

Importation, deprivation, and varieties of serving time: An integrated-lifestyle-exposure model of prison offending

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Abstract

Using data on 208 male, former inmates in a midwestern state, the current study extended the importation/deprivation debate by developing an integrated model of prison offending. The model contained attitudinal measures, self-control, perceptions of prison conditions, prison lifestyles, objective measures of prison conditions, and controls. Structural equation modeling indicated that both the importation and deprivation theories of inmate behavior were salient, however, their effects were mediated by the inmate's lifestyle while imprisoned, specifically, his participation in the inmate economy.

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Introduction

For many years, the etiology of prison violence was a foundational concern in criminology. Dozens of studies using a wide array of methodologies examined how social characteristics that inmates brought into the institution and the conditions of confinement influenced prison violence and other misconduct. A review of thirty-nine studies of institutional misconduct showed that both institutional factors and antisocial attitudes and behavior were among the most consistently significant predictors of misconduct (Gendreau, Goggin, & Law, 1997). Consequently, most researchers settled on an integrated approach emphasizing that prison violence resulted from both institutional and individual variables. Explanations of the nested, sequential, and potentially reciprocal processes remain imprecise to this day. Although interest in the importation-deprivation debate as a way of framing investigations of prison conduct waned somewhat in

recent years, methodological innovations such as hierarchical and structural equation modeling might revive it (Wang & Diamond, 1999; Wooldredge, 1998; Wooldredge, Griffin, & Pratt, 2001).

Many questions surrounding the transference of extra-institutional characteristics into different types of prisons and prison experiences remain unanswered. Why are some people more violent than others in prison? If something is imported into the prison, what is it? What are the most likely imported characteristics? What are the mechanisms of transference and how do they become troublesome in the prison environment? What shapes the propensity for violent behavior as inmates interact with others? These questions seemed particularly glaring in light of developmental research that integrated psychological characteristics of offenders with environmental events. Developmental approaches led to progress toward understanding how individual criminal predisposition and criminally antecedent experiences unfolded. Unfortunately, investigations of prison misconduct often neglected the short-term processes leading to offending and failed to bridge the space between the backgrounds and the foregrounds of crime. Empirical studies generally examined the structural characteristics of institutions as if they

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were experienced universally in a prison, or individual characteristics, usually based on official records, of the offender upon entry. Recently, some examined the hierarchical relationships between these components. In the bulk of this research, the imprisoned offender still was portrayed either as someone who had psychological characteristics that eventuated in crime or, alternately, as reacting automatically to the objective conditions of the incarcerated environment. Even sophisticated models portrayed the offender as a person with a set of characteristics that under conditions of incarceration engaged in crime (e.g., DeLisi, Hochstetler, & Murphy, 2003), as if the environment sparked this potential and it instantaneously exploded in misconduct. Everyone recognized that a process lay behind psychological and structural correlations with prison misconduct, but empirically its development was little understood. The place of inmate agency in shaping and understanding the environment and how this perception and action resulted in misconduct deserved examination.

Current focus

This study examined a sequential model of the specific mechanisms of importation of offender characteristics into prison, their effects on prison life, and ultimately, on prison offending. Specifically, structural equation modeling was used to examine how inmate characteristics, inmate attitudes, self-control, affective experiences of prison including perception of the environment, participation in the inmate economy, and witnessing victimization predicted serious prison misconduct.

Literature review

Importation model

The importation model used individual-level inmate characteristics that were manifested prior to incarceration to explain prison violence and misconduct. Many individual characteristics were found to relate to prison misconduct, such as the inability to cope under conditions of adversity (Power, McElroy, & Swanson, 1997; Sorensen, Wrinkle, & Gutierrez, 1998; Zamble & Porporino, 1988), depression and confusion (Baskin, Sommers, & Steadman, 1991), anger, antisocial personality style, and impulsivity (Wang & Diamond, 1999), and low self-control (DeLisi et al., 2003). The most convincing case for importation obviously was that pre-incarceration characteristics, such as arrest history and prison history, predicted prison offending (DeLisi, 2003; Flanagan, 1983; Goetting & Howsen, 1986; Ireland, 2000; Light, 1991; Myers & Levy, 1978; Simon, 1993; Winfree, Mays, Crowley, & Peat, 1994; Wooldredge, 1991; Wooldredge et al., 2001).

Deprivation model

Conversely, the deprivation model posited that the conditions of prison itself explained inmate misconduct even when controlling for inmate characteristics. Structural factors that were found to influence inmate behavior included the security-level of the facility (Cooley, 1993), crowding (Gaes, 1994), and management style and competency of administration (DiIulio, 1987, 1991). Macro-oriented investigations generally looked toward variation in prisons and their effects on rates of misconduct (Gaes, 1994; Poole & Regoli, 1983). Some disaggregated the prison population so that deprivation's effects on different populations could be examined (Gaes & McGuire, 1985; Harer & Steffensmeier, 1996). The most convincing and consistent findings at the macro-level derived not from conditions of housing, but aggregated characteristics of those who were housed and variables that might be seen as indicators of effective management. For example, McCorkle, Miethe, and Drass (1995) examined 371 American prisons and used documented assaults against inmates and staff as their dependent variables. They found that occupancy rate, ratio of guards to inmates, and institution size were not significant predictors, but that the ratio of Whites to Blacks among guards and security-level of institutions correlated with violence.

Administrative control model

Unlike the importation and deprivation models with their emphasis on inmates, the administrative control model points to prison officials, administrators, and governance generally as vital determinants of inmate behavior. According to administrative control theorists (e.g., DiIulio, 1987, 1991, pp. 33–59), prisons characterized by decisive, strong-leadership, formalized rules and organization, effective management, custodial culture, proactive staff interaction with inmates, and programming opportunities experienced less misconduct and violence than facilities that were poorly administered, managed, and controlled. Empirically, prison administration and management were linked to the most severe forms of inmate violence, including inmate homicides at the individual-level (Reisig, 2002) and lethal rioting at the collective-level (Useem & Kimball, 1989). This did not necessarily mean that tough, control-oriented, prison management was a panacea, however. Using data from disparate samples from the United States and Korea, scholars found that control-oriented, strongly administrated prisons could create stifling conditions that exacerbated inmate misconduct and violence. Rather than effectively controlling inmate violence, the rigidity of an overly administrative regime could increase prisonization among inmates and lead to disorder (Berk, 1966; Huebner, 2003; Reisig, 1998; Reisig & Lee, 2000). Indeed, Huebner (2003) recently conducted a multilevel analysis of inmate violence using data from 185 state correctional facilities that

encompassed nearly 4,200 inmates. Her analysis compared the coercive, control approach to remunerative controls that functioned as incentives to engender commitment in prison rules and goals. Overall, Huebner (2003) found that remunerative controls were able to reduce inmate violence, whereas coercive controls were not effective management tools.

Integrated model

Even in institutions characterized by considerable deprivation, individual-level factors were strong predictors of the risk of offending and victimization (Bonta & Gendreau, 1990). While environments might explain aggregate differences in violence between institutions, individual factors were at work in determining the likelihood that any prisoner would participate in disruptive or violent behavior. Penologists generally agreed that individuals imported characteristics from the street that made them more or less likely to engage in violence and misconduct in prison. The form of institutional life and how the individual chooses to do time also contributed to the risk of violence. While importation studies resulted in more consistent findings than deprivation studies, in many cases, the same studies found support for both (Goodstein & Wright, 1989; Thomas, Peterson, & Zingraff, 1978).

Some researchers found that the mismatch of inmate types and certain prison environments produced both victimization and offending at the individual level (Wright, 1991a, 1991b). For example, Poole and Regoli (1983) showed that inmate characteristics were used to select individuals into types of facilities and suggested that certain facilities fostered the development of inmate codes that mediated the direct effects of inmate characteristics. Similarly, Wooldredge (1997) found that individual characteristics existing before prison affected personal perceptions of crowding in the same institution. The implication was that structural factors, such as crowding, did not have universal impact on inmates in part because they were experienced differently. For example, some inmates adapted strategies, such as withdrawal and “acting tough.” Each strategy could be effective and was differentially available to inmates. The strategies utilized depended on the environment and personal characteristics and what an inmate thought would protect them from victimization and make imprisonment most comfortable (McCorkle, 1992; Toch & Adams, 1989).

Lifestyle-exposure model

At some point in their offending careers, many active criminals acquired a different understanding of the meanings of crime than their law-abiding counterparts and these attitudes could facilitate criminal involvement. Actuarial instruments included attitudinal components and these instruments were among the best predictors of misconduct

and recidivism. For example, Walters (1998) found that harmful belief systems and preferences were tied to drug-using, criminal lifestyles, and the chaotic circumstances that characterized them. While there was still much work to be done on how self-perceptions influenced offending, the literature was fairly consistent in identifying and speculating about a few consistent elements of criminal identities and attitudes (Menard & Elliott, 1994). Offenders might see themselves as adventurers who lived for the moment, emphasized spontaneity and toughness, and defined themselves in opposition to conventional authority figures such as law enforcement. Moreover, many viewed themselves as capable of navigating the social world in ways that conventional citizens could not and valued the experiences that prepared them for situations that they were likely to confront while incarcerated (Irwin, 1970). In other words, many street offenders believed that they possessed qualities and experiences that allowed them to gain self- and social-esteem on the streets, and, perhaps, in prison. To the degree that they had a crime-conducive identity and were accustomed to acting criminal, they were likely to engage in crime and dangerous interactions in prison.

Investigators of the foreground of crime often saw little difficulty in incorporating stable and antecedent individual differences into their explanations. The earliest versions of lifestyle exposure theories of lifestyle and victimization mentioned selection into dangerous situations and varying preferences for dangerous activities (Hindelang, Gottfredson, & Garofalo, 1978). In expanding the lifestyle theories of approach, Garofalo (1986) noted that people differed in their psychological propensities toward risk taking. By the time offenders committed institutional misconduct, they might be thoroughly entrenched in a lifestyle where offending, deviant beliefs, and risky activities were commonplace. Settings and transactions where violence seemed appropriate were part and parcel of street-life and specific trajectories of conduct in prison.

Lifestyle theories clearly indicated that demographics correlated with different risks of offending and victimization. Persons who placed themselves in circumstances where crime was often committed (e.g., bars, unsupervised youth parties, open-air drug markets) were much more likely to offend and be victimized (Kennedy & Forde, 1990; Li, Prieu, & MacKenzie, 2000; Miethe, Stafford, & Long, 1987; Mustaine & Tewksbury, 1998; Riley, 1987). While offenders and victims are not identical, victims also are different from the general population and may place themselves in situations that criminal offenders define as opportunity (Kuhlhorn, 1990). Obviously, participation in criminal networks and the potentially violent interactions that characterize street-life has implications. Those who are heavily involved in or exposed to it may select behaviors and ways of seeing the world that influence their level of offending. Lifestyle factors maintain indirect effects via “associations” and “exposure” (Hindelang et al., 1978).

The same can be said of certain transactions in prison. Prisons have niches that are characterized by dangerous transactions. For example, gang membership in prison increases violence and other prison misconduct among individual inmates (Gaes, Wallace, Gilman, Klein-Saffron, & Suppa, 2002). Drawing on data from 581 prisoners housed under different conditions, Wooldredge (1998) found that prisoners' lifestyles predicted victimization in the form of physical assaults by other inmates, as well as theft of personal property. Inmates whom were socially distant and more privileged in their outside lives were more likely to be victimized. Hours devoted to education decreased only the chances of assault, but recreation increased the chances of assault and both recreation and vocational training led to greater victimization by theft. Wooldredge (1998) advised that future research should examine the characteristics of both inmate offenders and victims while also measuring "associations" with potential offenders and "exposure" to high-risk situations. Wooldredge's suggestion served as an impetus for the current research which took seriously the contention from lifestyle-exposure theory that offending resulted indirectly from exposure to and interaction with potential victims, especially in dangerous situations.

Certainly, danger awaits many prisoners and some prisoners are much more likely to find dangerous situations than others. Ethnographic literature on prisons seemed to suggest that one of the most dangerous of these was participation in the informal inmate economy. This form of illicit interaction greatly increased the chances of victimization and offending. Where goods were scarce, there were many who attempted to take advantage of others. Moreover, in illicit economies there were no pleasant means of coercing reluctant debtors to pay (Irwin & Austin, 1997; Sykes, 1958; Toch, 1977). Differential involvement in the illicit inmate economy might be a predictor of involvement in prison crime and a mechanism that translated individual characteristics into institutional life.

Exposure to victimization might also be predicated by individual characteristics that placed an offender in dangerous circumstances and this exposure also could predict offending. If evidence from the free world could serve as a guide, it was reasonable to assume that witnessing victimization often resulted from a tendency to place oneself or be placed by circumstance in dangerous environs. While it might well be impossible to escape dangerous circumstances in some prisons, there was also reason to suspect that some inmates did a better job than others of insulating themselves from prisons' dangerous transactions.

Sample and method

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 sample encompassed 43 percent

of the male work-release parole population. All had been released from state prison within six 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. 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 cash for one to two hours of their time. Some subjects 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 suggested that sample participants did not differ substantively from the male work-release parole population. The sample was 61 percent White (population 72 percent White), 100 percent male (the state correctional population was 88 percent male, the male subpopulation was of course 100 percent male), and twenty-nine years old (average age of offenders in the population was thirty-one years). For offense type, the sample was 29 percent violent and 22 percent drug offenders compared to the population which was 28 percent violent and 22 percent drug offending. For several reasons, objective institutional conditions were included only in the correlation matrix. First, only rough indicators of objective prison conditions were available and the seven institutions from which offenders were drawn were fairly homogenous according to official statistics (Hochstetler, Murphy, & Simons, 2004, pp. 443–445). Second, the men served their sentences in units with varying levels of security, but almost all were imprisoned in close proximity to medium- or maximum-security inmates. All of the men were from overcrowded facilities that operated between 101 percent and 134 percent above capacity. Imprisonment within a unit probably affected their plight much more than their location behind a given prison's walls, but there simply were insufficient case numbers from each unit to confidently perform hierarchical analyses. Third, the state prison system had a sophisticated classification program in place that raised problems with interpreting institution-level effects as more than proxy measures of what happened when groups of similarly classified offenders interacted.

The study focused on individuals and their perceptions, and because of the sampling strategy that did not cluster on prison, represented a population of parolees not inmates. Readers should be cautious in interpreting and generalizing from the findings since the sample was from a single geographic area, contained only males, and did not measure experiences while offenders were imprisoned, but instead, after they had been released. Nevertheless, like prior investigators who used similar study groups (e.g., DeLisi et al., 2003; Hochstetler et al., 2004), the current authors believed that the data were valuable and inform the criminological understanding of inmate behavior.

Table 1
Items and measurement

Self-control ($\alpha = .83$)
Risk taking ($\alpha = .78$)
 I like to test myself every now and then by doing something a little risky ($r = .58$).
 Sometimes I will take a risk just for the fun of it ($r = .64$).
 I sometimes find it exciting to do things for which I might get in trouble ($r = .82$).

Temper ($\alpha = .84$)
 I lose my temper pretty easily ($r = .80$).
 Often, when I'm angry at people I feel more like hurting them than talking about why I'm angry ($r = .82$).
 When I am really angry other people better stay away from me ($r = .79$).

Criminal attitudes/lifestyle ($\alpha = .68$)
 Prior to my last sentence, I thought my health was in jeopardy due to my lifestyle ($r = .55$).
 Prior to my last sentence, I lived life in the fast lane ($r = .69$).
 Prior to my last sentence, my attitude toward police was that they were the enemy ($r = .69$).

Perceived prison environment ($\alpha = .69$)
 (Thinking of prison) I found the absence of privacy to be stressful ($r = .65$).
 (Thinking of prison) I found the boredom to be stressful ($r = .80$).
 I found the noise in prison to be stressful ($r = .52$).

Witness victimization ($\alpha = .73$)
 How often did you witness another prisoner being sexually assaulted? ($r = .58$)
 How often did you witness other prisoners being assaulted with a weapon? ($r = .76$)
 How often did you witness other prisoners involved in a physical fight? ($r = .74$)

Participation in inmate economy ($\alpha = .69$)
 While you were in prison, how often did you loan out goods for a profit? ($r = .71$)
 While you were in prison, how often did you get drunk or high? ($r = .75$)
 How often did you pay other prisoners to work for you (clean cells, buff floors, laundry, etc.)? ($r = .55$)

Offending ($\alpha = .68$)
 How often were you involved in physical fights with other prisoners? ($r = .69$)
 How often did you retaliate against a prisoner for doing you wrong or disrespecting you? ($r = .67$)
 How often did you carry, possess, or have a weapon stored nearby (shank, club, razor)? ($r = .65$)

Prison
 Maximum-security facility (0 = no, 1 = yes).
 Medium-security facility (0 = no, 1 = yes).
 Percent medium- and maximum-security prisoners in unit.
 Age (M = 29.4, SD = 7.3)
 Race (0 = non-White, 1 = White)

Measurement

Self-control

Self-control was operationalized using the Grasmick, Tittle, Bursik, and Arneklev (1993) scale. Six items were used to create an efficient self-control factor with two dimensions, risk-taking ($\alpha = .78$) and temper ($\alpha = .84$). Conceived as a single factor, Cronbach's alpha also would be acceptable ($\alpha = .83$), but in keeping with the literature on this measure and to satisfy questions about its structure (see DeLisi et al., 2003), two components were distinguished. Temper and risk-taking were significantly correlated with the latent self-control factor throughout the analyses. In addition to its widespread use as an indicator of criminal propensity, self-control had proven to be empirically stable (Arnekelev, Cochran, & Gainey, 1998; Turner & Piquero, 2002), and therefore, could be administered with some logical validity at any time in the sequence of behavior under study. Moreover, the use of self-control allowed for a model that controlled for inter-individual differences. Item and measurement correlations are shown in Table 1. Self-control was abbreviated as SELF, the risk-taking dimension was abbreviated as RISK, and the temper dimension was abbreviated as TEMP in the structural equation model shown in Fig. 1.

Perceived prison environment

The perceived prison environment latent factor was composed of three items. These items measured some of the more bothersome aspects of imprisonment, including privacy and sensory deprivation ($\alpha = .69$). Perceived prison environment was abbreviated as PERC in the structural equation model shown in Fig. 1.

Witness victimization

The latent witness victimization variable was composed of three items. These were intended to measure the level of danger faced by the respondent while incarcerated, perhaps only as he perceived it. The items referred to how often the respondent witnessed sexual assault, assault with a weapon, and physical fights ($\alpha = .73$). Witnessing victimization was abbreviated as WIT in the structural equation model shown in Fig. 1.

Participation in the inmate economy

Participation in the inmate economy was measured with three items. These included a question that referred

Coding for self-control items (strongly agree = 1, agree = 2, don't know = 3, disagree = 4, strongly disagree = 5). Coding for attitudes and perception variables (strongly agree = 1, agree = 2, disagree = 3, strongly disagree = 4). Coding for victimization, participation in inmate economy, and offending (never = 0, one to two times = 1, about once a month = 2, about once a week = 3, two to three times a week or more = 4).

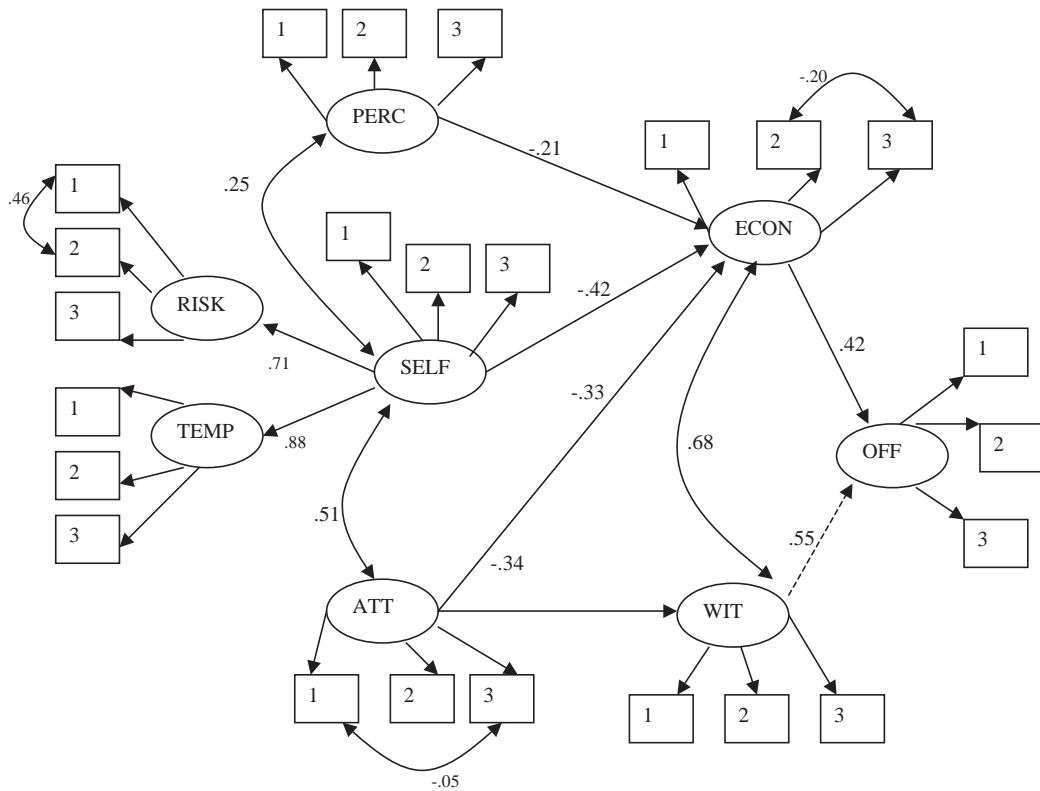


Fig. 1. Structural equation model of prison offending.

to loaning out goods for profit, contracting other prisoners to perform mundane services, and using drugs and alcohol in prison. These diverse items referred to activities that existed in most institutions and likely constituted the inmate economy ($\alpha = .68$). Together, the items measured an inmate's engagement in transactions with other inmates that were discouraged or forbidden by prison authorities. Participation in the inmate economy was abbreviated as ECON in the structural equation model shown in Fig. 1.

Offending

Offending was measured with three items: frequency of physical fights with other prisoners, how often they retaliated against a prisoner, and how often they carried or kept nearby something that they intended to use as a weapon ($\alpha = .68$). Offending was abbreviated as OFF in the structural equation model shown in Fig. 1.

Criminal attitudes

Criminal attitudes were measured with three items. These items were intended to measure respondents' identification with values conducive to continuance in crime upon prison entry. One item indicated that the inmate knew that his lifestyle prior to prison placed him at risk of injury. A

second asked the respondent to indicate whether prior to incarceration he had "lived life in the fast lane." The third item asked the respondent whether before incarceration his attitude toward the police was that they were the enemy. The items factored convincingly ($\alpha = .68$). Criminal attitudes were abbreviated as ATT in the structural equation model shown in Fig. 1.

Controls

Correlation analysis included control variables such as race (0 = non-White; 1 = White), age in years at time of the survey, and a variable that captured conditions of imprisonment (medium-security, maximum-security, and the percentage of inmates in his particular unit that were classified as either medium- or maximum-security). The prison conditions variables should be viewed as proxies for objective conditions since they could vary by subunit within a prison. These control variables were removed from subsequent SEM analysis because no theoretically driven model that adequately fit these data could be constructed.

Model construction

The goal was to assess not only the relationships between several social psychological variables, but also a

proposed structure for these relationships, thus the analysis proceeded in three stages. First, psychological variables (criminal attitudes and self-control) were correlated with perceived prison conditions, participation in the inmate economy, witnessing victimization, and self-reported offending. To satisfy readers' curiosities about how demographic controls and the setting of reference might shape these variables, age, race, and the prison variable were also included in these correlations.

Second, using structural equation modeling, a structure was imposed on the data based on a model that took into account past research on importation and deprivation and a commonsense temporal ordering of how the processes were likely to operate. A hypothetical developmental model was proposed to depict the logical and temporal order of the variables. The purpose of the first proposed structure was not to find the best-fitting and most parsimonious model, but to logically formulate a theoretically consistent model that fit sufficiently well to allow further diagnostics of the hypothesized paths it contained. In other words, the authors could have improved parsimony by refining the model, but chose not to since theory offered little objective guide. Fig. 1 contains the proposed model. In it, self-control, perceived prison conditions, and criminal attitudes occupy the left side as exogenous variables. All captured characteristics that presumably were presented soon after inmates entered penitentiaries. Participation in the inmate economy and witnessing victimization were placed in the middle of the model because deprivation theorists would suggest that they mediated the relationship of offending to personal and institutional conditions. These two endogenous lifestyle-exposure variables were correlated because it was unknown whether witnessing victimization preceded or followed participation in the inmate economy. The direct and indirect effects of all of the major constructs and latent factors on the offending variable were also modeled.

In the third stage of the analysis, findings from the results of the preceding stages were used to construct a more parsimonious model. The goal of this procedure was simply to illustrate refinements that could be made to the model without significantly sacrificing model fit. These refine-

ments retained paths that were significant and eliminated insignificant paths based on previous runs. While this provided some suggestive conclusions, a test of the refined model's structure would require other data sets.

Findings

Table 2 contains a correlation analysis of the variables. Many of them correlated significantly with other variables. Participation in the inmate economy ($r = .86, p = .01$) and witnessing victimization ($r = .87, p = .01$) were particularly significant correlates of offending. This led to the immediate suspicion that all three of these variables were linked to active participation in illegal inmate transactions, or lifestyle-exposure. In fact, witnessing victimization correlated with participation in the inmate economy ($r = .73; p = .01$) to a much greater degree than it correlated with any other variable. Criminal attitudes ($r = -.51; p = .01$), age ($r = -.34; p = .01$), and prison ($r = -.21; p = .03$) also significantly correlated with offending. Several independent variables correlated significantly with self-control, including age ($r = .37; p = .01$), criminal attitudes ($r = .51; p = .01$), participation in the inmate economy ($r = -.54, p = .01$), and witnessing victimization ($r = -.37; p = .01$). Criminal attitudes correlated significantly with perceived conditions ($r = .30; p = .01$), age ($r = .21; p = .01$), and witnessing offending ($r = -.45; p = .01$). Age correlated significantly with participation in the inmate economy ($r = -.23; p = .02$) and witnessing victimization ($r = -.28; p = .01$).

To achieve a model that fit the data sufficiently to proceed with examining paths, and following modification indices, two error terms in two measures were correlated. The items that measured paying other prisoners for work and use of drugs in participation in the inmate economy were correlated as were items about taking risks "for enjoyment" and "to test myself" in the risk-taking/self-control scale. Each of these modifications could be justified on the grounds that the items were similarly worded and contained the same answer sets. The current authors concurred with Longshore, Stein, and Turner's' (1998, p. 178) conclusion that "judicious and reasonable use of a small number of statistically significant

Table 2
Zero-order correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Self-control (1)	1.00	0.51**	0.37**	0.24**	0.11	-0.54**	0.08	-0.37**	-0.46**
Criminal attitudes (2)		1.00	0.21**	0.30**	-0.04	-0.02	0.00	-0.45**	-0.051**
Age (3)			1.00	0.07	-0.09	-0.23**	-0.00	-0.28**	-0.34**
Perceived conditions (4)				1.00	0.17*	0.02	0.11	-0.17	-0.03
Race (5)					1.00	-0.02	0.07	0.11*	-0.03
Inmate economy (6)						1.00	0.12*	0.73**	0.86**
Prison characteristics (7)							1.00	-0.18	-0.21**
Witness victimization (8)								1.00	0.87**
Offending (9)									1.00

* $p < .10$.

** $p < .05$.

and theoretically defensible supplementary correlations in a model with many degrees of freedom is not grounds for rejecting the results and, rather, is often encouraged.” As shown in Table 3, the measurement model with direct and indirect effects adequately fit the data after these minor modifications ($\chi^2/df = 228.56/169 = 1.35$; RMSEA = .04; GFI = .91; CFI = .96).

Only one variable, participation in the inmate economy, directly predicted offending ($b = .42$; $p = .06$). Importantly, participation in the inmate economy was predicted by several other independent variables, including self-control ($b = -.42$; $p = .02$), perceived conditions ($b = -.21$; $p = .06$) and criminal attitudes ($b = -.33$; $p = .02$). Criminal attitudes also predicted witnessing victimization ($b = -.34$; $p = .06$). Several correlations between independent variables also were significant, including perceived conditions/self-control ($r = .25$, $p = .02$), self-control/criminal attitudes ($r = .51$, $p = .03$), and perceived conditions/criminal attitudes ($r = .12$, $p = .08$). Error terms for inmate economy and witness victimization were strongly correlated ($r = .68$, $p = .01$). Self-control and criminal attitudes also had significant indirect effects on offending. Criminal attitudes increased offending ($b = -.28$; $p = .02$). Self-control decreased offending ($b = -.32$; $p = .08$). This suggested that to the extent that the variables on the left side of the model had effects, they operated through participation in the inmate economy and witnessing victimization.

Table 3
Total, direct, and indirect effects on endogenous variables and offending

	Offending (<i>b</i>)	Inmate economy (<i>b</i>)	Witness victimization (<i>b</i>)
<i>Inmate economy</i>			
Total (direct) effect	.42*		.68**
<i>Witness victimization</i>			
Total (direct) effect	.55	.68**	
<i>Self-control</i>			
Total effect	-.30	-.42**	-.19
Direct effect	-.01	-.42**	-.19
Indirect effect	-.28		
<i>Criminal attitudes</i>			
Total effect	-.39	-.33**	-.34*
Direct effect	-.07	-.33**	-.34*
Indirect effect	-.32		
<i>Perceived conditions</i>			
Total effect	.15	-.21*	-.02
Direct effect	.07	-.21*	-.02
Indirect effect	.08		

$\chi^2/df = 228.56/169 = 1.35$; GFI = .91; CFI = .96; RMSEA = .04 at .90 confidence interval.

* $p < .10$.

** $p < .05$.

For the purposes of illustrating the importance of lifestyle-exposure variables as mediators in the model, selective refinements to the original model were performed. To examine whether elements of lifestyle-exposure theory mediated the relationships of criminal attitudes, self-control, and perceived conditions to offending, all direct paths from these variables to offending were eliminated from the model. The results were convincing. The model fit just as well without the direct effects as it did with them ($\chi^2 = 229.52$, $df = 172$, $p = .003$; $\chi^2/df = 1.3$; GFI = .90; RMSEA = .04). In addition, none of the modification indexes suggested that significantly better fit would be achieved by keeping the direct effects of these variables in the model. The findings for the individual paths were similar to the full model, but the size of the coefficients increased when direct effects, however slight, were removed. Self-control significantly predicted participation in the inmate economy ($b = -.42$; $p = .01$). It did not predict witnessing victimization. Perceived conditions were a significant predictor of participation in the inmate economy ($b = .23$; $p = .04$), but had no significant effect on witnessing victimization. Criminal attitudes predicted both participation in the inmate economy ($b = -.34$; $p = .02$) and witnessing victimization ($b = -.35$; $p = .05$). Participation in the inmate economy maintained its strong effects on offending ($b = .50$; $p = .01$), moreover witnessing victimization became significant when the direct effects were eliminated ($b = .51$; $p = .01$). Correlations between witness victimization and inmate economy ($b = .68$; $p = .01$), criminal attitudes and perceived conditions ($b = .29$; $p = .01$), self-control and criminal attitudes ($b = .51$; $p = .01$), and self-control and perceived conditions ($b = .25$; $p = .01$) remained significant.

Discussion and conclusion

The findings from this study strongly supported lifestyle-exposure interpretations of prisoner misconduct. This conclusion was affirmed by several elements of the analysis. First, the strength of the relationship between participation in the inmate economy and other variables was revealing. This variable was the most powerful predictor of offending. Witnessing victimization and participation in the inmate economy were significantly and strongly correlated. Second, and related, the effects of criminal attitudes, self-control, and perceptual conditions were mediated by participation in the inmate economy and witnessing prison victimization. This suggested that the mechanism of transference of these pre-prison conditions into offending might be involvement in dangerous transactions with other inmates. Third, removing the direct effects from the model did not significantly diminish its fit and four degrees of freedom were gained. In the reduced model, both witnessing victimization and participation in the inmate economy were significant predictors of offending and the mediating effects of these variables for the exogenous variables became clearer.

Some of the findings from the correlation analysis were also noteworthy. For example, perceived conditions correlated with individual characteristics (race, criminal attitudes, and self-control), but not with the prison conditions variable. The findings indicated that the experience of prison might be a more individualized experience than often imagined. Subjective experiences of prison were likely to intervene between environmental variables and an inmate's actions. Much of the literature on prison conditions was too structural, implying that crowding affected inmate offending similarly. A premise that institutional conditions drove inmate behavior without specifying which inmates were likely to respond would certainly seem foreign to most experts in prison classification. Structural interpretations undoubtedly had value, however. In the correlation analysis, the only variable that correlated with the variable designed to capture objective variation in prison conditions was participation in the inmate economy. This variable was also the most significant predictor of offending in the structural equation models. The findings meshed neatly with those of investigators that preferred to see an active inmate economy as a structural condition and not as only a reflection of inmate composition. The correlation of this variable with exogenous variables at the individual-level could not and probably should not be seen merely as reflecting differential tendency to select into transactions, but also into certain institutions with active illicit economies in place. In fact, that interpretation fit easily into lifestyle-exposure theory, as it recognized that individual variables influenced the selection of settings.

Results provided limited support for interpretations of inmate misconduct that rested heavily on institutional conditions or the perceptual level of suffering by inmates. They also found little support that violent offending in prison could be understood as just another outcome of individual flaws in a simple and direct sense (Harer & Steffensmeier, 1996). Instead, transactions between inmates were more likely to occur in some settings than others. These elements of lifestyle-exposure mediated the effects of individual characteristics on offending. Offenders with criminogenic attitudes and low self-control did their time differently than others, namely they were more likely to engage in forbidden transactions with other inmates. This finding had potentially important implications for prison management policy (DiIulio, 1987, 1991).

Surprisingly few studies looked at individual characteristics, self-reported offending as a function of prison lifestyle, and inmate perceptions of the institution. Although the current study did, some caveats should be considered. Of course, the sample used in this study could be larger and more clearly representative of a population. While the current measures captured the theoretical constructs fairly well, they could benefit from further refinement. Some readers might also question whether the inmate economy items, witnessing victimization, and prison offending were measuring constructs that were too similar, even tautolog-

ical. The argument was temporal, but unfortunately the data were retrospective and cross-sectional. These were important limitations. Nevertheless, the SEM models herein permitted a clear examination of how individual differences related to interactive social processes that led to offending.

For some time, criminologists recognized that the importation/deprivation debate rested on a false distinction. Many penologists too easily set aside the details of the debate, coming to polite agreement that integrated perspectives were the answer. This study turned toward lifestyle-exposure theory, the recently invigorated interest in offender agency, and selection of environmental conditions to make a small contribution to understanding links between what prisoners bring to institutions and how they conduct themselves.

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