY IN THE
PARTICIPATION OF MINORS IN THE COMMERCIAL SEX MARKET

Courtney Thrash, M.A.

University of Nebraska, 2015

Advisor: Kirk Dombrowski

In 2000, the Trafficking Victims Protection Act defined any sex worker under the age of eighteen as a victim of sex trafficking and exploitation, while requiring evidence of coercion for those eighteen and over for the same charge. This definition makes explicit a common conception concerning CSEC, namely, that their status as participants in the sex economy rests upon a lack of personal and legal agency. Research on female sex workers often focuses on their victimization, such as childhood sexual abuse and neglect.

Conversely, research on male sex workers often ignores their possible victimization and instead emphasizes their drug use, sexual orientation, and HIV/AIDS status and/or risk.

Where no method for measuring (relative) agency or constraint has been proposed for this population, rigorous means for comparing or evaluating differences between the agency/constraint of male versus female CSEC remains largely speculative. This analysis offers an attempt at measuring (relative) agency and constraint among a sample of underage sex workers in New York City. Findings indicate that underage male and female sex workers experience similar levels of agency and constraint. Instead, other characteristics or circumstances, such as street status and drug use, are better indicators of differences in agency and constraint.

TABLE OF CONTENTS

Chapter 1: Introduction.....	5
Chapter 2: Background and Significance	7
Chapter 3: Methods.....	18
Chapter 4: Results.....	23
Chapter 5: Discussion and Conclusion	27
References.....	33
Appendix A.....	36

LIST OF MULTIMEDIA OBJECTS

Figure A1: Time Involved in Sex Work by Gender	36
Table A1: Explanation of Polya Negative Binomial Distribution Parameters	37
Table A2: Equations for Measuring Agency and Constraint.....	38
Figure A2: Analysis Routine	39
Table A3: Descriptive Statistics.....	40
Table A4: Curve Fitting Results	41
Table A5: Comparison Results	42
Table A6: Descriptive Statistics for Additional Analyses	43
Table A7: Curve Fitting Results for Additional Analyses.....	44
Table A8: Comparison Results for Additional Analyses.....	45

The participation of minors in the sex economy, sex trafficking, and the commercial sexual exploitation of children have received considerable attention from both lawmakers and the media. In 2000, the Trafficking Victims Protection Act (TVPA) defined any sex worker under the age of eighteen as a victim of sex trafficking and exploitation, while requiring evidence of coercion for those eighteen and over for the same charge (U.S. Department of State, 2000). This definition makes explicit a common conception concerning CSEC, namely, that their status as participants in the sex economy rests upon a lack of personal and legal agency.

Most research concerning sex workers in the United States centers upon females and their exploitation and/or risk factors for becoming involved in prostitution (Greene, Ennett, and Ringwalt, 1999; Roe-Sepowitz 2012; Tyler and Johnson, 2006; Widom and Kuhns, 1996). Male sex workers do not receive nearly as much attention. When they do receive scholarly attention, research overwhelmingly addresses sexual orientation, HIV status and risk, and/or drug use (Mimiaga, Reisner, Tinsley, Mayer, and Safren 2009; Simon, Morse, Osofsky, and Balson 1994; Timpson, Ross, Williams, and Atkinson 2007). In the United States, the prevailing belief concerning underage sex workers is the stereotypical image of young girls controlled and coerced into prostitution by male pimps. This prevailing belief completely disregards and ignores the idea of agency for underage sex workers. In addition, female sex workers who are not under the control of a market facilitator (i.e. pimp) and male sex workers are given little to no attention.

The lack of scholarly research and political attention on underage male sex workers is problematic. Most scholarly research focuses on female sex workers, especially when the focus is on underage individuals who are involved in the commercial

sex market. In addition, the political and media focus on underage female sex workers, especially those under the control of a market facilitator, implies that most underage sex workers are both female and highly exploited. Therefore, the information available on female sex workers can be utilized to inform the public and design and enhance public policy. In addition, since the information available on underage female sex workers indicates that they are an exploited and vulnerable population, it is essentially assumed that they have little or no agency in their decision to enter and remain in the life. The dearth of research on underage male sex workers means that very little information is available to the public about their experiences, possible exploitation, and needs. Therefore, the needs and/or rights of male sex workers, especially those who are underage, are essentially ignored. The lack of scholarly research on the possible exploitation of underage male sex workers implies that they are not as vulnerable as underage female sex workers and, therefore, have more agency in their decision to enter and remain in the life.

Since the question of agency is not addressed in the existing literature, it is not possible to know if underage male and female sex workers differ in their levels of agency and/or constraint. It is assumed in the literature that male sex workers do possess more agency in their decision to enter, stay in, and leave “the life.” However, no empirical analysis has actually been completed to address the differences or similarities that may exist between male and female sex workers and their decision to stay in or leave “the life.” The existing literature on underage sex workers is problematic if underage male sex workers are actually experiencing similar levels of agency and constraint or less agency and/or more constraint when compared to underage female sex workers. Either scenario

would indicate that additional scholarly research is needed on the experiences of underage male sex workers. In addition, either scenario would indicate that the political and media focus on the vulnerability of underage female sex workers is essentially ignoring the needs and plight of underage male sex workers.

BACKGROUND AND SIGNIFICANCE

Theoretical Background

The concept of agency is one that has been discussed thoroughly within the discipline of sociology (Coleman 1986; Emirbayer and Mische 1998; Hays 1994; Sewell 1992), although theoretical writings of agency seem to have waned in the past few decades. Coleman (1986) discusses the founding of a theory of action by philosophers throughout the 1600s-1900s. The theory of action put forth by individuals throughout the last four centuries argued that “individuals were seen as purposeful and goal directed, guided by interests and by the rewards and constraints imposed by the social environment” (Coleman 1986:1310). Therefore, the theory of action purported that the functioning and possible changing of society was influenced and guided by the behaviors and actions of individuals (Coleman 1986).

Since then, the concept of agency has been expanded and built upon. In particular, multiple theorists have discussed the ways in which agency and action are embedded within the larger social structure (Hays 1994; Sewell 1992). Hays (1994:64) writes that agency “can be understood as human social action involving choices among the alternatives made available by the enabling features of social structure, and made possible by a solid grounding in structural constraints.” According to this theory of

agency, individuals can be constrained by social structure because it can prevent the ability to be presented with or make certain choices, but social structure is also enabling in that it provides individuals with the tools necessary to make choices (Hays 1994). Alternatively, Sewell (1992:20) writes that “to be an agent means to be capable of exerting some degree of control over the social relations in which one is enmeshed, which in turn implies the ability to transform those social relations to some degree.” Emirbayer and Mische (1998) provide an interesting and novel definition of agency that incorporates how the individual is guided by his/her past, present, and possible future. Individuals are aware of their place within society and make choices based on their past and their desires for the future. Overall, agency is conceptualized as the ability for an individual to make choices within the social structure in which they are embedded. Although multiple attempts have been undertaken to provide definitions and explanations of agency within social structure, no known attempts have been undertaken to empirically and directly measure agency.

The oppression and empowerment paradigms offer conflicting ideas of the agency experienced by female sex workers (Bernstein 1999; Weitzer 2005; Weitzer 2009). The oppression paradigm regards prostitution as a way in which males are able to exert dominance and power over women (Weitzer 2005; Weitzer 2009). Kathleen Barry (1995:23) argues that “when the human being is reduced to a body, objectified to sexually service another, whether or not there is consent, violation of the human being has taken place.” In this manner, prostitution is viewed as oppressive, regardless of an individual’s choice to engage in the acts. Additionally, Catherine MacKinnon (1989:113) argues that “these investigations reveal rape, incest, sexual harassment, pornography, and

prostitution as not primarily abused of physical force, violence, authority, or economic, although they are that... They are abuses of women; they are abuses of sex.” Within the oppression paradigm, sex workers are denied agency. Sex workers are not viewed as choosing to enter or remain in the life; instead they are viewed as victims of exploitation. In addition, MacKinnon’s use of “she” to describe victims of prostitution, among others, implies that only female sex workers are exploited and oppressed. Male sex workers are not even addressed, let alone viewed as possible victims of exploitation.

In contrast to the oppression paradigm, the empowerment paradigm contends that sex work can simply exist as an alternative way in which to earn a living (Bernstein 1999; Wetizer 2009). Some contend that “involvement in prostitution can bring comparatively substantial financial returns...an enjoyable degree of ‘worker’s control’ can also exist (McLeod 1982:1). According to this perspective sex workers are not unilaterally referred to or regarded as victims of oppression or exploitation. Instead, sex workers are believed to have a choice in their decision to enter, remain in, and leave the life. Sex work is viewed as a legitimate way in which individuals can provide for themselves and/or their families. Although it is believed that individuals exercise agency, it is also acknowledged that agency is not experienced uniformly. As Chapkis (see Weitzer 2000:181) writes, “Sex workers’ ability to exercise control over the labor process varies widely...some sex workers appear able to determine more aspects of the transaction, while others are severely limited in their ability to do so.” Within the empowerment paradigm, sex workers are believed to possess agency. Sex workers are viewed as having agency in entering the life, as well as remaining in it. Sex workers are not deemed victims based solely on their involvement in the commercial sex economy.

Prevailing Ideas about Sex Workers

Most of the research on sex workers paints the picture of a young female coerced into sex work by a male pimp. An example of this research includes Rachel Lloyd's memoir *Girls Like Us* (2011). Lloyd is the founder of GEMS, Girls Educational and Mentoring Services, in New York City. Her memoir recounts her experiences with underage female sex workers in New York City. Lloyd reinforces the idea that an overwhelmingly large number of underage female sex workers are under the control of and are coerced into sex work by male pimps. Victor Minichiello, John Scott, and Denton Callander (2013:264) state, "popular accounts of sex work tend to present prostitution as a product of economic necessity or individual pathology, lending support to a representation of sex workers as passive and disempowered victims exploited and coerced into sex work." In addition, research from the early 1900s in Chicago finds that activists and authorities rarely concerned themselves with the plight of underage male sex workers (Romesburg, 2009). Despite the lack of research accorded to underage male sex workers in early twentieth century Chicago, Don Romesburg (2009:384) found that "teenage boys ran the gamut in relation to agency regarding sex work." Some underage sex workers were victims of exploitation, some were pushed into the life for survival, and others happily pursued and entered the life.

The prevailing belief about underage sex workers ignores the idea of agency on the part of the sex workers. All sex workers are viewed as exploited and oppressed, despite the variations in how sex workers may have entered the life. Jeffrey Dennis (2008:21) makes the assertion, after reviewing over one hundred sixty articles on sex

workers, that “the teenage boy sex worker is thus subject to redoubled invisibility, his gender and age causing him to virtually vanish from scholarly scrutiny.” In addition, Minichiello, Scott, and Callander (2013:264) stated “an alternate romanticized narrative suggests male sex work is inherently less exploitative than female sex work because interactions between two men make for a certain mutual equality missing the interactions between a male client and a female seller.” In the existing literature, male sex workers are considered to have more agency in their decision to enter the life.

Jeffrey Dennis (2008) further discusses the lack of research accorded to male sex workers. Most research on sex workers makes use of feminine pronouns and nearly eighty-five of the articles reviewed focused on female sex workers only. In addition, only seventeen percent of the articles reviewed explicitly stated that only female sex workers were being studied and the rationale behind that decision. This implies that researchers are only interested in female sex workers because they believe that they are the most vulnerable and exploited group. They may believe that the number of male sex workers is very low and that they are not being coerced into the life like female sex workers. In addition, the lack of research on male sex workers implies that they are not being victimized like female sex workers. This is evidenced by findings that indicate that researchers do not focus on the violence that male sex workers may experience at the hands of their customers or market facilitators. On the other hand, two-thirds of the articles reviewed that focused on female sex workers mentioned the violence that female sex workers may experience in their lives due to their occupation. In addition, research has found that female sex workers are most likely to be referred to as “prostitutes.” Male sex workers are more likely to be referred to as “sex workers.” The term “prostitute”

carries a negative connotation and implies that a person is being exploited and coerced into sex work. In contrast, the term “sex worker” implies that the person has more control and agency over their decision to enter, remain in, and leave the life.

Research on Male Sex Workers

An overwhelming majority of the scholarly literature on male sex workers addresses the issues of HIV status and/or risk, sexual orientation, and drug use. Most research tends to focus on the risk of sex work to male sex workers and their customers and their risky behavior characterized by the use of illegal substances. In addition, research on male sex workers is extremely interested in the sexual orientation of male sex workers. There is an interest in homosexuality within male sex work and heterosexual male sex workers who engage in sex with male customers.

At the end of the twentieth century, HIV became a public health concern in the United States (Minichiello et al. 2013). In particular, a focus on the spread of HIV within the gay community, and eventually to the heterosexual community, was present. A review of research on sex workers finds that over half of all articles pertaining to male sex workers address HIV/AIDS risk and danger (Dennis 2008). In contrast, approximately a quarter of research on female sex workers focuses on HIV/AIDS. When HIV/AIDS is addressed, male sex workers are rarely viewed as actual victims of the disease (Dennis 2008). Instead, male sex workers are viewed as carriers of the disease and a threat to the public. Existing research finds that between 23% and 31% of male sex workers are HIV positive (Mimiaga et al. 2009; Simon et al. 1994; Timpson et al. 2007). Although most male sex workers are knowledgeable about the risk and transmission of

HIV, many report inconsistent condom use with sex partners (Mimiaga et al. 2009; Simon et al. 1994). Additionally, male sex workers rarely believe that their sexual partners are HIV positive (Timpson et al. 2007). This indicates that male sex workers are not discussing HIV status or risk with those they are intimate with. In addition, since male sex workers are not concerned that their sexual partners may be HIV positive, they may see no need to use condoms regularly.

Research on male sex workers often focuses on the sexual orientation of male sex workers. In contrast, very little research on female sex workers is rarely interested in their sexuality. A review of research on sex workers found that only one article about female sex workers discusses their sexual orientation, while every article on male sex workers reports on their sexuality (Dennis 2008). The interest in the sexual orientation of male sex workers is relatively new. During the 1940s, homosexuality was viewed as deviant and a mental illness by psychiatrists and psychologists. However, research on male sex workers largely ignored the issue of homosexuality. Instead, research on male sex workers focused on heterosexual males, their decision to enter sex work, and the consequences of their actions (Bimbi 2007). This coincides with findings from the 1940s to the 1970s that show that research during this time characterized male sex workers as young, innocent and heterosexual males who were preyed upon by older men (Minichiello et al. 2013). Some research has found that approximately a quarter of male sex workers are homosexual, approximately 38% are bisexual, and another 38% are heterosexual (Simon et al. 1994). However, this research also found that every respondent reported engaging in oral sex with male customers. In addition, 38% reported engaging in oral sex with male customers. Both of these findings indicate that even those male sex workers who

identify as heterosexual are engaging in sexual acts with male customers. Male internet escorts are more likely to report being homosexual when compared to male street sex workers (Mimiaga et al. 2009).

A large number of male sex workers report regular use of marijuana and alcohol (Mimiaga et al. 2009; Simon et al. 1994; Timpson et al. 2007). Findings on the use of marijuana vary; however, at least half still report using marijuana at least once a week. In addition, nearly 88% of male sex workers report using alcohol at least once a week and 43% report daily use (Simon et al. 1994). Additional illegal substances that were most likely to be utilized by male sex workers were crack cocaine, cocaine, crystal meth, non-prescribed Viagra, and non-prescribed painkillers (Mimiaga et al. 2009; Simon et al. 1994; Timpson et al. 2007). In addition, approximately 40% of male sex workers report always being under the influence of illegal substances or alcohol while out working, while approximately 20% report almost always being under the influence of illegal substances or alcohol while working (Simon et al. 1994). Furthermore, over half of male sex workers report using two or more substances daily.

Research on Female Sex Workers

Research on female sex workers frequently addresses risk factors for entering the life. In particular, childhood abuse, including physical, emotional, and sexual, and neglect are viewed as risk factors for a female entering sex work (Greene et al. 1999; Roe-Sepowitz 2012; Tyler and Johnson, 2006; Widom and Kuhns, 1996). Research has found that being a victim of childhood sexual abuse is a predictor of entering sex work for adolescent females, but not for adolescent males (McClanahan, McClelland, Abram, and

Teplin 1999; Roe-Sepowitz 2012; Simons and Whitbeck 1991; Widom and Kuhns, 1996). Underage female sex workers also report high levels of emotional abuse from their parents or other important adults in their lives (Roe-Sepowitz 2012). Further research indicates that underage females who had not experienced sexual abuse were fifty-nine percent less likely to be involved in sex work than underage females who experienced sexual abuse (Tyler, 2009). In addition, the rates of childhood physical abuse, emotional abuse, and neglect are all quite high for females who are engaged in sex work (Tyler and Johnson, 2006). Kramer & Berg (2003:525) also found that “the experience of a single childhood risk factor – whether it is sexual abuse or physical abuse by a family member or parental drug/alcohol abuse – appears to speed up entry into prostitution, relative to women who experience none of these risks.”

Running away from home or spending more time away from home is a risk factor for entering sex work for underage females (McClanahan et al. 1999; Roe-Sepowitz 2012). Underage females who chose to run away from their childhood homes were more likely to be engaged in sex work as a minor than females who did not run away from home (Reid, 2011). Additionally, underage females who had been away from their childhood homes for longer periods of time were more likely to be engaged in sex work than underage females who had spent less time away from their childhood homes (Greene et al., 1999). Furthermore, the age at which female youth first engaged in alcohol/drug use is related to commercial sex work (Reid and Piquero, 2013).

A final risk factor for entering into sex work involves partners, friends, and customers. Some underage females are coerced into sex work by male partners or acquaintances who persuade them to trade sex for money and then partake in the profits

of the exchange (Norton-Hawk 2004; Tyler and Johnson, 2006; Williamson and Cluse-Tolar 2002). Pimps coerce underage and adult females into sex work through a number of techniques, including drug addiction, violence, and love (Kennedy, Klein, Bristowe, Cooper, and Yuille 2007). In addition, pimps often physically and emotionally abuse their sex workers (Williamson and Cluse-Tolar 2002). Female sex workers under the control of a pimp are more likely to run away from home, experiment with drugs at an early age, have serious family issues, engage in sexual relations at an early age, and experience physical and sexual violence from customers when compared to those without pimps (Norton-Hawk 2004). In addition, underage females who had friends who engaged in sex work were more likely to engage in sex work themselves. Research indicates that underage females who have friends that are involved in sex work are five times more likely to become involved in sex work (Tyler, 2009). Finally, underage females who had been approached by customers and propositioned for sex were five and a half times more likely to engage in sex work than underage females who had never been approached or propositioned (Tyler, 2009). A youth's social network can also be a protective factor against entering sex work. Ennett et al. (1999) found that youth who had a social network were less likely to have engaged in sex work compared to youth who reported not having a social network. In addition, having a social network that included a family member was negatively associated with pressure to engage in sex work.

Prostitution to reclaim control of one's sexuality involved underage females who entered sex work after experiencing childhood sexual and/or physical abuse. The path of prostitution as normal involves underage females who enter sex work because they lived in areas where sex work was very common. As a result, underage females viewed sex

work as a viable option for earning an income. In addition, these underage females viewed sex work as “glamorous.” Very few underage female sex workers were addicted to illegal substances or entered sex work to sustain a drug addiction. Most admitted to using drugs recreationally and the most common drug used was marijuana. On the other hand, female sex workers who entered sex work when adults were most likely to take the paths of prostitution to sustain drug addiction and prostitution for survival. The path of prostitution to sustain a drug addiction was most common for females who entered sex work as adults. Many of them viewed sex work as an easy and practical way to earn enough money to sustain their addiction. In addition, many adult female sex workers held moral condemnations against it. Many of them stated that they would not have entered sex work had they not been addicted to drugs. The path of prostitution for survival involved females who entered sex work as a means of earning enough money to provide the basic necessities for themselves and others.

In contrast, Kimberly Tyler and Katherine Johnson (2006) found that underage female sex workers were reluctant to enter the life, but did so out of necessity. They stated that they needed the money to survive and there was a lack of other options available to them. In addition, they found that some sex workers were forced into sex work by others, including friends and significant others. Further research by Kimberly Tyler (2009) found that underage females who had partners who attempted to coerce them into the life and friends who were involved in the life were more likely to enter sex work. Jennifer Cobbina and Sharon Oselin (2011) also found that some underage female sex workers had males who helped them enter the life. However, they found only a small number of underage females who expressed this situation.

Research Questions

Existing literature implicitly assumes that male sex workers have considerably more agency and less constraint than female sex workers. However, the question of agency and constraint has never been empirically examined in the existing literature, so it is not possible to know if underage male and female sex workers differ in their levels of agency and constraint. Therefore, the primary research question is:

Research Question #1: Do the levels of agency and constraint differ for male and female underage sex workers?

In addition to gender, other characteristics or circumstances could contribute to varying levels of agency and constraint. Existing literature points to other ways in which sex workers are divided into various sectors, such as type of sex work, drug use, and place of residence. As a result, the second research question is:

Research Question #2: Do any other characteristics or variables help explain differences in the levels of agency and constraint experienced by underage sex workers?

METHODS

Data

The data used in this analysis is from The Commercial Sexual Exploitation of Children in New York City (CSEC) study by Curtis, Dank, and colleagues (2008). The CSEC study was funded by the National Institute of Justice and included interviews with self-identified male, female, and transgender youth who were currently employed in the

commercial sex economy. Respondent Driven Sampling (RDS) was employed to recruit a sample of underage sex workers in New York City. A small number of initial respondents (referred to as “seeds”) were referred to the study and interviewed. Each seed was provided with a monetary incentive in exchange for their participation in the study. They were then provided with three referral coupons and were encouraged to distribute these coupons to other underage sex workers that were interested in participating in the research study as well. For every referral that resulted in an interview, the seed was provided with an additional monetary incentive. The respondents that were referred by the seeds were included in the first wave of the sample. This process continued until the desired sample size was reached. A total of 249 respondents were included in the original study.

Approach

Since no existing model exists for examining agency and constraint, we are modeling the decision to leave the life as a polya-type negative binomial process. Imagine a sex worker wakes up periodically and flips a biased coin until they receive a certain number of successful tosses so they can leave the life. If the coin lands on tails, an unsuccessful toss, then the tally remains the same, and the sex worker remains “in the life” and continues to flip the coin periodically. If the coin lands on heads, a successful toss, the tally of successful tosses is incremented by one. When the tally of successful tosses reaches a sufficient level, then the sex worker then leaves the life. Our goal is to ascertain how frequently classes of CSEC (e.g. males versus females) toss the coin; what

is the respective bias of the coin for each class; and what determines a sufficient number to allow for an individual to leave.

Based on individual responses to questions pertaining to the number of years in which underage sex workers have been engaged in the underground sex economy, “time in the life” curves were created for both males and females (Figure A1). To ascertain the relative agency and constraint experienced by classes of CSEC (e.g. males and females), maximum-likelihood estimation was used to obtain curves with parameters T , N , R , and P that most closely matched the “time in the life” curves for males and females, respectively. Using the parameters, relative agency and constraint can be obtained by comparing the values obtained for both males and females.

Traditionally, agency and constraint have been considered to be separate ends of a single spectrum: as agency increased, constraint decreased and vice versa. However, this analysis is unique in that agency and constraint are considered to be two separate spectrums, ranging from low to high. As a result, an individual can have high or low levels of both agency and constraint.

Table A1 presents the parameters of a polya negative binominal distributions and the parameter definitions used in this analysis. In addition, table A2 displays the equations used to ascertain levels of agency and constraint experienced by underage sex workers. Agency is considered the frequency in which underage sex workers consider leaving the life within a certain time frame. Those who think about leaving the life more frequently are considered to have more agency. Agency is calculated with the following equation:

$$Agency = (F^{-1}), \text{ where } F = \frac{T}{N}$$

In the preceding equation, T is considered to be the time period (in years) in which individuals can flip the coin to determine if they are eligible to leave the life. N is the total number of coin tosses an individual can make in time period T . Individuals with a larger N are flipping the coin more frequently within time period T and are considered to have more agency than individuals with a smaller N .

Constraint is considered the number of times that an underage sex worker must have a successful coin toss (“heads”) before he/she can leave the life. Those who have a higher threshold and, therefore, require more successful tosses before leaving are considered to have more constraint. Constraint is calculated with the following equation:

$$\text{Constraint} = \frac{R}{P}$$

In the preceding equation, P is the probability that an individual will obtain a successful toss at any given time. In addition, R is the number of successful tosses that an underage sex worker must obtain before he/she is able to “leave the life.” Individuals with a smaller P , a smaller probability of obtaining a successful toss, and a larger R , a greater number of successful tosses needed to leave, are considered to have more constraint than those individuals who have a larger P and smaller R .

Variables

The primary research question addresses the relative agency and constraint experienced by male and female underage sex workers using the number of years that they have been employed in the commercial sex economy. Respondents self-identified as male, female, or transgender. The original sample included interviews with 119 females, 111 males, and 19 transgender youth. Due to the small number of self-identified

transgender sex workers, they were not included in this analysis. As a result, 230 respondents were eligible to be included in this analysis.

The number of years that underage sex workers have been employed in the commercial sex economy (“time in the life”) was created using three open-ended questions. The first two questions asked respondents, “How old were you when you first started having sex for money or in exchange for other things?” and “For how long have you been in the life?” Respondents provided the age at which they first exchanged sex (ranged from 9 to 19) and the age at which they “entered the life” (ranged from 11 to 19). The third question asked respondents their current age at the time of the interview (ranged from 14 to 25). The age at which a respondent first exchanged sex and the age at which they entered the life were then each subtracted from their current age to obtain two numbers representing the number of years that a person has been employed in the commercial sex economy. These two numbers were then averaged to create an estimate of the number of years that respondents have participated in the commercial sex economy (ranged from 0 to 9). Responses were recoded into nine categories ranging from “ $x \leq 1$ year in the life” to “ $8 < x \leq 9$ years in the life.”

One male and one female respondent were excluded from the analysis because “time in the life” estimates could not be calculated based on their responses to interview questions. As a result, the analysis contains 226 respondents, 108 males and 118 females.

Analysis

Analysis was conducted using MAPLE 18 and the analysis routine is presented in Figure A2. The “time in the life” distributions were entered into the software. MAPLE 18

was able to determine the curve and set of parameters that most closely matched the “time in the life” for each gender by running iterations of curves and estimating how close they were to the gender distributions depicted in Figure A1. A Jensen-Shannon total information divergence estimate was utilized to determine how close the estimated curves were to the real distributions. The Jensen-Shannon total information divergence estimate provides the distance or difference between two probability distributions, in which smaller values indicate that two probability distributions are closer to each other. The curve with the smallest Jensen-Shannon total information divergence estimate was taken to be the best representation of the gender distributions and its parameters would be used to determine relative agency and relative constraint.

RESULTS

Analysis of Relative Agency and Constraint by Gender

The descriptive statistics of the respondents in the analytic sample are presented in Table A3 (n=226). Both male and female respondents have similar distributions for time spent in the life, with a large number of both males and females clustered at the lower end of the spectrum and a small number clustered at the higher end. The average time spent in the commercial sex economy for males is 3.09 years and for females is 2.75 years.

Table A4 presents the curve fitting results for males and females. The curve that best corresponds to the distribution of time in the life for male sex workers is the following: $T=18$, $N=75$, $P=0.109$, and $R=3.14$. According to the analogy presented above, male sex workers are flipping the coin 75 times in an 18-year period to determine if they

can leave the life, approximately once every 4.17 months. In addition, the probability of a male sex worker obtaining a successful toss is 0.109 and they must have 3.14 successful tosses before they are able to leave the life. The curve that best represents the distribution of time in the life for female sex workers is the following: $T=16$, $N=73$, $P=0.111$, and $R=3.22$. Female sex workers are flipping the coin 73 times in a 16-year period to determine if they are able to leave the life, approximately once every 4.56 months. The probability of a female sex worker obtaining a successful toss is 0.111 and she must have 3.22 successful tosses before being eligible to leave.

The relative agency and relative constraint results for males and females are presented in Table A5. Overall, underage male sex workers are experiencing 0.913 the agency and 0.990 the constraint that underage female sex workers are experiencing. Therefore, underage male sex workers are experiencing slightly less agency and slightly less constraint than underage female sex workers, but the results are remarkably similar and indicate that male and female sex workers may have similar experiences in the life. The literature on sex workers focuses on the victimization, exploitation, and lack of agency of females, but assumes that males have more agency and less constraint by ignoring their possible victimization and assuming they make a rational choice to enter the commercial sex economy. The results in this analysis indicate that it is possible that male and female sex workers should not be treated as separate populations with vastly different experiences. If male and female underage sex workers are experiencing extremely similar levels of agency and constraint, then the overwhelming focus on female sex workers and the emphasis on exploitation of female sex workers in scholarly

research and the media paints an incomplete and inaccurate depiction of underage individuals participating in the commercial sex economy.

Subsequent Analyses

Since it was found that male and female sex workers differ only slightly in their relative experiences of agency and constraint, additional analyses were conducted to determine if other variables may be able to explain variations in “time in the life” for underage sex workers. Additional analyses could indicate that other variables contribute to greater variation in the length of time employed in the commercial sex economy and are possibly better indicators of disparities in the experiences of underage sex workers. Six additional variables were chosen based on their possible link to the time that sex workers remain engaged in the commercial sex economy. In addition, an adequate number of respondents had to fall in each category. Since gender was found to have little impact on the relative agency and constraint experienced by underage sex workers, transgender youth were included in the subsequent analyses. Table A6 contains the descriptive statistics for the additional analyses. Sample sizes for each set of analyses vary based on valid responses to the respective questions. The curve fitting results for the additional set of analyses are presented in table A7 and the comparisons of relative agency and constraint are displayed in table A8.

The first variable examined was homelessness, with 111 individuals reporting that they were homeless at the time of the survey and 134 individuals reporting that they had a place of residence. Individuals were considered to be homeless if they reported that they lived on the streets, in a shelter, or they were squatting. The average time spent in the

commercial sex economy for homeless youth is 2.92 years, which is slightly higher than the average of 2.79 years for non-homeless youth. Results indicate that homeless individuals are experiencing 0.828 the agency and 0.875 the constraint that individuals who are not homeless are experiencing. Therefore, homeless individuals are experiencing less agency when compared to individuals who are not homeless, but they are also experiencing less constraint. The greater disparity in levels of agency and constraint experienced by homeless versus non-homeless individuals gives an initial indication that other factors aside from gender may have a greater influence on the agency and constraint experienced by underage sex workers.

Street status was the second variable examined, with 136 individuals reporting that they were working the streets and 109 reporting that they were not working the streets. The average time spent in the commercial sex economy for street workers is 2.95 years and for non-street workers is 2.72 years. Individuals who are working the streets are experiencing 2.209 the agency and 2.343 the constraint experienced by those who are not working the streets. Therefore, street sex workers are experiencing quite a bit more agency and constraint than those who are not working the streets.

Street troubles was the third variable examined to determine if verbal or physical altercations with people encountered on the streets influenced the time that individuals spend in the commercial sex economy. One hundred and nine individuals reported that they had street troubles, while 131 reported that they did not. The average time spent in the commercial sex economy for those who experienced street troubles is 3.16 years and for those who did not is 2.64 years. Individuals who reported altercations on the streets experienced 4.056 the agency and 4.753 the constraint experienced by those who did not

report street altercations. Therefore, individuals who reported street altercations are experiencing more agency and constraint when compared to those who are reporting no street altercations, and the disparity between levels of agency and constraint indicate that this factor may have a greater influence on underage sex workers than other factors in this analysis.

Marijuana use and cocaine use were examined to determine if substance use impacted the time that underage sex workers remained engaged in the commercial sex economy. Over half (133) of all respondents reported marijuana use, while 112 reported that they had not used marijuana. The average time spent in the commercial sex economy for marijuana users is 2.97 years and for non-marijuana users is 2.71 years. Marijuana users are experiencing 0.608 the agency and 0.650 the constraint experienced by those who report never using marijuana. Therefore, marijuana users are experiencing less agency and constraint when compared to those who report no marijuana use.

Respondents were less likely to report cocaine use, with only 64 reporting using cocaine and 181 reporting no use of cocaine. The average time spent in the commercial sex economy for cocaine users is 3.03 years and for non-cocaine users is 2.79 years. Cocaine users are experiencing 0.380 the agency and 0.414 the constraint experienced by those who are not using cocaine. Therefore, cocaine users are experiencing less agency and constraint compared to those who are non-cocaine users. In addition, the disparity in levels of agency and constraint experienced by cocaine versus non-cocaine users indicates that it may have a larger impact on levels of agency and constraint than marijuana use.

Alternative income was the last variable examined, with 77 reporting that they had alternative sources of income and 137 reporting that their only source of income was sex work. The average time spent in the commercial sex economy for those with alternative sources of income is 2.66 years and for those without alternative income sources is 2.96 years. Those with alternative sources of income are experiencing 1.490 the agency and 1.677 the constraint experienced by those who have no alternative income source. Therefore, individuals with alternative income sources are experiencing more agency and constraint when compared to those who have no alternative income sources.

DISCUSSION AND CONCLUSION

Existing literature on sex workers depicts males and females in vastly different ways. When discussing female sex workers, researchers often focus on childhood risk factors, such as sexual abuse, physical abuse, and runaway behavior, and adolescent social networks that precede entry into sex work (Greene et al. 1999; Roe-Sepowitz 2012; Tyler and Johnson, 2006; Widom and Kuhns, 1996). On the other hand, when discussing male sex workers, researchers emphasize HIV status and/or risk to the public, sexual orientation, and drug use (Mimiaga et al. 2009; Simon et al. 1994; Timpson et al. 2007). Females are assumed to have very little agency in their decision to enter the world of sex work. In addition, it is assumed that structural constraints force female sex workers to remain in the life and provide very few opportunities to leave. Males are assumed to have agency in their decision to enter sex work and have fewer structural constraints that force them to remain in the life. They are rarely ever portrayed as victims in the same manner as female sex workers. Yet, no systematic and empirical evidence suggested that male

and female sex workers experience different levels of agency and constraint. This analysis attempted to empirically test if differences in levels of agency and constraint vary by gender. Contrary to existing literature, results indicate that male and female underage sex workers are experiencing very similar levels of agency and constraint. Instead, other characteristics or circumstances contribute to varying levels of agency and constraint among sex workers.

The finding in this analysis that underage male and female sex workers are experiencing similar levels of agency and constraint has two possible explanations. The first is that differences do exist and this analysis was unable to pick up differences in levels of agency and constraints experienced by underage male and female sex workers. It is possible that the analysis discussed above was not sensitive enough to pick up differences in agency and constraint by gender. The second is that underage male and female sex workers are actually experiencing similar levels of agency and constraint. The analysis discussed above was sensitive enough to pick up varying differences in agency and constraint by street status, residence, and drug use, among others. It is reasonable to assume that the analysis is sensitive enough to gender differences and simply found none because they do not exist.

Street status, experience with street troubles, and drug use seem to contribute to disparities in agency and constraint among underage individuals in the commercial sex economy in a greater way than gender. Street workers, especially those who experienced physical or verbal altercations with others, are experiencing higher levels of agency and, therefore, are considering leaving the life more frequently than those who do not work the streets. Street sex work is considered to be the most undesirable, stigmatized and

lowest form of sex work (Weitzer 2005). Street sex workers have less control over their working conditions and have a higher risk of physical victimization when compared to off-street sex workers, such as those who utilize the internet to find customers or work for escort or call girl agencies (Weitzer 2005). In addition, street sex workers are highly visible and, therefore, at a greater risk of being victimized on the street. Street sex workers report violence from their pimps, customers, police officers, and members of the public (Nixon et al. 2002; Silbert and Pines 1981). Therefore, it is not surprising that street sex workers, especially those who have already been victimized, would be considering leaving the life on a more frequent basis. Additionally, street sex workers are experiencing higher levels of constraint that prevent them from leaving the life. Street sex workers often make less money than sex workers who are employed in higher and more desirable sectors of sex work. Sex workers who earn less money may have fewer opportunities to leave the life because they lack the necessary funds to do so.

Sex workers who engage in marijuana and cocaine use are experiencing lower levels of both agency and constraint than those who are not using these substances. Individuals who are addicted to substances are considering leaving the life less frequently than those who are not using substances and also face more constraints that prevent them from leaving the life when they do consider it. This may be due to the power that addiction holds over these sex workers. Sex work may be a desirable way to earn enough money to continue their habit (Dalla 2002). In addition, some sex workers may be trading sexual favors for their drug of choice. Therefore, sex workers may be reluctant to consider leaving the very life that allows them to easily continue their addiction. Unfortunately, the survey offered no way to determine if adolescents were addicted to

substances or simply used them occasionally. Information of that nature may have provided a way to determine if those who were addicted to substances had different levels of agency and constraint when compared to those who occasionally used substances.

While this analysis provides a novel way of examining a question that is discussed in the literature but has never been empirically addressed, it is not without limitations. First, the data used in this analysis was collected through respondent-driven sampling. Respondent-driven sampling is an ideal sampling method for studying hidden and hard-to-reach populations that are difficult to study using traditional sampling methods. However, respondent-driven sampling does not necessarily result in representative samples. Therefore, the sample of underage sex workers utilized in this analysis may not be representative of all underage sex workers. Additionally, the study was conducted in New York City and it is plausible that the findings generated by this analysis are not generalizable to underage sex workers employed in other cities or areas of the United States. Underage sex workers in smaller cities may not experience the same levels of agency and constraint as those in places like New York City. Finally, the model used in this analysis has never been employed in this manner. Replication of these analyses with other data sources would allow for a better understanding of agency and constraint experienced by underage sex workers.

This analysis offers one of the first attempts at empirically measuring and determining relative levels of agency and constraint within a population. Results suggest that the traditional view of female sex workers as oppressed and exploited and male sex workers as agents in choosing to participate in the commercial sex economy may be unwarranted. Based on this analysis, this traditional view is misleading and problematic.

The emphasis on female sex workers, especially those who are minors, in scholarly research and the media ignores the possible victimization, needs, and experiences of male sex workers. The dearth of research on male sex workers, especially those who are underage, also suggests that very few exist and that their experiences differ greatly from the experiences of female sex workers. However, male and female sex workers are experiencing similar levels of both agency and constraint, which suggests that they may be similarly affected by their engagement in the commercial sex economy. Instead, researchers may look to other factors of circumstances, such as type of sex work and drug use, as possible predictors of differences in the life and in levels of agency and constraint. While this method is novel and remains untested in other samples and research, it offers a first real attempt at empirically measuring a frequently conceptualized concept in existing sociological literature and theory.

REFERENCES

- Barry, Kathleen. 1995. *The Prostitution of Sexuality*. New York, NY: New York University Press.
- Bernstein, Elizabeth. 1999. "What's Wrong with Prostitution? What's Right with Sex Work? Comparing Markets in Female Sexual Labor." *Hastings Women's Law Journal* 10(1):91-117.
- Bimbi, David S. 2007. "Male Prostitution: Pathology, Paradigms, and Progress in Research." *Journal of Homosexuality* 53(1/2):7-35.
- Chapkis, Wendy. 2000. "Power and Control in the Commercial Sex Trade." Pp. 181-201 in *Sex for Sale: Prostitution, Pornography, and the Sex Industry*, edited by Ronald Weitzer. New York, NY: Routledge.
- Cobbina, Jennifer E. and Sharon S. Oselin. 2011. "It's Not Only for the Money: An Analysis of Adolescent versus Adult Entry into Street Prostitution." *Sociological Inquiry* 81 (3): 310-32.
- Coleman, James S. 1986. "Social Theory, Social Research, and a Theory of Action." *American Journal of Sociology* 91(6):1309-35.
- Curtis, Ric, Karen Terry, Meredith Dank, Kirk Dombrowski, and Bilal Khan. 2008. "The Commercial Sexual Exploitation of Children in New York City."
- Dalla, Rochelle L. 2002. "Night Moves: A Qualitative Investigation of Street-Level Sex Work." *Psychology of Women Quarterly* 26:63-73.
- Dennis, Jeffrey P. 2008. "Women are Victims: Men Make Choices: The Invisibility of Men and Boys in the Global Sex Trade." *Gender Issues* 25:11-25.
- Emirbayer, Mustafa and Ann Mische. 1998. "What is Agency?" *American Journal of Sociology* 103(4):962-1023.
- Ennett, Susan T., Susan L. Bailey, and E. Belle Federman. 1999. "Social Network Characteristics Associated with Risky Behaviors among Runaway and Homeless Youth." *Journal of Health and Social Behavior* 40(1):63-78.
- Greene, Jody M., Susan T. Ennett, and Christopher L. Ringwalt. 1999. "Prevalence and Correlates of Survival Sex among Runaway and Homeless Youth." *American Journal of Public Health* 89 (9):1406-09.
- Hays, Sharon. 1994. "Structure and Agency and the Sticky Problem of Culture." *Sociological Theory* 12(1):57-72.
- Kennedy, M. Alexis, Carolin Klein, Jessica T.K. Bristowe, Barry S. Cooper, and John C. Yuille. 2007. "Routes of Recruitment: Pimps' Techniques and Other Circumstances that Lead to Street Prostitution." *Journal of Aggression, Maltreatment, and Trauma* 15(2).
- Kramer, Lisa A. and Ellen C. Berg. 2003. "A Survival Analysis of Timing of Entry into Prostitution: The Differential Impact of Race, Educational Level, and Childhood/Adolescent Risk Factors." *Sociological Inquiry* 73(4):511-28.
- Lloyd, Rachel. 2011. *Girls Like Us*. New York City: HarperCollins Publishers.
- MacKinnon, Catherine A. 1989. *Toward a Feminist Theory of the State*. Cambridge, MA: Harvard University Press.
- McClanahan, Susan F., Gary M. McClelland, Karen M. Abram, Linda A Teplin. 1999. "Pathways into Prostitution among Female Jail Detainees and Their Implications for Mental Health Services." *Psychiatric Services* 50(12):1606-13.
- McLeod, Eileen. 1982. *Women Working: Prostitution Now*. London: Croom Helm.

- Mimiaga, Matthew J., Sari L. Reisner, Jake P. Tinsley, Kenneth H. Mayer, and Steven A. Safren. 2009. "Street Workers and Internet Escorts: Contextual and Psychosocial Factors Surrounding HIV Risk Behavior among Men who Engage in Sex Work with Other Men." *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 86 (1):54-66.
- Minichiello, Victor, John Scott, and Denton Callander. 2013. "New Pleasures and Old Dangers: Reinventing Male Sex Work." *Journal of Sex Research* 50 (3-4): 263-75.
- Nixon, Kendra, Leslie Tutty, Pamela Downe, Kelly Gorkoff, and Jane Ursel. 2002. "The Everyday Occurrence: Violence in the Lives of Girls Exploited Through Prostitution." *Violence Against Women* 8(9):1016-43.
- Norton-Hawk, Maureen. 2004. "A Comparison of Pimp- and Non-Pimp-Controlled Women." *Violence Against Women* 10(2):189-94.
- Reid, Joan A. 2011. "An Exploratory Model of Girl's Vulnerability to Commercial Sexual Exploitation in Prostitution." *Child Maltreatment* 16 (2):146-57.
- Reid, Joan A. and Alex R. Piquero. 2013. "Applying General Strain Theory to Youth Commercial Sexual Exploitation." *Crime & Delinquency*.
- Roe-Sepowitz, Dominique E. 2012. "Juvenile Entry into Prostitution: The Role of Emotional Abuse." *Violence Against Women* 18(5):562-79.
- Sewell, William H. 1992. "A Theory of Structure: Duality, Agency, and Transformation." *American Journal of Sociology* 98(1):1-29.
- Silbert, Mimi H. and Ayala M. Pines. 1981. "Occupational Hazards of Street Prostitutes." *Criminal Justice and Behavior* 8(4):395-99.
- Simon, Patricia M., Edward V. Morse, Howard J. Osofsky, and Paul M. Balson. 2004. "HIV and Young Male Street Prostitutes: A Brief Report." *Journal of Adolescence* 17:193-97.
- Simon, Ronald L. and Les B. Whitbeck. 1991. "Sexual Abuse as a Precursor to Prostitution and Victimization among Adolescent and Adult Homeless Women." *Journal of Family Issues* 12(3):361-79.
- Timpson, Sandra C., Michael W. Ross, Mark L. Williams, and John Atkinson. 2007. "Characteristics, Drug Use, and Sex Partners of a Sample of Male Sex Workers." *The American Journal of Drug and Alcohol Abuse* 33:63-69.
- Tyler, Kimberly. 2009. "Risk Factors for Trading Sex among Homeless Young Adults." *Archives of Sexual Behavior*.
- Tyler, Kimberly and Katherine Johnson. 2006. "Trading Sex: Voluntary or Coerced? The Experiences of Homeless Youth." *Journal of Sex Research* 43 (3): 208-16.
- U.S. Department of State. 2000. "Victims of Trafficking and Violence Protection Act of 2000." <http://www.state.gov/j/tip/laws/61124.htm>.
- Weitzer, Ronald. 2005. "New Directions in Research on Prostitution." *Crime, Law & Social Change* 43:211-235.
- Weitzer, Ronald. 2009. "Sociology of Sex Work." *Annual Review of Sociology* 35:213-34.
- Widom, Cathy Spitz and Joseph B. Kuhns. 1996. "Childhood Victimization and Subsequent Risk of Promiscuity, Prostitution, and Teenage Pregnancy: A Prospective Study." *American Journal of Public Health* 86 (11):1607-12.

Williamson, Celia and Terry Cluse-Tolar. 2002. "Pimp-Controlled Women: Still an Integral Part of Street Life." *Violence Against Women* 8(9):1074-92.

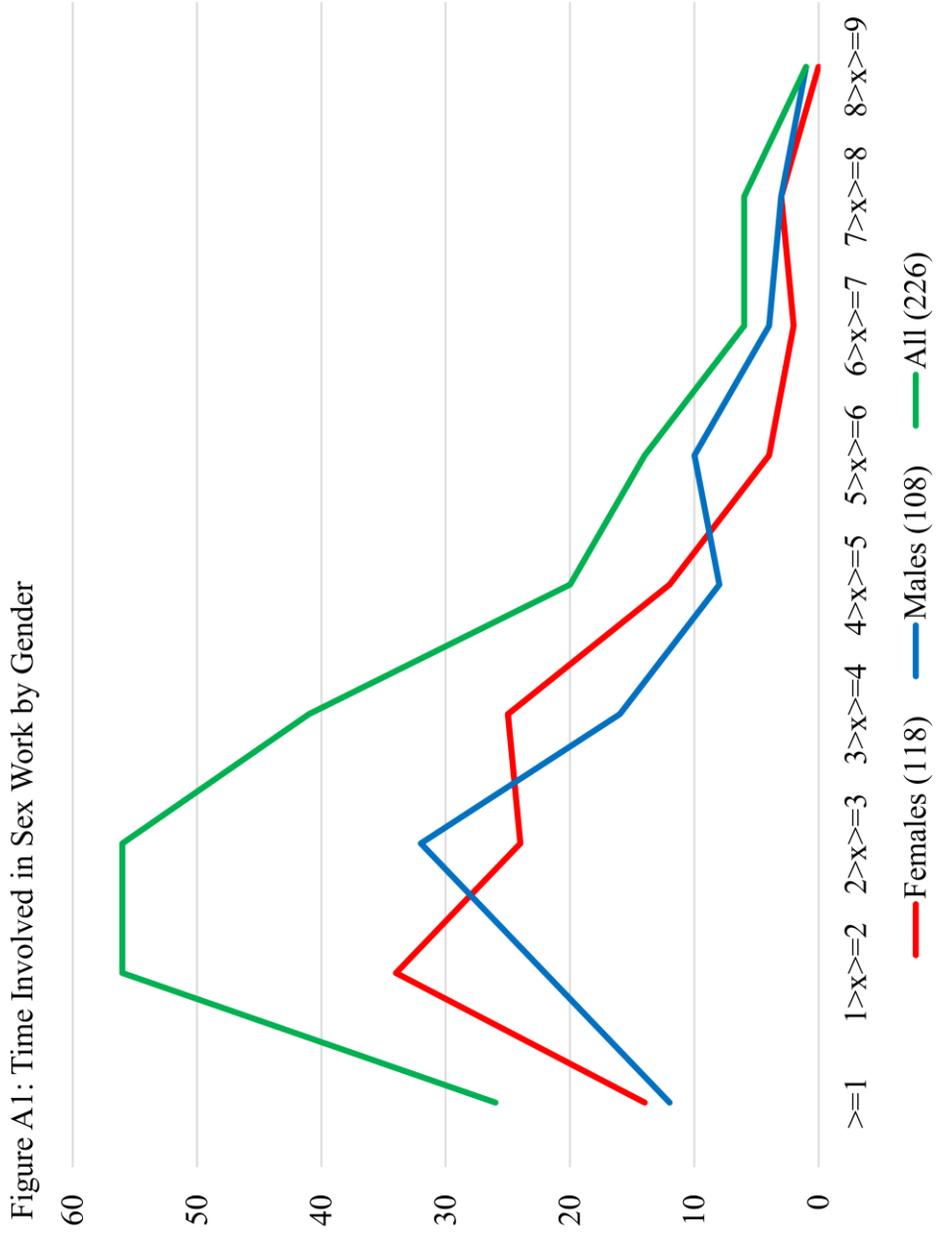


Table A1: Explanation of Polya Negative Binomial Distribution Parameters

Parameter	Definition
T	Time period (in years) in which the coin is flipped
N	Total number of coin tosses an made in time period T
P	Probability of a successful toss at any given time
R	Number of successful tosses needed to leave

Table A2: Equations for Measuring Agency and Constraint

Measure	Equation
Agency	$F^{-1}, \text{where } F = \frac{T}{N}$
Constraint	$\frac{R}{P}$

Figure A2: Analysis Routine

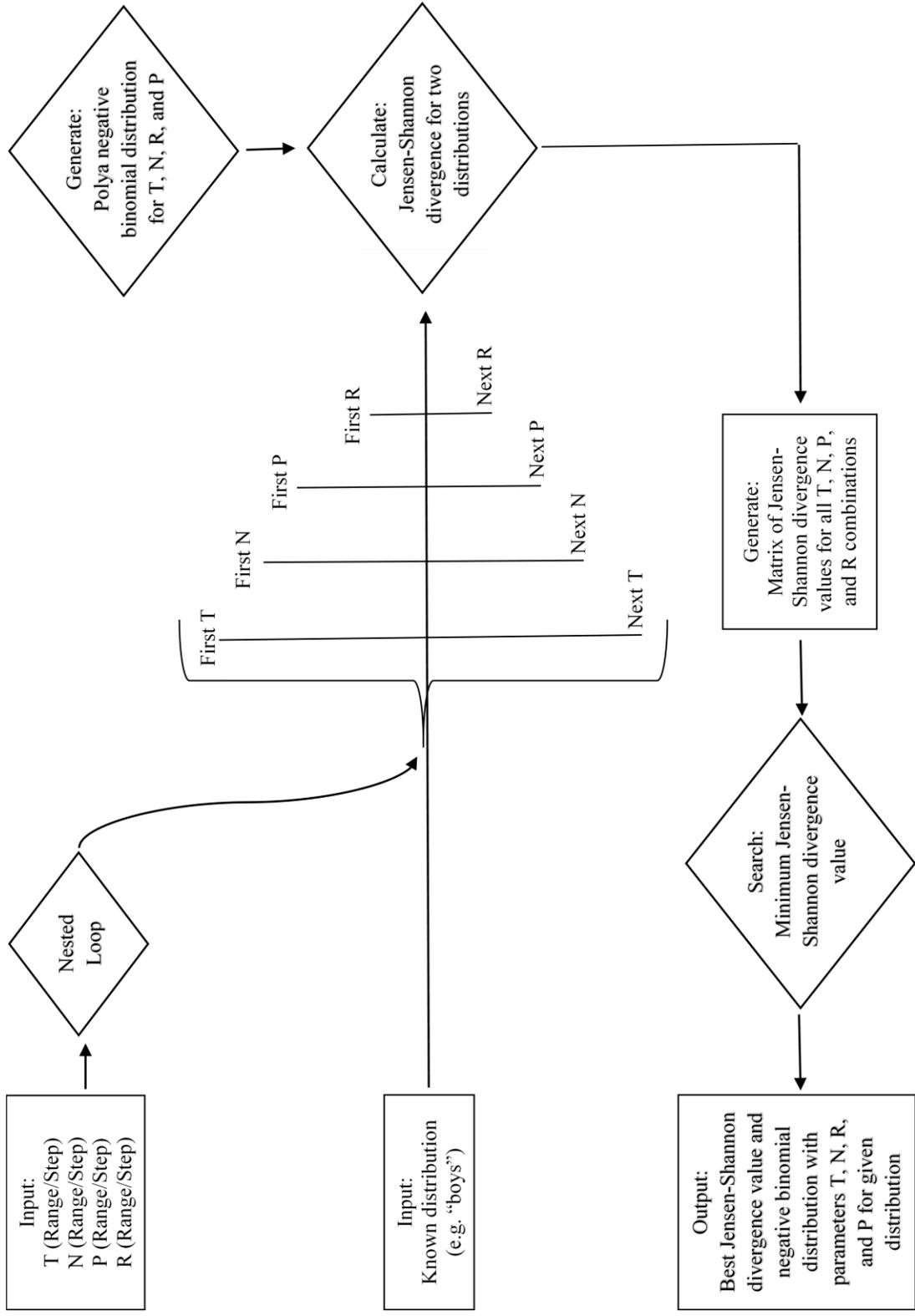


Table A3: Descriptive Statistics

Time in the Life	Gender	
	Male	Female
$0 \geq x \geq 1$	12	14
$1 > x \geq 2$	22	34
$2 > x \geq 3$	32	24
$3 > x \geq 4$	16	25
$4 > x \geq 5$	8	12
$5 > x \geq 6$	10	4
$6 > x \geq 7$	4	2
$7 > x \geq 8$	3	3
$8 > x \geq 9$	1	0
Total	108	118

Table A4: Curve Fitting Results

Variable	T	N	P	R	IRAD
Gender					
Male	18	75	0.109	3.14	0.093852
Female	16	73	0.111	3.22	0.078917

Table A5: Comparison Results

Variable	Relative Agency	Relative Constraint
Gender (Male / Female)	0.913	0.990

Table A6: Descriptive Statistics of Additional Analyses

Time in the Life	Variable											
	Homeless		Working Streets		Street Troubles		Marijuana Use		Cocaine Use		Alternative Inc.	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
$0 \geq x \geq 1$	17	14	13	18	15	15	14	17	7	24	6	22
$1 > x \geq 2$	22	38	30	30	17	41	33	27	14	46	23	30
$2 > x \geq 3$	25	36	37	24	27	32	36	25	16	45	23	30
$3 > x \geq 4$	24	21	30	15	19	26	21	24	14	31	17	19
$4 > x \geq 5$	8	12	10	10	12	8	11	9	4	16	4	14
$5 > x \geq 6$	9	6	10	5	11	4	9	6	4	11	2	12
$6 > x \geq 7$	3	3	3	3	4	2	4	2	3	3	1	4
$7 > x \geq 8$	2	4	2	4	4	2	4	2	1	5	1	5
$8 > x \geq 9$	1	0	1	0	0	1	1	0	1	0	0	1
Total	111	134	136	109	109	131	133	112	64	181	77	137

Table A7: Curve Fitting Results for Additional Analyses

Variable	T	N	P	R	IRAD
Residence					
Homeless	18	68	0.11	2.8	0.091779
Not Homeless	16	73	0.11	3.2	0.071915
Street Status					
Working Streets	18	82	0.12	3.7	0.079795
Not Working Streets	16	33	0.19	2.5	0.057103
Street Troubles					
Street Troubles	16	137	0.05	3.1	0.094640
No Street Troubles	18	38	0.23	3.0	0.079800
Marijuana Use					
Marijuana Use	18	39	0.20	2.9	0.079778
No Marijuana Use	16	57	0.13	2.9	0.073200
Cocaine Use					
Cocaine Use	18	38	0.19	2.8	0.081420
Not Cocaine Use	16	89	0.09	3.2	0.063437
Alternative Income					
Alternative Income	16	73	0.15	4.2	0.091264
No Alternative Income	16	49	0.13	2.7	0.090003

Table A8: Comparison Results for Additional Analyses

Variable	Relative Agency	Relative Constraint
Residence (Homeless / Not Homeless)	0.828	0.875
Street Status (Working Streets / Not Working Streets)	2.209	2.343
Street Troubles (Street Troubles / No Street Troubles)	4.056	4.753
Marijuana Use (Marijuana Use / No Marijuana Use)	0.608	0.650
Cocaine Use (Cocaine Use / No Cocaine Use)	0.380	0.414
Alternative Income (Alt. Income / No Alt. Income)	1.490	1.677