Understanding How Some Victims Become Perpetrators: Self-Control as a Moderator

Matt R. Nobles, Ph.D.
Robert J. Cramer, Ph.D.
Glen A. Kercher, Ph.D

February 2012

Crime Victims' Institute • Criminal Justice Center • Sam Houston State University

…from the Director

Perpetrators who are also victims have been a focus of research recently. Most of that research conceptualizes perpetration as increasing the risk of victimization. However, it also may be the case that the reverse is true. For example, some psychological findings suggest that perpetration may be related to a history of traumatic victimization. This study contributes to the latter debate by looking at how levels of self-control (e.g., risk-taking, temper) moderate the victimization-perpetration link for different types of crimes. The results of this study have important implications for parental monitoring and support in childhood and for expanding system responses to victims.

Glen Kercher
Crime Victims' Institute

Sam Houston State University
A Member of The Texas State University System

Mission Statement

The mission of the Crime Victims' Institute is to

- conduct research to examine the impact of crime on victims of all ages in order to promote a better understanding of victimization
- improve services to victims
- assist victims of crime by giving them a voice
- inform victim-related policymaking at the state and local levels.

Table of Contents

Figures

Executive Summary

Although much of the criminology literature conceptualizes the overlap in victims and offenders as originating with perpetration behaviors that result in increased risk of victimization, some evidence suggests that the reverse order also may be predictive. Socio-psychological literature, for example, offers alternative explanations demonstrating that perpetration in adolescence and adulthood may be driven by a lifetime history of traumatic victimization (e.g. child abuse or neglect, peer conflicts).[1, 2, 3] Research on individual-level personality and experiential factors, including a history of certain types of victimization, is significantly associated with different forms of future perpetration, including adolescent weapon carrying,[4] intimate partner physical abuse,[5] child molestation,[6] and adult sexual abuse.[7, 8] Smith and Ecob's review of theoretical explanations of the victimization-perpetration link,[9] highlight the roles environmental contextual factors and individual beliefs may play post-victimization. Sub-cultural explanations also may be valuable to address the phenomenon. For example, both personal value systems in gangs and learned aggression via victimization may offer clear pathways to future perpetration. In this case, there would be the intersection of the effects of individual traits, such as personality and self-control, and structural effects. Further, the interaction of individual and structural characteristics may provide additional predictive value to this relationship.

Gottfredson and Hirschi posit in their general theory of crime that low levels of self-control are associated with criminal behavior throughout the life course, an idea that has generated wide empirical support.[10] The theory also has been extended to account for different forms of victimization.[11, 12, 13, 14] Research from different areas of the psychology literature suggests that a history of certain types of victimization predicts later perpetration through various mechanisms. To date no research has explicitly tested low self-control as a moderating influence in the relationship between various forms of victimization and perpetration. The present study hypothesizes that low self-control affects the direction and strength of this relationship and that the relative influence of the moderation varies across crime types.

Low Self-Control and the Victimization-Perpetration Link

Gottfredson and Hirschi's theory posited that low levels of individual self-control predict involvement in a number of self-indulgent behaviors that coincide with crime and deviance (e.g., smoking, drinking, fast driving, illicit and unprotected sex)[15, 16] They argued that low self-control may lead to poor peer choices, unstable occupational histories, and deficient educational achievement. Therefore, individuals low in self-control will likely be "impulsive, insensitive, physical, risk-taking, short-sighted, and non-verbal."[17]

Schreck argued that victims and offenders share similar attributes — namely, the propensity to engage in short-term, high-risk behaviors that produce immediate gratification with little consideration for long-term and often serious consequences.[18] That means that people with self-control deficits would be less likely to think through their actions, would indicate a lower level of threat perception, and would be more likely to place themselves in potentially undesirable circumstances with an increased vulnerability to risk.

Research shows that low self-control elements are strongly associated with several forms of victimization.[19, 20, 21, 22, 23, 24, 25] In sum, individuals with low self-control often make decisions impulsively, engage in risky behavior, and have a higher frequency of exposure to deviant populations which, as a result, increases their risk of victimization.[26] Conversely, because a history of victimization has been associated with perpetration outcomes in certain types of offenders,[27] it is also logical to consider whether individual self-control as a trait may moderate or influence this relationship. In this framework, self-control may be a credible mechanism for clarifying the relationship between victimization and offending, which to date remains "an open empirical question."[28]

The role of self-control in explaining the victimization-perpetration link has some circumstantial support in the criminology literature. Schreck identified self-control as exerting a significant effect on the odds of being a crime victim, and also as showing a mediating effect on the relationship between demographics after controlling for criminal behavior.[29] In other words, individuals with lower levels of self-control were more likely to experience victimization, and in some cases individual self-control offered greater explanatory value than traditional background characteristics. Support for self-control as an intervening variable was found across different populations such as female inmates,[30] high school student athletes,[31] and with delinquent longitudinal data,[32] indicating that self-control as a construct is widely generalizable. At least one additional study involving gang membership did not support the mediation relationship for low self-control, but did generally conclude that self-control and victimization are theoretically associated.[33] Overall, these findings suggest that low self-control is consistently associated with victimization outcomes, although the precise nature of this relationship is still the subject of empirical attention for criminologists.

Self-Control: Measurement and Use as a Moderator

The measurement of self-control has received considerable empirical attention. Research in criminology has most frequently expressed the construct as a unidimensional factor in models predicting crime or analogous behaviors.[34, 35] However, more recent psychometric analyses of the properties of self-control support a multidimensional approach.[36, 37, 38, 39]

Accordingly, the present study features self-control represented by the six dimensions originally proposed by Gottfredson and Hirschi and later operationalized by Grasmick and colleagues.[40, 41] Specifically, these are impulsive, insensitive, physical, risk-taking, short-sighted, and non-verbal.[42]

The relatively few studies to date that have examined the influence of self-control on victimization and perpetration evaluate and discuss it as a *mediator* or third variable explanation.[43, 44] An alternative conception of the role of self-control is as a *moderator* variable that influences the relative effect that victimization history has on perpetration depending on one's own degree of self-control. Moderation involves a "qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable."[45] Specifically, moderation in this case suggests that the strength of the relationship between victimization history (predictor) and perpetration (outcomes) will be positive and statistically significant, and the strength of the association between victimization history and perpetration will vary depending on the level of one's self-control. For instance, individual differences in personality moderate outcomes for victims such as emotional well-being.[46] Moreover, self-control (sometimes referred to as self-regulation in clinical research) is frequently applied as a moderating mechanism of substance use,[47] depression,[48] and numerous other types of outcomes. To our knowledge self-control has not been investigated as a moderator of the victimization-perpetration link to date.

The present study therefore attempts to test the moderation relationship of low self-control and victimization history on crime perpetration.

Hypotheses

1. Consistent with extant research, low self-control measures will have positive and significant main effects for all three perpetration types, as compared to controls.
2. Victimization history will have positive and significant main effects for all three perpetration types (lifetime, property, and personal), as compared to controls.
3. Low self-control elements will moderate the impact of victimization for all three perpetration types.

Method

Participants. Survey participants were university students in the state of Texas (n = 2,901). E-mail addresses were obtained from the public domain for students from seven universities in the state of Texas. Half of the total possible individuals were contacted with an opportunity to participate in a survey via an online, third-party host (surverymonkey.com). Participants who elected to participate in the study were first notified of standard consent procedures and provided contact information for the primary investigator. They were also screened for eligibility (e.g., age, student status). All responses were voluntary, confidential, and anonymous, and no compensation was provided for participation in the survey.

Demographic data collected from participants included age, gender, student status (i.e., enrolled or not), race, frequency of religious activities, social support, relationship status, and geographic location (i.e., urban versus rural). The sample was predominantly female (n = 1,949, 67.2%), Caucasian (n = 2,268, 78.2%), urban (n = 2,130, 73.4%), and single (n = 1,290, 44.5%). Degrees of self-reported social support and religiosity were approximately equivalent within the sample.

Measures. Crime victimization and perpetration were assessed on a number of items asking if participants had either experienced (been victimized) or committed (perpetrated) a wide range of crime types. All items featured dichotomous response options.

Property crime victimization include

- having property stolen or attempted to be stolen from a public place;
- having property stolen from home;
- having any property damaged on purpose, such as a house or car; and
- having a motor vehicle or bicycle stolen or attempted to be stolen.

Personal crime victimization included

- having property taken or attempted to be taken by force;
- being attacked with a weapon;
- being forced or coerced or attempted to be forced or coerced into sexual activity; and
- being stalked by someone.

As with the victimization outcomes, all crime perpetration questions featured dichotomous response options.

Property crime perpetration included

- stealing or attempting to steal a motor vehicle;
- stealing property valued between $5 and $50;
- stealing property valued at more than $50;
- knowingly buying, selling, or holding stolen goods;
- selling or helping to sell marijuana; and
- selling or helping to sell drugs such as heroin, cocaine, or LSD.

Personal crime perpetration included

- committing robbery;
- attacking someone with the intent to seriously hurt or kill them;
- engaging or trying to engage in any kind of sexual behavior against someone's will;
- paying someone or being paid for sexual relations; and
- stalking someone.

The number of items endorsed for victimization (range zero to 13) and perpetration (range zero to 13) were sum totaled. Additionally, subtotals for property victimization (range zero to six), property perpetration (range zero to seven), interpersonal victimization (range zero to seven), and interpersonal perpetration (range zero to six) were tabulated.

Self-control was assessed using the measure of Low Self-Control.[49] The scale consists of 24 items each rated on a four-point scale (1 = strongly disagree, 4 = strongly agree). Therefore, higher scores reflect less self-control. Empirical support suggests that six, four-item subscales exist, namely:

- Impulsivity,
- Simple Tasks (such as "shortcut" activities that gratify desires with little up-front investment; e.g., cheating rather than studying)
- Risk Seeking,
- Physical Activities,
- Self-centeredness, and
- Temper.

***Data Analysis*.** General Linear Modeling (GLM) was used to assess the independent effects of crime victimization and self-control subscales, as well as their interaction, on crime perpetration (Appendix A). Three models were estimated, one for overall victimization/perpetration, one for property victimization/perpetration, and one for interpersonal victimization/perpetration. Control variables included in the model were participant age (in years), gender (male/female), geographic location (urban/rural), relationship status (five subcategories), social support (number of close friends), and religion (attendance at religious services). Predictor variables included the number of victimization episodes, the six self-control subscales, as well as the interaction terms for each subscale with victimization. The dependent measure was total lifetime crime perpetrations. Effect sizes were assessed using R^2 for the overall models and partial eta^2 for specific variables.

Results

Lifetime Victimization and Lifetime Perpetration

Main Effects. The collection of predictor variables had a significant effect on lifetime perpetration (Appendix A). Controlling for demographics noted above, results supported the hypothesis that lifetime victimization significantly and positively predicted lifetime perpetration. Moreover, the hypothesis was supported that several self-control subscales displayed significant main effects on lifetime perpetration. Specifically, risk seeking, self-centeredness, and temper significantly predicted lifetime perpetration regardless of victimization history. No other subscales emerged as significant predictors.

Moderators. Hypothesis three was also supported in that preference for simple tasks, risk seeking, and temper moderated the impact of lifetime victimization on lifetime perpetration. The moderations are depicted in Figures 1 through 3, respectively. The pattern for preference for simple tasks by lifetime victimization is as follows. Participants with low victimization (i.e., one standard deviation below the mean) demonstrate a slight increase in perpetration across levels of preference for simple tasks. However, this pattern reverses for those with high (i.e., one standard deviation above the mean) victimization; participants high in victimization show a slight increase in perpetration across ascending levels of preference for simple tasks. The association of risk seeking and lifetime perpetration is positive across

levels of lifetime victimization, but its disparity in lifetime perpetration is largest for those high in risk seeking. For lifetime victimization by temper, participants with low victimization display a decline of perpetration across ascending levels of temper. However, this pattern reverses for participants with high victimization; these participants show an increasing degree of perpetration across ascending levels of temper. Overall, the combination of high lifetime victimization with low preference for simple tasks, or high levels of risk seeking or temper, produce the greatest levels of lifetime perpetration.

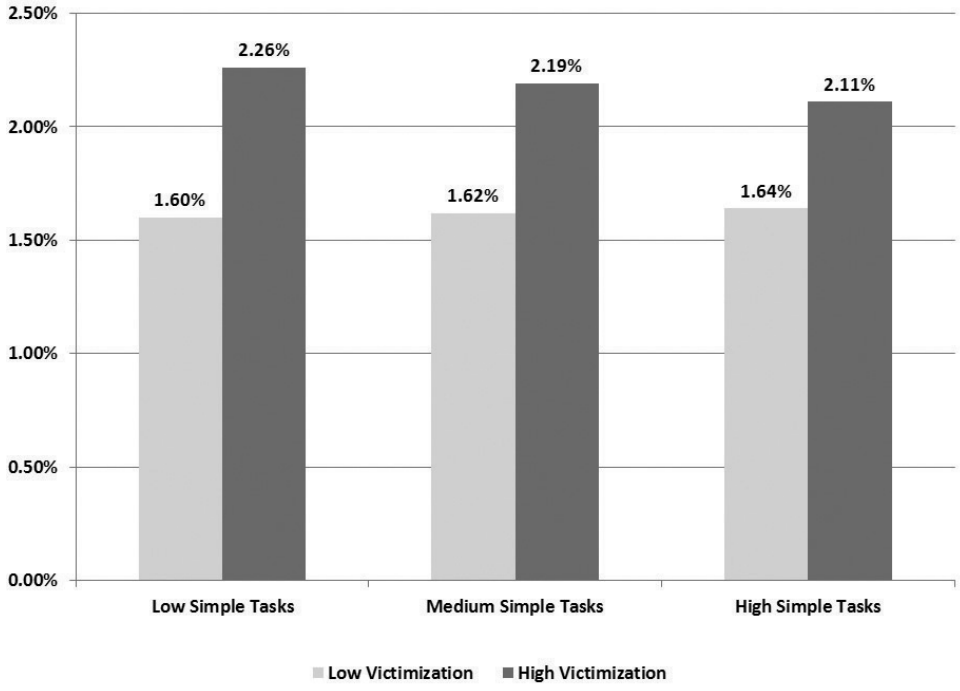

Figure 1. Moderation: Lifetime Victimization by Preference for Simple Tasks on Lifetime Perpetration

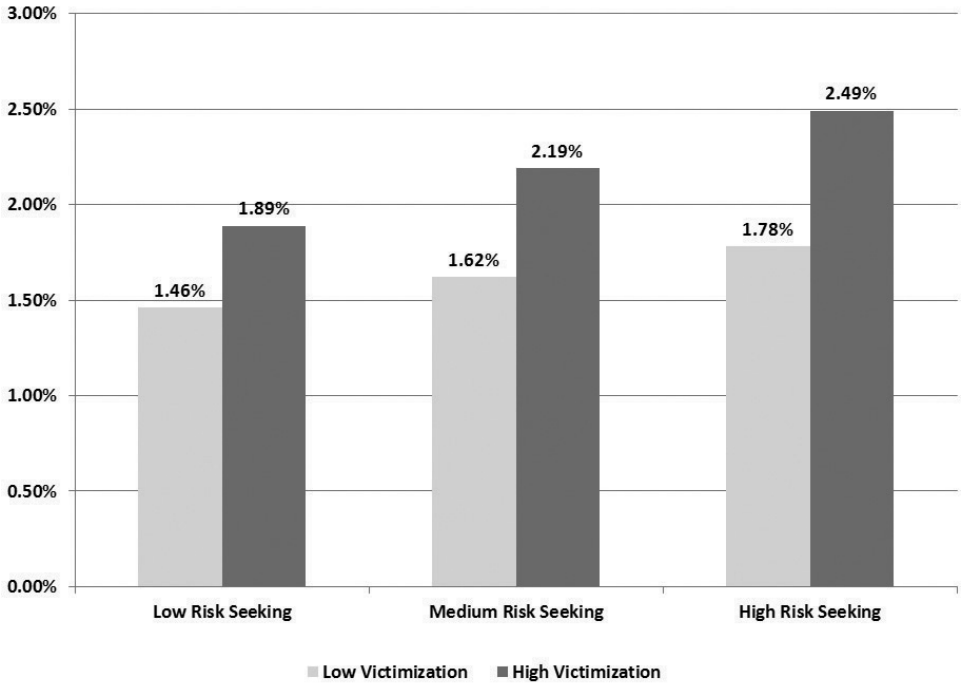

Figure 2. Moderation: Lifetime Victimization by Risk Seeking on Lifetime Perpetration

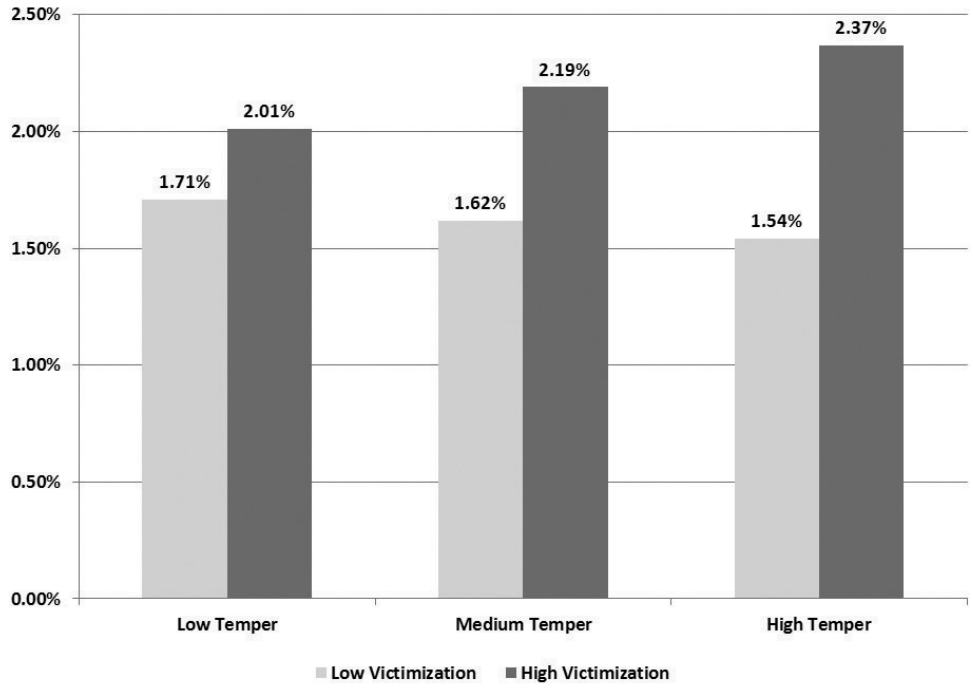

Figure 3. Moderation: Lifetime Victimization by Temper on Lifetime Perpetration

Property Victimization and Property Perpetration

Main Effects. To parse apart associations found for total lifetime victimization and perpetration, identical analyses were conducted for both property crimes and interpersonal crimes. The overall collection of independent variables predicting property crime was significant. With regard to property crime, property victimization positively predicted property perpetration. Risk seeking, a self-control subscale also significantly predicted property perpetration, although no other subscales emerged as significant predictors.

Moderators. Additionally, risk seeking and temper moderated the relationship between property victimization and property perpetration. These moderation patterns were identical to those observed and described for the lifetime perpetration models (see Figures 2 and 3). Overall, the combination of high property victimization with either high risk seeking or high temper yielded the greatest degrees of property perpetration. It is noteworthy that preference for simple tasks displayed no moderation in the property perpetration model, yet did in the lifetime perpetration model.

Interpersonal Victimization and Interpersonal Perpetration

Main Effects. With regard to interpersonal crime, interpersonal victimization positively predicted interpersonal perpetration. Additionally, several self-control subscales significantly predicted interpersonal perpetration. More specifically, preference for simple tasks, risk seeking, self-centeredness, and temper significantly predicted interpersonal perpetration. No other subscales emerged as significant.

Preference for simple tasks and temper moderated the relationship between interpersonal victimization and interpersonal perpetration (Appendix A). These moderation patterns were identical to those observed and described for the lifetime perpetration models (see Figures 1 and 2). Overall, the combination of high interpersonal victimization with either low preference for simple tasks or high temper yielded the greatest degrees of interpersonal perpetration. It is noteworthy that risk-seeking displayed no moderation in the interpersonal perpetration model, yet did in the lifetime perpetration model.

Discussion

This study elaborated on the victimization-perpetration link and a key intervening variable suggested from the criminology literature, individual level self-control. Although the link between low self-control, crime victimization, and crime perpetration has been explored on a limited basis in the literature, usually treated as a *mediator* between demographic factors and perpetration, this study makes a contribution by demonstrating that individual level of self-control consistently *moderates* this relationship, amplifying the main effects. Moreover, this study supports the multidimensional conceptualization of self-control suggested by several scholars, indicating that self-control sub-constructs perform differentially across crime type. [50,51,52,53]

We find general support with respect to the hypotheses of this study. First, consistent with extant research on the role of low self-control in predicting various types of crime perpetration as well as analogous behaviors, we show positive and statistically significant associations for several of the self-control subcomponents Specifically, the effect of risk seeking

was consistently significant across all three crime perpetration models, while effects for self-centeredness and temper were significant for lifetime as well as interpersonal perpetration. The effect for simple tasks was significant for interpersonal crime perpetration. Second, we show positive and significant effects for self-reported victimization history across all three perpetration types. This finding is consistent with research in personality psychology linking victimization history to some types of offending behaviors.[55] Third, we demonstrate evidence for low self-control elements functioning as moderators between victimization history and all three perpetration outcomes. Specifically, findings indicate that the effects of simple tasks, risk seeking, and temper moderated the relationship between victimization and lifetime perpetration. Moreover, risk seeking and temper moderated the relationship between victimization and property perpetration, whereas simple tasks and temper moderated the relationship between victimization and personal crime perpetration.

Implications for theory and policy are numerous. First, results extend and modify findings from the criminology literature[56, 57, 58] in that low self-control is shown as a moderating factor linking victimization and perpetration. This conceptual extension of the general theory of crime blends well with traditional frameworks of personality psychology that suggest an individual's inherent personality trait constellation alleviates behavioral expressions such as criminal behavior.[59, 60] Second, this study supports generalizations of Gottfredson and Hirschi's (1990) theory by showing that low self-control elements may function differentially across crime type, especially after controlling for other pertinent individual-level predictors (e.g., victimization history).[61] In fact, risk seeking was the only one of the six self-control elements to show significant main effects across perpetration type, suggesting that the remaining elements may exhibit different situational properties or may tap different elements of personality.

Results also show that individual-level self-control, determined by parental monitoring and support in childhood, interact with environmental risk factors in predicting perpetration.[62] This finding has intuitive appeal for explaining interpersonal crimes such as domestic violence and sexual abuse, in which a history of childhood victimization has been previously associated with perpetration in adulthood. In these cases, there may be some practical value to understanding the theoretical mechanisms that underlie the interaction of personal traits and environmental influence. Addressing parental management and support becomes increasingly policy-relevant when deficits may play some role in future offending. Going beyond the broader goal of passive "education" to a systematic study of obstacles blocking appropriate parental monitoring could be fruitful for social service providers. Also, the identification of potential protective factors that could minimize environmental risk could influence the second component of the interaction. While the precise mechanisms may vary widely according to social contexts, generally this could be accomplished by promoting a stake in conformity, increasing individual bonds to the community, facilitating normative and pro-social goal acquisition, or helping adolescents to identify and associate with non-delinquent peers.

These findings are also practically relevant in others ways. For instance, knowledge of the interaction between self-control and environmental risk may also inform system response, such that individuals who are known victims, especially for interpersonal crimes, can be provided with referrals to agencies or clinicians for appropriate management. The evidence that victimization history and low self-control interact to influence perpetration risk can also be a helpful tool in case management for social workers, corrections professionals,

and therapists. Where possible, identifying these risk factors could aid in developing tailored responses and could become part of a broader agenda for both treatment and prevention.

This study has several limitations that must be noted. Given the nature of the cross sectional survey data, it is impossible to fully establish the correct time-order. Although the premise of victimization history being associated with later perpetration has received considerable empirical support, it is also possible that involvement in crime perpetration raises an individual's risk for victimization. Future research, especially prospective longitudinal designs, will be able to address this limitation. Additionally, although the sample of college students surveyed for this study was large, it is unclear whether sampling bias may be present from the methods employed to recruit participants. Finally, the questions presented to survey participants regarding their individual histories may have omitted key indicators (e.g., measures of peers, family, community) that could have been useful in eliminating rival explanations for the observed results. Consequently, the findings presented here are only suggestive, and the authors recommend caution in generalizing.

In conclusion, low self-control has already been established as a consistent individual-level predictor of crime perpetration and analogous behaviors. In addition to the scholarly contributions related to criminological theory, policymakers and stakeholders such as advocates and service providers can benefit from identifying the nature and quality of interactive effects: both individual-level and environmental factors play a role in predicting criminal behavior. The interactive effects of low self-control and environmental factors represent two domains that could be addressed to produce desired outcomes.

Endnotes

1 Bell, C. C. & Jenkins, E. J. (1993). Community violence and children on Chicago's Southside. *Psychiatry, 56*, 46-54.

2 Dennis, R. E., Kirk, A., & Knuckles, B. N. (1981). *Black males at risk for low life expectancy: A study of homicide victims and perpetrators*. Washington: National Institute of Mental Health.

3 Rose, H. M. (1981). *Black homicide and the urban environment*. Washington: National Institute of Mental Health.

4 Vaughn, M. G., Howard, M. O., & Harper-Chang, L. (2006). Do prior trauma and victimization predict weapon carrying among delinquent youth? *Youth Violence and Juvenile Justice, 4*, 314-327.

5 Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression and Violent Behavior, 10*, 65-98.

6 Hunter, J. A. & Figuerego, A. J. (2000). The influence of personality and history of sexual victimization in the prediction of juvenile perpetrated child molestation. *Behavior Modification, 24*, 241-263.

7 Loh, C. & Gidycz, C. A. (2006). A prospective analysis of the relationship between childhood sexual victimization and perpetration of dating violence and sexual assault in adulthood. *Journal of Interpersonal Violence, 21*, 732-749.

8 Salter, D., McMillan, D., Richards, M., Talbot, T., Hodges, J., Bentovim, A., Hastings, R., Stevenson, J., & Skuse, D. (2003). Development of sexually abusive behaviour in sexually victimized males: A longitudinal study. *The Lancet, 361*, 471-476.

9 Smith, D. J. & Ecob, R. (2007). An investigation into causal links between victimization and offending in adolescents. *The British Journal of Sociology, 58*, 634-659.

10 Gottfredson, M. R. & Hirschi, T. (1990). *A General Theory of Crime.* Stanford, CA: Stanford University Press.

11 Holtfreter, K., Reisig, M. D., & Pratt, T. C. (2008). Low self-control, routine activities, and fraud victimization. *Criminology, 46*, 189-220.

12 Piquero, A. R., MacDonald, J., Dobrin, A., Daigle, L. E., & Cullen, F. T. (2005). Self-control, violent offending, and homicide victimization: Assessing the general theory of crime. *Journal of Quantitative Criminology, 21*, 55-71.

13 Schreck, C. J. (1999). Criminal victimization and low self-control: An extension and test of a general theory of crime. *Justice Quarterly, 16*, 633-654.

14 Schreck, C. J., Stewart, E. A., & Fisher, B. S. (2006). Self control, victimization, and the influence on risky lifestyles: A longitudinal analysis using panel data. *Journal of Quantitative Criminology, 22*, 319-340.

15 Supra note 1

16 Franklin, C. A. (2011). An investigation of the relationship between self-control and alcohol-induced sexual assault victimization. *Criminal Justice and Behavior, 38,* 263-285.

17 Supra note 1

18 Supra note 4

19 Fox, K. A. (2009). *Understanding Gang Membership, Crime Perpetration, and Victimization Among Jail Inmates: A Test of Self-Control and Social Disorganization Theories.* Dissertation from University of Florida, Gainesville.

20 Supra note 2

21 Supra note 3

22 Supra note 4

23 Supra note 5

24 Schreck, C. J., Wright, R. A., & Miller, J. M. (2002). A study of individual and situational antecedents of violent victimization. *Justice Quarterly, 19*, 159-180.

25 Stewart, E. A., Elifson, K. W., & Sterk, C. E. (2004). Integrating the general theory of crime into an exploration of violent victimization among female offenders. *Justice Quarterly, 21*, 159-181.
26 Bossler, A. M. & Holt, T. J. (2010). The effect of self-control on victimization in the cyberworld. *Journal of Criminal Justice, 38*, 227-236.
27 Supra note 14
28 Holtfreter, K., Reisig, M. D., Piquero, N. L., & Piquero, A. R. (2010). Low self-control and fraud: Offending, victimization, and their overlap. *Criminal Justice and Behavior, 37*, 188-204.
29 Supra note 4
30 Supra note 25
31 Supra note 24
32 Supra note 5
33 Childs, K. K., Cochran, J. K., & Gibson, C. L. (2009). Self-control, gang membership, and victimization: An integrated approach. *Journal of Crime and Justice, 32*, 35-60.
34 Grasmick, H. G., Tittle, C. R., Bursik, R. J., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. *Journal of Research in Crime and Delinquency, 30*, 5-29.
35 Piquero, A. R. & Rosay, A. B. (1998). The reliability and validity of Grasmick et al.'s self-control scale: A comment on Longshore et al. *Criminology, 36*, 157-174.
36 Arneklev, B. J., Grasmick, H. G., & Bursik, R. J. (1999). Evaluating the dimensionality and invariance of "low self-control." *Journal of Quantitative Criminology, 15*, 307-331.
37 Longshore, D., Turner, S., & Stein, J. A. (1996). Self-control in a criminal sample: An examination of construct validity. *Criminology, 34*, 209-228.
38 Marcus, B. (2003). An empirical examination of the construct validity of two alternative self-control measures. *Educational and Psychological Measurement, 63*, 674-706.
39 Vazsonyi, A. T., Pickering, L. E., Junger, M., & Hessing, D. (2001). An empirical test of a general theory of crime: A four-nation comparative study of self-control and the prediction of deviance. *Journal of Research in Crime and Delinquency, 38*, 91-131.
40 Supra note 1
41 Supra note 34
42 Supra note 1
43 Supra note 4
44 Supra note 28
45 Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
46 Bollmer, J. M., Harris, M. J., Milich, R., & Georgesen, J. C. (2003). Taking offense: Effects of personality and teasing history on behavioral and emotional reactions to teasing. *Journal of Personality, 71*, 557-603.
47 Wills, T. A., Gibbons, F. X., Sargent, J. D., Gerrard, M., Lee, H. R., & Dal Cin, S. (2010). Good self-control moderates the effect of mass media on adolescent tobacco and alcohol use: Tests with studies of children and adolescents. *Healthy Psychology*, *29*, 539-449.
48 Verstraeten, K., Vasey, M. W., Raes, F., & Bijttebier, P. (2009). Temperament and risk for depressive symptoms in adolescence: Mediation by rumination and moderation by effortful control. *Journal of Abnormal Child Psychology*, *37*, 349-361.
49 Supra note 34
50 Arneklev, B. J., Grasmick, H. G., & Bursik, R. J. (1999). Evaluating the dimensionality and invariance of "low self-control." *Journal of Quantitative Criminology, 15*, 307-331.

51 Supra note 37
52 Supra note 38
53 Supra note 39
54 Pratt, T. C. & Cullen, F. T. (2000). The empirical status of Gottfredson and Hirschi's general theory of crime: A meta-analysis. *Criminology, 38*, 931-964.
55 Supra note 14
56 Supra note 1
57 Supra note 4
58 Supra note 3
59 Dennison, S. M., Stough, C., & Birgden, A. (2001). The big 5 dimensional approach to understanding sex offenders. *Psychology, Crime, & Law*, *7*, 243-261.
60 Ryden-Lodi, B., Burk, W. J., Stattin, H., & Klinteberg, B.A. (2008). Personality and reconviction in crime: A three-year follow-up study of male criminal recidivists. *The International Journal of Forensic Mental Health*, *7*, 83-94.
61 Supra note 1
62 Ibid

Appendix A.
Summary of Self-Control Moderation Analyses by Victimization-Perpetration Model

	Lifetime Perpetration		**Property Perpetration**		**Interpersonal Perpetration**	
Predictor	***F***	η_p^2	***F***	η_p^2	***F***	η_p^2
Gender	74.05***	0.02	31.21***	0.01	65.70***	0.02
Race	3.33**	< 0.01	2.50*	< 0.01	3.65**	< 0.01
Geographic Region	9.62**	< 0.01	8.56**	< 0.01	4.75*	< 0.01
Relationship Status	4.69***	< 0.01	7.70***	0.01	0.95	-
Social Support	1.25	-	1.51	-	0.01	-
Religion	20.85***	0.02	23.00***	0.02	4.50**	< 0.01
Age	2.51	-	6.12**	< 0.01	20.30***	< 0.01
Victimization[a]	199.51***	0.06	104.92***	0.03	83.21***	0.03
Impulsivity	1.11	-	0.50	-	1.07	-
Victimization X Impulsivity	3.13	-	0.24	-	2.92	-
Simple Tasks	1.75	-	0.62	-	7.04**	< 0.01
Victimization X Simple Tasks	4.60*	< 0.01	0.13	-	17.57***	< 0.01
Risk Seeking	97.07***	0.03	114.37***	0.04	6.98**	< 0.01
Victimization X Risk Seeking	9.17**	< 0.01	4.56*	< 0.01	2.31	-
Physical Activities	0.96	-	2.19	-	1.29	-
Victimization X Physical Activities	1.00	-	1.06	-	0.09	-
Self-Centeredness	6.00*	< 0.01	2.67	-	4.91*	< 0.01
Victimization X Self-Centeredness	1.96	-	0.01	-	1.69	< 0.01
Temper	4.52*	< 0.01	3.16	-	18.76***	< 0.01
Victimization X Temper	39.65***	0.01	18.55***	< 0.01	34.67***	0.01
Model Summary	$F(31, 2870) = 30.65$, $p < 0.001$ $R^2 = 0.25$		$F(31, 2870) = 20.71$, $p < 0.001$ $R^2 = 0.18$		$F(31, 2870) = 15.84$, $p < 0.001$ $R^2 = 0.15$	

Note: Bold Print = Significant Predictor Variable; ηp2 = Partial Eta Squared Value (reported for significant predictors); * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

a: The victimization variable used in each model was specific to the perpetration (i.e., lifetime, property or interpersonal)

To view additional research publications relating to victims of crime please visit the Crime Victims' Institute website at:

www.crimevictimsinstitute.org

The Crime Victims' Institute
Sam Houston State University
Criminal Justice Center
Huntsville, Texas 77341-2180

phone: (936) 294-3100; fax: (936) 294-4296
email: terin@shsu.edu
www.crimevictimsinstitute.org

Sam Houston™ STATE UNIVERSITY
A Member of The Texas State University System