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Where "Old Heads" Prevail: Inmate Hierarchy in a Men's Prison Unit

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Abstract

Research on inmate social order, a once-vibrant area, receded just as U.S. incarceration rates climbed and the country's carceral contexts dramatically changed. This study returns to inmate society with an abductive mixed-methods investigation of informal status within a contemporary men's prison unit. We collected narrative and social network data from 133 male inmates housed in a unit of a Pennsylvania medium-security prison. Analyses of inmate narratives suggest that unit "old heads" provide collective goods in the form of mentoring and role modeling that foster a positive and stable peer environment. We test this hypothesis with Exponential Random Graph Models (ERGMs) of peer nomination data. The ERGM results complement the qualitative analysis and suggest that older inmates and inmates who have been on the unit longer are perceived by their peers as powerful and influential. Both analytic strategies point to the maturity of aging and the acquisition of local knowledge as important for attaining informal status in the unit. In summary, this mixed-methods case study extends theoretical insights of classic prison ethnographies, adds quantifiable results capable of future replication, and points to a growing population of older inmates as important for contemporary prison social organization.

Keywords

incarceration, prison, networks, hierarchy, status, mixed methods

The extraordinary embrace of mass incarceration in the United States has pushed the causes and consequences of imprisonment to the center of sociological inquiry. For example, more than 15 years ago, Wacquant (2001) claimed in an oft-cited article that the hyperpunitiveness endemic to U.S. criminal justice inextricably enmeshed race and criminality such that "'Young + Black + Male' is now openly equated with 'probable cause' justifying the arrest, questioning, bodily search and detention of millions of African-American males every year" (Wacquant 2001:118). His premise of the fusion of the "dark ghetto" and imprisonment presaged an explosion in punishment sociology focused on incarceration and social inequality (Alexander 2012; Pager 2003; Wakefield and Uggen 2010; Western

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2006; Wildeman 2009). This literature culminated in a 2014 National Research Council (NRC) report, *The Growth of Incarceration in the United States* (Travis, Western, and Redburn 2014), and direct links to criminal justice reform and Black Lives Matter social movements.

Although the correlates of incarceration and their implications for social (in)justice have garnered extensive treatment in the new millennium, the *experience and social organization* of prison have gone relatively unstudied. Largely forgotten in Wacquant's (2001) manuscript was a parallel argument connecting the postindustrial ghetto with contemporary prison life. Namely, he stated that the rapid influx of inmates accompanying mass incarceration—particularly minorities, youth, gang members, and drug offenders—overwhelmed and transformed the modern penitentiary, creating "a race-divided and violence-ridden 'warehouse' geared solely to neutralizing social rejects" (Wacquant 2001: 109). In this view, Anderson's (1999) predatory and violent "code of the street" penetrated the nation's prisons, resulting in chaotic, fragmented, and aggressive inmate social systems. This thesis, that current inmate society originated from urban decay and disorganization, echoed a long-standing importation perspective of prison social order (Irwin and Cressey 1962; Jacobs 1977), which holds clear implications for prisons' (lack of) rehabilitation potential and potentially justifies increased correctional controls (DiIulio 1987).

Wacquant's (2001) description of inmate social organization failed to gain traction in the years following its publication for two principal reasons. First, and applicable to all research on this topic, was the dramatic decline in prison-based research throughout the era of mass incarceration. As Wacquant (2001, 2002) himself recognized, many correctional administrators responded to growing inmate populations by prioritizing efficient prison management over evidence-based policies, and institutional review boards reacted to prior abuses through greater scrutiny of prison research (Jewkes and Wright 2016; Simon 2000). With prison doors increasingly closed to embedded research, the complexity of prison social organization constricted to distal and monochromatic impressions with few theoretical insights or concrete policy recommendations, weakening sociological claims to the field. Supporting this conclusion, the NRC mass incarceration report stated, "Most research on social and economic effects treats prison as a black box, with little detailed study of what takes place inside and its potential effects" (Travis et al. 2014:354).

Second, Wacquant's (2001) importation thesis appeared inconsistent with longitudinal statistics of inmate violence. Data from the Bureau of Justice Statistics show that inmate homicide rates dropped markedly during the period when incarceration rates rose most (Mumola 2005; Noonan and Ginder 2013; Sylvester, Reed, and Nelson 1977). Between 1980 and 2000, the inmate homicide rate dropped 90 percent, from greater than 60 to approximately 5 homicides per 100,000 inmates. Reported prison riots, correctional officer murders, and inmate escapes similarly dropped precipitously over this time period (Useem and Piehl 2006). Rather than Wacquant's portrait of chaos and violence, contemporary U.S. prisons appear safer and more stable than prior to the country's punitive turn.

The insufficiency of Wacquant's (2001) explanation leads to the question, "How *are* modern prisons socially organized and how have they adapted to the changes wrought by mass incarceration?" Several alternative explanations exist. For example, Skarbek (2014) argues that race-based prison gangs provide endogenous adaptations that stabilize inmate society through group segregation, strict hierarchical organization, and regulated activities centered on illegal drug markets. Others argue that changes in prison management (e.g., increased formal controls and use of disciplinary segregation) and changes in prison routines and the built prison environment (e.g., compartmentalized activities and podular designs) dismantled inmate society, increased peer isolation and mistrust, and cowed potential disorder (DiIulio 1987; Irwin 2005;

Kruttschnitt and Gartner 2005; Useem and Piehl 2006). Although provocative and consistent with the seeming paradox of decreased prison violence with increased overcrowding, such contradictory theories remain relatively untested, primarily due to the restrictions placed on prison research and the difficulty in operationalizing the explananda of inmate social organization. As a result, we know arguably less about inmate social order today than we did when the era of mass incarceration began over four decades ago.

In this study, we reenter the prison to empirically investigate contemporary inmate social organization with an in-depth case study of a prison unit's status hierarchy. Consistent with the inconclusive and unverified theoretical accounts outlined earlier, we relied on prior theory and knowledge as "sensitizing notions" to approach our specific case, but we let patterns emerge abductively and remained open to unexpected findings to build novel theoretical insights (Timmermans and Tavory 2012). We began our analyses by gathering qualitative narrative data on the sources of status as perceived by unit inmates. Coding the content of this perceptual data generated a surprising result: older inmates were clear leaders and positive mentors on the prison block. To pursue this unforeseen theoretical insight, we revisited the unit's hierarchical organization through a quantitative lens. Using formal network methods, we predicted inmate status nominations while holding constant important structural and inmate characteristics. These network analyses complement the qualitative results and demonstrate that, net of covariates associated with prior theory, inmate age and experience are strong and significant correlates of inmate status nominations. Moreover, these quantitative analyses allow us to disentangle three concepts related to time—age, time on the unit, and time spent in prison—each of which is associated with a different mechanism for status attainment.

Our abductive and mixed-methods analytic design produces new theory in an underdeveloped, but important, research domain. We find that prison "old heads" (i.e., older inmates with substantial local knowledge, prosocial attitudes, and positive peer influence) lie atop this particular unit's status hierarchy and are role models for their inmate peers. This finding essentially reverses the community development process Anderson (1999) describes in his influential urban ethnography. Rather than young males adopting a violent "code of the street" that displaces traditional and conventional authority represented in community old heads, we find that prison old heads consolidate unit authority and socialize younger and more transitory peers toward prosocial attitudes and behaviors. Consistent with the early functionalist account of prison's deprivations (Sykes 1958; Sykes and Messinger 1960), our findings suggest that, under certain institutional contexts, prison old heads are able to build community cohesion, alleviate the pains of imprisonment, and subvert the "deadly symbiosis" of ghetto and prison that Wacquant (2001) proposed.

PRIOR PERSPECTIVES ON INMATE SOCIAL ORGANIZATION

Inmate social structure first drew public attention with the publication of several seminal prison ethnographies of the mid-twentieth century that presented competing visions for inmate society. These classic studies remain among the most informative in providing theoretical guidance for contemporary studies of inmate social organization. In *The Society of Captives,* Sykes (1958) argued that the intricate inmate social system he observed in a New Jersey prison was indigenous to the conditions of confinement and therefore inextricably linked to system stability and functioning. He asserted that imprisonment's inherent deprivations force inmate adaptations that are likely to be exploitive ("alienative") and undermine group solidarity. However, within this potentially chaotic social milieu can arise "real men" or "right guys" (Sykes and Messinger 1960) who (1) adhere to the inmate code (e.g., loyalty to

other inmates, emotional detachment, and physical courage), (2) bear the indignities of prison with stoic resolve, and (3) maintain tenuous inmate cohesion that permits system stability and safety over victimization and revolt. For Sykes, such men lying atop the inmate hierarchy will work on behalf of the community to alleviate the pains of prison and maintain peace. Accordingly, the humane prison administration works hand-in-hand with the inmate social system to encourage passive resistance and inmate solidarity while avoiding crises stemming from harsh repression, over-regimentation, or the dismantling of peer interactions (Crewe 2007).

In the decade following Sykes' study, social revolutions fomenting outside prisons made the deprivation argument appear simplistic or, at best, antiquated. Indeed, the dominant theme of prison research at the time was that interconnected racial tensions in the United States, spiraling urban decay, and spatially concentrated crime were imported into prisons and thus generated inmate culture. Jacobs' (1977) *Stateville* was emblematic of prison research in the era. In exhaustive detail, he documented the socio-historical contexts and administrative regimes of an Illinois prison, concluding that Chicago's street gangs and social movements penetrated the inmate social system and overwhelmed the prison's formal controls built on charismatic or traditional authority. In the prison context, imported characteristics associated with hard-earned "street" status, such as gang membership and criminal reputation (Irwin and Cressey 1962; Mears et al. 2013), may determine prison interactions and position in the inmate status hierarchy. In summary, the informal organization inside prisons may merely reproduce pre-existing structures outside of prison, regardless of how much individuals contribute to the collective good of the inmate community.

The deprivation and importation models dominated research of inmate behavior over the past several decades. This research followed two primary paths. First, many studies relied on correctional administration data to test if deprivation or importation factors were more strongly correlated with inmate outcomes, including offending (Hochstetler and DeLisi 2005), disciplinary reports (Cao, Zhao, and Van Dine 1997; Jiang and Fisher-Giorlando 2002), suicide (Dye 2010), and psychological well-being (Slotboom et al. 2011). These studies provided mixed results, often finding that both perspectives help explain inmate behaviors or that substantial variation exists between prisons. Although benefitting from large generalizable samples and multivariate statistical analyses, these studies were unable to gain leverage on the cultural concepts at the heart of the importation and deprivation perspectives, and thus they had little to say about inmate social organization. In other words, because concepts such as informal status, peer relations, and group values are difficult to capture with official records, the antecedents of inmate social structure were generally beyond the reach of past quantitative analyses of the prison experience.

Second, a much smaller set of studies applied a case study approach to contemporary prison contexts. These studies covered similar ground to Sykes (1958) and Jacobs (1977) but updated the concepts to reflect current prison roles and changes in inmate demographics, prison architecture, or correctional policies. For example, Irwin (2005) interviewed inmates in California's Solano prison over the course of two years and concluded that the incarceration boom created many new "warehouse" prisons that maximized inmate control through physical design, rigid and expansive rules, and segregation policies. The result for inmate social organization, they claimed, was a détente in which racial and geographic groups remained socially segregated, but group partitions were more permeable than in the past and the fear of solitary confinement minimized intergroup antagonisms. Kruttschnitt and Gartner (2005) covered similar ground in two California women's prisons. With focus groups and surveys, these authors found that the contemporary neoliberal prison responded to overcrowding with increased control and decreased

resources. Confronted with greater staff distrust and disinterest, female inmates increasingly limited their social associations and withdrew into small group or solitary existences. Most recently, Skarbek (2014) also focused on social organization within contemporary California prisons. With secondary and official data of men's prisons, he argued that overcrowding and increased numbers of drug offenders gave rise to racially-based prison gangs that manage the drug trade while simultaneously maintaining order within the prison.

These studies provided detailed descriptions of the conditions of confinement in the era of mass incarceration, but they generally overlooked inmate hierarchy and power. Skarbek (2014) placed experienced gang leaders (i.e., "shot callers") at the top of the prison hierarchy, but he did not rigorously examine the correlates and characteristics of prison leadership. Perhaps the most thorough recent study on this topic comes from Crewe's (2009) research of an English medium-security prison. With thick descriptions and narratives, Crewe (2009:249–50) found that venerated inmates were those "who showed loyalty, sincerity, and respect for personal space and property, who dealt skillfully with prison staff, did not create problems for others, exhibited stoicism in the face of provocation, and upheld high levels of personal hygiene." Such characteristics align closely with those identified by Sykes (1958) over a half-century ago and suggest that, at least in English prisons, sources of status may not have changed as much as one might expect.

Crewe's (2009) ethnography benefits from its use of inmates' own words to describe inmate hierarchy. Simultaneously, however, it and other ethnographies are undermined by a lack of quantifiable metrics that allow for hypothesis testing and replication. These limitations slow scientific advancement because there are few means to adjudicate competing explanations. The complexity of social interactions and the large heterogeneity in prison conditions further reduce the comparability of ethnographic evidence (Kruttschnitt and Gartner 2005). Without clear means of operationalizing concepts for hypothesis tests, it is difficult to build on the insights of qualitative case studies or convince policymakers that embedded prison projects are worth the investment. A central objective of the current study is to blend the benefits of the case study and quantitative analyses with a mixed-methods design that uses narrative and network data.

AGE AND CONTEMPORARY INMATE SOCIETY

Research connecting mass incarceration with shifts in inmate society have principally focused on overcrowding, increased minority and drug-offender populations, or changes in prison formal controls (Crewe 2005; Irwin 2005; Kruttschnitt and Gartner 2005; Liebling and Arnold 2012; Skarbek 2014; Wacquant 2001). Absent from this literature is how changing prison age compositions that accompany mass incarceration may relate to contemporary inmate social organization. "Tough on crime" policies precipitating mass incarceration increased average sentence lengths and the frequency of life sentences (Kazemian and Travis 2015). These, along with an aging baby-boom generation, resulted in substantial increases in average prisoner age over time. Between 1993 and 2013, the state prison population age 55 or older grew by 400 percent, from 3 percent in 1993 to 10 percent in 2013 (Carson and Sabol 2016). Similarly, between 1992 and 2012, the number of inmates serving life sentences increased four-fold (Nellis and Chung 2013). The result is that there are now larger numbers of older inmates who have spent the majority of their lives behind bars, yet studies of how these inmates are situated within the inmate social structure remain limited. We propose that greater representation by older inmates within prison will likely affect inmate society in fundamental ways.

Consistent with the aggregate age-crime distribution (Hirschi and Gottfredson 1984), older inmates may be more conventional than

their younger peers, as evidenced by their lower recidivism rates upon release (Kim and Peterson 2014). Additionally, many long-term inmates opt to make the most of their prison lives, what Johnson (1987; Johnson and Dobrzanska 2005; Paluch, Bernard, and Johnson 2003) refers to as mature coping, by accepting their confinement, avoiding conflict and stress through organized routines, and caring for themselves and others with increased empathy and wisdom (see also Toch 1977). Consistent with this argument, Crewe, Hulley, and Wright (2016) provide a recent and thorough qualitative analysis of inmates serving long-term sentences (i.e., greater than 15 years). The authors find that the majority of inmates at the mid-to-late stages of long sentences reported adapting to their prison existences by (1) accepting their situations, (2) confronting and coming to terms with their crimes, and (3) managing their time through self-improvement, religious involvement, or "making amends" by giving advice or mentorship to younger inmates. In another recent article, Stuart and Miller (forthcoming) describe the mentoring role of "prisonized old heads" in the lives of young black men in Los Angeles' Skid Row neighborhood. These authors argue that older ex-inmates can become strong socializing agents in disadvantaged young men's lives by exporting prison desistance narratives and behaviors (e.g., daily exercise regimes) that were successful in negotiating life behind bars. The older inmate role described by this group of authors appears analogous to Sykes' (1958) "real men" and "right guys"; these inmates may similarly garner status rewards through group commitment and the provision of public goods, which helps maintain system stability within prisons (Kazemian and Travis 2015; Willer 2009).

Although penologists have recognized the changing age structure in prisons and speculate as to the experiences of older inmates, no prior study has rigorously tested how age and prison experience are associated with prison status. As Crewe and colleagues (2016) suggest, older and more experienced inmates may seek personal growth through inward self-discovery, spiritual rejuvenation, and the establishment of enclaves within the prison, or they may work toward redemptive projects that put them atop the inmate hierarchy to contribute to community well-being, solidarity, and peace. Limited evidence of the "lifer" experience suggests the former—long-term inmates typically form exclusive, insular, and marginal communities within the broader prison population (Honeywell 2015; Irwin 2010). Such findings suggest that older inmates carry little influence outside their immediate circle. However, when coupled with the imprisonment binge of the late twentieth century, which created a large cohort of now older inmates who have spent the majority of their lives behind bars, older inmates' influence may actually be greater in contemporary prisons compared to prisons of the past. The relative growth of the older inmate population in today's prisons may act as a counterweight to youthful violence and imported values, particularly when supported by institutional authorities. In the current study, we investigate this possibility by focusing on a prison unit with substantial inmate age heterogeneity. We examine if and how older and more experienced inmates occupy privileged positions in the unit's status hierarchy, and whether they can then establish norms and promote unit stability and cohesion.

AN ABDUCTIVE MIXED-METHODS APPROACH

Long-standing theories, few recent investigations, and altered prison conditions make abductive analysis an attractive strategy for understanding contemporary inmate hierarchy. Timmermans and Tavory (2012) advanced the abductive approach as an alternative to the perceived unfulfilled promises of grounded theory. Rather than ignoring prior theory and generating theory only through inductive data analyses, abduction relies on theory to sensitize the researcher to possible hypotheses while also emphasizing openness to potential surprises that stimulate theory construction. Abduction inherently suggests an iterative process whereby novel findings create new hypotheses that are reevaluated

through further investigation. In the current context, an abductive approach would rely on classic theories of inmate social order to inform the research question and methodology, but it would allow for unexpected results that alter the methodological sequence so as to revisit the phenomenon with new hypotheses.

We argue that a sequential mixed-methods strategy is well-suited for such an abductive approach toward prison informal organization and inmate status hierarchy, particularly if one proceeds from qualitative to quantitative analysis. Content analysis of qualitative data allows the researcher to identify both familiar and unexpected themes, which may then be pursued with formal statistical analysis of quantitative data. The two forms of data and analytic strategies complement one another, filling the gaps in each and sequentially generating and testing emergent hypotheses (Small 2011). Moreover, the quantifiable and reliable means of testing hypotheses offered by quantitative methods can be replicated in other contexts for increased generalizability. The inherently different types of knowledge gained through a mixed-methods design create opportunities to answer similar research questions from multiple angles.

Our methods are informed by a network perspective, which has burgeoned in sociological and criminological research in the past several decades (McGloin and Kirk 2010; Papachristos 2009). Central to the network paradigm is the idea that social systems consist of individuals, each with their own characteristics and behaviors, and the set of ties that embed individuals within a social structure. Sociologists commonly use social network data and analyses to examine the consequences of social structure for behavior and diffusion processes (Smith and Christakis 2008). Within criminology, Papachristos and colleagues provide prominent examples of this kind of research to explain the spread of gang violence (Papachristos 2009; Papachristos, Hureau, and Braga 2013) and gunshot incidents (Papachristos, Braga, et al. 2015; Papachristos, Wildeman, and Roberto 2015) over time and space. Occasionally, scholars analyze network data to characterize a context's overall structure and to understand the distribution of power and resources. For example, Smith and Papachristos (2016) recently created and analyzed a sample of criminal, personal, and legitimate networks in prohibition-era Chicago. They found that multiplex ties (i.e., ties that spanned the measured social spheres) explained the observed social structure, and they argued that these ties permitted criminal elites to influence and monitor conventional society. We follow a similar strategy to analyze the structure and underpinnings of inmate social organization (Kreager et al. 2016; Schaefer et al. forthcoming), while also addressing the shortcomings of a network approach with rich narrative data.

Approaching inmate hierarchy as a network question offers several advantages. A network perspective highlights status not as an attribute but as a relational process, as deference by one person to another (Gould 2002), which draws focus to both the receiver and the perceiver of status (Sauder, Lynn, and Podolny 2012). As a relational phenomenon, other relational processes may also operate and shape status attributions—processes such as the embeddedness of status in friendship relations or homophily (Labun, Wittek, and Steglich 2016). Moreover, status structures are self-reinforcing and develop through processes that are well-represented by network methods, for instance triads evolve to be transitive but not cyclical (Chase 1980). These varied aspects of status hierarchies make quantitative network approaches well-suited for investigating prison inmate structure. Yet, despite being the site of the first network studies (i.e., Moreno's [1932, 1934] examinations of relations in Sing Sing prison and in a reform school for girls), only a handful of quantitative network studies have subsequently breached the prison walls (Kreager et al. 2016; Schaefer et al. forthcoming).

A perceived limitation of network analysis is that its focus on relational *structure* often overshadows the *meaning* or *content* of the

social relations that make up that structure (Pachucki and Breiger 2010). In other words, the prioritization of structural properties has the potential to reduce social relations to binary matrices indicating the presence or absence of ties, rather than emphasizing that each tie has meaning and content for the actors themselves. Culture can take a backseat to structure. Individual narratives can shed light on the values and norms within a specific context, and how they inform status judgments and conferral (e.g., Rivera 2010), all of which are inaccessible with network nomination data alone. Applied to inmate status, qualitative data are able to describe, from the inmates' perspectives, which qualities, characteristics, or resources are valued within the local prison setting. Such data may be approached abductively to build general theoretical expectations, which can then be tested with quantitative data and mathematical models. In other words, textual data can point us in the right directions for formal statistical tests of specific hypotheses (Small 2011). In this study, we follow such a strategy by first eliciting and evaluating inmates' subjective perceptions of inmate status within the prison setting, and then using insights from this investigation to operationalize and test concepts with a quantitative network approach. Specifically, our qualitative analysis identifies inmates' age, their time on the unit, and their time in prison as interrelated, yet theoretically distinct, sources of informal status. Our quantitative network analyses permit us to disentangle these concepts statistically and compare their associations with peer-reported status nominations, demonstrating the potential for an abductive and iterative process to build new theory.

DATA

Data for this study come from the Prison Inmate Networks Study (PINS), a project focused on a single housing unit of a medium security Pennsylvania men's prison. At the time of data collection, the PINS prison was at maximum occupancy, holding approximately 2,400 inmates in 14 housing units, but not overcrowded. This study focuses on the prison's Custody Level 2 (CL2), or "good behavior," housing unit. According to Pennsylvania Department of Corrections (PADOC) policy, each inmate is assigned a custody level using the Pennsylvania Additive Classification Tool (PACT), an assessment instrument meant to place inmates in the least restrictive security level possible (Pennsylvania Department of Corrections 2011). CL2 classification is "assigned to inmates who demonstrate patterns of non-aggressive behavior. . . . Within the facility perimeter, the [CL2] inmate is generally permitted unrestricted movement in designated areas of the facility. These inmates require only intermittent, direct observation by staff" (Pennsylvania Department of Corrections 2011:46). Inmates in the CL2 unit typically demonstrate good behavior (i.e., no misconduct reports) for at least six months while in general population and volunteer for transfer to the CL2 unit. The unit manager selects inmates from a waiting list based on bed availability. At their discretion, unit managers may re-assign CL2 inmates back to general population due to aggressive or rule-violating behavior.

Physically, the observed CL2 unit is in a structure detached from the general population prison wings, creating a clear network boundary where residents are relatively free to associate with one another while not in their cells. The unit had beds for 205 inmates and a waiting list that kept the unit close to maximum capacity. The unit consisted of two tiers of double-occupancy cells and open-bay housing. It also had its own phone bank, laundry, classroom, and approximately a dozen bolted-in tables for recreational activities. The guard and administration offices were centrally located to maximize visibility into the unit's two wings.

The CL2 unit comprised 9 percent of the prison's inmate population, and the average CL2 inmate was in many respects comparable to other inmates in the prison. The mean age of both the CL2 unit and the prison overall was 40 years old; the CL2 unit was 39 percent white (40 percent in the prison overall), 47 percent black (49 percent in the prison

overall), and 14 percent Hispanic (10 percent in the prison overall); mean sentence lengths of 7.8 years in the CL2 unit compared to 8.7 years in the prison overall. The CL2 unit and the overall prison population also had similar offense and sentence characteristics, with virtually identical percentages of Part I and Part II offenses as defined by the Federal Bureau of Investigation's Uniform Crime Reports (U.S. Department of Justice 2004).

Of particular importance for our purposes, the unit was heterogeneous with regard to age. Unit inmates ranged in age from 21 to 72 years old, with 9 percent age 55 or older. The latter proportion closely approximates the 10 percent average across U.S. state prisons (Carson and Sabol 2016). The unit was also heterogeneous with regard to sentence length and parole eligibility. The unit housed a large number of inmates ($n = 75$, 37 percent of unit) who were past their minimum sentence dates and therefore eligible for parole. Alongside this more transient population, however, were 25 inmates (12 percent) whose minimum sentence date was five years or more in the future. These "long-termers" included six inmates serving life sentences without the eligibility for parole. Because parole-eligible inmates are likely to meet the criteria for entrance to the unit, the unit serves a secondary function of preparing inmates to exit the prison. This reentry role increases the importance of understanding the unit's informal status system, because the values entailed in that system may help or hinder the reintegration process.

The prison's location near the geographic center of Pennsylvania, between the population centers of Philadelphia and Pittsburgh, results in substantial inmate regional diversification. Philadelphia contributes the largest number (28 percent) of unit inmates, but overall the population is extremely diverse, with inmates representing 40 of the state's 67 counties. This geographic heterogeneity provides another potential source of inmate grouping and hierarchy, which we explore in our analyses.

Finally, PADOC offers a variety of programs that are largely standardized across all of the state's prisons. Inmates had access to a multitude of rehabilitation, treatment, and social activities while on the unit. These included religious fellowships, treatment programming, sports/hobby activities, vocational and educational training, and volunteer organizations. In the current study, we explore if involvement in such activities relates to our status outcomes.

Sample

Our objective was to interview as much of the unit's inmate population as possible. Prior to study recruitment, the survey instrument and study procedures were approved by the Pennsylvania State University Institutional Review Board (IRB). Project staff and interviewers also visited the unit and spoke with unit and prison administrators to discuss recruitment and survey administration procedures. The lead author and lead interviewer met with large groups of unit inmates on two occasions to advertise the study and recruit participants. Additionally, we continued recruitment through word of mouth and direct conversations with inmates on the unit as survey administration progressed. We had 142 (69 percent) unit inmates participate in the survey. Due to concerns regarding their ability to understand and consent to study participation, we did not use survey data from nine inmates who were classified as severely mentally ill, resulting in 133 respondents (68 percent of eligible respondents) with valid survey data.

Over a three-week period, participants were individually surveyed using Computer-Assisted Personal Interviews (CAPIs). To build trust, inmates sat beside interviewers so that both could see responses entered into a laptop computer. For three Spanish-speaking respondents, interviews were conducted in Spanish with Spanish versions of the CAPI. After completing the informed consent process, each survey took approximately one hour; responses were transferred to a confidential computer hard drive at the end of each day. Once all surveys were completed, the data were cleaned, coded, and merged with official data provided by PADOC.

Table 1. Descriptive Statistics (N = 205)

Variable	Mean/%	SD	Min.	Max.
Power/influence network indegree	.78	2.36	.00	14.00
Power/influence network outdegree	.97	1.28	.00	10.00
Age (in years)	39.47	11.13	21.00	72.00
Time in prison (in years)	8.01	7.53	.36	44.98
Time on unit (in years)	1.41	2.23	.01	14.16
Offense gravity score	9.99	3.37	1.00	18.00
Gang/Security Threat Group	6%		.00	1.00
Parole eligible	36%		.00	1.00
Race/ethnicity				
White/other race	39%		.00	1.00
Black	47%		.00	1.00
Hispanic	14%		.00	1.00
Religion				
Muslim	21%		.00	1.00
Catholic	19%		.00	1.00
Protestant	20%		.00	1.00
Other religion	24%		.00	1.00
No religion	15%		.00	1.00
Program participation	1.82	1.46	.00	6.00
Get along with network indegree	3.75	2.95	.00	14.00

Measures

Inmate hierarchy. During the CAPI administration, inmate respondents were asked, "Who are the unit residents you feel are the most powerful and influential?"[1] Each inmate was allowed to nominate and rank as many alters as they wished from an up-to-date unit roster. Aggregated across the unit, these nominations allow for the identification of inmates most commonly perceived as powerful and influential by their peers. The more nominations an inmate receives, the more consensus there is within the unit that the inmate has high status. This ranked measure of perceived status has greater face validity in prison settings than do other common network measures based on received friendship or "liked most" nominations (e.g., peer acceptance or sociometric popularity; LaFontana and Cillessen 2002; Parkhurst and Hopmeyer 1998). The number of sent power and influence nominations from the 133 eligible survey respondents ranged from 0 to 10 and was highly right-skewed (mean = 1.24, std = 1.68).[2] The sampled inmates gave a total of 165 nominations. The average inmate received .78 power and influence nominations (std = 2.36), with a maximum of 14 (see Table 1).[3]

Status attributions. The qualitative analysis is based on a follow-up question to the status nomination. For the three peers each respondent perceived as the most powerful and influential in the unit, respondents were asked, "Why is [inmate X] powerful and influential?" Interviewers listened to the responses, entered them into the laptop computer, and recited them back to the inmate to ensure the responses accurately captured the inmate's thoughts. Survey respondents provided power and influence responses that described why they nominated the particular inmate for 100 of the 165 nominated alters, which we use for our qualitative analyses of inmate status.

To further understand sources of inmate power and influence, we present excerpts from inmate narrative responses to the question, "How does a person get power and influence in this unit?" This question was asked of 74 unit residents three months after the initial data collection. These responses provide more global views on the local status system,

including responses from inmates who did not earlier nominate powerful and influential peers.

Status Correlates

For our quantitative analysis, we draw primarily on official data provided from PADOC. Table 1 lists descriptive statistics for these measures. We measure *age* in years, *time in prison* as the total number of years an inmate has been incarcerated in his lifetime, and *time on unit* as the number years the inmate has been assigned to the sampled unit.[4] Given their skewed distributions, we logged these measures prior to analyses. To operationalize criminal background, we include *offense gravity score*, ranging from 1 (misdemeanor) to 18 (1st degree murder),[5] and *gang/Security Threat Group*, which is a binary indicator for whether the inmate was classified as a street gang member or in a Security Threat Group (e.g., white supremacy or subversive group) at prison admission, based on self-admission, court records, associations, tattoos, or information from other law enforcement agencies. We include an indicator of *parole eligible* to capture inmates who may soon leave prison. We include measures of the respondent's *race/ethnicity* (white/other, black, Hispanic).[6] *Religion* is a categorical measure based on individuals' self-reported religious affiliation (Muslim, Catholic, Protestant, other, or none). From the CAPI survey, we include a measure of *program participation*, which is a count of the number of responses to the open-ended question, "What organized religious or social groups are you now participating in? These could include education classes, religious services, or something else." We include *city* (out of 28) and *state* (out of four) based on responses to the survey question, "In what city and state were you living before your prison stay?" Finally, we obtained the *get along with network* by asking respondents to nominate unit peers they "get along with most." This item is akin to friendship in that it represents whom inmates prefer to spend the most time with. We chose not to ask about friendship itself given that some inmates are adamant about not having "friends" in prison, only "associates" (Crewe 2009). The average inmate received approximately four "get along with" nominations, with a maximum of 14 (Table 1).

METHODS

Qualitative Analysis of Status Underpinnings

Each inmate who was nominated as powerful and influential in the unit had at least one, and often several, perceived reason(s) for his high status that were provided by fellow inmates. In the aggregate, these perceptions are useful for describing the characteristics thought most associated with status in the unit. We identified 376 distinct status attributions across the 100 responses for the power and influence nominations. We examined this list for larger themes and 12 response categories emerged (Krippendorff 2004). Three independent raters then coded the attribution list given the 12 categories, resulting in high inter-rater reliability (Krippendorff alpha = .83). When discrepancies occurred, attributions were placed in the majority-rated category. We coded 7 percent of attributions into a 13th "other or miscellaneous" category, because a majority of coders could not agree on a category or the response fell outside the 12 identified categories. To understand how the categories relate to one another, we created a correlation matrix for the 12 substantive response categories. Finally, to add depth to the power and influence nominations, we present representative responses to the question, "How does a person get power and influence in this unit?"

Quantitative Analysis of Status Nominations

Informed by our qualitative results and prior theory, we evaluate whether certain inmate characteristics are associated with receiving "power and influence" nominations by applying exponential-family random graph models (ERGMs) to the unit's power and influence network (Frank and Strauss 1986; Holland

and Leinhardt 1981). ERGMs formulate the probability of observing a network given a set of nodes and their attributes. An extensive literature exploring and discussing the model class exists (Robins et al. 2007; Snijders et al. 2006; Wasserman and Pattison 1996) and criminological examples are also available (e.g., Smith and Papachristos 2016; Young 2011). A powerful feature of ERGMs is their ability to account for the endogenous and mutually dependent nature of ties. This means predictors can include not only nodal attributes, but also dyadic and triadic properties (Koehly, Goodreau, and Morris 2004).[7]

Our ERGM analyses focus on testing if certain inmate characteristics (e.g., age, time in prison, and time on unit) are associated with receiving power and influence nominations from other inmates. We assess relative status based on a given attribute through a series of *receiver effects* that evaluate the likelihood of an $i \rightarrow j$ tie conditioned on j's value on a given attribute. Inmate attributes may also be associated with nominating others as powerful and influential. To account for this, we include a series of *sender effects* that evaluate the likelihood of an $i \rightarrow j$ tie conditioned on i's value on each attribute. Inmates may also nominate others who are similar to themselves (i.e., homophily [McPherson, Smith-Lovin, and Cook 2001]), in which case some inmates may be higher status because they are similar to more of their peers. We measure homophily in one of two ways: (1) for continuous variables (e.g., age), we assess homophily in the $i \rightarrow j$ dyad using the absolute difference between i and j on the attribute—this is an inverse indicator, thus homophily is indicated by a negative coefficient estimate; (2) for categorical variables (e.g., race/ethnicity), we measure homophily using *match* effects to indicate whether i and j are identical on the attribute (yes = 1, no = 0).

We include structural terms representing common forms of interdependency between dyads. To control for some individuals' tendency to receive more ties, we take into account the *indegree distribution*,[8] as research indicates that failure to do so may overestimate effects of attributes on receiving ties (Lusher and Ackland 2011). *Mutuality* accounts for the likelihood of an $i \rightarrow j$ tie conditioned on a $j \rightarrow i$ tie (i.e., reciprocity), and *triadic closure*[9] captures the likelihood of an $i \rightarrow j$ tie, conditional on the number of k inmates for which $i \rightarrow k$ and $k \rightarrow j$ ties also exist. These latter two terms are important controls (Wimmer and Lewis 2010) but also offer insight to the question of status hierarchy. Asymmetric ties are indicators of status inequality within relations (Martin 2009), whereas transitivity signals whether inmates who nominate a peer as high status agree with the status nominations of that peer (i.e., $i \rightarrow k$ and $k \rightarrow j$ thus $i \rightarrow j$). We control for the "get along with" network (i.e., whether friendship begets status) through (1) a *receiver* effect indexing how many times an inmate was nominated in the "get along with" network, and (2) an *edge covariate* effect, representing whether an $i \rightarrow j$ power and influence tie is affected by the presence of an $i \rightarrow j$ tie in the get along with network.

ERGM estimation is sensitive to missing data (Wang et al. 2016). Of the 205 individuals assigned to the unit under examination, 142 (69 percent) completed the survey instrument and are the source of our network data. Because status is operationalized using incoming ties, status could still be measured for individuals who did not take the survey; thus we retained them for this analysis. The 63 non-respondents and nine inmates excluded due to being diagnosed with a serious mental illness have valid incoming ties, but are missing survey data for their outgoing ties. We specify the ERGMs to restrict the set of networks from which the observed data are stochastically generated to those where these 72 inmates have zero outgoing nominations.

RESULTS

Qualitative Analysis of Status Underpinnings

The first stage of our analysis considers what the inmates themselves identified as the traits and characteristics associated with power and influence on the unit. Table 2 lists the 13

Table 2. Categories for Power and Influence Open-Ended Attributions ($N = 376$)

Category	Percentage
1. Age, Time-In, and Prison Wisdom	25%
"He knows prison," "Lifer," "Lots of time in," "He is an old head," "An elder," "He has an understanding of how everything runs"	
2. Sociable and Positive Personality	19%
"He is very charismatic," "Friendly," "He's trustworthy," "Good character and morals," "Very respectful," "He's humble"	
3. Teacher and Role Model	15%
"A tutor," "Gives good advice," "He's a problem solver on block," "Willing to help anybody," "He mediates between guys"	
4. Relationships with Guards/Staff	8%
"Persuasive with guards," "He has pull with COs," "He is respected by guards," "Always seems to be talking to the guards"	
5. Intelligent or Educated	8%
"Smart guy," "Avid reader, well-educated," "Has knowledge of religion," "He went to college," "Scholarly," "Self-educated"	
6. Avoids Trouble and Thinks Beyond Prison	3%
"He is never in trouble," "Has a plan for what to do when he gets out," "Not in a gang," "He doesn't care about black and white"	
7. Prison Group Leader	3%
"He runs programs," "Runs Islamic classes on block," "Leader of white inmates," "Peer leader of groups," "Organizes prayers"	
8. Prison Group Involvement	3%
"Stays active playing games, cards, dominos," "He plays sports," "Gavel club," "He is a gym worker so he is involved"	
9. Personal Friend or Shared Characteristic	3%
"He is my Bunkie," "I am a Muslim and he is a Muslim," "I've known him for a long time," "Good friend," "I was his cellie"	
10. Street Reputation or Gang Leader	2%
"Has a reputation," "Latin Kings leader," "Street savvy," "Well respected on the street," "He did a lot of bad things"	
11. Controls Prison Resource(s)	2%
"He runs the store," "He has a lot of money," "He runs the phone," "He's comfortable, taken care of"	
12. Feared	<1%
"A lot of people fear him"	
13. Other and Miscellaneous	7%
"He's influential," "He's a G," "He doesn't have any filter," "Knows his limits," "Not truly powerful, just thinks he is"	

Note: Three-coder reliability (Krippendorff Alpha) = .83.

categories that emerged from 376 inmate attributions for the "power and influence" nominations, along with representative language that inmates provided for each category. The right-hand column of the table lists the percentage of responses that coders placed in the respective categories. We explore the most prevalent categories and supplement these descriptions with related inmate narratives gathered from responses to "How does a person get power and influence in this unit?"

Age, Time-In, and Prison Wisdom

Unexpected based on prior theory but consistent with recent demographic trends and some contemporary ethnographic research, we find

strong evidence that unit inmates perceived as high status were older than their peers and had accumulated substantial institutional knowledge over the course of lengthy prison terms. As Table 2 shows, one quarter of the open-ended responses to "Why is [inmate X] powerful and influential?" were subsumed in the largest response category, "age, time-in, and prison wisdom." Adjectives such as "older," "old head," "lifer," "long time in," "been around," "experienced," and "elder" were far-and-away the most common explanations for unit status. It was also clear that age, prison experience, and time on the unit were used interchangeably to describe inmate status. Indeed, the argot role of "old head" explicitly links advanced age ("old") with knowledge and wisdom ("head"). As one inmate stated, "An 'old head' has been my age but I've never been his, he's been through it and can show you the way." More than anything else, the intersection of age and prison knowledge, gained either inside or outside the unit, was associated with inmates' subjective perceptions of unit power and influence. As another inmate who had served 16 years stated, "You earn respect from how much time you've done, you know what's going on in the system [whereas] young kids coming in now think they know everything, but they're just punks who ruin everything for the older guys." Not only did this inmate attribute age and knowledge to his own high status, but he pointed to the ignorance and impetuousness of youth as threatening the existing order. The salience of old heads in the inmate narratives provides a key theoretical insight, which we explore further in our quantitative analyses where we are able to disentangle the independent associations of age, prison time, and unit time with peer status nominations.

Provision of Public Goods

It was also clear from the qualitative data that contributions to the unit's general well-being, through positive social interactions, affirmations, role-modeling, or imparted knowledge, were perceived as associated with unit status. Approximately one fifth of the open-ended status explanations fell into the category, "sociable and positive personality." A 39-year-old Hispanic inmate summarized a common theme of recognizing your own and others' moral worth for unit power and influence: "Somebody that shows respect—that goes a long way. Shows respect to other residents and to themselves." Such respect was often linked with humility and authenticity, thus building group trust. As one inmate put it, "Everyone likes being respected, so the best way to be respected is to give respect." Beyond respect for others, many inmates spoke about the direct help that unit leaders provided to them or their peers. Fifteen percent of open-ended responses were in the category "teacher and role model." For example, a 22-year-old black inmate stated that powerful and influential unit peers provided "good advice. . . . I am probably the youngest person on the block and if I have my hands in my pants or my pants are sagging, they say something to me. Some of them are like father figures." As the end of the quote suggests, age, prison experience, and advice were commonly connected. A 25-year-old black inmate stated that a powerful and influential inmate is "somebody who can give you advice, will tell you when they see you doing wrong, somebody who has been around for a while and can help you deal with certain situations, someone older, most experience with how to get through different situations." These connections are visible in between-category correlations, with the category "age, time-in, and prison wisdom" highly correlated with both the "sociable and positive personality" category (r = .74) and the "teacher and role model" category (r = .53; see Table 3). Older inmates had higher status in the unit not only because they had more experience, but also because they were amicable and sought to impart positive advice to younger peers.

For the most part, the provision of advice, friendship, and trust were not limited to specific groups, suggesting status was associated

Table 3. Qualitative Response Category Correlations ($N = 376$)

	1	2	3	4	5	6	7	8	9	10	11
1. Age, Time-In, and Prison Wisdom											
2. Sociable and Positive Personality	**.738**										
3. Teacher and Role Model	**.534**	**.336**									
4. Relationships with Guards/Staff	**.753**	**.650**	**.604**								
5. Intelligent or Educated	.228	.259	.130	.125							
6. Avoids Trouble and Thinks Beyond Prison	.156	.272	.175	**.327**	−.260						
7. Prison Group Leader	.198	.284	**.430**	.268	.123	.076					
8. Prison Group Involvement	**.474**	**.317**	**.537**	**.514**	.240	.256	**.321**				
9. Personal Friend or Shared Characteristic	.196	.123	.073	.087	.007	.150	.099	−.201			
10. Street Reputation or Gang Leader	**.350**	**.469**	**.508**	**.414**	−.055	.202	**.473**	**.372**	.202		
11. Controls Prison Resource(s)	.216	.190	.015	**.418**	−.034	.181	−.057	.021	−.037	.159	
12. Feared	.178	**.467**	.027	**.408**	−.114	**.600**	.196	.216	−.065	**.482**	**.302**

Note: Significant correlations in bold ($p < .05$).

with public rather than private goods. A notable exception, however, was religious leadership. Three percent of open-ended responses for power and influence nominations were categorized as "prison leadership," and the majority of these were for religious activities. Black Muslim imams, for instance, were singled out as powerful and influential in the unit. However, even here, the source of power was often generalized beyond the religious group. For example, a Black Muslim leader was described as "for the Muslims, for the people, for the inmates." Rather than consolidate resources in the hands of a few, unit leaders appeared to provide both for their specific groups and for the wider inmate community.

Relations with Guards

"Age, time-in, and prison wisdom" was also highly correlated (r = .75) with "relationships with guards/staff," the latter making up 8 percent of power and influence explanations. Being in the unit for a long time allowed older inmates to build strong relationships with guards and to mediate inmate and guard communications. As a 40-year-old black inmate reported, powerful and influential inmates "have been here for multiple years. They're known by the officers and counselors [so it is] easier for them to get things done." In a "good behavior" unit, the staff has the power to move inmates back to general population for little cause, a condition that provides substantial power to inmates with staff "pull." A 44-year-old white inmate stated that powerful inmates are "buddies with the officers. There are some inmates who sit and talk with the officers all of the time, and the officers share information about other inmates. Because [the unit] is a special block, if someone has a serious problem with you, then they could get you moved off the block. You do see people who are respected for doing the right thing. People who help others do have some power, but people who are in with the staff are the ones who ultimately hold the power." As can be discerned from this response, being "in" with the guards provided access to resources, information, and power (i.e., relieving the collective pains of imprisonment) or "informal means of remuneration" (Colvin 1992:37) that undergird the system of control in the unit. But, the response also shows the potential to lose respect among peers for violating the prison code of not "snitching" on fellow inmates. An inmate (age 27, white) stated of powerful and influential inmates, "Ones who suck up to the higher ups, talking to [correctional officers] and counselors. [They] aren't afraid to speak badly about other inmates regardless of the consequences." Of course, whether having another inmate removed from the unit is a violation of the inmate code may depend on where you stand in the unit hierarchy and how disruptive the removed inmate was for the community. In some cases, helping to remove a disruptive inmate may provide a public good and reduce free riding, consistent with the "real man" role. In other cases, having an inmate removed may serve individual or small-group needs and thus be perceived by many as violating the inmate code and siding with staff over a fellow inmate. Inmate-staff relations, more than any other area, highlight the permeability and tenuousness of unit norms and inmate solidarity.

Although the qualitative data suggest a hierarchical social structure, some inmates did comment that guards, not inmates, hold the true authority in the unit. "I don't think there is anyone that is powerful or influential. . . . In the end you are at the mercy of the staff," said a 28-year-old white inmate. Similarly, a 44-year-old white inmate stated, "You can't be powerful or influential because if you speak up for the inmates or yourself [then the staff] move you off the block." In total, 7 out of 74 (9 percent) inmates responded to the question, "How does a person get power and influence in this unit?" with some form of "inmates are all the same" or "staff are the ones who are truly powerful." Although a minority of all responses, these do suggest that, whether inmates chose to recognize it or not, ultimate coercive authority rested with guards and the institution. These narratives draw attention to time on a particular unit, where interactions with other inmates and

staff are concentrated, as important in structuring the unit's status hierarchy. Experience on the unit can be used strategically to establish local norms and strengthen staff relationships. Conversely, inmates new to the unit may lack status because they are unknown and status attainment requires time.

The Irrelevance of Imported Criminal Biographies

High-status inmates did not appear to have more serious criminal backgrounds prior to their prison stay. Only 2 percent of the reasons stated for power and influence included "street" status or gang membership, and only once was a high-status nomination associated with fear. This is not to say that many high-status inmates were not convicted of heinous and severe crimes. Indeed, the "old heads" who had been in prison the longest necessarily had the most violent and extensive criminal backgrounds. What does not appear to support the importation argument, however, is that prison wisdom and prosocial contributions to community stability appeared to outweigh inmates' criminal pasts in determining the unit's hierarchy. In this unit, at least, inmates who contributed to the unit in positive ways or oriented others toward self-betterment or leaving prison were afforded greater status.

An important contribution of an approach that relies on many independent narratives is that it sheds light on infrequent accounts that might be overlooked in other quantitative or ethnographic study designs. For example, even though most inmate narratives converged on previously mentioned prosocial themes, not all residents viewed the unit's hierarchy in the same way. A 43-year-old Hispanic inmate stated that power and influence depend on "reputation. It's based on a prison code. No ratting, no stealing, no drug using, can't go around owing anybody anything. Will not hesitate one second to stab somebody. Completely disconnected from [guards]." This perception is at odds with most others' in the unit and generally consistent with the importation perspective. Such unique viewpoints likely stem from inmates' diverse prior experiences. Indeed, although this particular inmate received only one "get along with" nomination, he was perceived as very powerful and influential (nomination indegree = 8), likely due to his leadership role in a prominent street gang prior to incarceration. In essence, he occupied a high-status position but was not central to the community, because he did not exhibit the amicability and leadership associated with the "old head" role. Hearing such minority voices is important because they demonstrate the heterogeneity in attitudes and perceptions that, under different conditions and circumstances, may dominate a unit's social structure and would be lost in studies focused on average or normative responses. As seen in Table 2, several response categories, such as "personal friend or shared characteristic" and "controls prison resource(s)," may have had great significance to the inmates who reported them even if they were not strongly associated with global status in the unit. Only a saturated study of unit inmates easily captures such variable accounts and connects them to the unit's overall status hierarchy.

Quantitative Analysis of Status Nominations

The qualitative results provide insights into the unit's values and culture. They explain *why*, according to the inmates themselves, individuals were afforded status on the unit. Missing from these results, however, are (1) an overhead view of the unit's social structure, (2) an assessment of which inmates occupy uppermost status positions, and (3) a means to rule out competing explanations for status attributions. Our quantitative analysis overcomes these limitations while drawing on the insights garnered above. In particular, we can test whether being an "old head" truly carries greater status relative to imported criminal backgrounds. Moreover, we can unpack the different temporal aspects of "old head" that emerged in the narratives, such as distinguishing age from the related concept of prison experience.

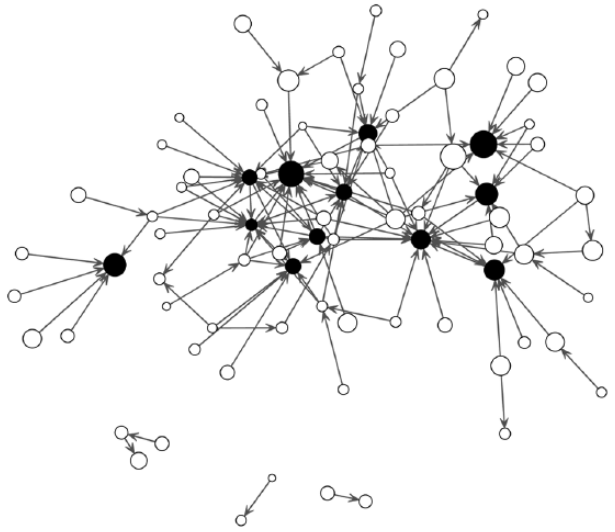

Figure 1. Power and Influence Nominations in a Prison Unit
Note: Nodes represent inmates, shaded by blockmodel membership (black = core, white = periphery) and sized proportional to inmate age. Only the 79 inmates included in the blockmodel analysis are shown (remaining inmates are isolates in the network).

To visualize the global structure of the power and influence network, Figure 1 plots the relations between the 79 inmates with at least one outgoing or incoming nomination. Nodes are sized by age (i.e., larger nodes are older inmates) and shaded by position (described below). Three noteworthy properties of the network bear discussion. First, the graph is sparse. The average indegree for all 205 inmates was .78 (std = 2.36), and the average outdegree for the 133 inmates who completed the survey was .97 (std = 1.28). The lower standard deviation for outdegree than indegree suggests the distribution of nominations received was far more unequal. Second, the unit contained mostly low-status inmates who were not perceived as powerful or influential by any respondents. Indeed, only 49 inmates (24 percent) received at least one power/influence nomination (i.e., 76 percent have indegree = 0).[10] Importantly, there was a great deal of variation even among inmates who received nominations. In particular, among the 49 inmates receiving at least one nomination, the mean number of nominations was 3.28 (std = 3.91) with a range of 1 to 14. Finally, there was a near complete absence of reciprocity. Of the 133 inmates who completed the survey and were eligible to provide network data, there were only 129 ties and only 1 of these was reciprocated (a reciprocity rate of .78 percent).[11] Such low reciprocity demonstrates dyadic-level status inequality, which is consistent with a hierarchical structure.

To offer further insight into the overall unit status structure, inmates in Figure 1 are shaded according to their "position" in the status hierarchy. We determined position using a blockmodel, the goal of which is to partition nodes into sets such that nodes in the same set have the same pattern of ties to and from other sets (White, Boorman, and Breiger 1976).[12] Excluding non-informative isolates and non-respondents, the network consists of two blocks. The first block (the core) consisted of 12 inmates and had a density of .11 (i.e., the proportion of possible ties observed). The second block (the periphery) had 67 inmates and a density of .005. We refer to these as the core and periphery based on the pattern of ties *between* inmates in the two blocks. The density of ties from the periphery to the core was .11, and the core to periphery density was 0 (i.e., none of the 804 possible ties were present). This pattern of deference

reflects a distinct hierarchical structure, with inmates distinguished as occupying a position in either the interconnected, higher-status core or the lower-status periphery. Consistent with this status difference, average indegree differs between blocks. Whereas all members of the core had at least four incoming status nominations, no peripheral member had more than two.

Bivariate Correlations

After finding a relatively cohesive higher-status core, we now turn to analyses predicting which inmates were at the top of the status hierarchy. Table 4 shows the correlation matrix for the study variables. As a first step, we examined bivariate correlations between nomination indegree and inmate characteristics. This builds on the qualitative results by quantifying the association between the number of status nominations inmates received and their individual attributes. Table 4 shows these correlations and indicates that inmate age, time in prison, time on the unit, offense severity, and gang or Security Threat Group (STG) affiliation were significantly associated with "power and influence" nominations. The findings for age, time on unit, and time in prison are consistent with results from the narrative data presented earlier, but the findings for offense gravity score and gang/STG are not. This suggests that inmates belonging to a gang/STG or with a more severe offense were higher in status. As some of these correlations may be spurious, our next step is to estimate the relative strength of various sources of status through the ERGM multivariate network analyses.

Exponential Random Graph Models

Table 5 presents ERGM estimates for four models of the power/influence network.[13] The estimates of greatest theoretical interest are attribute-based receiver effects, which reflect how attributes were associated with incoming status nominations. Model 1 excludes the "old heads" indicators (i.e., age, time in prison, and time on unit) so we can focus on endogenous network processes (i.e., mutuality, get along with ties, degree distribution, and triadic closure) and the temporally prior imported attributes. Results of Model 1 show that inmates with higher offense severity scores were more likely to receive a power/influence nomination. Model 1 also indicates homophily on several attributes, including offense severity and race/ethnicity (only Hispanic inmates). In addition, gang or STG members were more likely to send a power/influence nomination, and Muslim inmates were less likely to receive a power/influence nomination. Overall, the results of this model parallel the bivariate correlations reported earlier: power and influence were associated with criminal offending in a manner consistent with the importation perspective.

Model 1 also includes terms capturing endogeneity in the power/influence network and the association between the power/influence and "get along with" networks. These estimates illuminate the nature of interdependence between dyads. The negative estimate of the GWIDEGREE effect controls for the skewed nature of the indegree distribution. The negative estimate for mutuality suggests ties were less likely to be reciprocated than expected by chance, which would imply that status flowed in only one direction within dyads. The positive GWESP coefficient indicates a tendency toward transitivity: when inmates nominated someone as powerful/influential, they were also likely to nominate inmates whom the nominee thought were powerful/influential. These patterns for mutuality and transitivity are consistent with a hierarchical arrangement of ties. Examining estimates for the "get along with" network, the positive edge covariate term indicates a large overlap between ties in the "get along with" network and the power/influence network. However, the "get along with" receiver effect is small and not significantly different from zero. Jointly, these effects indicate that inmates were more likely to nominate as powerful and influential particular inmates whom they also got along with, but there was

Table 4. Quantitative Covariate Correlations ($N = 205$)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Indegree																	
2. Outdegree	.103																
3 Parole eligible	–.050	.026															
4. Program participation	–.045	**.144**	**.374**														
5. Muslim	.106	.124	–.012	.032													
6. Catholic	.037	.060	.011	–.017	**–.253**												
7. Protestant	–.045	–.076	.027	**–.142**	**–.272**	**–.242**											
8. Other religion	–.050	–.044	–.031	.062	**–.301**	**–.273**	**–.292**										
9. No religion	–.046	–.077	.028	.076	**–.223**	**–.201**	**–.213**	**–.243**									
10. White/other race	–.028	.048	.097	.017	**–.411**	**.348**	.008	–.055	**.172**								
11. Black	.057	.038	–.028	.073	**.532**	**–.403**	–.024	–.032	–.124	**–.744**							
12. Hispanic	–.053	–.107	–.083	–.121	**–.181**	.094	.048	.106	–.053	**–.320**	**–.381**						
13. Offense gravity score	**.351**	**.131**	**–.182**	**–.183**	**.132**	–.016	.025	–.023	**–.142**	–.044	.107	–.096					
14. Gang/Security Threat Group	**.240**	**.182**	–.098	.113	.093	–.037	–.041	–.065	.058	–.101	.029	.115	.024				
15. Age (log years)	**.254**	.030	.130	.086	**–.204**	.065	.101	.055	–.017	**.213**	–.126	–.115	**.240**	–.091			
16. Time on unit (log years)	**.542**	**.143**	**.213**	**.341**	.086	.062	–.038	–.027	–.103	.044	.086	**–.178**	**.314**	.134	**.532**		
17. Time in prison (log years)	**.244**	**.190**	.045	.043	–.046	.112	–.041	.002	–.036	**.154**	–.085	–.114	**.322**	–.028	**.271**	**.412**	
18. Survey non-participant	**–.153**	**–.354**	.023	**–.154**	–.117	–.013	.105	–.011	.045	**.142**	–.132	.018	–.084	–.096	.006	–.123	–.065

Note: Significant correlations in bold ($p < .05$).

Table 5. Exponential Random Graph Models for Power/Influence Network (N = 205)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Model Term	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
Edges	–5.711***	1.128	–8.850***	2.358	–6.271	1.172	–6.068***	1.213	–10.964***	2.864
GWIDEGREE (α = 1.0)	–3.347***	.382	–3.007***	.391	–2.868***	.437	–2.812***	.431	–2.342***	.457
Mutuality	–1.922*	.887	–1.894*	.965	–1.610	.958	–1.634*	.793	–1.369	.977
GWESP (α = .0)	.517*	.218	.371	.226	.498*	.238	.387	.201	.357	.212
Get along with network										
Receiver	.047	.035	.078	.044	.053	.049	.030	.031	.044	.042
Edge covariate	3.335***	.228	3.348***	.220	3.363***	.226	3.319***	.211	3.327***	.241
Offense gravity score										
Receiver	.093**	.036	.070	.042	.065	.041	.095*	.041	.054	.040
Sender	–.035	.043	.006	.042	.015	.040	–.022	.048	.002	.055
Absolute difference	–.083*	.041	–.071	.041	–.082*	.042	–.063	.038	–.053	.044
Gang/Security Threat Group										
Receiver	.252	.306	.304	.307	.276	.321	.536	.351	.625	.334
Sender	.721*	.357	.805*	.355	.878*	.355	.746*	.378	1.084**	.377
Match	–.047	.348	–.023	.333	–.063	.334	–.072	.357	–.018	.356
Parole eligible										
Receiver	.036	.182	.118	.194	.057	.191	–.236	.204	–.112	.212
Sender	–.087	.255	–.158	.257	–.096	.259	–.085	.256	–.132	.260
Match	.406	.222	.370	.221	.398	.226	.383	.229	.342	.222
Race/ethnicity[a]										
Receiver – Black	.972	.670	.846	.657	.871	.681	1.112	.672	.988	.681
Receiver – Hispanic	.333	.481	.661	.431	.507	.468	.781	.495	.975	.548
Sender – Black	.012	.695	–.054	.645	.110	.670	–.163	.661	–.014	.661
Sender – Hispanic	–1.033	.531	–1.032	.561	–.991	.573	–1.139	.585	–1.143*	.578
Match – White	.992	.697	.923	.668	1.029	.695	.945	.671	.832	.686
Match – Black	–.386	.726	–.308	.689	–.305	.708	–.215	.685	–.266	.705
Match – Hispanic	1.899*	.854	1.702*	.808	1.902*	.868	2.046*	.863	2.008*	.868
Religion[b]										
Receiver – Muslim	–.828*	.385	–.728*	.362	–.921*	.413	–.686	.384	–.472	.423
Receiver – Catholic	–.202	.327	–.312	.354	–.458	.357	–.374	.378	–.444	.399
Receiver – Protestant	–.514	.348	–.601	.341	–.683	.376	–.815*	.350	–.901*	.413

(*continued*)

Table 5. (*continued*)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Model Term	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
Receiver – Other religion	−.541	.387	−.804*	.393	−.902*	.415	−.729	.413	−.875	.451
Sender – Muslim	.597	.504	.530	.502	.529	.506	.647	.523	.529	.513
Sender – Catholic	.362	.446	.404	.445	.453	.447	.377	.444	.406	.451
Sender – Protestant	.428	.441	.425	.460	.422	.447	.535	.473	.395	.474
Sender – Other religion	.396	.427	.450	.431	.435	.426	.472	.437	.525	.434
Match – None	1.133	.759	1.084	.655	1.061	.733	1.302	.762	1.232	.727
Match – Muslim	.843	.511	.730	.505	.677	.495	.674	.522	.644	.515
Match – Catholic	.187	.589	.120	.595	.102	.588	.213	.575	.300	.574
Match – Protestant	.377	.689	.357	.654	.405	.692	.383	.728	.354	.731
Match – Other religion	−.113	.651	−.124	.696	−.041	.674	−.136	.690	−.157	.692
Program participation										
Receiver	.026	.063	.021	.073	−.022	.078	.075	.076	.013	.078
Sender	.096	.078	.078	.082	.157	.087	.092	.082	.117	.098
Absolute difference	.004	.086	.018	.082	.051	.081	−.013	.087	−.010	.082
City match	.126	.266	.120	.268	.078	.267	.151	.265	.207	.268
State match	−.213	.241	−.096	.235	−.133	.271	.038	.278	.274	.280
Age (log years)										
Receiver			2.031***	.535					1.960**	.681
Sender			−1.198*	.564					−.573	.630
Absolute difference			−1.744**	.602					−1.475*	.664
Time in prison (log years)										
Receiver					.732***	.217			.291	.234
Sender					−.569**	.212			−.425	.269
Absolute difference					−.433	.235			−.171	.247
Time on unit (log years)										
Receiver							.593***	.150	.490**	.162
Sender							−.174	.126	−.102	.150
Absolute difference							−.311*	.146	−.323*	.157
AIC	−19152		−19171		−19174		−19176		−19192	
BIC	−18823		−18818		−18821		−18823		−18790	

[a]White/other is reference category.
[b]None is reference category.
*$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed tests).

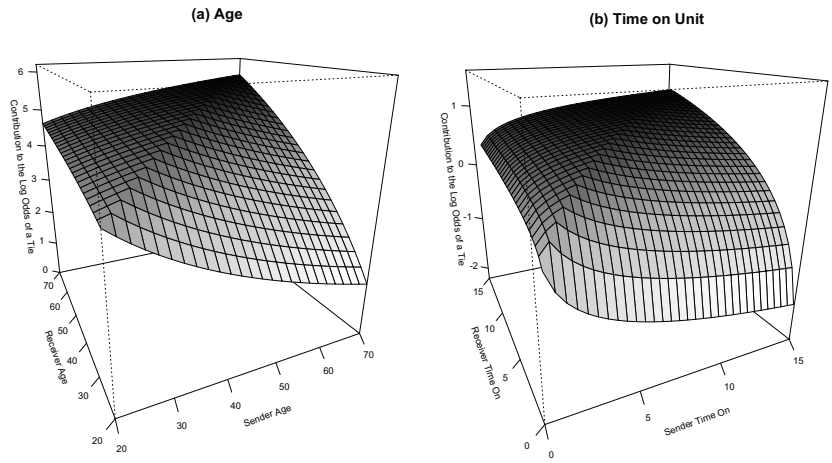

Figure 2. Predicted Power/Influence Nominations by Joint (a) Age and (b) Time on the Unit
Note: Based on estimates from Model 5 (Table 5), the contribution to the log odds of a tie for the combination of sender and receiver value on the attribute. Combinations with a higher value on the *z*-axis are more likely to exhibit a tie in the observed network net of other model effects.

no boost in status from getting along with many fellow inmates.[14]

Models 2, 3, and 4 enter each of the "old head" indicators separately, before entering them jointly in Model 5. Although the correlations between age, time in prison, and time on unit are relatively modest (see Table 4), there is still a potential for multicollinearity. Comparison of the full model (Model 5) to the separate models (Models 2, 3, and 4) shows little change in the standard errors, suggesting multicollinearity is not a concern. Thus, we proceed to interpret Model 5.

The positive age estimate indicates that older inmates were more likely than younger inmates to receive power/influence nominations.[15] Similarly, the positive time on unit receiver estimate indicates that the longer an individual had been on the unit, the more likely he was to receive a power/influence nomination. The relative strength of these coefficients is obtained by evaluating the predicted effect of a one standard deviation increase: for log years on the unit (std = 1.48), the odds of a tie increase by 2.07, and for log age (std = .28) the odds increase by 1.73. Thus, for both estimates, a one standard deviation increase effectively doubles the odds of an inmate receiving a power/influence nomination.[16] Note there was no significant association between overall time in prison and receiving a power/influence nomination. This is interesting in that time in prison had a positive correlation with indegree (Table 4) and is a predictor of power/influence nominations in Model 3, suggesting that the effect of time in prison was explained away by other modeled covariates and that age and time on unit are more salient to status processes.

An advantage of the ERGM is that one can control for sender attributes and similarity between the sender and receiver (i.e., homophily). Model 5 also found significant homophily effects for both age and time on the unit, indicating that dyads exhibiting wider differences in these attributes were less likely to have a tie. However, these attributes also displayed significant receiver effects, which affects the interpretation of homophily. Interpreting these attribute-based effects should be done in light of all effects related to the attribute. To aid in understanding the "old heads" estimates, Figure 2 plots the predicted contribution to the log odds of a power/influence nomination for combinations of sender and receiver age (panel a) and time on unit (panel

b). The *z*-axis reflects the conditional likelihood of observing a tie given the combination of sender (*x*-axis) and receiver (*y*-axis) attributes, all else being equal. The patterns are similar for both age and time on unit. Power/influence nominations were most likely in dyads where the sender and receiver were both older and had spent more time on the unit, and least likely for dyads with an older, tenured sender and younger, less tenured receiver. In combination, these results indicate that status tended to flow upward along the age and time on unit dimensions. Across the board, inmates were most likely to nominate someone older or with more time on the unit, but not someone younger or with a shorter tenure.

Turning to the importation indicators in Model 5, we see that the receiver estimates for offense gravity score were no longer significantly different from zero. Once the full set of covariates were included, inmates with the most serious criminal backgrounds were no more likely to receive a power and influence nomination than was the average unit inmate. In comparing models, it is interesting to note that offense gravity score remained a significant predictor of power/influence nominations net of time in prison (Model 4) but not age or time on unit (Models 2 and 4). Although criminal background was associated with status, this association was partly a consequence of age and time in prison. Altogether, Model 5 reveals a pattern of power/influence nominations more consistent with a deprivation argument than with an importation argument.

A handful of other model estimates were significant in the final model. One persistent result is that inmates in a gang/STG were more likely to nominate others as powerful and influential. This effect was not theorized, but it suggests that perhaps gang-involved inmates were more attuned to the unit's status hierarchy. Additionally, Hispanic inmates were less likely to send ties, and there was a persistent homophily effect for Hispanics. This could reflect distinct status hierarchies for Hispanics and non-Hispanics. However, with so few Hispanic inmates, this finding is merely suggestive. Finally, Protestant inmates were less likely to receive ties relative to inmates with no religious affiliation.

It may seem surprising that the models did not show evidence of homophily among whites or blacks, or based on religion or geography. Preliminary analyses (not shown) indicated that some of these estimates were significant when network controls were excluded from the model. This suggests that the network terms likely mediated the associations between homophily and status relations. The simplest way for this to occur would be if homophily were a basis for determining which inmates "get along with" one another (Schaefer et al. forthcoming). As inmates self-segregated on the basis of shared race/ethnicity, religion, and other factors, they formed a set of relatively homogenous relationships in which power and influence could emerge. This would create a status hierarchy characterized by homophily in many of the ways expected, without homophily necessarily driving the status structure directly.

In summary, the ERGM analyses identified several correlates of status that determined who in the unit was likely to receive power and influence nominations. Once we account for the multitude of factors that can form the basis of status attributions, we found it was age and time on the unit, and *not* crime severity, gang background, or time in prison that served as status markers. Interestingly, our findings that age and time on the unit attenuated the associations between crime seriousness and status are consistent with the qualitative findings that older and more experienced inmates moved past their (more serious) criminal pasts to create a stable and prosocial prison community.

DISCUSSION

In his influential urban ethnography, *Code of the Street*, Anderson (1999) lamented the devaluation of "old heads" in the socioeconomically disadvantaged Philadelphia neighborhoods he observed. These older and experienced men were community role models

who mentored youth to value self-respect, civility, and conventional attainment in the face of economic adversity. Anderson (1999) argued that urban deindustrialization and concentrated disadvantage replaced the authority of old heads with a moral code prioritizing violence and instant gratification as the primary means of gaining and maintaining all-important "street" status.

Our study examined informal status in a contemporary Pennsylvania men's prison unit where many inmates were raised in the same Philadelphia communities Anderson (1999) studied, and who now have been in prison for all or most of their adult lives. Ironically, we found that inmate versions of old heads occupied positions of high status within our observed prison unit, raising the intriguing possibility that some of Anderson's (1999) subjects grew up to assume positive prison leadership roles that would contrast sharply with the violent "street" identities of their youth.

We approached inmate status through an innovative abductive mixed-method research design, in which qualitative narratives opened novel hypotheses that we explored further with network analyses. In their narratives, respondents stated that the wisdom of older and more experienced inmates was associated with prison status and that prison leaders contributed to community stability and well-being. The quantitative network analyses complemented these results by showing that older inmates were most often nominated as powerful and influential in the unit and were central to the unit's status hierarchy. Moreover, our statistical models demonstrated that age and time on the unit, not prison time, gang involvement, or the severity of their committing offense, were significant predictors of unit status. In combination, our results point toward the leadership role of unit elders who were respected by peers, "in" with guards and staff, and provided public goods to the inmate community.

Theoretically, our case study updates seminal prison ethnographies with concepts relevant for the era of mass incarceration. In many ways, our results are consistent with Sykes' (1958) "real man" or "right guy" prison roles, but add to these the characteristics of age and prison experience, particularly relevant concepts as the era of mass incarceration approaches its fifth decade. Our findings suggest that older and more experienced inmates are able to cope with the long-term pains of imprisonment through a sense of relatedness to others and positive social influence. Older inmates' generative scripts (Maruna 2001) appeared to be formalized into a status system built on prosocial norms rather than fear and violence. In a historical period when unprecedented numbers of inmates are serving long sentences and are now in their middle-age years, our results suggest that this growing demographic can serve as a stabilizing, even therapeutic, force within prisons.

Our analyses suggest that both age and prison knowledge are associated with prison status, but for different reasons. Our qualitative data suggest that more experienced inmates were provided status principally because they had the knowledge and social capital to get things done on the unit. In a prison setting, new inmates are at an extreme disadvantage because they have little information about situational norms and are entering a well-established and potentially disorienting social system. McCleery's (1961:165) early description of prison entry remains true today: "Custodial practice made admission to the prison a harsh demoralizing and depersonalizing experience, [that] included no positive preparation for life in the yard. The absence of official orientation or published regulations, the secrecy and arbitrariness of discipline, the shocking unfamiliarity of prison life and the demands imposed by regimentation combined to make the new inmate helplessly dependent on experienced men." As both our qualitative and quantitative results suggest, local prison experience was key to inmate status: "old heads" were able to mentor younger peers and capitalize on working relationships with correctional officers and prison staff.

Our statistical analyses found that age had a significant association with inmate status independent of prison unit tenure. Our qualitative narratives offer insight to the distinct mechanisms responsible for this statistical

finding. Consistent with the age-crime curve and prior literature documenting the trajectories of long-term inmates (Crewe et al. 2016; Johnson 1987; Johnson and Dobrzanska 2005; Paluch et al. 2003), our respondents reported that older inmates learned to accept and manage their prison existences through prosocial activities and peer mentoring. This provision of public goods, in turn, was rewarded with increased status by inmate peers, which solidified the positions of "old heads" atop the inmate status hierarchy (Willer 2009). Prison unit tenure thus captures the concrete (and prosocial) ways in which these inmates have contributed to life in the unit and age indicates maturity and psychological adjustment to prison existence. In reality, these different mechanisms are correlated and build on each other, as it typically is older inmates who are in a position to provide public goods to the unit. If this is so, these distinct mechanisms may not be perceptible to inmates. As Ridgeway (1991) argues in her status construction theory, if an attribute (e.g., age) is correlated enough with a valued resource (e.g., advice and mentoring), the attribute itself will take on positive status value regardless of whether any specific older inmate provides public goods.

Although we found little evidence that attributes inmates imported from their pre-prison existences (i.e., gang involvement or offense severity) had significant net associations with status in the observed unit, such attributes were significantly correlated with status at the bivariate level. High-status old heads committed more serious offenses than did others in the unit, resulting in long sentences. However, their prior crimes or gang membership were rarely mentioned as factors driving status. Additionally, our quantitative analyses revealed that associations between pre-prison covariates and status nominations were attenuated once other variables, such as age and time on the unit, were considered. Thus, although old heads were often convicted of serious crimes and may have held "street" status prior to prison, it was their long prison terms and provision of prosocial community goods that resulted in increased prison status (Crewe et al. 2016; Willer 2009).

The fact that we found a status hierarchy dominated by prosocial older inmates runs counter to some recent prison research (Michalski 2017; Skarbek 2014). Are our observations confined to the unit we observed or are they generalizable to other prison settings? Our inmate sample was similar to the broader prison population across many measurable dimensions (e.g., race, offense severity, age, regional origin), and all of our sampled inmates began their convictions in general population units. Such commonalities suggest that institutional factors may be more influential than inmate characteristics for explaining any between-unit or between-prison differences. For example, staff in the sampled unit wielded ultimate control over inmate selection and retention processes. Thus, the potential to sanction misbehavior through instantaneous unit removal, an option unavailable in general population units, may have acted as a sword of Damocles that prevented the penetration of violent or criminal norms. Inmates, particularly those with long sentences, would value the unit's peace and stability too much to risk approving violence by themselves or others. The relatively small size of the unit and lack of overcrowding may also have made it easier for a single core group to establish and maintain leadership. In larger units, subgroups similar to the gangs that Skarbek (2014) describes may be necessary to regulate the more complex inmate society, leading to a marginalization of "old heads" similar to what Anderson (1999) observed in disadvantaged black communities. Or, the observed unit may have had just the right mix of transient (younger) and long-term (older) inmates to create conditions favorable to an "old head" hierarchy. Such ecological factors, in addition to prison variations by gender, region, and security level, require further research to determine their relative importance for contemporary inmate status hierarchies. However, our results, at a minimum, suggest that age *can* structure inmate status hierarchies, and this positive age-status association is likely to increase as the number of older inmates continues to rise in the country's prisons. More broadly, this

research helps make the case for how status orders vary, even across seemingly similar populations, reinforcing the call for investigations of status across contexts (Rivera 2010; Sauder 2005).

Practically, our study suggests that a critical mass of old heads could increase unit stability and cohesion; correctional authorities should consider this when designing prison policy. Of course, we are not advocating that inmates serve longer sentences just to benefit prison stability. That older inmates are higher status and likely to exhibit prosocial behaviors does not validate the punitive policies that put them in prison in the first place. In fact, our findings may be interpreted as evidence that, consistent with the age-crime curve, older inmates are low societal risks, and policymakers should seek to return them to their communities whenever possible. Stuart and Miller's (forthcoming) recent ethnography of Los Angeles' Skid Row neighborhood supports this conclusion, finding that "prisonized old heads" informally socialize younger high-risk peers to daily routines and cultural schemas that promote criminal desistance. Nor are we suggesting that correctional staff cede all their authority to older inmates. Our findings rely on the vigilance and actions of guards to select, monitor, and retain inmates who reinforce prosocial norms. Such a system requires a modicum of inmate freedom, but it does not necessitate guards fully trusting the inmates, and it may even function better without such trust. As Sykes (1958) suggested long ago, prisons need to find the right balance between inmate freedom and constraint to foster a humane and safe social system.

Aside from the generalizability inherent to our case study design, we also acknowledge three additional potential limitations. First, we were unable to test whether high-status old heads positively influenced the behaviors and attitudes of other unit residents. Such causal inferences require longitudinal data that we lacked at the time of this writing. Second, we recognize that although a unit hierarchy associated with pro-community norms offers promise, it does not necessarily translate into positive rehabilitative outcomes. Additional research is required to understand how other aspects of unit structure, such as prison programming, may contribute to rehabilitation and successful community re-entry outcomes. Finally, some may question our use of "power" and "influence" as adequate measures of status in a prison context. To address this issue, we must first consider alternative survey vocabulary. The term "status" is complex and has no agreed-upon definition among academics, let alone among an incarcerated population. "Respect" is another option, but as Crewe (2009) points out, and we show in our qualitative narratives, this term has variable meanings in a prison setting and commonly does not refer to individuals' relative rank. For example, in what Crewe (2009) labels "recognition respect," respect is viewed as a moral right rather than a zero-sum rank. We thus argue that both "high status" and "respected" are less clear than "powerful" and "influential" for understanding inmate hierarchy.

Limitations aside, our study takes a large leap in a research area that has generally withered over the past several decades. This study sheds light into the black box of prison in ways that are replicable in other prison contexts. We were able to explore long-standing cultural and structural expectations for inmate social organization, connect these with contemporary prison conditions, and provide a baseline for future investigations. In the end, we heeded Wacquant's (2002:386) call to "worry less about 'challenging the terms of the discourse that frames and supports prisons' and more about getting inside and around penal facilities." By getting on with embedded field research, we discovered a prison unit's "unseen environment" (Clemmer 1940) and connected this to theory and institutional contexts. As the era of mass incarceration shows signs of plateauing and larger numbers of inmates exit prison (Carson and Sabol 2016; Clear and Frost 2013; Cullen, Jonson, and Stohr 2013), it is critical to continue documenting prison experiences, building theory, and connecting these with community re-entry processes that reduce inequality and promote social justice.

APPENDIX

Table A1. Logistic Regression of Survey Participation ($N = 205$)

Variable	Coefficient	SE
Intercept	–.624	1.028
Power/influence indegree	–.375	.235
Age (in years)	.011	.015
Time in prison (in years)	–.024	.044
Time on unit (in years)	–.018	.109
Offense gravity score	.010	.051
Gang/Security Threat Group	–.613	.854
Parole eligible	.013	.353
Race/ethnicity (white/other race referent)		
Black	–.748	.426
Hispanic	–.351	.493
Religion (none referent)		
Muslim	–.046	.626
Catholic	–.386	.554
Protestant	.434	.525
Other religion	–.146	.515
Program participation	.159	.422

*$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed tests).

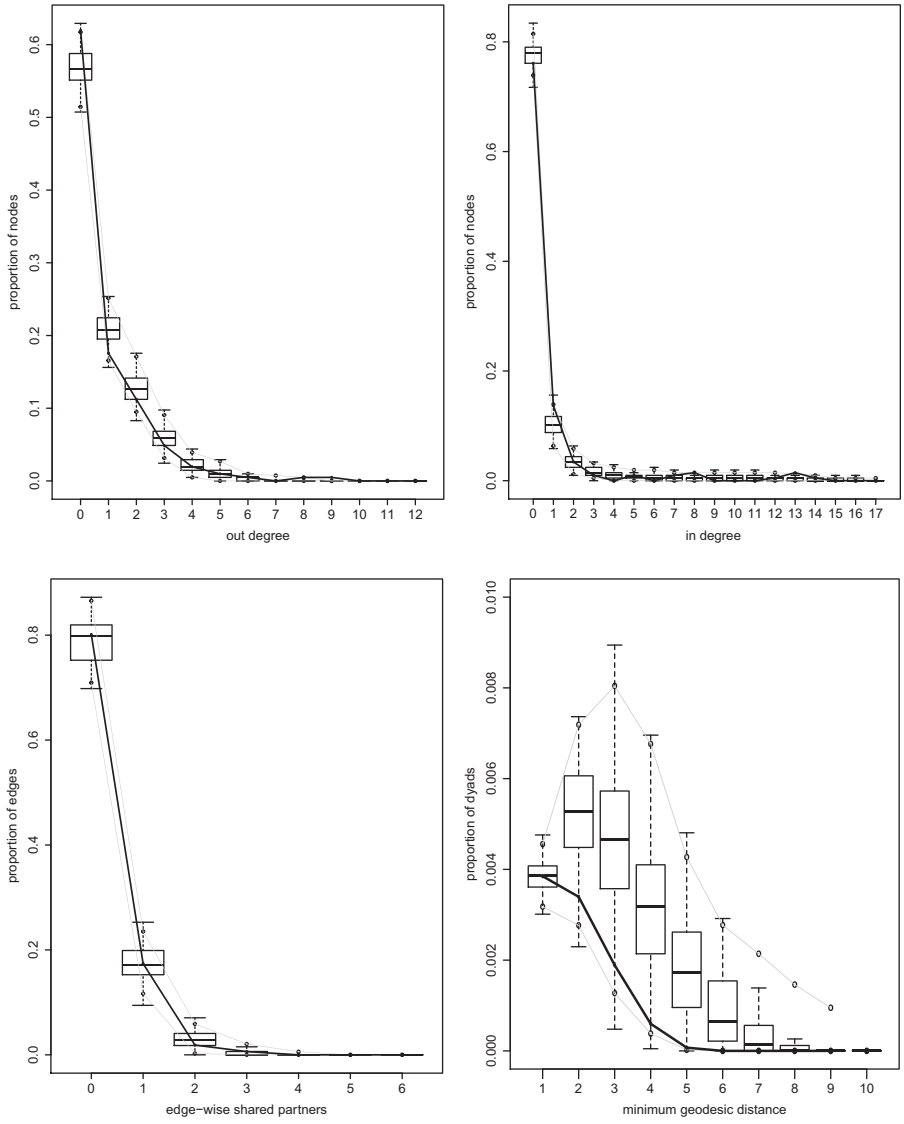

Figure A1. Goodness-of-Fit Plots
Note: Panels represent frequency distributions for key network statistics. Good fit is indicated by distributions from model-based simulations (boxplots) centered on observed values (dark line). For minimum geodesic distance, on average, the model underestimates the number of unreachable dyads by 1 percent. This is not shown because 99 percent of dyads are unreachable and including them stretches the *y*-axis to make the plot completely uninformative. For more information on ERGM goodness-of-fit, see Hunter and colleagues (2008).

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Notes

1. Sociologists commonly distinguish status, defined as an actor's relative rank based on respect, social influence, or deference, from power, defined as an actor's capacity to control and extract resources from others (Magee and Galinsky 2008; Ridgeway and Walker 1995; Thye 2000). In prison settings, limited resources and liberties keep these concepts closely aligned (Crewe 2009). In addition, the survey item's "most" qualifier forces a relative ranking consistent with common definitions of status.
2. Of surveyed inmates, 58 (44 percent) did not nominate a powerful and influential peer. In their notes, interviewers mentioned three commonly reported reasons for non-response to this question: (1) the inmate was new to the unit and did not know who was powerful and influential, (2) the inmate felt inmates were not powerful or influential in the unit (e.g., "the guards have all of the power"), or (3) the inmate was uncomfortable divulging this information to research staff. To better understand the non-response subsample, we estimated a logistic regression predicting non-response that included our primary independent variables, and we found that none of the attributes significantly differentiated non-response and survey participation (see Appendix Table A1).
3. A deidentified list of power and influence nomination dyads (i.e., edgelist) is available at: http://justicecenter.la.psu.edu/research/pins.
4. Preliminary analyses included a measure of whether the inmate has a life sentence. However, this variable was highly correlated with time in prison (i.e., $r = .62$) and thus excluded from the analyses presented here due to high variance inflation factors.
5. Misdemeanor parole violations may result in prison sentences. The unit average offense gravity score ($\bar{x} = 9.99$) is equivalent to aggravated assault with attempted serious bodily injury.
6. One Native American inmate and one Asian inmate were coded into the white/other category.
7. We estimated the models and evaluated goodness-of-fit using the *ergm* package (Hunter et al. 2008) in *R*.
8. We parameterize the degree distribution using the geometrically weighted indegree (GWIDEGREE) effect (Hunter 2007; Levy 2016).
9. We parameterize triadic closure using the geometrically weighted edgewise shared partner (GWESP) effect (Hunter 2007; Hunter and Handcock 2006).
10. Highly skewed distributions commonly follow a power-law distribution, where the probability distribution of k, $p(k)$, approximates $k^{-\gamma}$ where γ is a scaling parameter in the 2 to 3 range (Kadushin 2012). Applied to inmate status nominations, a power-law distribution suggests a few "elite" inmates are surrounded by mostly low-status peers. The power and influence network closely approximates a power-law distribution. The scaling parameter for the power-law distribution is 2.53, at the midpoint of the expected 2 to 3 range. These results provide preliminary evidence of a hierarchical structure and show that the unit's status system is not flat or decentralized.
11. An alternative measure of reciprocity is rho (Katz and Powell 1955), which adjusts for the baseline reciprocity expected given the observed outdegree distribution. Rho for the network of 133 inmates is .008.
12. The stochastic blockmodel we use departs from earlier blockmodel approaches by assigning nodes a probability of belonging to each set (Nowicki and Snijders 2001). All nodes in our data had at least a .90 probability of belonging to one of the sets and were classified accordingly. For this analysis, we considered only the 79 inmates who responded to the survey and were non-isolates (i.e., sent or received at least one nomination). Isolates would all belong to the same structural position, and non-respondents would be biased toward higher status by virtue of only receiving incoming ties. We estimated models for one to four blocks using a Variational-EM algorithm (Mariadassou, Robin, and Vacher 2010), then we used the Integrated Completed Likelihood (ICL; Biernacki, Celeux, and Govaert 2000) to determine which block structure fit best. We performed estimation using the *blockmodels* package (Leger 2015) in *R*.
13. Diagnostics of the MCMC algorithm showed sufficient convergence. Inspection of goodness-of-fit plots for the final model show a very good fit to the data (see Appendix Figure A1).
14. In unlisted analyses, we also tested whether the power/influence nominations of ego matched those of inmates whom ego reported "getting along with," which is a form of structural balance. This pattern was present at the bivariate level, but it became non-significant once the "get along with" edge covariate was introduced to the model. Other model estimates were not substantively affected by the presence of this effect.
15. Additional analyses examined whether the effect of age on receiving a tie was conditioned by time on

unit (i.e., an interaction). We found no evidence to support this relationship.

16. For years on the unit: $e^{(.490\times1.48)} = 2.07$. For age: $e^{(1.960\times.28)} = 1.73$.

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