REVISITING THE LITERATURE ON PRISONERS WHO ARE OLDER: ARE WE WISER?

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This article critically reviews the scholarly literature that describes older U.S. inmates and that examines correctional responses to this subpopulation of incarcerated offenders. This review indicates that the number of incarcerated men and women who are older is increasing. Older offenders are primarily incarcerated for violent offenses, and many report one or more chronic health conditions. Health care management is the most prevalent theme in the current literature, and there is tremendous variation in how jurisdictions accommodate older inmates. This review of the literature reveals major gaps in our scientific understanding of older inmates, and it concludes with recommendations for policy- and practice-relevant research.

The number of older inmates in U.S. facilities has increased by more than 50% since 1996 (American Correctional Association, 1999). This unprecedented growth has mobilized correctional administrators and other criminal justice professionals to examine policies that balance a number of equally compelling issues: public safety, economic costs, institutional management, and humanitarian concerns (W. E. Adams, 1995; Faiver, 1998; Hunsberger, 2000; Wall, 1998). The literature on older prisoners was last reviewed by Rubenstein in 1984, who at that time described the research as "sparse and sporadic" (p. 153) and "fraught with methodological limitations" (p. 164). The purpose of this article, therefore, is to take stock of the scholarly literature published since the late 1970s that describes older inmates and examines the biopsychosocial characteristics that are unique to this subpopulation of incarcerated offenders.

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Few scholars (viz., M. E. Adams & Vedder, 1961; Baier, 1961; Freedman, 1948) expressed any intellectual interest in older prisoners prior to the 1970s. Instead, the earliest literature explored theoretical paradigms about criminal behavior among older persons (e.g., Keller & Vedder, 1968; Moberg, 1953; Whisken, 1968). In the 1970s and 1980s, researchers (Cullen, Wozniak, & Frank, 1985; Forsyth & Gramling, 1988; Gewerth, 1988; Malinchak, 1980; Shichor & Kobrin, 1978) were concerned about the prevalence and types of crimes committed by older persons. As the population of older prisoners steadily increased during this time period, scholars, policy makers, and the media focused on issues such as living conditions (Alston, 1986; van Wormer, 1981), institutional adjustment (Aday & Webster, 1979; Gillespie & Galliher, 1972), recreation and socialization needs (Bintz, 1974; Fry, 1988; Goetting, 1984b), and health care and rehabilitation (Goetting, 1985; Ham, 1980; M. McCarthy, 1983). The most recent literature on older inmates is preoccupied with their health care needs and with the costs of providing specialized care (Chaiklin, 1998; Faiver, 1998).

The goal of this review is to provide a comprehensive and critical review of what is known to facilitate additional empirical analysis. We accomplish this by providing an overview and profile of older inmates (e.g., incidence, demographics, types) and by describing their biopsychosocial characteristics (e.g., adjustment to prison, mental and physical health status). We also examine the extent to which policy and practice recommendations are supported by data. This review concludes with recommendations for further research.

METHODS AND RESULTS OF SEARCH

To determine the type and quantity of available literature, we conducted searches of Internet resources and relevant electronic databases for the years 1977 through 2001, using the parameters "older inmates" and "older offenders." An abstracts database and online search was conducted by the National Criminal Justice Reference Service, yielding no scholarly publications (C. Keller, personal communication, February 8, 2000). A. Fins of the American Correctional Association found four relevant book chapters (personal communication, February 11, 2000). We then reviewed reference lists for obtained sources until all entries were exhausted.

Our search uncovered numerous publications about older offenders in general (i.e., theories about deviance, crime patterns, and arrest rates). However, the current review is restricted to 49 scholarly publications written since 1977 that specifically focus on older U.S. prisoners, 24 of which are empiri-

TABLE 1: Primary Subject Focus of Scholarly Publications (*N* = 49) on Older U.S. Inmates

Subject	n	%
Empirically based publications (*n* = 24)		
Overview/descriptive profile	10	41.7
Institutional adjustment/behavior	7	29.2
Health-related issues	4	16.7
Program descriptions	2	8.3
Program evaluation	1	4.1
Nonempirical and impressionistic publications (*n* = 25)		
Overview/descriptive profile	10	40.0
Health-related issues	8	32.0
Program descriptions	3	12.0
Housing issues	2	8.0
Correctional staff training issues	2	8.0

NOTE: Scholarly publications include published books and book chapters, and articles published in refereed journals since 1977.

cally based descriptive investigations (see Table 1). We also included criminal justice population data sources that are routinely disseminated by national organizations. Two nationwide studies (Aday, 1994b; Goetting, 1984b) surveyed state prison systems about existing facilities and programs for older inmates. Twenty-two empirical investigations examined inmate characteristics: of these, 2 were at the national level and 20 were at the state or local level. The research methodology used for these latter 22 studies included surveys (*n* = 10, 45.4%), secondary analysis (*n* = 6, 27.2%), or a combination of both (*n* = 3, 13.7%). Three (13.7%) used a case study approach (Aday, 1994a; Golden, 1984; Reed & Glamser, 1979). Among the 15 state-level studies that incorporated secondary analysis or survey research methods, the sample size of older inmates ranged from 40 to 469, with a median sample size of 92 inmates. As seen in Table 1, general descriptions of older inmates compose the largest proportion of subject matter for both types of publications.

OVERVIEW AND PROFILE OF OLDER INMATES

INCIDENCE

A major and persistent shortcoming is the lack of agreement among scholars on an age criterion by which older prisoners are designated (W. E. Adams, 1995; Aday, 1994b). Among the empirical reports listed in Table 1, for exam-

TABLE 2: Frequency and Proportion of Older Inmates in State Prison Systems With More Than 1,000 Older Inmates

State	n	*Cumulative* n	*%*	*Cumulative %*
Texas	8,436	8,436	19.7	19.7
California	4,385	12,821	10.2	29.9
Florida	2,396	15,217	5.6	35.5
New York	1,963	17,180	4.6	40.1
Ohio	1,871	19,051	4.4	44.5
Pennsylvania	1,545	20,596	3.6	48.1
Georgia	1,298	21,894	3.0	51.1
Arizona	1,015	22,909	2.4	53.5

SOURCE: Adapted from *1999 Directory: Juvenile and Adult Correctional Departments, Institutions, Agencies, and Paroling Authorities*, by the American Correctional Association, 1999 (p. xxxii).
NOTE: An older inmate is 55 years of age or older. Reported percentages refer to proportions of the total U.S. older inmate population (N = 42,930).

ple, 7 used an age criterion of 55 and older, 9 used a criterion of 50, and 1 used 60. Thus, the estimated proportion of older inmates reported in the literature varies with both the age criterion and the sources of data that were used (e.g., Goetting, 1985; Rubenstein, 1984).

Using an age criterion of 55, data indicate that older inmates currently compose about 4% of the total inmate population. In 1999, the American Correctional Association reported that 42,930 inmates over the age of 55 were incarcerated in state (n = 35,686) and federal (n = 7,244) facilities. This represents 3.7% of the total adult inmate population (N = 1,168,713). Of the 37 states that provided 1998 data, 20 account for almost three fourths (n = 31,662, 73.8%) of the inmate population over 55 years of age. As seen in Table 2, eight states reported more than 1,000 older inmates each and account for more than half of the total older inmate population. The greatest number of older inmates was reported by Texas, followed by California, and Florida (see Table 2).

OLDER INMATE DEMOGRAPHICS

Available, albeit dated, evidence suggests that older inmates tend to be unmarried White men who were employed prior to incarceration but who never graduated from high school. The most representative demographic data are available from two nationwide studies. Goetting (1984a) surveyed 11,397 randomly selected state prisoners, 248 of whom were 55 years of age

or older. Falter (1999b) conducted a secondary analysis of Federal Bureau of Prisons medical data for 1,051 randomly selected inmates over the age of 50. Older inmates in Goetting's (1984a) and Falter's (1999b) studies were predominantly male (at 96% and 93%, respectively). In terms of race, approximately half of the inmates were Black (49%) and half were White (48%) in Goetting's (1984a) study. Falter (1999b) reported a far greater proportion of White (78%) than Black (20%) older inmates in the federal system. Descriptive statewide studies (e.g., Aday & Webster, 1979; Fry, 1987; Kratcoski & Babb, 1990) also report a greater proportion of White than Black older inmates.

Approximately one third (34%) of Goetting's (1984a) respondents were married. They reported two children, on average. Falter (1999b) did not gather data on these latter variables. A far greater proportion of unmarried than married participants were reported in state-level studies (e.g., Colsher, Wallace, Loeffelholz, & Sales, 1992; Fry, 1987; Moore, 1989). In Goetting's (1984a) study, approximately three fourths (74%) were employed prior to incarceration, and the mean completed education level was seventh grade. Wilson and Vito (1986) also found that more than two thirds of the inmates in their sample (from one Kentucky institution) reported less than a high school education. Conversely, there was a greater proportion of high school graduates in studies conducted by Fry (1987) (at one California facility) and by Kratcoski and Babb (1990). This latter study included older inmates from 8 Federal Bureau of Prisons, 1 Pennsylvania, 3 Florida, and 3 Ohio facilities.

OLDER INMATE TYPES

Older male inmates appear to compose different categories of offender types. Goetting (1984a) delineated four inmate types from her representative survey of 248 inmates: career criminals (prison recidivists), old offenders (inmates whose first incarceration occurred at age 55 or older), first offenders (who were first incarcerated before the age of 55), and old-timers (inmates who were growing old in prison). Aday and Webster (1979) distinguished between first and chronic older offenders among 95 inmates from Arkansas and Oklahoma facilities. Fry (1987) also distinguished between first and chronic older offenders in a profile of 62 California inmates, and he identified four patterns among first offenders: those who are violent, white-collar, or drug or alcohol involved. Fry (1987) characterized chronic offenders either as drug or alcohol abusers or as property offenders.

OFFENSES COMMITTED BY INCARCERATED OLDER OFFENDERS

Since the 1970s, criminologists have expressed considerable concern about escalating crime rates among older persons as this segment of the population continues to grow (for a review, see Forsyth & Gramling, 1988). Gewerth (1988) found that older persons are most frequently arrested for fraud, embezzlement, larceny-theft, alcohol-related offenses, assault, and sexual offenses. Shichor and Kobrin (1978) examined changes in Uniform Crime Reports arrest data for older offenders (age 55 or older) from 1964 through 1974. These authors found that older persons were most likely to be arrested either for aggravated assault (among violent crimes) or for larceny-theft (among property crimes). Sapp (1989) replicated this study using Uniform Crime Reports data from 1972 through 1981, and he obtained similar findings. These data, however, provide no information about convictions or sentencing decisions.

There is some evidence to suggest that criminal justice agencies exercise lenience with older offenders (B. R. McCarthy & Langworthy, 1987; Shichor & Kobrin, 1978). Champion (1988) examined sentencing decisions (N = 2,365) from randomly selected federal judges, and he found a negative correlation between sentencing severity and the offender's age. Although violent crimes were more severely punished compared with property offenses across all ages, Champion (1988) found that probation was used in lieu of incarceration more than 4 times as much for older offenders than for their younger counterparts. B. R. McCarthy and Langworthy (1987) similarly found that older offenders were more likely to be under community supervision for violent crimes than younger offenders. These authors' data suggested that older nonviolent offenders are more rigorously screened out by the criminal justice system than are their younger counterparts.

Male offenders who commit violent crimes such as aggravated assault, sex offenses, and homicide are more prevalent than nonviolent offenders in samples of incarcerated older inmates. Aday's (1994a) case study data suggested that first-time older offenders had committed violent crimes against family members. Kratcoski and Walker's (1988) research indicated that homicides committed by older persons are most likely to be perpetrated by male offenders against their spouses in the home. However, Kratcoski and Walker did not specify whether their sample was drawn from incarcerated offenders. More than two thirds (70%) of the 248 older prisoners in Goetting's (1984a) nationwide study were serving sentences for violent offenses, whereas approximately one fourth (26%) were incarcerated for property offenses.

Unlike the state prisons, Kratcoski and Pownall (1989) found that only 13% ($n = 707$) of Federal Bureau of Prisons inmates over the age of 50 ($N = 5,522$) were incarcerated for violent offenses. One third (32%) of Goetting's (1984a) respondents reported a prior probation experience, and half (51%) experienced at least one incarceration. Fewer than half of Federal Bureau of Prisons inmates ($n = 2,494$, 45%) reported a prior commitment (Kratcoski & Pownall, 1989). Older inmates with criminal justice histories were also prevalent in state-level descriptive studies (Faiver, 1997; Teller & Howell, 1981; Walsh, 1989; Wilson & Vito, 1986).

There is no available research that specifically investigates whether older offenders are more likely to commit violent acts or if older offenders are more likely to be incarcerated if they are violent. Moreover, systematic investigation is hampered by the numerous limitations of Uniform Crime Reports data (Sapp, 1989), as well as the broad discretion granted to law enforcement and criminal justice agents with whom older offenders interact.

BIOPSYCHOSOCIAL CHARACTERISTICS OF OLDER INMATES

ADJUSTMENT TO PRISON

The literature suggests that numerous interacting individual and institutional variables contribute to an older inmate's adjustment to incarceration. Older male inmates have been portrayed both as loners (Kratcoski & Babb, 1990; Vega & Silverman, 1986) and as being involved in friendship networks (Sabath & Cowles, 1988). In one of the few empirical studies that included women, Kratcoski and Babb (1990) found that older women lacked a support system from both inside and outside of the institution, and they experienced a greater sense of isolation than men. Wilson and Vito (1986) found that all of the older male inmates in their study ($N = 87$) reported difficulties with loneliness and with missing their families.

Sabath and Cowles (1988) found that being involved in work and social interactions had positive effects on adjustment to prison life. Rubenstein (1984) and Goetting (1983) concluded from their respective literature reviews that inmate adjustment is related to various individual (e.g., educational level, health status, and so forth) and institutional characteristics (e.g., security level, degree of mainstreaming). These authors criticized earlier researchers (viz., Reed & Glamser, 1979; Teller & Howell, 1981) for failing to properly account for these variations.

MENTAL HEALTH ISSUES

Although Gewerth (1988) cited evidence that the offenses of older persons can often be attributed to age-related disturbances (e.g., organic brain syndrome), the actual prevalence of mental illness among older inmates cannot be ascertained from the literature. The limited research to date suggests that some older inmates experience symptoms of depression and anxiety. Colsher et al. (1992) found little evidence of either cognitive impairment or psychotic symptoms among older male inmates in their sample ($N = 119$). However, some participants reported symptoms of depression, loneliness, and anxiety (at 15.4%, 7.1%, and 8.1%, respectively). Aday (1994a) also found evidence of depression, guilt, and psychological stress among 25 older male inmates who were first-time offenders.

Correctional health professionals express conflicting opinions based on their personal experiences and impressions. Kelsey (1986) believed that except for the long-term deterioration that occurs with aging, older inmates demonstrate few mental health problems. Conversely, Booth (1989) and Dugger (1988) stated that older inmates are at high risk for developing depression, especially those who are experiencing ill health and age-related changes and losses. Chaiklin (1998) speculated that older inmates with mental illness are overlooked because of limited resources, cramped environments, and improperly trained staff. Chaiklin further attributed low detection rates of mental illness to staff suspicions about malingering.

PHYSICAL HEALTH STATUS OF OLDER INMATES

The health status of older inmates has been measured through either self-report or secondary analysis of prison medical records. In a nationwide study of Federal Bureau of Prisons health care data, Falter (1999b) examined the relationship between medical encounters and the prevalence of five chronic health care conditions (viz., noninsulin-dependent diabetes, insulin-dependent diabetes, arteriosclerotic heart disease, chronic obstructive pulmonary disease, hypertension). The author found that hypertension and heart disease explained almost 25% of the variance in total number of medical encounters. Few state-level, health-related surveys have been conducted with older inmates. Colsher et al. (1992) found that 65% of the older male inmates in their health survey of Iowa state prisoners ($N = 119$) self-reported good health; however, almost half believed that their health had worsened since incarceration. The most commonly reported chronic illnesses were arthritis (45%), hypertension (40%), venereal disease (22%), ulcers (21%), prostate

problems (20%), myocardial infarction (19%), and emphysema (19%). Incontinence, sensory and flexibility impairment, and limitations in gross physical functioning were also prevalent (Colsher et al., 1992). Most inmates smoked cigarettes and had a history of alcohol consumption. Wilson and Vito (1986) similarly observed high rates of alcohol abuse among older inmates. Colsher et al. (1992) recommended modifying prison environments and implementing specialized health promotion and prevention programs to meet the needs of older inmates.

Moore (1989) examined the characteristics of 41 older male inmates in Michigan and found that 83% had at least one chronic health problem, and 49% had three or more. Inmates most frequently self-reported cardiac, vision, respiratory, and gastrointestinal health problems (at 25.9%, 17.0%, 14.8%, and 9.0%, respectively). In one of the few studies that included women, Kratcoski and Babb (1990) found that twice as many older women than men reported heart, respiratory, and degenerative illnesses. Thus, the findings of Colsher et al. (1992), Kratcoski and Babb (1990), and Moore (1989) parallel those of Falter (1999b).

Moore (1989) examined the impact of prison environments on the use of health care, and he found that male inmates who were segregated made more demands for medical care than those who were not. In fact, older inmates who were relocated to a segregated unit demonstrated a 100% increase in medical demands. Wilson and Vito (1986) surveyed both correctional staff and inmates to assess medical needs among 87 older male prisoners who were housed in the general population ($n = 62$) and in a segregated geriatrics unit ($n = 25$) of a Kentucky institution. Many inmates felt that the prison environment exacerbated their respiratory and arthritis problems. Other medical complaints were related to their beliefs that services and medications for serious illnesses were not available to them in prison. These concerns, as well as the fear of dying in prison, were more frequently expressed among inmates in the geriatrics unit (Wilson & Vito, 1986). Staff believed that inmates' medical problems were aggravated by the stress of incarceration and prison conditions. Staff also believed that older inmates were preoccupied with medical concerns because of high levels of lethargy and inactivity, especially among those in the geriatrics unit (Wilson & Vito, 1986).

In sum, empirical evidence suggests that older inmates are more likely to demand health care services than are their younger counterparts. The prison environment, housing considerations, and the availability of specialized programming also influence the extent to which older inmates consume services. Very little is known about the health status of females and non-White older inmates because these populations are underrepresented in the

research. The available evidence suggests, however, that considerably more older women than men report debilitating chronic and degenerative illnesses.

SOCIAL STATUS

The empirical literature provides a conflicting picture of the social status of older inmates within the prison hierarchy. Goetting (1983, 1985) and Rubenstein (1984) cited evidence that younger inmates respect older inmates for their knowledge of prison life, which enables older inmates to establish behavioral norms and occupy leadership roles. According to this perspective, incarcerated older inmates are accorded prestige and respect by their peers. Conversely, other researchers (e.g., Kratcoski & Babb, 1990; Wilson & Vito, 1986) found that older inmates are vulnerable to and fearful of predatory younger inmates.

SECURITY ISSUES

Available evidence suggests that older male prisoners are less likely to commit disciplinary infractions than are their younger counterparts. Wiegand and Burger (1979) described older inmates as loners who "often live quietly, not bothering anybody and nobody bothering with them" (p. 51). Goetting (1984a) found that older prisoners were substantially less likely than their younger counterparts to be guilty of rule breaking within the prison. Wilson and Vito (1986) also found that older inmates violated prison rules less frequently than younger inmates.

McShane and Williams (1990) compared disciplined with nondisciplined older inmates, and these authors identified a subtype of older inmate whose most common offense was refusing to carry out an order. Disciplined older inmates had longer prison sentences and a history of incarceration. They were relatively younger and healthier and had fewer outside contacts than the nondisciplined group (McShane & Williams, 1990). This latter finding is consistent with Sabath and Cowles's (1988) research indicating that family contact has a positive impact on the morale and conduct of older inmates. Although insubordination was the most common infraction for disciplined inmates, McShane and Williams (1990) did not raise the issue of whether staff training might impact these behaviors. Kratcoski and Babb (1990) found that older inmates appear to be violating rules when, in fact, they may have neither heard nor understood them. Gewirtz (1984), Goetting (1983, 1984a), and Morton (1993, 1994) emphasized the importance of training correctional staff to properly understand and effectively respond to the behaviors and heightened needs exhibited by older inmates.

CORRECTIONAL RESPONSES TO OLDER INMATES

FORMAL PROVISIONS FOR OLDER INMATES

Available data suggest that there is tremendous variability in the extent to which correctional systems supply older and other special-needs inmates with formal provisions (i.e., housing accommodations and specialized educational, vocational, medical, and recreational programs). We found numerous policy recommendations (e.g., Aday, 1994b; Duffee, 1984; Goetting, 1985; Vito & Wilson, 1985) for specialized programming, and several program descriptions (e.g., Aday, 1977; Anderson, 1994; Hunsberger, 2000; Wilson & Vito, 1986); however, we were unable to locate one controlled outcome-oriented evaluation of any type of corrections-based geriatric program.

According to Kratcoski and Pownall (1989), the Federal Bureau of Prisons has designated specific institutions to provide health care to inmates who are chronically ill or handicapped. These facilities either house Comprehensive Medical Units or they provide access to specialized medical care in the community. Thus, attention is given to health status along with security needs and regional considerations when determining how older offenders are distributed throughout Federal Bureau of Prisons institutions.

GERIATRIC PROGRAMS AND SERVICES

One uncontrolled evaluation of a therapeutic program for older inmates was located in the literature (viz., Aday, 1977). The Geriatrics Unit Program offered specialized activities (e.g., visitation, toy repair, arts, and crafts) to 55 male inmates over the age of 55. Aday (1977) found that measures of life satisfaction among inmate participants were comparable to those of older respondents in the community. Specialized programs for older prisoners should prevent deterioration and should promote alertness and physical activity (Rosefield, 1993; Vito & Wilson, 1985). Recommendations for such programs include the following: (a) appropriate work assignments (Goetting, 1984b); (b) arts and crafts (Aday, 1977); (c) wellness, exercise, and passive recreational activities (Aday, 1994b; Falter, 1999a); (d) leisure-time activities (Rosefield, 1993); and (e) opportunities for visitation and socializing (Neeley, Addison, & Craig-Moreland, 1997). Several authors (viz., Moore, 1989; Wilson & Vito, 1986) believe that gardening is of particular interest and utility to older inmates.

SUMMARY

The incarceration of older inmates has been deemed problematic for social justice and humanitarian reasons, because of practical or logistical issues, and most recently because of the costs associated with caring for inmates with numerous health-related conditions. Thus, the problem of older inmates has proven to be a slippery one. Despite a limited amount of current research on older inmates, several findings of this review merit highlighting:

1. The proportion of state and federal inmates 55 years of age and older is steadily increasing. The number of inmates older than 75 will continue to increase in the future if current sentencing practices remain in place. Proportional increases appear more dramatic than numerical increases for this latter subgroup of older offenders and for females in particular.
2. The most reliable and representative descriptive data on older inmates were last gathered in 1979 (Goetting, 1984a). At that time, older state inmates were most likely to be unmarried White men with children who reported less than a 12th-grade education.
3. The population of older inmates is likely composed of heterogenous subtypes, with the needs of first-time offenders being different from those of more chronic offenders and oldtimers.
4. Older offenders are most likely to be incarcerated because of violent crimes such as aggravated assault, homicide, and sex offenses. These crimes of violence are often perpetrated against family members in the home.
5. Older inmates are likely to report one or more chronic health conditions. Some may also report symptoms of depression and anxiety. Gender differences exist with respect to older inmates' health and mental health status, with greater reported health concerns among older women. A history of alcohol use appears prevalent among older male prisoners.
6. Most states and the Federal Bureau of Prisons have implemented limited provisions to accommodate older inmates and those with special needs.

Our review indicates that scholarly concern about the needs and experiences of older inmates has dissipated over the past three decades. There is widespread support for specialized programming, staff training, physical environment improvements, health promotion programs, and alternative sentencing. These recommendations are based not on reliable and representative data that detail the health condition of older inmates but on their presumed deteriorated health status.

As of 1990, most states did not have written policies that specifically addressed older inmates, one third offered no special provisions, and another third had no plans to implement specialized programming (Aday, 1994b).

American Correctional Association survey data from 1998 indicate that among eight states with the greatest number of older inmates (see Table 1), only two (Texas, Ohio) provided specialized geriatric programs. These same data (American Correctional Association, 1998) also indicate that approximately one third of state correctional administrators see no need to provide older inmates with any formal specialized services. Thus, the care and management of older inmates appears to be more of a problem for some states than for others.

CONCLUSIONS AND RECOMMENDATIONS

Empirical research on older inmates is believed to lag behind because of the stereotypes associated with aging (E. H. Johnson, 1988) and because of their low priority status relative to younger inmates (H. W. Johnson, 1989). In the early 1980s, Goetting (1983) and Rubenstein (1984) each reviewed approximately 20 early studies (most of which overlapped) about older inmates. Both authors found conflicting results and large gaps in the knowledge base, and they similarly concluded that research designs did not properly control for influential individual and institutional characteristics. At that time, Goetting (1983) and Rubenstein (1984) criticized investigators for not complying with acceptable standards of research, for relying on invalid and nonrepresentative data, and for failing to develop consistent operational definitions. Correctional researchers since then have done little to correct these problems: Impressions are uncritically accepted, primary data sources are misused, sample sizes are small, and measures are unreliable. On the other hand, it should be noted that much of the available literature is exploratory in nature, and it addresses the specific need to generate information to develop responsive policies and programs, not scientific findings. This policy-research focus is not unlike the knowledge-building process that accompanied the dramatic increases in women's imprisonment that occurred in the early 1990s.

It is recommended that researchers employ more rigorous designs to control for the relative contributions of influential variables. Based on our review, the following relevant inmate characteristics emerge: (a) level of preincarceration functioning, (b) criminal history, (c) health and mental health status, (d) institutional behavior, (e) adjustment to the aging process, and (f) social support. The most influential institutional variables include (a) housing arrangements, (b) access to medical care, (c) qualifications and training of staff, and (d) availability of specialized programming.

Intellectual interest in issues affecting older inmates has been supplanted by more practical concerns about how to manage them in institutions geared toward younger, healthier, and more predatory inmates. Information needs since the 1980s have been altered by a highly influential political agenda and by pressing economic priorities, and the research on older inmates has not kept pace with these changes. We would argue that unless gross violations of human rights are discovered, the problem of older inmates will continue to be one of bed management and cost containment.

We have identified two research priorities as a result of our review: an empirically derived typology of older inmates and a representative survey of older inmates' health status. Investigations should be conducted with older inmates in both the federal and state systems.

A national-level descriptive study of inmates over the age of 55 is long overdue. The number and type of older prisoners who should be considered special-needs inmates is unclear. Replication of Goetting's (1984a) study could lead to the development of an empirically based typology of older inmates. For example, correctional researchers (viz., Lightfoot & Hodgins, 1993) have devised an empirically derived typology of substance-abusing offenders to inform the development of more comprehensive and cost-effective treatment programs. A typology of older offenders would enable correctional administrators to allocate treatment resources in an informed and responsible manner. It is further advisable to measure how the number and characteristics of older offenders change over time, with particular emphasis on racial and gender differences. An empirically based typology would also inform future research. If, for example, sufficient evidence indicates that first-time offenders are more prevalent than other types of older inmates, then it would behoove researchers to systematically examine socioeconomic contributors to criminality among older persons.

State-level surveys should be administered to document the prevalence and types of certain health conditions among older offenders. Such conditions include the following: (a) chronic illness (e.g., diabetes, chronic obstructive pulmonary disease, and hypertension), (b) acute illness (e.g., stroke and myocardial infarction), (c) neurological disorders (e.g., Parkinson's and Alzheimer's diseases), (d) terminal diseases (e.g., cancer), and (e) mental illness (e.g., depression and anxiety). Research designs should allow for an examination of gender differences and, if necessary, statistical controls should be used to separate older from other special-needs inmates.

Our review suggests that the relationship between health status and health care utilization may be moderated by certain institutional variables. Thus, utilization data should not be used as a proxy measure for health status.

Rather, these data should be gathered in concert, along with descriptive information about relevant aspects of the institutional environment (e.g., housing arrangements, availability of care, access to community-based resources) that could prove influential. This level of health-related information will enable administrators to develop the most cost-effective and comprehensive health care arrangements for their particular institutions. Such an approach is especially important when investigating the health status of older female inmates who are more likely to be the recipients of differential treatment because of their segregation in a dual prison system (Goetting, 1985).

Contrary to Newman and Newman's (1984) belief that elderly criminals are not dangerous, our review indicates that sex offenders and perpetrators of family violence are overrepresented among older state inmates, relative to younger inmates. A history of alcohol use is also prevalent. However, we did not locate any descriptions of treatment programs that specifically addressed these problems. It is unknown whether their needs are overlooked, or if older inmates simply participate in programs offered to their younger counterparts who have similar histories. These are critical areas for program development and testing. We further caution correctional administrators about overreliance on community supervision. Although Hoffman and Beck (1984) found that recidivism rates decline with age, other researchers (e.g., Ellsworth & Helle, 1994; B. R. McCarthy & Langworthy, 1987) believe that this decline has more to do with negligent and discriminatory parole and probation practices than with actual changes in offenders' behaviors. Given the lack of proper supervision for violent and alcohol-involved older offenders, shifting the burden of care may place offenders' family members and the larger community at risk.

The most important conclusion that can be drawn from this review is that we would be wise to recognize that existing research on older inmates has been conducted primarily to stimulate the development of needed correctional policies and programs. Policy researchers are currently challenged to find and disseminate facts that will illuminate both the most compelling issues affecting older inmates and the provisions designed to accommodate them. Such knowledge will serve to benefit diverse prison systems that vary in their institutional populations, problems, and resources.

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