1-1-2017

The Complexity of Public Attitudes Toward Sex Crimes

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Abstract

Previous research suggests that public opinion about crime is nuanced as it has been found to vary greatly depending upon the type of questions asked and the amount of information provided. Few have similarly examined the complexity of public attitudes specifically about sex crimes. A survey was administered to a sample of U. S. residents utilizing the factorial survey method. The results suggested that specific details about the offense, offender, and victim had a significant effect on perceptions. The findings point to discrepancies between policy and public opinion, as well as to the importance of educating the public about the realities of sexual offending and victimization.

Keywords: sex crimes, sex offender policy, public opinion, factorial surveys

There are few groups of criminal offenders that incite as much fear and disdain among the public as sex offenders (Pickett, Mancini, & Mears, 2013; Quinn, Forsyth, Mullen-Quinn, 2004). Not surprisingly, researchers have also found that attitudes toward sex offenders tend to be rather punitive, particularly in comparison to other criminals (Craig, 2005; Hogue, 1993; Levenson, Brannon, Fortney, & Baker, 2007; Mears, Mancini, Gertz, & Bratton, 2008). Despite the decrease in sexual offense rates over the past few decades (Bureau of Justice Statistics, 2013; Federal Bureau of Investigation, 2012), the media's focus on rare, yet extremely tragic sex crimes continues to fuel public fear of victimization and punitiveness toward offenders (Malinen, Willis, & Johnston, 2014; Quinn et al., 2004; Sahlstrom & Jeglic, 2008). In fact, it has been posited that media sensationalism has contributed to the myths that all sex offenders are recidivistic, untreatable predators and that sex crimes have reached epidemic proportions (Levenson, 2003; Malinen et al., 2014; Sample & Bray, 2003).

In addition to the proliferation of myths, the intense media coverage and subsequent public outcry to protect society from sexual predators sparked a slew of sex offender management policies in the U. S. during the 20th century (Brown, 2009; Levenson, 2003). Importantly, it has been noted that much of this legislation has resulted in a net-widening effect (Harris, Lobanov-Robansky, & Levenson, 2010). That is, more offenders have become subjected to these requirements which has diverted the focus away from high-risk offenders and contributed to the perception that sex offenders comprise a homogeneous group (Association for the Treatment of Sexual Abusers [ATSA], 2008; Quinn et al., 2004). In sum, these policies have coalesced into a fear-inducing agent that has permeated the public conscience.

Growing public fear and punitiveness toward offenders is not unique to sex crimes. The media's focus on the most violent crimes and the political stance of appearing "tough on crime" have significantly contributed to public opinion about crime (Roberts & Stalans, 1997; Tonry, 2004). To be sure, public opinion polls such as the Gallup Poll have consistently revealed intense punitiveness toward criminals. These polls often find that the majority of the public supports the death penalty, believes the courts to be too lenient, and favors goals of incapacitation and retribution over rehabilitation (Cullen, Fischer, & Applegate, 2000; Roberts & Stalans, 1997).

While these simplistic polls suggest that public opinion about crime is overwhelmingly punitive, researchers have found that public opinion is actually more complex and varies in accordance with the amount of information provided to respondents (Cullen et al., 2000). For example, support for the death penalty decreases when alternative sentences are offered or when specific offense details, such as offender sex or age, are provided (Cullen et al., 2000). Others have found that when presented with the option, the public is likely to endorse punishment *and* rehabilitation (McCorkle, 1993). Thus, the findings of public opinion research are driven, at least in part, by the complexity of questions asked and the amount of information provided to respondents (Cullen et al., 2000).

The extensive body of literature on public opinion about crime clearly illustrates the complexity of these attitudes. However, few researchers have similarly examined the complexity of public opinion about sex crimes. A number of studies have found that general attitudes toward sex offenders (e.g., sex offenders cannot be rehabilitated) are significantly more negative than attitudes toward criminals. However, it is possible that when asked about "sex offenders" many are inclined to envision the media-proliferated stereotypical image of a violent, predatory male pedophile despite the fact that few offenders meet this description (Quinn et al., 2004). In fact, it has been noted that when researchers ask general questions about criminals, the majority of respondents typically think of a violent offender (Roberts & Stalans, 1997). As such, similar to the findings of research on public opinion about crime, it is possible that public attitudes toward sex offenders are more complex than previous studies have indicated depending upon the type of questions asked and the amount of information provided to respondents. Thus, the purpose of this study was to determine the extent to which specific offense, offender, and victim characteristics affected public attitudes about the punishment and management of sex offenders in the community.

Literature Review

Although statistics indicate that sexual offense rates in the U. S. have decreased since the 1990s, research consistently reveals a high level of fear of sexual victimization (Sims & Johnston, 2004; Warr, 1995). In an effort to explain the pervading fear and "public outrage" that seems to accompany the topic of sexual offending, Pickett et al. (2013) recently tested three theoretical explanations (p. 731). The victim-oriented concerns model focuses on the harm suffered by the most vulnerable members of society (i.e., females, children) as a result of sexual victimization. The sex offender stereotypes and risk-management concerns models hone in on the commonly held misperceptions that sex offenders are irredeemable "monstrous others" and that sex crimes rates continue to rise (p. 731). As noted above, these three explanations are likely products of media sensationalism, as well as political rhetoric in the recent "war on sex offenders" (Gillespie & King, 2014). Pickett et al. (2013) found empirical support for all three models though they argue they are more likely complimentary than competing.

Seemingly in response to the high level of public fear of sex crimes, researchers have uncovered extreme punitiveness toward "sex offenders" as well. For example, among the participants in Levenson et al.'s (2007) study of public attitudes toward sex offenders, the mean prison sentence a sex offender should serve was 38.8 years, although the mode was 99 years, which was the largest number that would fit in the space provided. Similarly, Mears and colleagues (2008) found that when asked about the appropriate punishment for sex offenders, 94% of respondents indicated incarceration for sexual assault or rape of an adult and 97.1% recommended the same punishment for sexual assault or rape of a child. In regard to the most punitive response, Mancini and Mears (2010) identified significant public support for the use of capital punishment for rapists (47%) and child molesters (65%). Overall, these studies suggest a high level of public punitiveness toward sex offenders. However, it is important to note that these studies assessed relatively broad opinions toward sex offenders. That is, with the exception of victim age, these studies were not able to determine the extent to which other important factors (e.g., offender sex) affected public opinion toward sex offenders. The present study sought to fill that void in the literature.

As noted earlier, several laws were enacted in the U. S. in the 1990s intended to protect the public by monitoring released sex offenders in the community. These laws, referred to as Sexually Violent Predator (SVP) Laws, include mandates such as sex offender registration (i.e., The Jacob Wetterling Act), community notification (i.e., Megan's Law), and residence restrictions (Levenson, 2003). Despite research suggesting these policies have little effect on sex offender recidivism (Letourneau, Levenson, Bandyopadhyay, Armstrong, & Sinha, 2010; Tewksbury & Jennings, 2010; Zandbergen, Levenson, & Hart, 2010), and may even exacerbate a released sex offender's ability to successfully reintegrate (Levenson, D'Amora, & Hern, 2007; Tewksbury, 2007), several researchers have discovered strong public support for them.

In 2009, Kernsmith, Craun, and Simmons examined public support for registration for different types of sex offenders (e.g., incest, pedophile, date rapist) and found that respondents were most likely to support registration for offenders against children, though support for registration was high for all offenders (65.1% - 97%). Similarly, Mears et al. (2008) found that 92% of the sample supported registration and 76% supported residence restrictions for sex offenders with child victims. According to Phillips' (1998) study of Washington residents, an overwhelming majority believed notification increased public safety despite the fact that less than half of those with children indicated having taken preventative measures based on the information. In regard to sex offender registration, Anderson and Sample (2008) found that while almost 90% of respondents were aware of the registry and reported it made them feel safer, only about one third had ever accessed it.

Another important finding of several studies is that these sex offender management policies seem to garner support regardless of whether they have any effect on sexual offending or victimization. For instance, Levenson and colleagues (2007) found that over 70% of their respondents indicated they would continue to support SVP laws even without evidence of their effectiveness. In a similar study of law enforcement officers, Tewksbury and Mustaine (2013) found that 81.5% indicated continued support for residence restrictions even in the absence of supporting empirical evidence. These findings suggest that, regardless of whether they are evidence-based or effective, sex offender management policies garner a great deal of support. However, it is important to consider how respondents conceptualize "sex offender" when asked about support for these policies. If they picture the rare, stereotypical image of all sex offenders as violent, recidivistic predators, the near blanket support often identified in research is based on media-proliferated myths and misconceptions (ATSA, 2008; Quinn et al., 2004).

The Impact of Offense Characteristics on Attitudes About Sex Crimes

Although most research in this area identifies a high degree of punitiveness toward sexual offenders and support for harsh sex offender management policies, the majority of studies have asked only about "sex offenders." That is, specific information about the offense, offender, and victim was not provided. Based on research illustrating the complexity of public opinion about crime (Cullen et al., 2000), it is reasonable to assume public opinion about sex crimes is similarly complex. In fact, several studies have revealed that a number of characteristics can have a significant effect on perceptions about sex crimes.

Victim and Offender Sex. The stereotypical image of a male perpetrator and female victim in sexual assaults has prompted some researchers to examine the extent to which victim and offender sex affect attitudes about sex crimes. For example, Rogers and Davies' (2007) study found that respondents deemed male perpetrators of child sexual abuse more culpable than female perpetrators. In addition, sexual assault by a male was considered more severe than assault by a female, and male victims of male perpetrators were held less culpable than male victims of female perpetrators. Similarly, Gould and Gertz' (1994) findings indicated that sexual offenses involving a female offender were deemed less serious and assigned a more lenient punishment by participants. More recently, Gakhal and Brown (2011) found that the views of forensic professionals, students, and the public specifically toward female sex offenders were generally more positive than those toward "sex offenders."

Victim and Offender Age. In addition to sex, the age of the victim and the offender can also be important variables in that sexual assaults involving an adult offender and a child victim are often deemed more serious. For example, Weekes, Pelletier, and Beaudette (1995) found that sex offenders who had child victims were deemed the most dangerous and immoral. Similarly, Ferguson and Ireland's (2006) study identified the most negative attitudes toward sex offenders with child victims. Other studies have reported similar findings in that sexual offending against children is deemed the most serious and deserving of harsh punishment (Kernsmith et al., 2009; Rogers, Hirst, & Davies, 2011). Fewer studies have examined the effect of offender age on attitudes toward sex offenders. Sahlstrom and Jeglic's (2008) study is one of the few that has examined attitudes toward juvenile sex offenders. Their findings suggested that juvenile sexual offending was considered a very serious crime; however, additional research is needed to examine these attitudes among a public sample and to compare them to attitudes toward adult sex offenders.

Victim-Offender Relationship. Several studies have revealed that sexual assaults are deemed less serious and offenders less culpable when a previous relationship exists between the victim and offender. In 2004, Frese, Moya, and Megías found that respondent ratings for victim responsibility were higher for acquaintance rape scenarios than for stranger rapes. In fact, the stranger rape scenario yielded the highest level of perpetrator blame and estimation of victim trauma. Similar discrepancies were found in Yamawaki's (2007) research that examined rape-supportive beliefs using two rape scenarios (i.e., date, stranger). Participants presented with the date rape scenario were more likely to blame the victim, minimize the seriousness of the rape, and excuse the rapist. Overall, these studies suggest that situations in which the victim and offender had a previous relationship are related to more victim blame, less perpetrator blame, and lower levels of perceived severity.

Respondent Characteristics. Research indicates that the demographics and experiences of respondents can also have an impact on attitudes. One of the more consistent findings is that females typically report greater fear of and punitiveness toward sex offenders (Brown, Deakin, & Spencer, 2008; Craig, 2005; Kernsmith et al., 2009; Levenson et al., 2007; Phillips, 1998; Pickett et al., 2013; Willis, Malinen, & Johnston, 2013). Some researchers have also found that older, less educated individuals from lower socioeconomic backgrounds are more likely to harbor negative attitudes toward sex offenders (Brown, 1999; Mears et al., 2008; Pickett et al., 2013; Willis et al., 2013). A somewhat surprising correlate is previous victimization, which has been shown to predict more lenient attitudes toward sex offenders in some studies (Ferguson & Ireland, 2006; Nelson, Herlihy, & Oescher, 2002). It

has been posited that since individuals are more likely to be sexually assaulted by someone they know, their attitudes may be based less on misconceptions and stereotypical images of sexual offending (Brown, 2009; Nelson et al., 2002; Willis et al., 2013).

The Present Study

Although several researchers have found public attitudes toward "sex offenders" to be punitive and supportive of harsh legislation, few have examined how several specific offense details affect these perceptions. Drawing from the extensive body of research on the nuanced nature of public opinion about crime (Cullen et al., 2000), the goal of this study was to determine the extent to which offense type, victim and offender sex, victim and offender age, and previous relationship affected public attitudes toward the punishment and management of sex offenders. Based on the previous research discussed above, as well as Pickett et al.'s (2013) victim-oriented concerns model, it was hypothesized that respondents would be more punitive and supportive of registration in situations involving: more serious offenses perpetrated by strangers; older, male offenders; and younger, female victims. That is, it was expected that scenarios characterized by one or more of these attributes would be deemed more severe in terms of harm to the victim and society, and consequently, more deserving of harsh punishment and monitoring for the offender. In addition, it was also hypothesized that respondents who were female, parents, of lesser educational attainment and lower annual income, and who had not been sexually victimized would display more punitive attitudes toward sex offenders.

Method

Sampling

In order to gather data for this study, a mail survey with an online option was sent to a random sample of Pennsylvania households gathered using multistage cluster sampling. A list of all incorporated cities and towns in Pennsylvania was obtained from the U.S. Census Bureau (2010a). This list was stratified by population size into four strata and then disproportionately sampled relative to stratum size. Next, a disproportionately stratified, random sample of zip codes from the selected cities was gathered. Once the zip codes were randomly selected, a list of all carrier routes within each was compiled and again random samples were generated from each stratum. Last, a random sample of residential mailing addresses within the selected carrier routes was gathered, resulting in a final sample of 400 addresses. The adult (i.e., age 18 or over) who had had the most recent birthday was asked to complete the survey (Dillman, Smyth, & Christian, 2009).

Based on previous research reported by Dillman et al. (2009), a conservative response rate of 30% was expected. However, after several weeks and a reminder postcard, the desired sample size was not achieved with the mail survey. In the interests of time and resources, the online version of the survey was administered to a sample of 1,000 adult Pennsylvania resident e-mail addresses by a contracted survey research company. The final sample size achieved was 174 (i.e., 74 mail surveys; 100 e-mail surveys), which was sufficiently large enough to conduct the analyses based on power, significance, and an expected medium effect size (Cohen, 1992). Despite the adequate sample size for analysis, it is important to note that the findings may not be generalizable to all Pennsylvania residents due to the low response rate, probable selection bias for the e-mail survey (i.e., panel members who had opted in to participate in research surveys), and the combination of data from two different survey modes. However, as is discussed in more detail below, the sample was comparable to the population in regard to several characteristics and there were few significant differences between mail and e-mail survey respondents.

The demographic characteristics of the respondents are displayed in Table 1 and briefly discussed below in comparison to the Pennsylvania population according to the U. S. Census (2010b). In regard to respondent sex, females were slightly overrepresented (55.5%) which is not remarkably different from the Pennsylvania population in which 51.3% are female. The sample was also similar to the population in terms of race/ethnicity, median annual household income, and percentage with children under the age of 18. However, there were some notable differences between the sample and the population. Whereas 98.3% of respondents reported a high school diploma or higher, 86.9% of Pennsylvanians aged 25 or older had received a high school diploma. The median age of Pennsylvanians was 40.1 years while the median sample age was 51.0 years. Thus, in comparison to the population, the sample was slightly more likely to be female, older, and of higher educational attainment, which is not uncommon in survey research (Dillman et al., 2009).

{Table 1 about here}

Sample frequencies were also calculated for the experiential variables (not shown). The first of these asked respondents if they had ever been the victim of a rape or sexual assault. Almost 11% of respondents answered this item affirmatively, which is consistent with the results of the *National Crime Victimization Survey* relative to the U. S. population (BJS, 2013; U. S. Census, 2010b). Next respondents were asked if they personally knew someone who had ever been the victim of a rape or sexual assault. Over one third of the sample (37.9%) responded affirmatively which was slightly lower than other studies that have measured indirect sexual victimization (Nelson et al., 2002; Willis et al., 2013).

Additional analyses were run to determine if there were any significant differences between mail and e-mail survey respondents in regard to the demographic and experiential variables. The only variables that were significant were age ($p<.001$) and whether the respondent had children under 18 ($p<.05$) in that e-mail respondents were younger (on average, about nine years) and more likely to have children under the age of 18 than mail survey respondents. The relationship between survey mode and the other demographic and experiential variables was not statistically significant. Thus, with the exception of age and parental status, the respondents from the two survey modes were similar in terms of these demographic and experiential variables.

Measurement

Dillman et al.'s (2009) *Tailored Design Method* was used as a guide for survey construction and implementation. In the initial mailing, each respondent received an invitation to participate including the essentials of informed consent (implicit), the survey, and a prepaid return envelope. As noted above, reminder postcards were sent to the entire sample two weeks later. For the online version of the survey, respondents received an e-mail with the invitation to participate, informed consent, and link to the survey.

The survey included vignettes developed specifically for the purposes of this study that described five different sexual offenses of which a defendant was convicted. The five types of offenses included: voyeurism (i.e., videotaping someone undressing without their knowledge); exhibitionism (i.e., exposing one's genitals to another person); fondling (i.e., sexual touching without consent); sexual assault (i.e., sexual acts without the use of force); and rape (i.e., sexual acts with the use of force). Rather than using the legal terms for these offenses, which may have been confusing to some respondents, a brief description of the offense was provided. While each survey included descriptions of these same five offenses, the factorial survey method (Rossi & Anderson, 1982) was used to randomly vary the scenario characteristics of offender and victim sex (male, female), offender age (15, 25, 50), victim age (8, 15, 25, 50), and victim-offender relationship (stranger, neighbor, close friend, relative). Offender age was limited to 15, 25, or 50 to make the vignettes as believable as possible. These scenario characteristics comprised the primary independent variables in this study. Sample vignettes are displayed in Figure 1.

{Figure 1 about here}

Each vignette was followed by two questions intended to measure the dependent variables of prison sentence and registration requirement. These variables were measured continuously by asking respondents to indicate the recommended prison term (How many years would you send this offender to prison for? If you would not send this offender to prison, please write "0" in the space provided) and registration requirement (How many years would you require this offender to register their name, address, and photo with the police so that anyone could see the information? If you would not require them to register, please write "0" in the space provided). Thus, respondents were asked to indicate the prison term and registration requirement for each of the five vignettes. The last section of the survey measured the demographic and experiential variables discussed above.

Results

Once data collection was complete, several analyses were performed beginning with descriptive statistics and frequencies for the dependent variables. Across all scenarios, prison sentences ranged from 0-100 years with a mean of 10.394 years (SD=18.656). Of those that assigned any prison term (67.4%), sentences ranged from 0.5-100 years with an average of 15.545 years (SD=20.991). The second item asked respondents to assign the registration requirement for the offender. Again, recommended registration lengths ranged from 0-100 years and the mean registration requirement across all scenarios was 20.524 years (SD=27.876). Among scenarios that resulted in required registration (70.8%), terms ranged from 0.5-100 years with a mean of 29.224 years (SD=29.220). The prison sentence and registration requirement variables are broken down by offense type and presented in Table 2. As anticipated, prison sentence and registration recommendations generally increased as the offense became more serious.

{Table 2 about here}

In terms of data distribution, the prison sentence data were highly, positively skewed (skewness=3.158) whereas the data for registration were less skewed (skewness=1.663) with more outliers. In order to account for this, these variables were transformed into their natural logarithm (Osborne, 2002). While data transformation often results in more complex interpretations, the improvement in the normality of the distributions (skew of 0.391 and -0.055, respectively) resulted in more reliable parameter estimates and significance testing (Osborne, 2002). Thus, the transformed variables were used in all analyses.

In order to test the hypotheses of this study, hierarchical linear modeling (HLM) was used to allow for analysis of data at two levels (Luke, 2004). There were a total of five vignettes nested within each survey (i.e., respondent), resulting in two levels of data. The Level One independent variables were the vignette characteristics of offense type, offender sex and age, victim sex and age, and victim-offender relationship. The Level Two variables were the demographic and experiential items for each respondent. Prior to constructing the HLM models to test the hypotheses, null models (i.e., containing only dependent variables) were run using full maximum likelihood estimation which is typically the first step in constructing multilevel models (Luke, 2004). The output was used to calculate the intraclass correlation coefficient (ICC), which measures the amount of variance in the dependent variable accounted for by group-level data (i.e., Level Two variables) (Luke, 2004). The calculated ICCs indicated that between 42.4% and 49.4% of the variance in the dependent variables was between respondents, which is considered moderately high and provided additional justification for the use of HLM (Luke, 2004; Raudenbush & Bryk, 2002).

The model for the prison sentence variable is displayed below in Table 3. As noted above, direct interpretation of these parameters is inappropriate since the transformed versions of the prison sentence and registration requirement variables were utilized. Nevertheless, these analyses were able to elucidate the direction and significance of the Level One and Level Two variables. As hypothesized, offense type (b=.320, p<.001) and offender age (b=.012, p<.001) were both positively related to prison sentence indicating that more serious offenses and older offenders resulted in longer sentences. Also consistent with the hypothesis, offender sex (b=-.370, p<.001) was a significant predictor in that situations involving female offenders elicited shorter prison terms. In regard to victim characteristics, prison sentences were shorter for situations involving older victims (b=-.011, p<.001). The only Level 2 variables that were significant were respondent sex (b=.386, p<.01) and education (b=-.099, p<.05). Consistent with the hypothesis and previous research, females and those with less education were more likely to assign longer prison sentences.

{Table 3 about here}

In order to examine explanatory power, the R^2 for each level of data in the model was also computed (Luke, 2004). As noted below Table 3, the Level One variables resulted in a 41.3% proportionate reduction in prediction error and the Level Two variables resulted in a 45.8% reduction. Thus, in comparison to the null model, including the scenario characteristics, and demographics and experiences of respondents reduced the prediction error of prison sentence by more than 40%.

Table 4 presents the model for registration requirement with the same Level One and Level Two variables discussed above. As with prison sentence, and consistent with the hypothesis, the Level One variables of offense type (b=.251), offender age (b=.016), offender sex (b=-.447), and victim age (b=-.016) were significant (p<.001) and in the expected directions. That is, registration requirement lengths were longer for situations involving more serious offenses, male offenders, older offenders, and younger victims. The previous relationship between the victim and offender was also significant (b=-.068, p<.05) in that registration requirements were shorter for situations in which the victim and offender had a previous relationship.

{Table 4 about here}

Respondent sex (b=.777, p<.001) and education (b=-.153, p<.05) were again significant and in the expected directions. In this model respondents with children under 18 (b=.511, p<.05) were more likely to assign longer registration requirements. The calculated Level One and Level Two R^2 indicated that these variables reduced the registration requirement prediction error by 25.23% and 24.81% respectively. Though not as powerful as the prison sentence model, these variables were able to reduce the prediction error of sex offender registration by about one quarter.

Discussion

Drawing from the vast body of research on public opinion about crime, the primary goal of this study was to examine the complexity of public attitudes toward sex crimes. While several researchers have found that the public is quite punitive toward "sex offenders," the intent of this study was to determine the effects of offense type along with victim and offender sex, age, and previous relationship on perceptions about the punishment and required registration for those convicted of sexual offenses. Although studies have examined the effects of some of these variables on attitudes about sex crimes, the researchers are not aware of any other study that has included all of these variables using a factorial survey design. Based on the results discussed above, several offense characteristics had a significant effect on public attitudes toward sex crimes suggesting opinions are more complex than many previous studies have indicated.

As hypothesized, respondents displayed more punitive attitudes in scenarios involving more serious offenses, male offenders, older offenders, and younger victims. Situations involving a victim and offender who had a previous relationship resulted in shorter registration requirements. In regard to respondent characteristics, females and those with less education were more likely to assign longer prison sentences and registration requirements. Additionally, parents of children under 18 were more likely to assign longer registration requirements. Overall, these findings are consistent with the hypothesis, as well as previous research. Surprisingly, however, the sex of the victim was not significant in any of the models, nor was respondent annual income or direct or indirect sexual victimization.

The variables that were found to significantly impact respondent attitudes are not surprising. It stands to reason that more severe offenses should generally result in more serious punishments. Additionally, the variables of victim and offender age may very well have been deemed indicative of severity. That is, situations involving older offenders and younger victims were seen as more serious, which is consistent with Pickett et al.'s (2013) victim-oriented concerns model in regard to perceived victim harm. Also not surprising was the impact of offender sex in that situations involving female offenders elicited shorter prison and registration terms. This reflects the perception that sexual victimization by a female perpetrator is not as severe, which has been discovered in other studies as well. Though this was expected, it is concerning in light of research suggesting female-perpetrated sexual abuse can be more emotionally traumatic and difficult to comprehend for both male and female victims (Denov, 2004; Elliot, 1993). For some victims, sexual victimization by a female perpetrator represents "a deeper sense of betrayal" because it essentially defies traditional views of femininity and motherhood (Denov, 2004, p. 149). These seemingly widespread perceptions may inhibit survivors of female-perpetrated abuse from reporting the crime and they may also cause those to whom they do report (e.g., law enforcement, parents, teachers) to fail to appropriately respond.

The notion that the findings of research are influenced by the methodology's inclusion and measurement of variables is not new. However, the implications of this are worth considering particularly if the findings are used by politicians as support for "tough on crime" legislative agendas (Roberts & Stalans, 1997). As noted earlier, it is likely that when the public is asked their opinions about the punishment and management of "sex offenders" they immediately picture a terrifying, albeit rare image of a violent, perpetually recidivistic sex offender, resulting in uniformly punitive responses that may not be truly indicative of the complexity of public opinion. Indeed, the findings of this study suggest that public attitudes toward the appropriate punishment and registration requirement for those convicted of sexual offenses are anything but uniform. As noted earlier, suggested prison sentences and registration requirements ranged from 0-100 years (see Table 2). This trend remained even within certain offense types. For example, among all voyeurism scenarios, assigned prison and registration terms still ranged from 0-100 years indicating a considerable amount of variation in opinion.

Although many have posited that public opinion should have little effect on policymakers' decisions since it is often based on information gleaned solely from the media (Roberts & Stalans, 1997), public opinion is integral in a democracy (Mears et al., 2008). Based on the results of this study, there may be several discrepancies between public opinion and Pennsylvania policies regarding the punishment and management of sex offenders in the community. For example, according to the Pennsylvania State Police (2012), lifetime registration is required for offenders (age 14 or older) convicted of Tier III sexual offenses including rape (18 Pa.C.S. § 3124.1). While 89.4% of the rape scenarios in this study resulted in required registration (i.e., a term of greater than zero years), the assigned terms ranged from 0.5–100 years. In other words, over 10% of the rape scenarios did not result in registration and there was a great amount of variation among those that did require registration.

While this study provided evidence for the notion that public attitudes toward sex crimes are complex, there were some limitations, most notably the survey response rate. Because the response rate was low, the findings may not be generalizable back to the population of Pennsylvania residents. Although the sample was similar to the population in regard to the majority of the demographic and experiential variables, comparisons to Census data suggested that the sample was slightly more likely to be female, older, and of higher educational attainment which could have affected the findings. Thus, future researchers should endeavor to achieve higher response rates in order to examine public opinion about sex crimes among a more generalizable sample. Another potential limitation was respondent knowledge. It is likely that the majority of respondents were not familiar with sentencing and/or sex offender registration practices in Pennsylvania, which hints at the importance of education.

As discussed earlier, the inclusion of the e-mail surveys and combination of data from two different survey modes was necessary to conduct the analyses, but also a potential limitation of this study. In regard to demographics, analyses revealed that e-mail survey respondents were significantly younger and more likely to have children under 18 than mail survey respondents. During hypothesis testing, models were run including survey mode and it was not a significant predictor in either of the models (not shown). Thus, while the inclusion of the e-mail surveys affected the overall demographic characteristics of the sample in regard to age and parental status, it did not appear to have a significant effect on determining the extent to which the scenario characteristics affected attitudes toward prison sentence and registration requirement among this sample of Pennsylvania residents.

There is no doubt that sexual offenses are serious crimes that can result in extreme harm to victims and to society as a whole. However, the manner in which these crimes have been addressed by policymakers in the U.S. (i.e., SVP laws) has likely resulted in increasing public fear and fueling the proliferation of myths. For example, these laws convey a false sense of safety to the public by suggesting that offenders on the registry pose the greatest risk (Quinn et al., 2004). On the contrary, research indicates offenders are most likely to be someone the victim knows and/or first-time offenders (i.e., not on the sex offender registry) (Craun, Simmons, & Reeves, 2011). In conclusion, if public opinion about sex crimes is indeed informed by misconceptions, steps should be taken to educate the public, and perhaps policymakers as well, on the reality of sexual offending and victimization. Such efforts could not only lead to more evidence-based policies, but also to more informed decisions regarding sexual victimization risk.

References

Anderson, A. L., & Sample, L. L. (2008). Public awareness and action resulting from sex offender community notification laws. *Criminal Justice Policy Review, 19*(4), 371-396. doi: 10.1177/0887403408316705

Association for the Treatment of Sexual Abusers. (2008). Research and statistics debunk common misconceptions. In L. Zott (Ed.), *Sex offenders and public policy* (pp. 43-53). Detroit, MI: Greenhaven Press.

Brown, S. (1999). Public attitudes toward the treatment of sex offenders. *Legal and Criminological Psychology, 4*(2), 239-252.

Brown, S. (2009). Attitudes towards sexual offenders and their rehabilitation: A special case? In J. Wood & T. A. Gannon (Eds.), *Public opinion and criminal justice: Context, practice and values* (pp. 187-213). Portland, OR: Willan Publishing.

Brown, S., Deakin, J., & Spencer, J. (2008). What people think about the management of sex offenders in the community. *Howard Journal of Criminal Justice, 47*(3), 259-274. doi: 10.1111/j.1468-2311.2008.00519

Bureau of Justice Statistics. (2013). *Criminal victimization, 2012*. Retrieved from http://www.bjs.gov/content/pub/pdf/cv12.pdf

Cohen, J. (1992). A power primer. *Quantitative Methods in Psychology, 112*(1), 155-159.

Craig, L. A. (2005). The impact of training on attitudes towards sex offenders. *Journal of Sexual Aggression, 11*(2), 197-207. doi: 10.1080/13552600500172103

Craun, S. W., Simmons, C. A., & Reeves, K. (2011). Percentage of named offenders on the registry at the time of the assault: Reports from sexual assault survivors. *Violence Against Women, 17*(11), 1374-1382. doi: 10.1177/1077801211428604

Cullen, F. T., Fischer, B. S., & Applegate, B. K. (2000). Public opinion about crime and corrections. In M. Tonry (Ed.), *Crime and justice: A review of research, vol. 27* (pp. 1-79). Chicago, IL: University of Chicago Press.

Denov, M. (2004). *Perspectives on female sex offending*. Burlington, VT: Ashgate Publishing.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: John Wiley & Sons.

Elliot, M. (Ed.). (1993). *Female sexual abuse of children*. London, UK: Longman Group UK Limited.

Federal Bureau of Investigation. (2012). *Crime in the United States 2012*. Retrieved from http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s.-2012

Ferguson, K., & Ireland, C. A. (2006). Attitudes toward sex offenders and the influence of offence type: A comparison of staff working in a forensic setting and students. *British Journal of Forensic Practice, 8*(2), 10-19.

Frese, B., Moya, M., & Megías, J. (2004). Social perception of rape: How rape myth acceptance modulates the influence of situational factors. *Journal of Interpersonal Violence, 19*(2), 143-161. doi:10.1177/0886260503260245

Gakhal, B. K., & Brown, S. J. (2011). A comparison of the general public's, forensic professionals' and students' attitudes toward female sex offenders. *Journal of Sexual Aggression, 17*(1), 105-116. doi: 10.1080/13552600.2010.540678

Gillespie, L. K. & King, L. L. (2014). Legislative origins, reforms, and future directions. In T. Richards & C. Marcum (Eds.), *Sexual victimization: Then and now* (pp. 15-32). Thousand Oaks, CA: Sage.

Harris, A. J., Lobanov-Rostovsky, C., & Levenson, J. S. (2010). Widening the net: The effects of transitioning to the Adam Walsh Act's federally mandated sex offender classification system. *Criminal Justice and Behavior, 37*(5), 503-519. doi:10.1177/0093854810363889

Hogue, T. (1993). Attitudes toward prisoners and sexual offenders. *Issues in Criminological and Legal Psychology, 9,* 27-32.

Kernsmith, P. D., Craun, S. W., & Foster, J. (2009). Public attitudes toward sexual offenders and sex offender registration. *Journal of Child Sexual Abuse, 18*(3), 290-301. doi: 10.1080/10538710902901663

Letourneau, E. J., Levenson, J. S., Bandyopadhyay, D., Armstrong, K. S., & Sinha, D. (2010). Effects of South Carolina's sex offender registration and notification policy on deterrence of adult sex crimes. *Criminal Justice and Behavior, 37*(5), 537-552. doi:10.1177/0093854810363569

Levenson, J. S. (2003). Policy interventions designed to combat sexual violence: Community notification and civil commitment. *Journal of Child Sexual Abuse, 12* (3-4), 17-52. doi: 10.1300/J070v12n03_02

Levenson, J. S., Brannon, Y. N., Fortney, T., & Baker, J. (2007). Public perceptions about sex offenders and community protection policies. *Analyses of Social Issues & Public Policy, 7*(1), 137-161. doi: 10.1111/j.1530-2415.2007.00119.x.

Levenson, J. S., D'Amora, D. A., & Hern, A. L. (2007). Megan's law and its impact on community re-entry for sex offenders. *Behavioral Sciences & the Law, 25*(4), 587-602. doi: 10.1002/bsl.770

Luke, D. A. (2004). *Multilevel modeling.* Thousand Oaks, CA: Sage Publications, Inc.

Malinen, S., Willis, G. M., & Johnston, L. (2014). Might informative media reporting of sexual offending influence community member's attitudes towards sex offenders? *Psychology, Crime, & Law, 20*(6), 535-552. doi: 10.1080/1068316X.2013.793770

McCorkle, R. C. (1993). Research note: Punish and rehabilitate? Public attitudes toward six common crimes. *Crime & Delinquency, 39*(2), 240-252. doi:10.1177/0011128793039002008

Mears, D. P., Mancini, C., Gertz, M., & Bratton, J. (2008). Sex crimes, children, and pornography. *Crime & Delinquency, 54*(4), 532-559. doi:10.1177/0011128707308160

Nelson, M., Herlihy, B., & Oescher, J. (2002). A survey of counselor attitudes towards sex offenders. *Journal of Mental Health Counseling, 24*(1), 51-67.

Osborne, J. (2002). *Notes on the use of data transformations*. Retrieved from http://pareonline.net/

Pennsylvania State Police. (2012). *Megan's Law*. Retrieved from http://www.pameganslaw.state.pa.us/

Phillips, D. M. (1998). *Community notification as viewed by Washington's citizens*. Retrieved from http://www.wsipp.wa.gov/rptfiles/CnSurvey.pdf

Pickett, J. T., Mancini, C., & Mears, D. P. (2013). Vulnerable victims, monstrous offenders, and unmanageable risk: Explaining public opinion on the social control of sex crime. *Criminology, 51*(3), 729-759. doi: 10.1111/1745-9125.12018.

Quinn, J. F., Forsyth, C. J., & Mullen-Quinn, C. (2004). Societal reaction to sex offenders: A review of the origins and results of the myths surrounding their crime and treatment amenability. *Deviant Behavior, 25*(3), 215-232. doi: 10.1080/01639620490431147

Raudenbush, S. W., & Bryk, A. S. (2000). *Hierarchical linear models: Applications and data analysis methods.* Thousand Oaks, CA: Sage Publications.

Roberts, J. V., & Stalans, L. J. (1997). *Public opinion, crime, and criminal justice.* Boulder, CO: Westview Press.

Rogers, P., & Davies, M. (2007). Perceptions of victims and perpetrators in a depicted child sexual abuse case: Gender and age factors. *Journal of Interpersonal Violence, 22*(5), 566-584. doi:10.1177/0886260506298827

Rogers, P., Hirst, L. & Davies, M. (2011). An investigation into the effect of respondent gender, victim age, and perpetrator treatment on public attitudes towards sex offenders, sex offender treatment, and sex offender rehabilitation. *Journal of Offender Rehabilitation, 50*(8), 511-530. doi: 10.1080/10509674.2011.602472

Rossi, P. H. & Anderson, A. B. (1982). The factorial survey approach: An introduction. In P. H. Rossi & S. L. Nock (Eds.), *Measuring Social Judgments* (pp. 15-67). Beverly Hills, CA: Sage Publications.

Rossi, P. H., Berk, R., & Campbell, A. (1997). Just punishments: Guideline sentences and normative consensus. *Journal of Quantitative Criminology, 13*(3), 267-90. doi: 10.1007/BF02221093

Sahlstrom, K. J., & Jeglic, E. L. (2008). Factors affecting attitudes toward juvenile sex offenders. *Journal of Child Sexual Abuse, 17*(2), 180-196. doi: 10.1080/10538710801916705

Sample, L. L., & Bray, T. M. (2003). Are sex offenders dangerous? *Criminology & Public Policy, 3*(1), 59-82. doi: 10.1111/j.1745-9133.2003.tb00024.x

Sims, B., & Johnston, E. (2004). Examining public opinion about crime and justice: A statewide study. *Criminal Justice Policy Review, 15*(3), 270-293. doi: 10.1177/0887403403252668

Tewksbury, R. (2007). Exile at home: The unintended collateral consequences of sex offender residency restrictions. *Harvard Civil Rights-Civil Liberties Law Review, 42*(2), 531-540.

Tewksbury, R., & Mustaine, E. E. (2013). Law-enforcement officials' views of sex offender registration and community notification. *International Journal of Police Science & Management, 15*(2), 95-113. doi: 10.1350/ijps.2013.15.2.305

Tewksbury, R., & Jennings, W. G. (2010). Assessing the impact of sex offender registration and community notification on sex-offending trajectories. *Criminal Justice and Behavior, 37*(5), 570-582. doi:10.1177/0093854810363570

Tonry, M. (2004). *Thinking about crime: Sense and sensibility in American penal culture.* New York, NY: Oxford University Press.

U. S. Census Bureau. (2010a). *Annual estimates of the population for incorporated places in Pennsylvania.* Retrieved from http://www.census.gov/popest/

U. S. Census Bureau. (2010b). *American fact finder.* Retrieved from http://quickfacts.census.gov/

Warr, M. (1995). Public opinion on crime and punishment. *Public Opinion Quarterly, 59*(2), 296-310. Retrieved from http://www.jstor.org/stable/2749706

Weekes, J. R., Pelletier, G., & Beaudette, D. (1995). Correctional officers: How do they perceive sex offenders? *International Journal of Offender Therapy & Comparative Criminology, 39*(1), 55-61.

Willis, G. M., Malinen, S., & Johnston, L. (2013). Demographic differences in public attitudes towards sex offenders. *Psychiatry, Psychology & Law, 20*(2), 230-247. doi: 10.1080/13218719.2012.658206

Yamawaki, N. (2007). Rape perception and the function of ambivalent sexism and gender-role traditionality. *Journal of Interpersonal Violence, 22*(4), 406-423. doi: 10.1177/0886260506297210

Zandbergen, P. A., Levenson, J. S., & Hart, T. C. (2010). Residential proximity to schools and daycares: An empirical analysis of sex offense recidivism. *Criminal Justice and Behavior, 37*(5), 482-502. doi:10.1177/0093854810363549

Table 1
Demographic Variable Frequencies (N=174)

Variable	Attributes	Valid N	Valid %
Sex	Male	77	44.5%
	Female	96	55.5%
Race/Ethnicity	Caucasian/White	146	84.9%
	African American	16	9.3%
	Asian	4	2.3%
	Hispanic	6	3.5%
Education Level	Less than high school	3	1.7%
	Received high school degree/GED	51	29.7%
	Some college; no degree	32	18.6%
	Associate's Degree	27	15.7%
	Bachelor's Degree	42	24.4%
	Master's Degree	14	8.1%
	Doctorate Degree	3	1.7%
Annual Income	$0 - $20,000	26	15.3%
	$20,001 - $40,000	47	27.6%
	$40,001 - $60,000	48	28.2%
	$60,001 - $80,000	19	11.2%
	$80,001 - $100,000	10	5.9%
	Over $100,000	20	11.8%
Children under the age of 18	No	135	77.6%
	Yes	39	22.4%

Figure 1
Sample Vignettes

Voyeurism
Case #1: A 50-year-old male is found guilty of videotaping the victim while they were undressing. The victim did not know they were being videotaped. The victim is a 15-year-old female. The victim and offender are neighbors.

Exhibitionism
Case #2: A 15-year-old female is found guilty of exposing (showing) their genitals to the victim who did not ask to see them. The victim is an 8-year-old female. The victim and offender are relatives.

Fondling
Case #3: A 25-year-old male is found guilty of sexually fondling (such as touching) the victim. The victim is a 15-year-old male. The victim and offender have never met before.

Sexual Assault
Case #4: A 50-year-old female is found guilty of performing sexual acts with the victim. The offender did not use force (such as hitting or using a weapon), but the victim said they did not want to do it. The victim is a 25-year-old male. The victim and offender are close friends.

Rape
Case #5: A 25-year-old male is found guilty of using force (such as hitting or using a weapon) to perform sexual acts with the victim. The victim is a 50-year-old female. The victim and offender are neighbors.

Table 2
Dependent Variable Descriptive Statistics (N=870)

Offense Type	Prison term (>0 years)	Prison (years)	Registration (>0 years)	Registration (years)
Voyeurism	53.5%	M = 5.814 SD = 14.646	59.4%	M = 16.824 SD = 27.997
Exhibitionism	52.0%	M = 5.850 SD = 14.853	60.4%	M = 16.802 SD = 27.496
Fondling	65.3%	M = 9.778 SD = 18.869	69.0%	M = 18.688 SD = 26.312
Sexual Assault	74. 0%	M = 13.025 SD = 20.314	74.9%	M = 22.216 SD = 28.551
Rape	89.9%	M = 17.621 SD = 21.117	89.4%	M = 28.035 SD = 27.648

Table 3
Prison Sentence Model (N=835)

Fixed Effects	Coefficient	SE	T-ratio
Between persons			
Intercept2 (β_{00})	1.528	.070	21.949*
Sex (β_{01})	0.386	.141	2.734**
Age (β_{02})	-.003	.005	-.526
Race (β_{03})	.098	.213	.461
Education (β_{04})	-.099	.050	-1.988***
Income (β_{05})	-.050	.052	-.967
Parent (β_{06})	.363	.198	1.834
Direct Victimization (β_{07})	-.112	.270	-.415
Indirect Victimization (β_{08})	.098	.213	.461
Within persons			
Offense Type (β_{10})	.320	.024	13.552*
Offender Age (β_{20})	.011	.002	5.267*
Offender Sex (β_{30})	-.370	.066	-5.622*
Victim Age (β_{40})	-.011	.002	-4.859*
Victim Sex (β_{50})	-.064	.069	-.929
Relationship (β_{60})	-.038	.030	-1.278

Random Effects	SD	Variance	χ^2 (df)
Intercept1 (u_{0j})	.816	.666	951.343 (158)*
Level-1 (r_{ij})	.835	.698	

*p<0.001; **p<.01; ***p<.05
$R^2_1 = .412$; $R^2_2 = .458$

Table 4
Registration Requirement Model (N=835)

Fixed Effects	Coefficient	SE	T-ratio
Between persons			
Intercept2 (β_{00})	2.078	.082	25.214*
Sex (β_{01})	.777	.175	4.438*
Age (β_{02})	-.001	.006	-2.562
Race (β_{03})	.057	.240	.238
Education (β_{04})	-.153	.060	-2.562**
Income (β_{05})	-.010	.070	-.142
Parent (β_{06})	.511	.226	2.260***
Direct Victimization (β_{07})	-.250	.182	1.520
Indirect Victimization (β_{08})	.277	.182	1.520
Within persons			
Offense Type (β_{10})	.251	.027	9.300*
Offender Age (β_{20})	.016	.003	6.053*
Offender Sex (β_{30})	-.447	.075	-5.926*
Victim Age (β_{40})	-.017	.003	-6.389*
Victim Sex (β_{50})	-.016	.078	-.207
Relationship (β_{60})	-.068	.033	-2.068***

Random Effects	SD	Variance	χ^2 (df)
Intercept1 (u_{0j})	.969	.939	977.582 (157)*
Level-1 (r_{ij})	.973	.946	

*p<0.001; **p<.01; ***p<.05
$R^2_1 = .252$; $R^2_2 = .248$