A Study of Recidivism among Online Sexual Predators

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Cover Page Footnote

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Since the development of internet communication platforms and social media, the online sexual predation of minors has affected as much as an estimated 19 percent of the under-eighteen-years-old population.[1] Online victimization against minors includes, but is not limited to, online sexual solicitation, sexual harassment, production and distribution of child pornography, and other illegal affronts against persons under the age of eighteen.[2] Furthermore, it is estimated that as many as 13.4 percent of sexual offenders commit multiple offenses, making recidivism an important topic of study.[3] These data suggest that analyzing the intersection of online sexual offense and recidivism may be a crucial area of study due to the devastating impact these offenses have on human lives. Research suggests that online sexual predation may lead to a number of victim symptom sequelae, including severe trauma, anxiety and depressive symptoms, substance abuse, interpersonal difficulty, eating disorders, suicidal ideation, and other social-emotional challenges.[4] Furthermore, as many as 96 percent percent of children who experience online victimization experience victimization offline as well, compounding the gravity of online victimization statistics.[5]

In a 2015 study, researcher George Palermo reported an overall sexual offense recidivism rate of 13.4 percent, which included a 12.7 percent recidivism rate specifically among child molesters.[6] These data are not specific to online sexual offenses and suggest that it is not uncommon for sexual offenders to commit multiple offenses, even when they have previously been caught, tried, and convicted. The Bureau of Justice Statistics (2019) reports that within nine years of release from prison, sex offenders are less likely than other types of offenders to get arrested, but "more likely than other types of offenders to be arrested for rape and sexual assault."[7] In contrast to the findings of Palermo, The Bureau of Justice Statistics found that

sexual offenders had a 67 percent probability of re-offending.[8] A notable gap in the literature is a specific measure of recidivism rates among the specific sub-population of study, internet sexual offenders targeting minors. Although there is not parity in the data on recidivism rates, it is uniformly clear throughout the literature that recidivism is not an unlikely outcome of imprisonment and is therefore a topic that requires further analysis.

The present study seeks to identify predictive factors of recidivism among online sexual predators who have offended against minors. The data analyzed in this report is taken from a representative national survey examining the frequency and characteristics of online criminal sexual offenses against minors in 2012. Ultimately, the study seeks to contribute to a robust body of literature aimed at identifying predictive factors of online sexual recidivism.

Literature Review

Through the lens of General Strain Theory, the present study seeks to examine the realities and hypothesized predictors of offender recidivism. General Strain Theory (GST) was chosen as the theoretical paradigm because of its goodness of fit with the population of multiple-offense criminal offenders. From the literature on GST, arises the question of whether or not the strain caused from being a sex offender compounds the likelihood of re-offense. The present study will address whether specific crimes are predictive of recidivism within the observed sub-population of offenders. The literature on sexual offender recidivism examines a number of other possible hypotheses for why offenders re-offend. Although contradictory and vague, the literature is resolute in the idea that personality and personal history likely play a significant role.[9] This study will also examine whether particular personal history variables can predict the likelihood that the offender has previously offended. In this way, previous literature and the gaps therein beget the variables studied in the present data analysis.

General Strain Theory (GST) is a cousin of Social Learning Theory that posits that individual strain or adversity may result in an increase in delinquent or deviant behavior.[10] Specifically, the theory contends that delinquency is emergent from three typical contexts: 1) strain as the actual or anticipated failure to achieve positively valued goals; 2) strain as the actual or anticipated removal of positively valued stimuli; and 3) strain as the actual or anticipated presentation of negatively valued stimuli.[11] In other words, the allure or deterrent of an identified stimuli may elicit a delinquent response in individuals if an undesired outcome is predicted or experienced. This undesired outcome or *strain* precedes the delinquent behavior. Through the GST paradigm, an examination of individual factors as well as an analysis of the social environment is critical in analyzing the interplay between social punishments and rewards and individual response.[12]

An empirical body of research testing General Strain Theory (GST) suggests that certain social punishments contribute disproportionately to the experience of *strain* that leads to delinquency.[13] In particular, social ostracization, negative social relationships, and the experience of anomie are predictors of delinquent behavior.[14] GST ultimately contends that although it is possible for an individual to respond to negative social pressure in a non-delinquent manner, negative social pressure is often the precursor to delinquency.[15]

Studies of General Strain Theory have not only focused on individual experiences that predict delinquency, but also provide a theoretical examination of sexual offender recidivism. For the purposes of the present research study, recidivism refers to the re-commission of a sexual offense. Although empirical literature on the intersection of sexual offenders and GST is extremely limited, researchers Alissa Ackerman and Meghan Sacks conducted a unique study that found that Registration and Community Notification Laws (RCNL) create the strain and

negative stimuli that can be a significant predictive factor in offender recidivism[16]. Ackerman and Sacks explain, "GST is uniquely situated as a parsimonious theoretical explanation for recidivism post-RCNL, given what we currently know...and the consequences of registration and community notification."[17] Similarly, a study conducted by Joan Reid and Alex Piquero found that caregiver strain and difficulty nurturing generationally transmitted to youth who had increased level of sexual offense commission and recommission later in life.[18] Although examining different perspectives of strain, the literature linking General Strain Theory to sexual offense recidivism suggests that it is an area primed for further study. It is through this GST lens, therefore, that the present research seeks to understand other potential strain factors such as personal history factors and nature of previous crime factors and their power in predicting online offender recidivism.[19]

As applied to the present study, General Strain Theory examines both personal history variables and nature of the crime variables that may potentially cause the stress that predicates recidivism. The researcher intentionally chose personal history variables such as drug and alcohol use, mental illness history, history of illegal activity that were likely to create strain in their life once released from jail or prison.[20] Previous research contends that adverse childhood experiences may play a predictive role in the commission of sexual crimes later in life.[21]

To highlight this point, researchers Jill Stinson and Judith Becker state:

> ... research suggests [sexual offenders] with psychotic diagnoses with co-morbid substance use disorders or personality disorders are six times more likely to have been arrested for violent sexual crimes... individuals who manifest psychotic illness and sexual behavior problems present with greater psychopathology and additional psychiatric management needs than other sex offender groups.[22]

In other words, when analyzing sexual offender recidivism, it is vital to also examine salient personal history factors because they often contribute to the strain placed upon the offender.

General Strain Theory hypothesizes that this strain increases the likelihood that an individual will recidivate.[23]

The interplay of the nature of the offender's crime and offender recidivism is also an important area to consider under the frame of General Strain Theory. In the public eye, not all who were incarcerated are equal, placing a greater social stigma on those who were deemed guilty of sexual offenses.[24] Researcher Laura Grossi contends that sexual offenders often experience social and structural barriers that are "above and beyond" those faced by non-sexual offenders reentering society after prison.[25] Results of the social and structural barriers faced disproportionately by sexual offenders include "increased discrimination in housing or employment, [they may] be denied access to local social capital, be systematically excluded from participating in community-based support programs, and may face community resistance or mobilization against them.[26] It is clear that due to the nature of their offense, sexual offenders face increased barriers and strain that prevent them from assimilating seamlessly back into society after incarceration.

Grossi further contends that simply by labeling a sex offender, and outing the nature of their crime, their strain and likelihood of re-offense may increase significantly.[27] Punitive legal measures in place to track offenders and warn members of society of the presence of an offender in their community are one such cause of sexual offender strain.[28] These studies contend that because offenders are unable to shed their "sex offender" label, they experience an immense sense of psychological strain that increase likelihood of re-offense.[29] Mechanisms such as ankle trackers, sex offender registries, and other stigmatizing and barrier-creating legal initiatives have been questioned by researchers as possible factors that increase likelihood of recidivism.[30] The present study seeks to fill a notable gap in the literature by determining—even more

specifically—if specific sub-groups of sexual crimes are predictors of recidivism. From evidence presented in existing literature, the researcher hypothesizes that more violent sexual crimes will be linked to a higher likelihood of recidivism because they place a larger strain on the individual.

Gaps in the Literature

There a number of significant gaps in the literature on online offender recidivism. Researcher Christopher Valentine explains that sexual offense data are often skewed or show differential representation of raw data due to factors such as "changing attitudes" of young people about reporting, increased internet safety measures implemented across domains, education, and other factors that have evolved over time.[31] In other words, the social world has seen significant internet culture shifts that may increase or decrease protection, susceptibility, and internet footprint-tracking that may cause a shift in statistical data on the subject of online offender recidivism. This data availability may result in new longitudinal data analyses in subsequent years or simply increased validity in findings as sample sizes increase due to the ubiquity of internet technology. As a result, it is important to interpret existing data through a critical lens that places the numbers within a cultural context. Since data interpretation may pose a challenge to the validity of findings, it is crucial that research continue to test and re-test hypotheses so that the current data available to scholars mirrors cultural changes in internet use, abuse and reporting.

One confounding factor that leads to significant gaps in the literature are conflicting ideas of what constitutes online sexual victimization. Although topics such as creation and distribution of child pornography are widely seen as sexual victimization, concepts such as sexual cyber-bullying are less neatly laid within the construct of online sexual victimization.[32] The present research will seek to fill this gap in the literature by clearly conceptualizing the acts considered

the be online victimization. These acts include possession, production, and distribution of child pornography and the sexual exploitation of a minor including solicitation, molestation, rape, harassment, stalking, coercion, and trafficking. Due to limited data availability, cyber-bullying and other critical domains of sexual victimization may be excluded from the present study, but should be explored in future research.

Furthermore, the literature on sexual offense recidivism lacks specificity, although researchers contend that previous pathology, sexual deviance, and other personal histories may significantly contribute to re-offense. The present study seeks to fill in the gaps in the literature by analyzing a specific sub-group of offenders with a greater specificity of personal history factors chosen for analysis. This study will provide well-defined variables and thoroughly conceptualized sub-population of sexual offenders in order to increase the clarity of findings around the topic of offender recidivism.

Methodology

This secondary data analysis study will attempt to answer the following research question: For online sexual offenders who have committed crimes against minors (people under 18 years of age) in the United States, do variables on personal history and variables detailing the types of offense committed predict whether or not the offender is a repeat offender? This study will control for the effect of certain demographic variables such as gender, race and offender age at the time of the crime. The researcher hypothesizes that certain personal history characteristics and particular types of offenses will emerge as predictive factors of offender recidivism.

This research involves the use of secondary data, The Second National Juvenile Online Victimization Incidence Study (NJOV-2), collected by Cornell University for publishing via the National Data Archive of Child Abuse and Neglect. The data collected from the NJOV-2 is taken

from a representative national survey taken from local, country, state and federal law enforcement agencies quantifying the frequency of online sexual offenses against minors, the characteristics of the offenses, and the demographic information of the offender between 2000 and 2006. The National Data Archive of Child Abuse and Neglect provided de-identified data to the researcher for data analysis. The present was approved by the Institutional Review Board (IRB) at The Catholic University of America, the university with which the researcher is affiliated.

The NJOV-2 data were collected from law enforcement agencies via mail survey and telephone follow-up. From the sample of 2,500 law enforcement agencies that were selected at random for participation in the study, there were 1,051 sexual offense cases reported and ultimately used in the data findings. Although the data are not provided, it is possible that multiple cases were committed by the same offender. There were three inclusion criteria for the NJOV-2: 1) was the offense internet-related, 2) Was the victim under 18 (or legally a "minor") and 3) Did the arrest happen between July 1, 2000 and June 1, 2001 or during the calendar year of 2006. The inclusion criteria were chosen to fit the population and crimes of interest and the time frame of data collection. If inclusion criteria were met, the case was included for analysis and follow-up telephone interviews were conducted to garner additional detail about the crime.

All participation was voluntary and participating law enforcement agencies were assured that they could cease participation at any time. Identifying information was omitted from the data prior to its release to the researcher. Furthermore, both waves of the study passed review from the New Hampshire University Institutional Review Board and complied with the U.S. Department of Justice's ethical regulations. Lastly, all research participants were offered the opportunity to be sent the results of the survey once data collection terminated.

In the present study, the independent variables are personal history variables and nature of the crime variables. The dependent variable is offender recidivism. The researcher will control for the effects of race, age, and gender. Personal History variables were extricated from the available NJOV-2 data examining their respective characteristics ancillary to their sexual offense. These data provided contextual non-demographic characteristics of who the offenders were. In other words, personal history variables are an attempt at understanding who commits online sexual crimes against minors in a manner that is more specific than general demographics. For the purposes of the present study, personal history variables include: 1) Did the offender have trouble with drugs and alcohol at the time of the crime? 2) Did the offender have a diagnosed mental illness at the time of the crime? 3)Were there prior arrests for non-sexual offenses, and 4) Did the offender have an illegal job at the time of the crime? These personal history variables were chosen predominantly in response to the gaps in the literature that suggest that personal history and personality may have predictive power over chance of recidivism. They were also chosen due to their availability within the secondary data set. Each item was included as a separate variable with a "yes" or "no" response (0=No, 1=Yes). All other responses such as "not ascertainable," "do not know," or "refused" were recoded as missing responses because they did not clearly answer the question posed.

Nature of the crime variables specify the act or infraction that led to the offender's arrest for internet-related sexual exploitation chargers against minors. The nature of the crime variables was selected from the available data in response to existing empirical findings on sexual offense recidivism. Although findings demonstrate that highly stigmatized crimes are associated with recidivism, the research does not adequately address which crimes, specifically, predict a higher likelihood of offense. In other words, the researcher seeks to understand if certain internet-

related sexual crimes carry more strain and predictive power over further sexual offenses. Each nature of the crime item was entered as a separate variable and was recoded to dichotomously reflect yes/no responses (0=No, 1=Yes).

In the present study, the dependent variable is offender recidivism. This variable may be defined as whether or not the offender was already a registered offender at the time of the crime. In other words, if the offender had already been convicted of a previous sex crime. The dependent variable was recoded in the present study to become a dichotomous variable that demonstrates a yes/no response (0=No, 1=Yes).

The control variables are demographic characteristics that were collected during the national survey are age at the time of crime commission, sex/gender, and race. The intention of incorporating these control variables is noise-reduction. Controlling for variables increases the probability that dependent variable is varying in accordance with the independent variable without interference from other salient variables.[33] The variable of offender sex was collected in two categories, males (coded as 1) and females (coded as 0). Age is measured at a continuous level and is normally distributed (mean = 36.61, median = 35, St. Deviation = 13.133, Skewness = .455). Race is a categorical variable that initially contained six racial distinctions. For the purposes of this logistic regression analysis, the variable has been collapsed into two categories to create a more even distribution of cases: white (coded as 1) and non-white (coded as 0). Statistics for the new categorical variable that describes offender race show that 92 percent of offenders are white (n = 972) and 7.1 percent of offenders are non-white (n = 74).

For data analysis, the researcher conducted a hierarchal logistic regression analysis to examine whether variables on personal history and types of offense predict whether or not the offender is a repeat offender, while controlling for the effect of certain demographic variables

such as gender, race and offender age. Descriptive analyses were first conducted to show the sample characteristics and goodness of fit between the data and hierarchal logistic regression. Because the dependent variable is dichotomous and yields results that attest to the predictive power of the independent variables, a logistic regression method was indicated. The researcher conducted a three-block hierarchal logistic regression in which control variables were entered into Block 1, nature of the crime variables were entered into Block 2, and the personal history characteristics were entered in Block 3. This was done so that the researcher could better analyze the effect of the independent variables, both as groups and as individual variables, without the noise contributed by the inclusion of the control variables. Ultimately, the results will suggest whether or not the personal history variables and the nature of the crime variables will significantly predict the offender's likelihood that they have committed previous sexual offenses.

Data Analysis

Before conducting the statistical analysis, the researcher ran the descriptive statistics to check for any abnormalities in the data that may interfere with the validity of the results. At this time, data missingness of over 10 percent was detected in the dependent variable (Was the offender a convicted sex offender at the time of arrest?). To address data missingness, the researcher excluded cases with missing values for the dependent variable. Nine hundred forty-six cases were excluded from the study due to missing data, resulting in a final sample size of 105. Upon inspection, all other variables appeared suitable for entry into the analysis and bivariate correlations were run. Among independent and control variables, no Pearson's Correlation value exceeded .8, suggesting that the assumption of multicollinearity was met and it was appropriate to proceed with the hierarchal logistic regression.

The results of the binary logistic regression showed nonsignificant results for Block 1, Block 2, and Block 3 (See Table 1). Block 1 demonstrated overall statistical non-significance (p=.209; Nagelkerke R-Square = .081). The Hosmer and Lemeshow test of goodness of fit shows non-significant results, suggesting that observed event rates matched the expected event rates (p=.215). Each of the control variables, sex (p=.999), Age (p=.238) and Race (p=.657) yielded non-significant results. These findings suggest that none of the control variables significantly predicted whether or not the offender had previously been convicted of a sexual offense.

Block 2, including variables on the nature of the crime, also yielded non-significant results (p= .098; Nagelkerke R-Square= .211). Although overall non-significant, the increase in the Nagelkerke R-Square value suggests that the addition of the nature of the crime variables in Block 2 improved the independent variables' ability to explain variation in the dependent variable. For Block 2, the Hosmer and Lemeshow results show a goodness of fit between the observed and expected events (p=.854). The variables entered, "Did the case involve the sexual exploitation of a minor?," "Was this a child pornography distribution to minors case?," "Was this a child pornography production case?," and "Was this a child pornography possession case?" all demonstrated non-significant findings (p > .05).

Block 3 included all personal history variables and also reported non-significant findings (p=.062; Nagelkerke R-Square=.342). Once more the increase in the Nagelkerke R-Square value suggests that as personal history variables were added to the model, it became a more parsimonious model. Hosmer and Lemeshow results demonstrate non-significant results, suggesting a goodness of fit between the expected and observed values (p=.561). Each variable entered in Block 3 including, "Did the offender have a problem with drugs and alcohol at the time of the crime?," "Did the offender have a diagnosed mental illness at the time of the crime?,"

"Did the offender have any prior arrests for nonsexual offenses?," and "Did the offender have an illegal occupation at the time of the crime?" all yielded non-significant results (p > .05). Ultimately, Block 1, Block 2, and Block 3 all reported non-significant results overall and for each variable therein suggesting no significant prediction power for offender recidivism.

Discussion and Conclusion

The results of the hierarchal regression retain the null hypothesis, suggesting that neither the personal history traits nor nature of the crime characteristics entered into the regression significantly predict whether or not the crime is the offender's first offense. Curiously, although both General Strain Theory and the empirical research suggest that personal history and nature of the crime variables may significantly contribute to the significant prediction of recidivism, the data refute this hypothesis. Further research may re-test a similar design with other sexual offender sub-populations, a different theoretical paradigm, choose to incorporate a larger sample size, or choose different traits and characteristics to test. Amalgamated, these data may create a more comprehensive picture of whether or not certain crimes or social backgrounds may increase the likelihood that a sexual offender re-offends upon release. These data are critical to public safety and particularly to those negatively affected by sexually motivated crimes.

There were a number of limitations presented by the current study. Firstly, because it was a secondary analysis, the researcher had no control over the breadth and depth of the information provided on each offender and sexual offense case. It may have contributed significantly to the findings to have many more questions about the offender's personal history and types of crimes they committed (i.e. cyber-bullying, internet stalking, online conspiracy to commit sex crimes etc.). Secondly, due to data missingness, the number of cases entered into the logistic regression was reduced to 105 cases. Further research may seek to expand the sample size to a wider

population so as to increase the validity and reliability of results. Lastly, a major limitation of the data analysis was the time frame in which the study spans. Because the most current data offering a national representative study available was amassed 2000-2001, it is likely that it is out of date. Future research will provide a more contemporary analysis of the current online-related sexual offenses committed against minors.

Nevertheless, the findings provide significant implications for social work at the micro, mezzo, and macro levels. Retaining the null hypothesis provides a rule-out of possible risk factors that can predict offender recidivism. Micro-level social workers working with offenders may therefore exert effort in other domains of the offender's psycho-social spiritual health that may better prevent recidivism (i.e., offender self-perceptions, experience of ostracism, etc.). On the mezzo-level, the data rendered by this study provides imperative data for work with offenders at the organizational level. By understanding what does not contribute to recommission of these crimes, organizations can place their efforts, funds, and therapeutic initiatives into programs that dismantle other barriers to lawful living (i.e., dismantling legal re-entry barriers that cause further strain to the offender, offering support groups to offenders or others affected by sexual crimes). On a macro level, the present research resolves some ambiguity about online sexual recidivism. Refuting hypotheses about what does not contribute to recidivism opens up opportunity for future researchers to test alternative hypotheses. This body of empirical research may one day agree upon risk factors and protective factors that prevent future harm to children. This information is critical not only to social workers, but also to law enforcement, criminologists, educators, parents, and to many others across a host of domains. Ultimately, the present study seeks contributes meaningful and impactful results that can benefit not on the social work domain, but also society at-large.

Appendix

Table 4:

Logistic Regression Analysis on Sexual Offender Recidivism

	B	Wald	Odds Ratio	P-Value
Step 1: Control Variables				
Sex (Male)	-20.974	.000	.000	.999
Race (White)	.42	.197	11.527	.657
Age	.022	1.394	1.034	.238
Overall				.209
Step 2: Nature of the Crime (1= Yes)				
Sex (Male)	-21.089	.000	.000	.999
Race (White)	.168	.026	1.182	.872
Age	.016	.550	1.016	.458
Sexual Exploitation of Minor	-1.675	3.593	.187	.058
Child Pornography Distribution to Minor	1.187	.890	3.276	.345
Child Pornography Production	1.581	2.836	4.858	.092
Child Pornography Possession	1.269	.180	1.309	.671
Overall				.098
Step 3: Personal History Variables (1=Yes)				
Sex (Male)	-21.264	.000	.000	.999
Race (White)	1.535	.813	4.639	.367
Age	.020	.822	1.020	.365
Sexual Exploitation of Minor	-1.496	2.683	.224	.101
Child Pornography Distribution to Minor	1.270	.965	3.561	.326
Child Pornography Production	1.338	1.906	3.812	.167
Child Pornography Possession	.277	.156	1.319	.693
Did offender abuse drugs/alcohol?	-.436	.411	.647	.522
Did offender have mental illness?	21.545	.000	2.274	.999
Did offender have previous nonsexual arrests?	.561	.810	1.752	.368
Did offender have illegal occupation?	1.068	.709	2.910	.400
Overall				.062

*p < .05

**parentheses indicate reference groups

The data used in this research, [162, Second National Juvenile Online Victimization Study

NJOV-2] were obtained from the National Data Archive on Child Abuse and Neglect and have

been used in accordance with its Terms of Use Agreement license. The Administration on

Children, Youth and Families, the Children's Bureau, the original dataset collection personnel or

funding source, NDACAN, Cornell University and their agents or employees bear no

responsibility for the analyses or interpretations presented here.

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