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Toward a General Theory of Criminal Justice

Low Self-Control and Offender Noncompliance

Matt DeLisi

Andy Hochstetler

Iowa State University

George E. Higgins

University of Louisville

Kevin M. Beaver

Florida State University

Christine M. Graeve

Iowa State University

Building on an extension of self-control theory to criminal justice, the current study explored Gottfredson and Hirschi's general theory with data from a sample of 208 male parolees selected from the midwestern United States. Ordered logit regression models linked offender low self-control to an array of outcomes, including social interactions with prison staff, correctional substance abuse, physical assaults against correctional staff, weapon carrying, placement in a disciplinary unit, infraction history, and retaliation against another inmate. Overall, the study demonstrated promising empirical links between low self-control and criminal justice noncompliance as one or both self-control measures (attitudinal Grasmick scale and 3-item disputatiousness scale) were significantly related to every criminal justice outcome net the effects of 20 controls for criminal career, demographic, social background and risk factors, and various correctional risk measures.

Keywords: *self-control; criminal justice; recidivism; offender; career criminal*

Since the publication of Michael Gottfredson and Travis Hirschi's *A General Theory of Crime* in 1990, self-control theory has become a dominant area of inquiry in criminology. Part of the reason for the theory's popularity pertains to its sweeping, parsimonious, even audacious thesis. Gottfredson and Hirschi theorize that an individual's level of self-control is the outcome of parental socialization occurring in approximately the first 10 years of life. Parents who responsibly monitor their child's behavior, recognize their child's inappropriate or deviant behavior, and appropriately sanction, punish, or correct their child's behavior are likely to instill or inculcate self-control. Parents who are unable or unwilling to fully invest and participate in the responsibilities inherent to parenting fail to

Authors' Note: Please direct all correspondence to Professor Matt DeLisi, Iowa State University, 203A East Hall, Ames, IA 50011-1070; phone: (515) 294-8008; fax: (515) 294-2303; e-mail: delisi@iastate.edu.

instill self-control. Because the effects of early-life parental socialization are so profound, an individual's level of self-control is theorized to be relatively stable and endure over the life course. On this issue, Gottfredson and Hirschi (1990, p. 108) suggest, "The stability of criminality is a staple of pragmatic criminology."

Persons with low self-control demonstrate a constellation of attitudinal and behavioral characteristics. They tend to (1) have a here-and-now orientation, whereby they seek immediate as opposed to delayed gratification; (2) prefer easy and simple tasks and dislike activities that require diligence, tenacity, and persistence; (3) engage in behaviors that are risky and exciting rather than cautious and cognitive; (4) fail to see the longer term benefits of investing in social institutions; (5) be attracted to endeavors that entail little skill or planning; and (6) be unkind, insensitive, hot tempered, self-centered, and unsympathetic to others. Recently, Hirschi (2004, p. 543) redefined self-control as "the tendency to consider the full range of potential costs of a particular act." As such, those with low self-control do not consider the full range of costs of their acts. The generality of self-control theory pertains to the multitudinous ways that these characteristics manifest (Gottfredson & Hirschi, 1990). Those with low self-control are hypothesized to be attracted to and engage in imprudent behaviors, such as smoking, gambling, drinking, sexual promiscuity, and unsafe driving; criminal behaviors that encompass the use of "force or fraud" against others; and failure in or indifference to family, school, work, and other social institutions. As Hirschi and Gottfredson (1994, p. 261) noted, "evidence has accumulated that people who tend to lie, cheat, and steal also tend to hit other people; that the same people tend to drink, smoke, use drugs, wreck cars, desert their spouses, quit their jobs, and come late to class."

DeLisi and Berg (2006) recently argued that self-control theory has import for the criminal justice system. That is, individuals with low self-control are likely to have trouble when controlled by the criminal justice system. For instance, individuals with low self-control are likely to be unsuccessful when they are granted parole because they are unable to resist the temptations of crime. Although some authors have applied low self-control to criminal justice outcomes (Benda, 2003; De Li, 2005; Longshore, 1998; Longshore & Turner, 1998; Longshore, Turner, & Stein, 1996; Piquero, MacDonald, Dobrin, Daigle, & Cullen, 2005), to date no study has examined the role of self-control in the context of DeLisi and Berg's (2006) propositions. The current study is the first to empirically explore this recent extension of self-control theory to criminal justice outcomes. To do so, the literature on self-control theory is reviewed, paying specific attention to the empirical status of the theory and theoretical focus pertaining to correctional samples and criminal justice outcomes.

Literature Review

Empirical Status of Self-Control Theory

To date, criminologists have empirically linked self-control to an array of outcomes using an assortment of data sources, measures, and research designs. Vazsonyi, Pickering, Junger, and Hessing (2001) conducted a large-scale ($N = 8,417$) examination of self-control theory using representative samples of youth from the Netherlands, Hungary, Sweden, and the United States and produced several findings that were concordant with the theory. For example, low self-control was correlated with deviant behavior for males, females, and five

different age groups of adolescents from the four nations. Moreover, the effects of self-control appeared to be invariant across national and cultural contexts. Winfree, Taylor, He, and Esbensen (2006) conducted a 5-year-longitudinal study of self-control theory based on data from 965 youths sampled from six cities: Philadelphia, Pennsylvania; Lincoln and Omaha, Nebraska; Las Cruces, New Mexico; Portland, Oregon; and Phoenix, Arizona. They found clear differences in self-control, impulsivity, and risk taking by offender status. Offenders always demonstrated less self-control, more impulsivity, and greater risk taking than nonoffenders and the slopes of the group differences were relatively unchanging (also see, Arneklev, Cochran, & Gaaney, 1998; Beaver & Wright, 2007; Turner & Piquero, 2002).

T. D. Evans, Cullen, Burton, Dunaway, & Benson (1997, pp. 490-491) found that self-control was related in the expected direction to "quality of family relationships, attachment to church, having criminal associates and values, educational attainment and occupational status, and residing in a neighborhood perceived to be disorderly. Self-control is also significantly related to quality of friendships and the analogous behavior measure is negatively related to marriage and positively related to nights out." Similarly, Gibson, Wright, and Tibbetts (2000) found that low self-control was related to multiple dimensions of school failure, poor family relations, limited career goals, associating with delinquent peers, and delinquent behavior. Self-control has been linked to problematic outcomes in specific areas of life. For instance, in terms of traffic behavior, persons with low self-control are more likely to be involved in traffic accidents (Junger & Tremblay, 1999; Junger, West, & Timman, 2001), less likely to wear seat belts (Keane, Maxim, & Teevan, 1993), and more likely to drive drunk and indicate that they would drive drunk (Keane et al., 1993; Piquero & Tibbetts, 1996). Among school-based outcomes, self-control is significantly related to academic cheating, cutting class, truancy, and academic suspension or expulsion (Cochran, Wood, Sellers, Wilkerson, & Chamlin, 1998; Gibbs, Giever, & Martin, 1998). Persons with low self-control are also significantly likely to engage in criminal acts of force and fraud, such as violent, property, and public-order crimes, imprudent behaviors, and forms of victimization (for reviews, see Britt & Gottfredson, 2003; DeLisi, 2005; Hirschi & Gottfredson, 1994; Pratt & Cullen, 2000).

Ultimately, the empirical status of self-control appears to be secure. Pratt and Cullen (2000) reviewed 21 studies that included 17 independent data sets and 49,727 individual cases. They examined the effect-size estimates of 126 self-control measures to crime-related dependent variables and found a consistent effect size that exceeded .20.

Empirical Links Between Self-Control and Criminal Justice

Although self-control theory has been studied extensively in criminology, it has been understudied and perhaps underappreciated in terms of its applicability to criminal justice. Part of the reason for this could stem from Gottfredson and Hirschi themselves, who were unenthusiastic about the ability of the state to deter or control crime. They argued, "Given the ineffectiveness of natural learning environments in teaching self-control, we would not expect the artificial environments available to the criminal justice system to have much impact" (Gottfredson & Hirschi, 1990, p. 269). Although there is some reason to be skeptical about state efforts to instill self-control in adults, this says little about the relationship between self-control and criminal justice outcomes.

A small body of research addressed self-control theory with correctional samples and criminal justice outcomes. Longshore et al. (1996) examined self-control theory using 580 offenders involved in the Treatment Alternatives to Street Crime (TASC) program and found that self-control was predictive of both crimes of force and fraud, and that offenders with lower self-control committed more crimes. Their work is noteworthy in that it was the first investigation of self-control theory using a sample of persons with extensive criminal histories. Subsequent research with the same data source provided additional support for self-control theory vis-à-vis the role of criminal opportunity (Longshore, 1998; Longshore & Turner, 1998).

DeLisi (2001a, 2001b) used a probability sample of 500 adult arrestees to explore the applicability of self-control theory among known offenders who a priori would have very low levels of self-control. Offenders with low self-control were significantly likely to accumulate arrests for varied types of criminal behavior, including violent, property, white-collar, and nuisance offending. Furthermore, low self-control was related to various criminal justice outcomes and behaviors, such as missing court appearances, violating probation and parole sentences, escaping from custody, and being sentenced to prison.

Low self-control has also proven to be a significant facilitator of recidivism. Benda (2003) conducted a 5-year follow-up of 601 adult male graduates of a boot camp and found that self-control was the strongest predictor of recidivism among offenders whose criminal careers started before and after age 10. For both onset groups, the effects of self-control exceeded those of many acknowledged correlates of crime, including delinquent peer associations, family attachments, abuse history, frustration and general strain, gang involvement, weapons violations, and drug history. Similarly, W. P. Evans, Brown, & Killian (2002) examined the postrelease behavior of formerly institutionalized juvenile delinquents. Controlling for demographic, criminal history, and family variables, they found that youth possessing higher levels of decision-making competence scored highest on the post-detention success scale. Youths who avoided risky, impulsive decisions also had stronger beliefs about their long-term ability to remain crime free. De Li (2005) linked low self-control to drug problems among a diverse sample of 620 jail inmates in Philadelphia. Moreover, the effects of self-control on drug abuse operated similarly for White, Black, and Hispanic inmates. Self-control also appears to relate to outcomes at the extremes of crime; for instance, Piquero et al. (2005) established an empirical link between low self-control, serious/violent criminal offending, and homicide victimization using a sample of nearly 4,000 parolees from the California Youth Authority.

Increasingly, investigators are recognizing that offenders need substantive cognitive, lifestyle, and behavioral treatments to help them desist from crime. Changing the mindset of a criminal offender goes a long way toward his or her rehabilitation, and self-control plays a major role. To illustrate, Pearson, Lipton, Cleland, and Yee (2002) analyzed data from the Correctional Drug Abuse Treatment Effectiveness (CDATE) project, a 4-year meta-analysis of correctional treatment evaluation studies conducted between 1968 and 1996. Pearson et al. found that standard behavior modification programs were not the best approach to reduce recidivism. Rather, programs that employed cognitive-behavioral and social skills interventions, such as increasing self-control among offenders, were most effective. In a separate meta-analysis, Dowden and Andrews (1999) found that self-control deficits were one of the most important treatment needs among female offenders and that

self-control influenced other risk factors such as unemployment. Others have found that the elements of low self-control, such as impulsivity, having a bad temper, being action-oriented, and having an immediate time horizon, were important to social therapy among prisoners (Ortmann, 2000), recidivism among paroled drug offenders (O'Connell, 2003), recidivism among defendants on electronic monitoring (Payne & Gainey, 2004), and institutional violence among prison inmates (Wang & Diamond, 1999).

Theorizing Criminal Justice With Self-Control Theory

With this burgeoning empirical link between self-control, correctional samples, and criminal justice outcomes, DeLisi and Berg (2006) developed an ambitious conceptual application of the general theory to criminal justice system processing and outcomes. DeLisi and Berg argue that because of the negative characteristics inherent in low self-control, criminal defendants are possibly disadvantaged when interacting with criminal justice personnel and could even receive differential treatment. Complying with the conditions of criminal justice sanctions was theoretically unlikely for offenders with low self-control. As a global construct, it could be an important determinant of recidivism, offender noncompliance with the criminal justice system, and criminal justice system processing.

Self-control theory was theorized to be particularly well suited to inform correctional research because criminal sanctions are essentially trials of responsibility that require employment, sobriety, and other features of conventional adult behavior. In effect, correctional treatment seeks to instill the very interpersonal skills and wherewithal that those with self-control presumably have. Much of the criminal justice system is designed to monitor compliance with programs that may indicate such wherewithal. DeLisi and Berg (2006) noted that across the corrections continuum, there is voluminous evidence that low self-control among criminal defendants jeopardizes their chances for rehabilitation. Among probationers, clients who absconded or were revoked had worse stakes in conformity than probationers who successfully completed their sentences. Indeed, Mayzer, Gray, and Maxwell (2004) found that absconders and violators had less education, less stable employment, more dependents, and greater residential instability than their compliant peers. In a study of adjudicated delinquents who were released from confinement and later sentenced to adult prison, Benda, Corwyn, and Toombs (2001, pp. 608-609) found that youths with personality profiles that closely matched those theorized by Gottfredson and Hirschi were among the most recidivistic offenders. Among prisoners, Hochstetler, Murphy, and Simons (2004) found that inmates with low self-control were significantly likely to experience depression, demonstrate symptoms of posttraumatic stress disorder, and experience maladjustment to confinement (see also Hochstetler & DeLisi, 2005).

Research Purpose

In sum, low self-control is a deficiency that creates a recursive correctional problem for criminal defendants. Many offenders lack the skills and social support to successfully comply with sanctions that stress work commitment, sobriety, and compliance. The current study seeks to build on recent theoretical work by empirically examining the effects of self-control on an assortment of criminal justice outcomes in corrections. If Gottfredson and

Hirschi (1990) were correct in their assumption that self-control is a protean construct that predicts negative outcomes across contexts, then self-control should emerge as an important correlate of offender noncompliance with the criminal justice system.

Method

Data and Sample

Data for this study were collected between September and December 2001. The 208 participants in the study were male parolees who were residents of work release facilities in a midwestern state. They were selected from a sampling frame of 480; therefore, the study sample represented 43% of the male work-release parole population. All had been released from state prison within the last 6 months. The men served their last prison sentence in prisons located across the state and were assigned to work release programs with a variety of conditions, such as substance abuse treatment, no contact with victims in their case, compliance with restraining orders, and mental health counseling. At each facility, brochure dissemination and regular intercom communication announced that researchers would be administering surveys the following week. The advertisement promised that information in the study was confidential and reassured residents of the right to refuse any question. Participants were paid \$30 for 1 to 2 hr of their time. Some participants had work schedules and conditions of release that made it difficult to contact them in the facility and this complication reduced the rate of participation.

Descriptive information suggests that sample participants did not differ substantively from the male work-release parole population. The sample was 62% White (population 72% White), 100% male (the state correctional population was 88% male, the male subpopulation is of course 100% male), and 34 years old (average age of offenders in the population was 31). For offense type, the sample was 29% violent and 22% drug offenders, compared to the population, which was 28% violent and 22% drug offenders.

Variables and Measures

Criminal career parameters. Four variables were included to control for criminal career onset and chronicity based on their empirical links to recidivism and other negative criminal justice outcomes (Blumstein, Cohen, Roth & Visher, 1986; DeLisi, 2005; Piquero, Farrington, & Blumstein, 2007). Arrest onset and prison onset were coded (1 = 5 through 10 years old, 2 = 11 and 12 years old, 3 = 13 and 14 years old, 4 = 15 and 16 years old, 5 = 17 and 18 years old, 6 = 19 through 22 years old, 7 = 23 through 25 years old, 8 = 26 through 30 years old, 9 = 31 years old or older). Career arrests and career prison were coded (1 = once, 2 = twice, 3 = 3 through 5 times, 4 = 6 through 10 times, 5 = 11 or more times).

Offender social demographics. Age was continuously coded from 18 to 55 years old. Race was dichotomized (0 = White, 1 = non-White). Education level was coded (1 = elementary school, 2 = secondary school did not graduate, 3 = high school graduate, 4 = high school graduate with some postsecondary schooling, 5 = college graduate). Offender income was

the annual income in the year immediately prior to the defendant's incarceration (1 = *less than \$10,000*, 2 = *\$10,000 through \$20,000*, 3 = *\$21,000 through \$30,000*, 4 = *\$30,000 through \$40,000*, 5 = *more than \$40,000*). Marital status was dichotomized (0 = *not currently married*, 1 = *currently married*) as was whether the offender had children (0 = *no*, 1 = *yes*).

Background social risk factors. A host of family, socioeconomic, and neighborhood disadvantages can engender antisocial behavior and weak attachment to social institutions, and facilitate noncompliance with the criminal justice system (Laub & Sampson, 2003; Loeber & Farrington, 1998; Thornberry, 1997). As such, controls for the educational attainment of both the offender's mother and father were included (1 = *elementary school*, 2 = *secondary school did not graduate*, 3 = *high school graduate*, 4 = *high school graduate with some postsecondary schooling*, 5 = *college graduate*). Two additional items assessed the extent to which the offender was raised in a criminogenic environment (see Pratt, Turner, & Piquero, 2004): (1) While growing up, immediate members of my family were in trouble with the law, and (2) I was raised in a neighborhood where serious crime occurred. Both were coded (1 = *never*, 2 = *once or twice*, 3 = *monthly*, 4 = *weekly*, 5 = *two times a week or more*).

Self-control. Hirschi and Gottfredson (1993) expressed a preference for behavioral measures of self-control; however, the bulk of the empirical support for the theory was produced using the 24-item attitudinal measure developed by Grasmick, Tittle, Bursik, & Arneklev (1993). Investigators are increasingly using measures that encompass both attitudinal and behavioral dimensions of self-control to empirically assess this issue (e.g., Benda, 2005; Turner & Piquero, 2002) and the current study follows this convention. Based on the Grasmick et al. (1993) scale, we created an additive scale of z scores (range 11 through 49) with lower values representing low self-control. Alternative specifications of self-control, including factor loadings on the six dimensions, a summary factor score, and a dichotomous term for offenders in the 90th percentile of low self-control (0 = *no*, 1 = *yes*), were also run and produced similar findings. We employed the additive measure based on its intuitive, interpretable metric: Those with low scores had low self-control and vice versa. Intuitiveness is lost with factor analysis.

A three-item disputatiousness measure (Cronbach's $\alpha = .74$) to evaluate the hot-tempered, impulsive behavioral dimensions of self-control was derived from prior research (Markowitz & Felson, 1998). This might better reflect Gottfredson and Hirschi's (1990) contention that many criminal manifestations of self-control are contingent on situational opportunity than scales that measure a trait. Offenders responded to three items: (1) If someone rudely cut in front of you and a friend at the movie theater when the show might sell out and then looked at you as if there was nothing you could do about it, what would you do? (2) In prison, if someone had rudely cut in front of you in the cafeteria line and then looked at you as if there was nothing you could do about it, what would you do? and (3) If you accidentally pulled your car too far across a crosswalk and a person on the sidewalk kicked the front of your car but not hard enough to dent it, what would you do? Response categories for all three items were (1 = *ignore them*, 2 = *say something mild to them just to let them know you don't approve*, 3 = *order them to apologize*, 4 = *curse at them*, 5 = *confront them*, 6 = *hit them*). Technically, this measure is attitudinal, because offenders report on how they

would respond in various situations; nevertheless, it taps the disputatious quality of low self-control and provides a supplementary measure to the Grasmick et al. (1993) scale.

Other covariates. Six additional controls for commitment to rehabilitation, family adversity, inmate classification, and mental health status were employed based on their empirical and theoretical links to recidivism (Hochstetler et al., 2004; Wang & Diamond, 1999). Three binary terms assessed whether the inmate had received mental health treatment (0 = *no*, 1 = *yes*), substance abuse treatment (0 = *no*, 1 = *yes*), or had a close friend or family member die while most recently imprisoned (0 = *no*, 1 = *yes*). The Level of Service Inventory–Revised (LSI-R) is a respected correctional risk assessment scale that has been empirically validated (Andrews & Bonta, 1995; Gendreau, Goggin, & Smith, 2002; Gendreau, Little, & Goggin, 1996; Girard & Wormith, 2004). It assesses risk based on factors such as antisociality, employment, family, recreational and leisure activities, drug history, and antisocial peers. A 4-item hostility measure (Cronbach’s $\alpha = .80$) comprised the following items: (1) I feel easily annoyed and irritated, (2) I have temper outbursts that I cannot control, (3) I have urges to break or smash things, and (4) I get into frequent arguments. All were coded with the following response categories (1 = *not a bit*, 2 = *a little bit*, 3 = *a moderate bit*, 4 = *quite a bit*, 5 = *extremely*). A 12-item depression measure (Cronbach’s $\alpha = .88$) comprised various items, such as “I feel blue,” “I have no interest in things,” “I feel hopeless about the future,” “I have thoughts of death or dying,” and “I feel worthless.” All were coded with the following response categories: 1 = *not a bit*, 2 = *a little bit*, 3 = *a moderate bit*, 4 = *quite a bit*, 5 = *extremely*.

Dependent variables and analytical approach. To fully assess the generality of self-control theory, seven dependent variables were used. The questionnaire item, response categories, and coding are (1) In general, I got along well with prison staff (1 = *strongly agree*, 2 = *agree*, 3 = *disagree*, 4 = *strongly disagree*); (2) While you were in prison, how often did you get drunk or high? (3) While you were in prison, how often were you involved in physical fights with correctional officers? (4) While you were in prison, how often did you carry, possess, or have a weapon nearby? (5) While in prison, how often did you spend time in the disciplinary unit? (6) How often did you receive a disciplinary ticket or incident report? and (7) During your last sentence, how often did you retaliate against a prisoner for doing you wrong or disrespecting you? These last six items were coded 1 = *never*, 2 = *once or twice*, 3 = *monthly*, 4 = *weekly*, 5 = *two times a week or more*. Ordered logit regression was used because it can accommodate quasicontinuous dependent variables where the distance between adjacent categories is unequal and larger values correspond to higher outcomes. Diagnostic tests for multicollinearity revealed variance inflation factors ranging from 1.13 to 2.63, well below the threshold of problematic variance inflation factor values of 10 (StataCorp, 1999). Descriptive statistics for all study variables appears in Table 1.

Results

Building on DeLisi and Berg’s (2006) recent extension of Gottfredson and Hirschi’s (1990) general theory, the current models offer an investigation of the effects of offender

Table 1
Descriptive Statistics (N = 208)

Variables	<i>M</i>	<i>SD</i>	Range
Self-control			
Self-control	33.05	7.41	11-49
Disputatiousness	9.44	4.02	3-18
Criminal career parameters			
Arrest onset	4.28	2.14	1-9
Prison onset	3.78	1.50	1-9
Career arrests	4.08	1.09	1-5
Career prison	2.03	.95	1-5
Offender social demographics			
Age	35.21	8.99	18-55
Race	.38	.49	0-1
Education	3.07	.91	1-5
Income	1.96	1.06	1-5
Marital status	.16	.35	0-1
Children	.67	.47	0-1
Background social risk factors			
Father's education	3.59	1.66	1-5
Mother's education	3.23	1.35	1-5
Neighborhood crime	2.17	1.31	1-5
Family criminality	1.71	.81	1-5
Other covariates			
LSI-R	29.29	7.09	12-45
Hostility	8.65	3.73	5-25
Depression	24.65	8.87	14-63
Mental health treatment	.25	.44	0-1
Substance abuse treatment	.83	.38	0-1
Family death	.53	.49	0-1
Dependent variables			
Got along with prison staff	2.34	.80	1-5
Got high in prison	1.88	1.19	1-5
Fought correctional staff	1.11	.34	1-5
Had prison weapon	1.43	.94	1-5
Went to disciplinary unit	1.86	.80	1-5
Received infraction ticket	2.23	.85	1-5
Retaliated against other prisoner	1.68	.79	1-5

Note: LSI-R = Level of Service Inventory–Revised.

self-control on an array of criminal justice outcomes, including social interactions with prison staff, correctional substance abuse, physical assaults against correctional staff, weapon carrying, placement in a disciplinary unit, infraction history, and retaliation against another inmate. Overall, the results indicate promising empirical links between low self-control and criminal justice noncompliance, as one or both self-control measures were significantly related to every criminal justice outcome net the effects of 20 controls for criminal career; demographic, social background, and risk factors; and various correctional risk measures.

Table 2
Ordered Logit Regressions: (1) Got Along With Prison Staff ($n = 193$), (2) Correctional Substance Abuse ($n = 192$), and (3) Physical Fights With Correctional Staff ($n = 193$)

Variable	(1)	(2)	(3)
Self-control			
Self-control	-.02 (0.59)	-.046 (1.34)	-.11 (1.55)
Disputatiousness	.14 (.3.19)*	.27 (.5.27)*	.34 (2.28)*
Criminal career parameters			
Arrest onset	-.11 (1.09)	-.18 (1.56)	-.64 (2.21)*
Prison onset	-.19 (1.16)	-.59 (3.27)*	-.30 (0.74)
Career arrests	.09 (0.50)	.31 (1.51)	.01 (0.00)
Career prison	-.22 (0.98)	.21 (0.86)	.64 (0.94)
Offender social demographics			
Age	.02 (0.77)	.06 (2.31)*	.19 (2.32)*
Race	.59 (1.63)	-.96(2.32)*	-2.1 (2.03)*
Education	-.36 (2.02)*	-.02 (0.09)	1.2 (2.33)*
Income	-.08 (0.50)	-.22 (1.17)	.03 (0.06)
Marital status	.55 (1.27)	.71 (1.46)	-.22 (0.21)
Children	-.42 (1.18)	-.49 (1.25)	-2.9 (2.36)*
Background social risk factors			
Father's education	.02 (0.19)	.23 (2.04)*	.63 (2.11)*
Mother's education	.05 (0.39)	-.30 (2.20)*	-.48 (1.36)
Neighborhood crime	-.10 (0.93)	.04 (0.29)	-1.17 (2.58)*
Family criminality	.14 (0.61)	.15 (0.56)	.42 (0.68)
Other covariates			
LSI-R	-.02 (0.91)	-.01 (0.47)	.06 (0.86)
Hostility	.13 (.2.24)*	-.05 (0.76)	-.34 (2.20)*
Depression	-.02 (1.07)	-.01 (0.57)	.05 (1.11)
Mental health treatment	.38 (1.02)	.16 (0.38)	.18 (0.18)
Substance abuse treatment	-.03 (0.06)	.33 (0.59)	-1.37 (1.14)
Family death	-.25 (0.60)	.52 (1.07)	2.67 (2.00)*
Pseudo R^2	.16	.27	.46
LR χ^2	71.0*	130.94*	56.34*

Note: LSI-R = Level of Service Inventory-Revised. LR = likelihood ratio. Unstandardized regression coefficients and (z scores) are presented.

* $p < .05$.

As shown in Table 2, only three variables were significantly related to whether an inmate got along with prison staff while incarcerated. As expected, disputatious offenders were less likely to get along or amicably coexist with correctional staff ($b = .143$, $z = 3.19$), as were less educated ($b = -.360$, $z = -2.02$), and more hostile ($b = .128$, $z = 2.24$) defendants. Numerous significant effects emerged for the correctional substance abuse model. Offenders with high disputatiousness ($b = .274$, $z = 5.27$) were significantly likely to use alcohol or drugs during confinement. Prison onset was inversely related to subsequent substance abuse while incarcerated. Older inmates, non-Whites, and inmates whose mother had low educational attainment were likely to use alcohol or drugs during confinement. Father's educational attainment was positively related to correctional substance abuse. Arguably, the most serious outcome was fighting with correctional officers; in theoretical parlance, this

represents the use of force against authority figures during incarceration. Those who were disputatious ($b = .342$, $z = 2.28$) were likely to fight with correctional staff, as were offenders with an early arrest onset. Other demographic, background, and situational factors also influenced assault against correctional staff. Older inmates, non-Whites, those without children, offenders who suffered the death of a family member while imprisoned, and defendants from criminogenic neighborhoods were significantly less likely to fight with staff. Importantly, self-control was not significantly related to any of these outcomes net the influence of disputatiousness and other controls.

As shown in Table 3, self-control, as measured by the Grasmick et al. (1993) scale, was unrelated to carrying a prison weapon, being placed in the disciplinary unit, and receiving an infraction ticket. However, offenders with low self-control were significantly likely to report that they retaliated against another prisoner during their confinement ($b = -.062$, $z = -2.22$). On the other hand, disputatiousness, which encompassed the explosive, impulsive, hot-tempered use of force to respond to a personal affront, was consistently predictive of these criminal justice outcomes. In other words, disputatious inmates were significantly more likely than others to carry a prison weapon ($b = .309$, $z = 4.69$), be moved to the disciplinary module ($b = .141$, $z = 2.93$), receive an infraction ticket ($b = .169$, $z = 3.46$), and retaliate against another inmate ($b = .202$, $z = 4.14$). No other variable was as consistently related to the outcomes as disputatiousness.

Among the other covariates, criminal career variables were frequently related to criminal justice outcomes. Arrest onset was inversely and significantly related to weapons carrying and retaliation against other prisoners. Prison onset was inversely and significantly related to amassing infractions and being sent to the disciplinary module. Offenders with multiple prior prison commitments were also significantly likely to carry weapons. These effects are consistent with criminal career and institutional misconduct research (e.g., Blumstein et al., 1986; DeLisi, 2005; DeLisi, Berg, & Hochstetler, 2004; Graeve, DeLisi, & Hochstetler, 2007; Piquero et al., 2007).

Discussion

Persons with low self-control are impulsive, insensitive, action-oriented, negatively tempered risk-takers who tend to perform poorly or fail to meet the responsibilities of school, work, and family (Gottfredson & Hirschi, 1990). Across variations in gender, race and ethnicity, country of origin, degree of criminality, data source, and measurement, persons with low self-control also commit significantly greater amounts of crime, deviance, and imprudent and maladaptive behaviors than persons with higher levels of self-control (T. D. Evans et al., 1997; Gibson & Wright, 2001; Higgins, 2004, 2005; McGloin, Pratt, & Maahs, 2004; Polakowski, 1994; Sellers, 1999; Vazsonyi, Wittekind, Belliston, & Van Loh, 2004; Wiebe, 2003; Winfree et al., 2006). The current study added another domain that attests to the generality of self-control: criminal justice outcomes.

Building on the empirical literature and DeLisi and Berg's (2006) recent conceptual extension of the general theory, the current study was an investigation of the effects of offender self-control on an array of criminal justice outcomes. These included social interactions with prison staff, correctional substance abuse, assaults against correctional staff, weapon carrying, placement in a disciplinary unit, infraction history, and retaliation against

Table 3
Ordered Logit Regressions: (1) Prison Weapon (*n* = 192),
(2) Disciplinary Unit (*n* = 193), (3) Infraction (*n* = 193), and
(4) Retaliate Against Another Prisoner (*n* = 192)

Variable	(1)	(2)	(3)	(4)
Self-control				
Self-control	-.00 (0.09)	-.02 (0.85)	-.04 (1.44)	-.06 (2.22)*
Disputatiousness	.31 (4.69)*	.14 (2.93)*	.17 (3.46)*	.20 (4.14)*
Criminal career parameters				
Arrest onset	-.29 (1.96)*	-.06 (0.55)	-.18 (1.75)	-.22 (2.05)*
Prison onset	-.12 (0.53)	-.55 (3.16)*	-.32 (1.90)*	-.09 (0.52)
Career arrests	.04 (0.16)	-.34 (1.78)	.05 (0.25)	-.12 (0.61)
Career prison	.79 (2.49)*	.10 (0.41)	-.07 (0.30)	-.13 (0.54)
Offender social demographics				
Age	.04 (1.12)	.03 (1.21)	-.01 (0.44)	-.02 (0.64)
Race	-.14 (0.27)	.65 (1.71)	-.20 (0.51)	-.23 (0.61)
Education	.11 (0.46)	-.04 (0.23)	.01 (.0.05)	.06 (0.30)
Income	-.15 (0.63)	.04 (.0.23)	-.10 (0.52)	.18 (0.99)
Marital status	.60 (1.02)	.27 (0.56)	-.18 (0.39)	.19 (0.40)
Children	-.37 (0.76)	.46 (1.21)	.05 (0.12)	.33 (0.85)
Background social risk factors				
Father's education	.26 (.1.97)*	.02 (0.22)	-.03 (0.25)	-.06 (0.53)
Mother's education	-.22 (1.34)	-.06 (0.42)	-.18 (1.35)	-.06 (0.42)
Neighborhood crime	-.05 (0.32)	.05 (0.41)	.06 (0.50)	.09 (0.73)
Family criminality	.07 (0.21)	.01 (0.03)	.37 (1.49)	.37 (1.46)
Other covariates				
LSI-R	-.06 (1.66)	.029 (1.15)	-.02 (0.56)	-.01 (0.49)
Hostility	-.00 (0.07)	.056 (0.94)	.01 (0.14)	.01 (0.14)
Depression	.04 (1.30)	.013 (0.62)	-.01 (0.33)	.02 (0.99)
Mental health treatment	.40 (0.79)	.252 (0.65)	.07 (.0.17)	.04 (0.10)
Substance abuse treatment	-.55 (0.84)	1.01 (1.91)*	.42 (0.86)	.65 (1.30)
Family death	.82 (1.26)	.741 (1.65)	.16 (0.35)	.16 (0.34)
Pseudo R^2	.26	.22	.22	.22
LR χ^2	78.54*	89.0*	80.44*	85.38*

Note: LSI-R = Level of Service Inventory-Revised. LR = likelihood ratio. Unstandardized regression coefficients and (*z* scores) are presented.

**p* < .05.

another inmate. Overall, the results indicated promising empirical links between low self-control, offender noncompliance, and criminal justice outcomes. One or both self-control measures, the Grasmick et al. (1993) attitudinal scale, and a newly devised three-item measure of disputatiousness were significantly related to every criminal justice outcome net the effects of 20 controls for criminal career, demographic, social background and risk factors, and various correctional risk measures.

DeLisi and Berg (2006, p. 154) assessed:

Self-control theory posited individuals who lead generally unsuccessful lives where opportunities at school, work, and home were poised for failure. . . . Poorly controlled persons

engaged in behaviors and placed themselves in social settings that were conducive for involvement in crime as both offender and victim. At times, these persons viewed themselves and their local life circumstances as the outcome of cruel, external forces, not their own shortcomings. With this disposition and behavioral repertoire, the offender interacted with criminal justice personnel, and, perhaps inevitably, set the stage for multiple opportunities for failure.

Their forecast was empirically supported here. In a variety of contexts, criminal offenders with low self-control or high disputatiousness continually engaged in conduct that was not conducive to rehabilitation, worsened their relationships with staff and other inmates, and jeopardized their criminal justice status and likelihood of reintegrating to society (see also Wilson, Gallagher, & MacKenzie, 2000, p. 363). This cross-situational consistency is consonant with Junger et al.'s (2001) assessment of self-control theory using data from a Dutch sample of 1,531 persons involved in traffic accidents. Junger and her colleagues found that persons who displayed risky traffic behavior that resulted in an accident were also likely to engage in various forms of criminal behavior. Specifically, they had an odds ratio of 2.6 for having an arrest for a violent crime, 2.5 for vandalism, 1.5 for property crime, and 5.3 for traffic crime. Irrespective of context, low self-control increases the likelihood for trouble, problems, or other deleterious outcomes.

Although the current study employed a self-control framework, the findings could also be interpreted from other theoretical perspectives, such as social learning (Wood, Gove, Wilson, & Cochran, 1997), biological (Beaver, Wright, & DeLisi, 2007), biopsychological (Cauffman, Steinberg, & Piquero, 2005), and subcultural (Stewart & Simons, 2006) approaches. To illustrate, Wood et al. (1997) applied social learning theory to the study of habitual criminal conduct using a mixed sample of incarcerated felons, male college students, and imprisoned career criminals. They found that chronic offenders were largely unaffected by the rewards that conventional society provides and that crime, especially violent crime, was intrinsically rewarding and reinforcing. Rather than attributing systemic noncompliance to low self-control, social learning theorists could argue, and argue compellingly, that career criminals adapt to the various punishments inflicted by the state and respond in ways that solidify their criminal self-image. Similarly, the current disputatiousness measure is reconcilable with subcultural explanations, whereby slight affronts or interpersonal disputes are responded to with violence (Stewart & Simons, 2006).

The measurement of self-control has at times been as controversial as the theory itself. For example, Tittle, Ward, and Grasmick (2003) argued that cognitive/attitudinal measures perform as well as or better than behavioral measures of self-control and thus they sharply disagree with Gottfredson and Hirschi's claim that behavioral measures are the optimum approach to operationalizing and testing their theory. Marcus (2003, 2004) forcefully argued that most tests of self-control theory suffer from fundamentally fatal measurement problems, many of which are related to attitudinal measures. In the present study, self-control, as measured by the Grasmick scale, was significantly related to just one outcome, retaliation against a prisoner. Conversely, disputatiousness was significantly related to *all* outcomes. Because of questions about the dimensionality and ultimate utility of the Grasmick scale, criminologists should devise new measures of the self-control construct, particularly in its developing application to criminal justice (see DeLisi, Hochstetler, & Murphy, 2003; Higgins, 2007).

We urge readers to consider some limitations of the current study to inform future investigations of the links between self-control theory and criminal justice. First, the hallmark of self-control theory is its purported universality. As such, samples should be sufficiently large to permit disaggregated analyses of the effects of self-control by age, onset, gender, race and ethnicity, and other psychosocial variables. Although prior research addressed the universality of self-control theory (De Li, 2005; Higgins, 2004, 2007; Vazsonyi, Pickering, Junger, & Hessing, 2001; Vazsonyi et al., 2004; Winfree et al., 2006), the current effort was limited to male parolees from a homogeneous midwestern state and thus has limited generalizability. Second, data collection occurred for a 2-year follow-up period, which is probably not a sufficient follow-up period to fully examine the effects of self-control on parolee behavior and recidivism. Unlike our retrospective, cross-sectional design, studies that use longitudinal data could assess the effects of self-control over extended periods of time, such as 5 or 10 years. If fluctuations in offender self-control are discovered over time, this would conflict with Gottfredson and Hirschi's (1990) central argument that self-control is stable.

Similarly, longitudinal designs allow researchers to examine the effects of turning points or life events that careen offenders down prosocial or antisocial pathways (Laub & Sampson, 2003; Sampson & Laub, 1993). Surely there are life events that activate or suppress an offender's self-control or criminal propensity vis-à-vis compliance with the criminal justice system. For instance, several investigators (Benda, 2003; Benda & Tollett, 1999; Benda, Toombs, & Peacock, 2003; De Li, Priu, & MacKenzie, 2000; Griffin & Armstrong, 2003; MacKenzie & De Li, 2002) examined the relationships between the local life circumstances of conventional offenders and recidivism. The results were consonant with self-control/social control theories. Those who attached to family and work demonstrated sharp reductions in criminal offending. Those who remained criminally active were prone to using drugs, alcohol, and weapons (see also Pearson et al., 2002).

Third, as the current effort explored the effects of self-control in the correctional sphere, future research should investigate DeLisi and Berg's (2006) thesis that self-control is a meaningful correlate of criminal justice outcomes among police, judicial, and correctional contexts. A systemic examination could assess self-control as offenders interacted with police officers, booking staff, court officers, attorneys, judges, and correctional staff, and the discretionary outcomes that are produced from these interactions. If defendants with low self-control are consistently noncompliant and present themselves to criminal justice practitioners in a negative manner, self-control is likely to emerge as a vital variable in the study of criminal justice.

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Matt DeLisi is coordinator of criminal justice studies and an associate professor in the Department of Sociology at Iowa State University. He has published more than 70 scholarly works on topics such as career criminals, self-control theory, inmate behavior, psychopathy, and behavioral and molecular genetics.

Andy Hochstetler is an associate professor in the Department of Sociology at Iowa State University. His recent and forthcoming articles appear in *Justice Quarterly*, *Journal of Criminal Justice*, and *Social Problems*.

George E. Higgins is an assistant professor in the Department of Justice Administration at the University of Louisville. He received his PhD in criminology from Indiana University of Pennsylvania in 2001. His most recent publications appear in *American Journal of Criminal Justice*, *Criminal Justice and Behavior*, *Criminal Justice Studies*, *Western Criminology Review*, *Deviant Behavior*, and *Psychological Reports*. He is the recipient of the 2006 William L. Simon/Anderson Outstanding Paper Award for the Outstanding Faculty Paper from the Academy of Criminal Justice Sciences. His current research focuses on criminological theory testing and quantitative methods.

Kevin M. Beaver is an assistant professor in the College of Criminology and Criminal Justice at Florida State University. He earned his PhD in criminal justice from the University of Cincinnati in 2006 and has published 30 scholarly works on genetic/biological correlates of crime, developmental criminology, and tests of criminological theory.

Christine M. Graeve earned a master's degree in sociology at Iowa State University.