OLDER MEN IN PRISON:

EMOTIONAL, SOCIAL, AND PHYSICAL HEALTH CHARACTERISTICS

by

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Older Men in Prison : Emotional, Social and Physical Health Characteristics

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ABSTRACT

A comparative survey was carried out in three medium security Federal prisons in British Columbia. Ninety-two inmates and eight senior officials were interviewed. The purpose was to describe various social, emotional and physical health characteristics of older inmates, and to make comparisons between sub-groups of inmates.

For the inmate survey, the key independent variables were age (16-29 vs. 45 and over), length of time spent in prison (less than five years vs. five or more years) and prison (three medium security institutions). Five categories of dependent variables were investigated: involvement in prison life, social support, physical health status, emotional health status, and, use of and satisfaction with prison health services.

The results showed that when compared with younger inmates, the older men were equally involved in most of the prison activities. They had MORE contacts with friends and family, MORE friends in prison, and experienced LESS stress than the younger men. They did appear to have few opportunities for physical activity appropriate to their needs. Aside from problems with vision and hearing, their physical health did not appear to be any worse when compared to that of younger inmates. They tended to be more highly regarded by the prison staff and commanded positions of trust and prestige in their jobs. A surprisingly large number had found creative opportunities for volunteer work. Interesting discrepancies were found between the officials' views and the inmates' self-reports in relation to involvement in prison life, social support, and physical

health.

Specific issues and problems were identified, and as a result, a number of policy and program recommendations were generated.

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CHAPTER I

The Purpose, Problem and Rationale

The Purpose

This study concerned a small and sometimes forgotten group of men --- older prison inmates. It was designed to describe their physical and emotional health and social network characteristics, and to compare these with those of younger men in the same institutions. Another goal was to examine relationships between health-related behaviors, resources and outcomes among inmates. Data were obtained from both inmates and a small sample of prison officials, thereby allowing for comparisons between the officials' perceptions and the data obtained from the inmates.

The study design is that of a cross-sectional comparative survey, using primarily face-to-face interviews to collect the data.

The results of the study are expected to be of practical value to corrections officials in relation to planning programs and formulating health and social support policies.

Specific Problems

An initial concern in this study was the dearth of information regarding patterns of criminal behavior among older Canadians. In order to address this, a review of admissions into the country's Federal penitentiaries was undertaken,

documenting age-related admission rates and crime patterns over a 19-year period. This review is presented in Chapter Two.

The remaining chapters of the dissertation pertain to a study of older men in three Canadian Federal penitentiaries. A prison is a unique environment in which to undergo the process of aging. Andreas Schroeder (1976), newly released from a British Columbia prison, poetically recorded his impressions as follows:

> Prison is a huge, lightless room filled with hundreds of blind, groping men, perplexed and apprehensive and certain that the world is full of nothing but their enemies, at whom they must flail and kick each time they brush against them in the dark...a composite of all those seats in the world which are obscured by pillars and beams, and from behind which you can neither see game nor scoreboard nor attract the attention of the ice-cream man (p.x).

The literature review suggested that <u>older men in prison</u> may have unique experiences and needs, when compared with their younger counterparts. Newman and Newman (1984) noted that of all of the areas of the criminal justice system that older people encounter, it is incarceration that reveals the need for clearly-articulated policies in housing, medical care, diet and program.

In order to explore these issues within the context of <u>Canadian prisons</u>, this study investigated the following:

1) Similarities and differences, between older and younger inmates, regarding participation in prison programs and activities, social support networks, physical health status,

stress and distress, and, use of and satisfaction with prison health services.

2) Similarities and differences - on the same variables - between inmates who have served shorter and longer periods of time in prison.

3) Similarities and differences, on these health-related variables, among inmates incarcerated in different prison settings.

4) Interrelationships among these variables, in keeping with prevailing theories regarding the social and behavioral correlates of health and illness.

5) Senior prison officials' attitudes towards older inmates and their perceptions of related service requirements.

The study therefore focused on the older inmates and health. Newman (1984) claimed that there is no agreement in the literature as to what constitutes an older inmate. The work to date has focused on men over age 40, 45, 50 and 65. In this investigation, men aged 45 and over were considered to be older inmates. As Newman (1984) noted, at the present time, " there are so few inmates over age 45 that it is not worthwhile to disaggregate above these ages" (p.4).

The term health is also defined in the literature in broadly divergent ways. Two definitions served to guide this study. The World Health Organization defines health as "state of complete physical, mental, and social well-being and not

merely the absence of disease or infirmity" (WHO,1958). Brody and Sobel (1981, p.30), using a systems theory view, define health as "the ability of a system to respond adaptively to a wide variety of environmental challenges (for example, physical, chemical, infectious, psychological, social)". From these definitions, health is seen as a process, incorporating biological, social, mental and environmental interactions. Individually, and in concert, these factors are believed to influence the onset, duration, severity and aftermath of modern illness. Implicit as well are the notions of behavioral response and adaptation. This view of health provided strong direction for selecting a broad cross-section of variables in this study of prisoners' health.

The Need for the Study

At present the number of older men in both Federal and provincial prisons is not large, in comparison with younger men. However, this population has been steadily increasing. Table 1 shows recent increases of this age-group in Federal prisons (that is, among prisoners serving sentences of two or more years). Table 2 demonstrates that in B.C. prisons (sentences under two years), the number of older inmates more than doubled from 1978 to 1983.

An even greater increase may occur in the near future. Shichor (1984) noted that such a trend can be expected as a result of the aging of our general population. It has been observed, too, that, increasingly, more older people are

TABLE 1

OLDER INMATES IN CANADIAN FEDERAL PRISONS - 1982-1984

	DECEMBER 31, 1982		DECEMBER 31, 1983		DECEMBER 31, 1984	
AGE GROUPINGS	NO.	% OF TOTAL	NO.	% OF TOTAL	NO.	% OF TOTAL
AGE 50-59	410	3.7	425	3.7	448	3.7
AGE 60-64	68	.6	71	.6	79	.7
AGE 65 AND OVER	43	.4	46	.4	53	.5
TOTAL	521	4.7	542	4.7	580	4.9

SOURCE: CANADIAN MINISTRY OF CORRECTIONS ANNUAL REPORTS - 1982-1984

TABLE 2

OLDER INMATES IN BRITISH COLUMBIA PRISONS - 1978-1984

	ADMISSIONS				AVERAGE DAILY COUNT			
	AGE 40-49		AGE 50+		AGE 40-49		AGE 50+	
YEAR	NO.	%	NO.	%	NO.	%	NO.	%
1978-79	780	10.9	465	6.5	107	8.3	56	4.3
1979-80	703	10.0	506	7.2	105	8.1	68	5.2
1980-81	658	9.6	453	6.6	85	7.5	51	4.5
1982-83	1488	9.1	919	5.5	166	8.1	105	5.1
1983-84	1748	10.3	1044	6.2	202	10.0	114	5.7

SOURCE: B.C. MINISTRY OF ATTORNEY GENERAL, CORRECTIONS BRANCH ANNUAL REPORTS - 1978-1984.

involved in serious crime. Shichor and Kobrin (1979) found that arrests of persons age 55 and over for serious crimes more than doubled between 1964 and 1974, in contrast with declining arrests for minor crimes. Feinburg (1984) reported that a similar trend occurred throughout the 1970s. The arrest rate for rape increased 155 percent for men aged 65 and over in the U.S.A. from 1976 to 1985, and 112 percent for those 60 to 64 (Chaneles, 1987). Further, Canadian corrections officials have predicted that recent increases in sentences for murder, along with tighter parole requirements, will result in a build-up of "lifers" in the system (Zubreki, 1983). In order to adequately plan for the future, accurate documentation of trends in Canada is essential.

The study focused on inmates in medium security prisons. The majority of existing studies on health and stress have been conducted in maximum security settings. However, 6,206 of Canada's 12,343 Federal inmates - about 50% - are housed in medium security prisons, at an average annual cost of about $40,672 per inmate (Basic Facts, 1986). Therefore, there is a need for research concerning this population.

Existing research about older criminals, particularly those in prison, is generally quite limited. Further, as Rubinstein (1984) noted, results tend often to be inconclusive and contradictory. A search of the literature revealed that Canadian studies in this area are sparse and there has been virtually no research, in Canada or elsewhere, which specifically identified health problems of older inmates and

their related service requirements.

There are, however, isolated findings based on studies in the U.S.A., which suggest that older inmates may be unique in their needs and activities. Comparing their responses in a national survey with those of younger inmates, Goetting (1984) found that older prisoners spent much less time engaging in most prison activities, were less likely to receive wages for their work, and they were more likely to be assigned to janitorial or low status jobs. Significantly fewer older men maintained regular contact with friends or family on the outside. These findings have yet to be replicated, and, it was of interest to determine whether they apply to Canadian inmates.

Older inmates may also be unique in their perceptions of, and responses to, stressful aspects of prison life. There is some evidence to suggest that in American prisons, they are more affected than younger inmates by the following: fear of violence from other inmates, frequent theft of their personal belongings, and noise and rough language (Krajic, 1979). The present study investigated the pervasiveness of such experiences in Canadian prisons.

In terms of their ability to handle these situations, older men may be at a disadvantage. Robert Johnson (1976), in his book Culture and Crises in Confinement, suggested that survival in prison depends on certain critical factors. He identified several coping strategies which included: adopting a "real-man" stance, maintaining support from family or friends outside, and

developing an ability to find meaning in day-to-day aspects of prison life. Among older men, declines in physical endurance and strength may make it difficult to play a tough or menacing role, and, as mentioned, support from friends and family and involvement in prison programs may be meager.

It is important to ascertain if coping limitations do exist among older inmates, and if so, whether or not they have any measurable effects on health. There is evidence to suggest that this may be so. In a large-scale study of a Tennessee prison, Jones (1976) found much higher rates of psychological distress and physical illness among older prisoners. These relationships are examined in the present study.

Interestingly, two studies found similar trends in patterns of health service use by older prisoners. Both Jones (1976) and Twaddle (1976) reported that while older men had higher rates of illness in general, they used health services less frequently than younger men. It was of interest to find out whether similar patterns existed in Canadian prisons and to document inmates' views about the quality of health care which they receive.

This dissertation is distinct from existing research in several ways. It is based on a broad conceptualization of health which acknowledges the complex interplay of biological, social, emotional and behavioral components of health and illness. It incorporates views of both older and younger inmates, as well as those of prison officials. To date, it is

the only work which systematically examines older inmates' uses of and satisfaction with prison health services. And finally, it is the first comprehensive study of older inmates in Canada. Hopefully, the study will generate interest in this field and will suggest avenues for further investigation.

CHAPTER II

Crime Patterns Among Older People

This chapter provides general background information concerning the extent and nature of older people's involvement in criminal activity. Specifically, it describes:

1) Theoretical issues concerning criminal behavior of older people.

2) The amount and nature of criminal activity among older men in Canada.

3) Differences in criminal offences of younger, middle-aged and older Canadian males.

4) Changes in age-related crime rates among men in Canada between 1961 and 1979.

The Relationship Between Crime and Age

As people age, they commit fewer crimes. This pattern has consistently been found in many cultures, as far back as crime records have been kept (Hirschi and Gottfredson, 1983). Several theories have been put forth to explain this relationship. However, each of these theories has limitations.

One common explanation centers on the declines in physical stamina and agility which accompany the aging process (Moberg, 1953). There is clear evidence from many sources that aging is associated with a lower incidence of crimes of a type demanding physical strength. This view is often supported by the

contention that rates of non-physical crimes such as fraud, remain consistent throughout the lifespan. As will be shown later in this chapter, this assertion was not supported by data on admissions into Canada's Federal prisons over the 19-year time period extending from 1961 to 1979. Therefore, a more adequate theory than one based simply on physiological change is needed to account for the decline of criminal behavior in later life.

In a related argument, it has been suggested that as people age, they commit fewer crimes because they experience diminished passion, reduced anger and increased ability to control impulsive behavior. Weiss (1973) cites studies which show that old people in the general population display less hostility and rebelliousness and have fewer antisocial attitudes. One might therefore expect to find that older persons who do engage in crime would be more similar to younger criminals, than to the general elderly population, in terms of their personalities. However, in spite of both groups having committed crimes, studies of older and younger prison inmates show that they too have marked personality differences. For example, McCreary and Mench (1977) examined MMPI results of 362 male misdemeanor offenders who has been referred for pre-sentence evaluation. They found that the older men had less impulsivity, less resentment, and fewer antisocial symptoms. Teller and Howell (1979) also found older criminals to be less socially deviant. Nevertheless, both personality modifications and physiological declines likely do play a role in mitigating violence and other

forms of criminal behavior in later life.

Greenburg (1979) proposed a social integration theory to explain lower crime rates among older persons. He argued that in many societies, chronic unemployment among the young results in material deprivation, masculine status anxiety, and criminal behavior. Aging brings about better social integration so that material and identity needs can be met in non-criminal ways. However, Hirschi and Gottfredson (1983) presented interesting arguments refuting this theory, noting, for example, that employed youths commit as many crimes as those who are unemployed.

Another argument suggests that older criminals become better at crime, more successfully escaping arrest (Moberg, 1953). It has also been suggested that once apprehended, their crimes are more likely to treated lightly by the police and courts. For example, alternatives to prison may be used more frequently for older offenders -- parole, diversion programs, nursing homes and, mental hospitals (Jackson, 1981), and as a result, older criminals may be underrepresented in the country's prisons.

Explanations for Criminal Behavior of Older Persons

A small percentage of older people do engage in criminal activities. And, as suggested in Chapter I, there is evidence to suggest that this may be increasing. Chaneles (1987) suggested that recent increases may be due to several broad social, biological and psychological trends. People are living

longer and healthier lives, are less detached from the mainstream of society, and may be more willing to use force to obtain what they believe they deserve.

Further insights into why some older people engage in crime can be gained from an examination of factors underlying specific types of crimes. First we consider their violent crimes, i.e. murder, robbery, assault and sex crimes. It has been found that most of the violent crimes of first time older offenders are crimes of passion involving relatives or neighbors as victims (Krajick, 1979). Shichor and Kobin (1978) offer the explanation that advancing age may bring about a narrowing of one's world, intensified primary relationships and increased conflict. Long standing disputes may assume greater emotional meaning, as age-related losses accumulate, leading to unprecedented violence. Interestingly, this contradicts the notion that people become less passionate as they age.

There is evidence to suggest that neurological disorders underlie many instances of violent behavior among older criminals. Zeegers (1978) reported a nearly 50% incidence of organic brain disease among male sex offenders age 60 and over. And recently, a team of Boston specialists discovered that brain dysfunction and neurological deficits were present in more than 90% of a group of 300 excessively dangerous criminals (Schmeck, 1985). These disorders, found among males of all ages, were linked to genetic factors, alcohol and drug abuse, and acute infections of various sorts. This area of research promises to further our understanding of the complex roots of violent

behavior among the old and young alike.

What factors contribute to sexual crimes in later life? On the basis of case studies of a number of older sex offenders, Moberg (1953) found several common themes. He identified that many of these men suffer from sudden lapses of moral inhibitions associated with underlying organic brain changes. He also found that some men seemed to undergo a late revival of sexual interest which he interpreted as a subconscious wish for a final chance to perpetuate life by fathering a child.

It has been noted that many sex-offenders lack certain basic social skills, e.g., being able to assert themselves. In addition, many of these men have histories of being abused themselves, and, many are repeat offenders. The recidivism rate for those who are not treated is thought to be as high as 80% (Freeman-Longo & Wall, 1986).

Cormier, et al. (1961) noted the following:

> Among the group who commit their first (sex) offences in their 40's, personal problems abound....These men usually blame themselves for failures, for instance in refusing an education in their youth. They wonder why they have been unsuccessful in their sexual life or why they have failed to find a wife.... We find a man who has usually worked hard, lived honestly, but found in his 40's no corresponding rewards for his labours.

This sense of failure, often associated with a "mid-life crisis", may equally well explain many of the crimes of older people in general. However, because none of the research to date used longitudinal designs, it is extremely difficult to trace the actual roots of criminal activity using a

developmental framework.

Crime Patterns of Older Canadians

An initial search of the literature revealed NO research which described crime patterns of older Canadians. Several published data sources were examined; many lacked detailed information cross-classifying offenders by age and type of crime. For example, the provincial corrections reports provide good age breakdowns for both admissions and average daily counts, but no breakdowns of crime categories by age. (See Table 1, which was based on the Province of B.C. Annual Reports.)

A more comprehensive breakdown showing crimes by age was found in one data set, the Admissions to Federal Penitentiaries, reported in the Annual Reports to the Director of Penitentiaries. These data are examined in this chapter, for the years 1960 to 1979. In addition to looking for trends over time among older persons, comparisons are made between admission patterns of older, middle-aged and younger men.

Several limitations should be noted at the outset. First, data pertaining to prison admissions provide a biased picture of criminal behavior. They describe only those who were apprehended, convicted, and sentenced - a small proportion of all persons who engage in crime. In the case of the elderly, this may be a particular bias if in fact they do receive preferential treatment by the police and courts.

A second limitation is that the data include only those

sent to Federal penitentiaries, i.e., about one half of the country's total 25,000 inmates. These are the serious offenders; others convicted of minor crimes such as vagrancy, drunkenness and petty theft are dealt with through community diversion programs, or if incarcerated, are usually sent to provincial, municipal and/or city jails. U.S. figures suggest that lesser crimes, i.e., misdemeanors, may account for up to 80% of the total arrests of older people (Wilbanks, 1985). Therefore, we are dealing here with a fairly small percentage of the total criminal population.

These data are also biased in that each inmate is only entered once, according to his most serious crime. Since less serious crimes are not recorded for those with multiple convictions, the data will be weighted in favor of the more serious crimes.

Two additional problems deserve mention. Reporting responsibilities have been shifted between different agencies so that the information no longer exists in consistent form after 1979. Even with the relatively constant scheme in effect through the 1961-1979 period, it was necessary to exercise some editorial discretion to standardize the age and offence groupings from year to year.

Initially, the admissions data were organized into nine five-year age groupings and 11 crime categories, for each of 18 years. For summary purposes, most of the tabulations are reported for three broad age categories: 15-29, 30-44 and 45 and

over, and, only selected years are shown in the tables. The schema used to standardize the crime categories, shown in Table 3, was chosen to conform with those used in studies by Ham (1976) and Shichor (1984).

Frequency distributions of admissions were tabulated for all crimes, by year and age groupings. Since these numbers are affected by fluctuations in the age of the general population, the process was repeated using admission rates, based on age-specific population figures published by Statistics Canada.

Most of the discussion below focuses on the admission rates. It should be noted that few existing studies on prison admissions have reported rates. As a result, only limited comparison with other studies is possible.

General admissions trends - 1961-1979

As shown in Table 4, the total number of admissions to Canadian Federal prisons increased from 1961 to 1979 by 41%, from 3,263 to 4,583. However, those aged 45 and over showed the smallest increase - 9%, compared to a 33% increase for those aged 30-44 and a 47% increase for those aged 15-29.

When these admissions figures are converted to rates per million population, a different picture emerges. Table 4 shows a rate increase of 5% for those aged 30-44 but rate decreases of 16%, for those aged 15-29, and 12%, for those aged 45 and over. Therefore, for the years 1961 through 1979, there is NO evidence of increases in prison admission rates for older persons.

TABLE 3

CLASSIFICATION OF CRIME CATEGORIES USED IN THIS STUDY

CRIMINAL CODE CATEGORIES	STUDY CLASSIFICATION
MURDER ATTEMPTED MURDER MANSLAUGHTER KIDNAPPING *	HOMICIDE-RELATED
RAPE OTHER SEXUAL OFFENCES DANGEROUS SEX OFFENDER *	SEX-RELATED
ASSAULT WOUNDING POSSESSION OF WEAPONS	ASSAULT
ROBBERY	ROBBERY
FRAUD	FRAUD
BREAKING AND ENTERING	BREAKING AND ENTERING
THEFT	THEFT
POSSESSION OF STOLEN GOODS	POSSESSION OF STOLEN GOODS
NARCOTICS AND DRUGS	DRUGS
OTHER	PRISON BREECH, PAROLE OR MANDATORY SUPERVISION REVOKED, PLUS ALL OTHER.

NOTE:* DENOTES NEW CATEGORIES 1975 - 1979.

TABLE 4

AGE-SPECIFIC ADMISSIONS AND RATES OF ADMISSION INTO CANADIAN FEDERAL PENITENTIARIES - SELECTED YEARS (1961-1979)

	NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)						
	15-29		30-44		45+		
YEARS	NO.	RATE	NO.	RATE	NO.	RATE	TOTAL
1961	2084	1080	934	509	245	132	3263
1967	2185	912	952	495	264	127	3401
1973	2869	955	1049	522	312	131	4230
1979	3072	904	1244	532	267	103	4583
1961-79 CHANGE							
NO.	+988	-176	+310	+23	+22	-29	1320
%	+47%	-16%	+33%	+05%	+09%	-12%	+41%

The percentage distributions for each age group, by year and type of crime, are shown in Table 5. Several features of this table are noteworthy.

First, Table 5 A shows that for each of the years examined, the older persons' admissions were more likely to be for non-violent crimes than for violent crimes. This disputes the notion that in general, older persons' crimes are most likely to be of a violent nature. Secondly, over the 19-year period, the distribution of crimes shifted. Increases were observed in the proportion of admissions for both theft and homicide. A large increase in the percentage of crimes in the "other" category was observed over this time period. This category included breech of prison rules, revocation of parole or mandatory supervision, drunkenness, and all other categories of the criminal code not previously mentioned. More detail would be needed regarding the crimes in this category in order to offer any explanation for this finding.

Among men aged 30 to 44, it is again the case that for each of the years examined, crimes were more likely to be of a non-violent nature (see Table 5 B). Over the 19-year period, proportionate increases occurred in relation to homicide, assault, drugs and again, the category of "other crimes". When contrasted with the older mens' crimes for the year 1979, a higher proportion of break and enter and robbery and drug-related admissions occurred, along with lower proportions of fraud and theft.

TABLE 5

DISTRIBUTION OF CRIME-SPECIFIC ADMISSIONS INTO CANADIAN FEDERAL PRISONS - 1961-1979

CRIMES	PERCENTAGE DISTRIBUTION OF ADMISSIONS BY YEAR			
	1961	1967	1973	1979
A. AGE 45 AND OVER				
BREAK AND ENTER	24%	14%	10%	6%
FRAUD	19%	20%	13%	9%
THEFT	14%	20%	21%	22%
STOLEN GOODS				
SEX-RELATED	14%	14%	5%	9%
ROBBERY	6%	6%	5%	6%
HOMICIDE	4%	5%	10%	11%
ASSAULT	3%	2%	8%	4%
DRUGS	9%	6%	5%	9%
OTHER	7%	12%	24%	36%
TOTAL CRIMES	243	264	307	265
B. AGE 30 - 44				
BREAK AND ENTER	30%	26%	14%	10%
FRAUD	11%	18%	10%	6%
THEFT	13%	13%	8%	5%
STOLEN GOODS	4%	6%	5%	3%
SEX-RELATED	7%	8%	4%	8%
ROBBERY	14%	17%	12%	12%
HOMICIDE	3%	4%	8%	8%
ASSAULT	3%	5%	7%	6%
DRUGS	7%	7%	8%	12%
OTHER	9%	12%	25%	32%
TOTAL CRIMES	931	804	1046	1244
C. AGE 15 - 29				
BREAK AND ENTER	39%	31%	23%	20%
FRAUD	5%	6%	4%	2%
THEFT	15%	13%	8%	4%
STOLEN GOODS	3%	4%	5%	2%
SEX-RELATED	5%	4%	5%	5%
ROBBERY	18%	18%	20%	26%
HOMICIDE	1%	2%	4%	7%
ASSAULT	2%	3%	5%	4%
DRUGS	2%	2%	12%	8%
OTHER	10%	17%	15%	22%
TOTAL CRIMES	2081	2175	2866	3070

The crime-specific admissions for men aged 15 to 29 are shown in Table 5 C. Again, the majority of the crimes were non-violent. Admissions for many of the crimes decreased, but notable exceptions were robbery, homicide, assault, drugs and again the "other" category. When contrasted with the crimes of men aged 45 and over, the table shows that the younger men had higher proportions of break and enter and robbery convictions, and lower proportions of fraud, theft, sex-related crimes and homicide.

A closer examination of the individual crime categories was undertaken. The text will highlight both age-related differences in admissions and rates, and trends over time. Violent crimes will be considered first, i.e., homicide-related crimes, sex crimes, assault and robbery (see Tables 6-10).

Trends in violent crimes - 1961-1979

Table 6 shows the age-specific admissions and rates of admission into Canadian prisons for homicide, for the years 1961 through 1979. As with EVERY crime in these data with the exception of fraud, the admissions and rates per million population are highest for those aged 15-29, for each of the years examined; they are second highest for the middle-aged group, and lowest for those aged 45 and over.

For each age category, increases in both numbers of admissions and rates were observed over the 19-year period. The rate for the oldest group approximately doubled from 1961 to

TABLE 6

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR HOMICIDE AND RELATED CRIMES - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	26	13	21	11	9	5	56	10
1964	48	23	34	18	10	5	92	16
1967	46	19	34	18	10	5	90	14
1970	116	42	52	27	19	9	187	27
1973	122	41	82	41	32	14	236	32
1976	164	50	111	52	27	11	302	38
1979	221	65	97	42	29	11	460	55

1979. However, the rates for the middle-aged and youngest groups increased more than four times.

Table 7 shows the number of admissions and admissions per million population for assault for selected years. The rates for those aged 45 and over varied over the 19 years, increasing only slightly by 1979. In contrast, the rates for both the middle-aged and youngest group doubled over this period.

The number of admissions and admission rates for robbery, more serious than 'theft' in that the offender is usually armed, are shown in Table 8. No distinct patterns emerge for the oldest group. A decrease was observed for those aged 30 to 44. However, the youngest group showed a fairly dramatic change in rate of admission for robbery, increasing from 196 per million in 1961 to 234 per million in 1979.

Interestingly, the admissions into Federal prisons in Canada for sex-related crimes by older people decreased over the period under investigation. The admissions per million population fell from 18 in 1961 to 10 in 1979 (see Table 9). The rates rose for those aged 30 to 44, from 33 to 41 per million; they dropped from 53 to 46 per million, for those aged 15-29.

A finer breakdown of the sex-related crimes admissions is informative (see Table 10). The rates of two of the sub-groups, men ages 40-44 and 45-49, were high. In fact their rates exceeded the average rates for all ages in a number of the years examined. Tables 9 and 10 indicate, therefore, that

TABLE 7

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR ASSAULT - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	38	20	24	13	6	3	68	12
1964	66	31	41	22	16	8	123	21
1967	65	27	37	19	5	2	107	17
1970	147	54	40	21	11	5	198	29
1973	141	47	72	36	24	10	234	32
1976	164	50	61	29	7	3	232	30
1979	136	40	68	29	11	4	215	26

TABLE 8

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR ROBBERY - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	378	196	134	73	14	8	526	94
1964	406	193	117	63	11	6	534	90
1967	382	159	137	71	15	7	534	83
1970	643	235	163	84	16	7	822	119
1973	557	185	127	63	15	7	699	95
1976	812	249	142	66	17	8	971	123
1979	797	234	151	65	16	7	964	116

TABLE 9

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR SEX-RELATED CRIMES - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	102	53	61	33	33	18	196	35
1964	117	56	79	42	51	26	247	42
1967	93	39	60	31	38	18	191	30
1970	141	51	72	37	33	15	246	36
1973	142	47	43	21	15	6	200	27
1976	158	48	72	34	15	6	245	31
1979	156	46	95	41	25	10	276	33

TABLE 10

SEX-RELATED CRIMES ADMISSIONS TO CANADIAN PRISONS PER MILLION POPULATION - MEN AGED 40 AND OVER AND ALL AGES - 1961-1979

YEAR	AGE GROUPINGS				
	40-44	45-49	50-59	60+	TOTAL ALL AGES
1961	30	19	22	5	35
1962	33*	34*	12	7	30
1963	39*	38*	26	5	33
1964	47*	34	31	6	42
1965	41*	43*	24	9	43
1966	40*	20	12	3	32
1967	20	22	21	6	30
1968	34*	25*	13	6	27
1970	37*	23	15	4	36
1971	20	20	14	0	29
1972	27*	19	5	1	28
1973	11	13	4	2	27
1974	11	18	4	1	31
1975	23	5	7	1	31
1976	20	11	5	2	31
1977	27*	16	4	1	28
1978	39*	12	5	1	33
1979	23	14	13	1	33

NOTE: * DENOTES RATES EQUAL TO OR GREATER THAN AVERAGE RATES FOR ALL AGES COMBINED.

sex-related crimes are most prevalent among younger and middle-aged men, and are extremely infrequent among men over the age of 59. This contradicts the picture which is often portrayed by the media, depicting sex crimes as being associated with "dirty old men".

Trends in non-violent crimes - 1961-1979

The data show a downward trend over time in both admissions and admission rates for non-violent crimes. For several of the crimes in this category, the relative decreases are more dramatic for the younger age groups. Remember, however, that the data are biased insofar as less serious crimes are not included for multiple offenders. It is likely the case that if all convictions were included, different patterns would emerge.

Let us first consider the admissions for fraud, shown in Table 11. In contrast with every other crime, the admissions and rates per million population are highest among middle-aged men, those aged 30-44, when compared with both younger and older men. Furthermore, for most of the years under investigation, the rates for those aged 15 to 29 were double the rates for the oldest age group - men aged 44 and over. This contradicts the explanation presented earlier in the chapter regarding the "physical decline" theory of why older people commit fewer crimes.

Table 11 also shows the trends in fraud-related admissions which occurred over the 19 years of this inquiry. Among those age 45 and over, there was slight increase in admissions and

TABLE 11

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR FRAUD - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	94	49	101	55	47	26	242	43
1964	126	60	147	79	53	27	326	55
1967	127	53	145	75	52	25	324	51
1970	154	56	207	106	60	27	421	61
1973	110	37	102	51	41	17	253	34
1976	95	29	85	40	28	11	208	26
1979	60	18	77	33	25	10	162	19

rates up until 1970. This was followed by a marked decline; the rate dropped from a high of 27 per million in 1970, to a low of only 10 per million by 1979. The rates followed the same pattern for both of the other age groups.

Admissions and admission rates into Canadian Federal prisons for drug-related crimes are presented in Table 12. For the years 1961, 1964, and 1967, the rates are higher for middle-aged men than for either of the other two groups. However, thereafter, there was a marked increase in drug-related admissions for the group aged 15 to 29, and as a result, the rates are highest among younger men for each of the remaining years. The rates were lowest for those aged 45 and over, for each year examined.

The trends in drug-related admissions over the 19-year period show some interesting patterns. The rates approximately doubled from 1961 to 1979, for those aged 30-44, and more than tripled for the men aged 15-29. In contrast, however, declines were observed for the rates for older men; from 12 per million in 1961, to a low of 5 per million in 1970.

Finally, rates for the related crimes of breaking and entering, theft, and possession of stolen goods are shown in Tables 13, 14, and 15, for selected years. Again, rates are highest for the younger men and lowest for those aged 45 and over. The admission rates dropped sharply from 1961 to 1979, for each of these crimes, for all three age groups. It may be the case that as convictions for the more violent crimes

TABLE 12

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR DRUG-RELATED CRIMES - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	36	19	69	38	22	12	127	23
1964	23	11	53	28	23	12	99	17
1967	42	18	62	32	16	8	120	19
1970	155	57	48	25	12	5	215	31
1973	340	113	86	43	13	5	439	60
1976	292	90	111	52	18	7	421	53
1979	234	69	147	63	24	9	405	49

TABLE 13

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR BREAK AND ENTER - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	819	424	279	152	57	31	1155	206
1964	910	432	267	143	56	29	1233	208
1967	678	283	210	109	37	18	925	144
1970	805	294	267	137	82	37	1154	167
1973	657	219	149	74	31	13	837	113
1976	628	193	134	63	17	7	779	99
1979	631	186	118	51	15	6	764	92

TABLE 14

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR THEFT - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	318	165	118	64	30	16	466	83
1964	274	130	123	66	33	17	430	72
1967	285	123	105	55	40	19	430	67
1970	277	103	114	59	58	25	449	65
1973	223	79	79	39	45	19	347	47
1976	156	49	52	24	33	12	241	31
1979	107	38	60	26	16	7	183	22

TABLE 15

ADMISSIONS TO CANADIAN FEDERAL PRISONS BY AGE FOR POSSESSION OF STOLEN GOODS - 1961-1979

AGE GROUPINGS

NO. OF ADMISSIONS AND RATES (PER MILLION POPULATION)

	15-29		30-44		45+		TOTAL	
	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
1961	62	32	40	22	8	4	110	20
1964	126	60	55	29	11	6	192	32
1967	88	37	49	25	14	7	151	24
1970	115	42	62	32	17	8	194	28
1973	139	46	47	23	18	8	204	28
1976	101	31	49	23	9	4	159	20
1979	63	19	31	13	9	3	103	12

increased, the courts leaned towards more severe sentences for these crimes, and conversely, less severe sentences for the less violent crimes. It would be interesting to examine provincial admissions data, i.e., persons sentenced for less than two years, to see whether there were corresponding increases in admissions for the above named crimes during the same time period.

Discussion and Summary

The chapter has provided a summary of patterns of admissions to Federal penitentiaries in Canada over a 19 year period. Of a total of 70,803 male admissions, about 6% were for offenders aged 45 and over, and about 26% were for those aged 30-44. Men aged 15 to 29 accounted for 68% of the admissions.

The Canadian data once again demonstrated that older people commit fewer crimes. This relationship has interesting implications for the future. Most forecasters are predicting a population shift toward a larger proportion of seniors in the next 50 years. As a result, we should expect to experience a corresponding drop in overall crime rates. Indeed, a reduction in serious crime has already been noticed in the U.S.A. James Fife, a Criminal Justice Professor at American University, attributes some of the recent drop to the aging of the baby boom generation (N.Y.T., Sept., 1983).

In the Canadian data, fraud, breaking and entering, and, sex-related offences were the most frequent basis for admission of the older offenders, accounting for about 40% of their total

convictions. Their total admissions for the violent crimes - homicide, assault, sex-related crimes and robbery - accounted for only 27% of the admissions. This refutes the idea that the majority of older persons crimes involve violence. Were we able to distinguish between first-time and repeat offenders we might find that first-time older offenders are more apt to have engaged in violent criminal acts. We did find that between 1961 and 1979, admissions for homicide, among those aged 45 and over, doubled. It would be of interest to see whether this pattern has continued in the ensuing years.

Among those age 45 and over, the total admissions over the 19-year time period did increase, from 243 in 1961 to 265 in 1979. However, when these admissions were converted to rates per million population, the rate for the same period dropped from 132 to 103. Therefore, the data did not support the contention that criminal activity by older people is dramatically increasing.

An important trend disclosed by the study was the extent of the increase in admissions of younger offenders for crimes of violence. Our Federal prisons are becoming increasingly occupied by violent, young men. In view of this, how well do older less-violent inmates fit in to this environment? A small number of prisons in the United States have begun to segregate older inmates in separate prisons or dormitories. A 1982 survey in the United States revealed that of 51 states, four had adopted special policies, programs or facilities to accommodate elderly inmates (Goetting, 1984). One Canadian Federal prison,

in Nova Scotia, has introduced programs specifically related to older inmates' needs, and health officials have identified this group as a priority in their next five-year plan (personal communication with N. Brochu, Director of Nursing - Corrections Canada, September 9, 1986).

The material in this chapter has provided a macroscopic view of issues pertaining to criminal activity of older persons. In the remaining chapters of this dissertation, the results of a more microscopic examination of older criminals will be described.

CHAPTER III

Older Inmates: A Review of the Literature

Introduction

This chapter reviews existing theory and research pertaining to emotional, physical and social characteristics of older prisoners, and examines health-related components of prison environments, i.e., social, administrative, and stress-related factors.

Described by Ham (1976) as "a forgotten minority," this population has only recently begun to interest scholars in the fields of sociology, medicine, psychology and criminology. Few of these investigations have focused on Canadian institutions. And, as will be shown in this chapter, while the general topic of health care in prisons has been investigated with some frequency, little attention has centered on what particular services older inmates may require.

In general, research with prisoners suffers from a number of methodological and practical difficulties. For example, inmates' subjective accounts often differ markedly from objective test results; further, test biases arise from subjects becoming "test-wise," and it is believed that responses on standard tests are often contrived (McKay et al., 1979). In attempting to arrive at the "truth", a triangulation of research methods would seem to be preferable to relying on a single method of inquiry. For example, data could be collected from both inmates and prison staff on a given topic, an approach not

found in the literature on older inmates.

The research to date is largely cross-sectional. This is undoubtedly influenced by the fact that longitudinal studies in prison are hindered by inmate turnover, the aforementioned testing effects, and a tendency for inmates to refuse to participate in research for which they can see no immediate payoffs. Consequently, little is known about patterns of inmate behavior which occur over time.

In studies pertaining to health, those which relied exclusively on prison medical records have unique problems. It has been found, for example, that many inmates use health services for reasons other than those which they acknowledge openly. They may be hoping to avoid work, make social contacts, interact with the nurses, or procure drugs (Sheps & Schecter, 1984). These motives are usually hidden and the information recorded on official charts tends to reflect only stated medical complaints.

The existing research on <u>older inmates</u> suffers from limitations in generalizability in that small, non-random samples have most often been used. In addition, few studies compared older inmates with non-incarcerated elderly populations, thereby making the effects of imprisonment per se difficult to ascertain.

Intelligence, Personality and Socio-demographic Characteristics of Older Inmates

A number of researchers have investigated various personality and socio-demographic characteristics of older criminals - both arrestees and men in prison. According to Rubenstein (1984), the findings in this area have generally been inconclusive or contradictory. He noted that in the area of intelligence, for example, a study by Wiegand and Burger (1979) characterized older criminals as competent, quick and shrewd, while Panton (1974) found the majority to be poorly educated, with low IQs and a strong likelihood of mental retardation. These inconsistencies illustrate the general difficulty in attempting to characterize this population -- perhaps suggesting that better interviewing methods and measuring techniques are needed.

A comparison of MMPI (Minnesota Multiphasic Personality Inventory) test results, between 120 older inmates and 2,500 younger ones, was made by Panton (1977). A number of interesting differences were found:

> aged inmates demonstrated greater anxiety, despondency, apprehension, and concern with physical functioning. They appeared somewhat naive and self-centered, were likely to be demanding of attention and support, and appeared inclined towards the avoidance of responsibility. They expressed feelings of inadequacy and insecurity and were likely to be easily influenced and intimidated by younger, more aggressive inmates....They appeared to have limited ability to cope with situational stress and appeared to have difficulty in personal adaptability and resourcefulness. (p. 203-209)

Older first-time offenders appear to differ from older

career criminals, i.e., recidivists, in several ways. Usually from a higher social class, they are more often married and tend on the whole to have more positive attitudes about life. They are less socialized into the prison culture than chronic offenders (Keller & Vedder, 1968). Cormier et al. (1961) found that personal problems were common among sex-offenders who commit their first offence in their 40s; they were often preoccupied with past failures in work or personal relationships.

The Effects of Prison on the Aging Process

It is interesting to consider the effects which prison environments may have on psychological and physical aspects of aging. Several studies have addressed this, although in this area of study, scientific control is next to impossible because of the large number of uncontrollable variables (McKay, H., Jayewardene, C. & Reedie, P., 1979).

Gillespie and Galliher (1972) examined inmates' views on whether their surroundings contributed to premature aging. Most young and middle-aged inmates thought that the social experience of prison life retarded aging. Those aged 60 and over, on the other hand, often expressed the opinion that they were aging too quickly; their reasons included strain associated from close confinement with young "trouble-makers" and strict regimentation of daily life.

Johnson and Toch (1982) observed that older inmates tend to be overly concerned with physical and mental deterioration. As

a result of isolation from men of the same age, they may view normal changes that occur in the aging process -- hearing loss, less acute eyesight, etc. -- as aberrant, or peculiar to themselves.

The Effects of Long-term Incarceration

Few studies have demonstrated that lengthy incarceration poses undue risks to emotional or physical well-being. In a survey involving 1270 inmates from both maximum and medium security prisons, long term offenders who were in their first three years of their sentence reported higher levels of anxiety, depression, and psychosomatic illness than did those who had served six or more years. In addition, they had poorer self-esteem and more fear of other inmates (MacKenzie & Goodstein, 1985).

However, there is evidence to suggest that following lengthy confinement, long-term inmates may develop a constellation of behaviors and feelings similar to those described in the literature on nursing homes and mental hospitals. Researchers have used various terms to describe this phenomena, e.g. "institutionalization" and "institutional neurosis." This area of study is complicated by the fact that the behaviors bear close resemblance to those indicative of several psychiatric and developmental disorders. An examination of some of the work in this area will serve to illustrate these issues.

Mackenzie and Goodstein (1985) note that the term

"institutionalization" is generally used to describe a process involving "losing interest in the outside world, viewing prison as home, losing the ability to make independent decisions, and in general, defining oneself totally within the institutional context" (p.398-399).

In a study which investigated the long-term effects of imprisonment in Germany, Rasch (1981) examined the records of those serving life sentences. While he found no evidence of abnormal rates of physical or intellectual decline over time, about half of the subjects showed evidence of "emotional withdrawal and apathy." For some, this may have been evidence of "institutionalization." However, Rasch noted that over time, inmates frequently put up emotional barriers that prevented clear differentiation of illness such as depression.

Describing similar phenomena, Hicks and Alpert (1978) reported a high incidence among older inmates of what they termed "institutional neurosis," a condition manifested by "lack of desire for freedom, mechanical behavior and general inexpressiveness."

In this author's opinion, this same pattern of behaviors could also be an expression of unresolved developmental tasks in middle age, manifested by a state of despair as described by Erik H. Erickson (1978).

Dr. George Scott, a well known prison physician, has described the effects of regimes in Canadian institutions as "appallingly destructive," observing that inmates frequently

undergo dramatic psychological deterioration. He has outlined the dynamics of the process as a succession of well defined stages.

The inmate may give initial indications that serious trouble is underway by displaying unusual irritability, intolerance for others and psychosomatic complaints. Later, impulsivity and impatience may become marked along with an exaggerated fear of violence; social situations of all kinds are seen as threats and he may refuse to work or demand solitary quarters. A further stage is often signaled by a bizarre disregard for personal hygiene, and more seriously, manifestations of strong paranoid ideation, accompanied by complete rejection of peers and reckless verbal assaults on the guards or staff. Finally, behavior may become violent and dangerous: destruction of personal belongings and living quarters, assault, self-mutilation and suicide attempts are not uncommon (Scott, 1983). The extent of such serious maladjustment among older inmates is worthy of further investigation, and it is clear that longitudinal research is necessary if a complete understanding of these patterns is to be attained.

In summary, while the majority of prison studies have concluded that long-term incarceration produces few demonstrable disabilities, several researchers have found that long-term inmates may develop severe apathy and withdrawal. A number of important questions remain unanswered. Exactly how many men are affected by this condition? Why are some affected while others

are not? What proportion of these men are suffering from conditions unrelated to the stress of institutionalization, i.e., developmental crises or depression? And more importantly, is it possible to prevent this condition or treat it once it has been diagnosed?

The following sections review literature related to stress and coping in prison, underlying themes in many studies of prison life.

Effects and Sources of Stress Among Older Inmates

Lazarus and Folkman (1984) define stress as "a particular relationship between a person and his environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p.19). The study of stress has become important in modern times since it has been closely linked with many causes of morbidity and mortality (Stanhope & Lancaster, 1984).

In an interesting study involving 133 male prisoners, a strong relationship was found between an increase in reported stress (operationally defined as the total number of worries, upsets, aggravations, obstacles, sources of tension, or stress), and, impaired functioning of the immune system. The later was in turn associated with severe upper respiratory infections (McClelland, Alexander & Marks, 1982).

There is some evidence to suggest that prisons may be particularly stressful for older men. In his research involving

204 maximum security inmates, Jones (1976) found that on average, those aged 45 and over exhibited many more symptoms of psychological distress, an indirect measure of stress, than either middle-aged or young inmates.

A recent study by Vega and Silverman (1987) examined stress and anger among 40 minimum security inmates between the ages of 63 and 80. The State-Trait Personality Inventory (Spielberger, 1979) and Anger Expression Scale Scale (Spielberger, 1985) were administered. Stress levels were inferred from the sub-scales which measured both anxiety and anger. No differences were found on the anxiety and anger sub-scales, when these subjects were compared with a sample of men age 20 to 58 in a higher security prison. The older subjects did however have significantly higher scores than a non-inmate standardization group, on several of the sub-scales, i.e., State and Trait-Anxiety scales, State and Trait-Curiosity scales, and State-Anxiety scale. The authors suggest, therefore, that while older men often behave like model prisoners, their emotional reaction to imprisonment is as severe as that of younger men.

Next we consider specific sources of stress inside prison. In general, the research on this topic suffers from a lack of consistency in categorizing sources of stress and a corresponding lack of valid and reliable data-collecting instruments. However, a great deal has been written on the subject.

Descriptions of prisons typically depict them as

overcrowded warehouses, devoid of meaningful stimuli; boredom, anxiety and depression are the norm, and physical violence becomes a primary outlet for tension (Puri, 1985). Sexual tension, continuous observation and frequent struggles for power are factors that may result in stress-related disorders.

Ham (1976) documented that older inmates are particularly affected by insecurity, exaggerated fears of illness and pain, and great anxiety about attacks from young black inmates. Krajick (1979), a journalist, conducted several interviews with older inmates in various age-segregated facilities. He reported that their greatest sources of stress were boredom and loneliness. He noted that these men lacked opportunities for employment and hence had no way of earning institutional privileges and parole.

Coping with Stress in Prison

There are, of course, wide differences in the ways that individuals cope with the stresses associated with prison life. In general, the research on coping in prison has not kept pace with the rich developments in the general literature on coping. For example, no study was found which differentiated between coping orientation and coping mode as defined by Lazarus and Launier (1978).

Because of the unique stresses in prison, and the unique rules and norms which govern behavior, patterns of coping take on a number of interesting dimensions. For example, Toch (1977) found that a victim of violence in prison is often caught in a

double bind; he knows that inmates and staff respect a man who can stand up for himself and fight back, but is also aware of the risks this poses for release or parole. When violence is used by a victim, Toch claims that it is usually at a point when a man feels pressed beyond endurance and he "snaps", rather than a deliberate attempt to display manly force. Another unique feature of coping in prison is the "search for safety" through establishing protector-protectee relationships or by identifying "niches" within the prison - places which afford privacy, safety, and structure (Toch, 1977). Coping and survival may therefore become synonymous inside the prison walls.

Several studies have attempted to describe how inmates deal with stress. The focus of much of this work has been on general adjustment to prison, rather than on how inmates cope with any particular stressor. For example, Johnson identified several strategies which seem to contribute to personal adjustment in prison. Dignity and manhood appear to be preserved by the adoption of a "tough-guy" stance: one who is cool, aloof and in control of his emotions at all times. Physical prowess is highly valued.

In an interesting study which looked at the effects of incarceration history on adjustment to prison, it was found that older inmates with no previous history of incarceration manifest the most difficulty in adjusting to prison (Lipman, Lowery, & Sussman, 1985). "Old cons", who had been in and out of prison many times, and old "lifers", who had committed one serious crime when they were younger, appeared to adjust to prison

remarkably well by comparison. It was suggested that this may occur because both of the latter groups of inmates are better prepared as a result of past experience.

Some men not only adjust to prison but appear to thrive, developing new resources and strengths. Reed and Glamser (1979) suggested that for some older men, prison is seen to be a "sanctuary" where adequate housing, nutrition and medical care are provided and personal responsibilities are minimal.

Lazarus and Folkman (1984) distinguished between coping that is directed toward managing or altering the stressor, and coping that is directed towards regulating the emotional response to the stressor. The former is referred to as "problem-focused" coping and the later as "emotion-focused" coping. Vega and Silverman (1987) found that among elderly inmates, denial and avoidance accounted for nearly 50% of the reactions inmates reported in relationship to their "most disturbing problem". Further study on these patterns is warranted.

Prison Employment and Programs

In a very broad sense, involvement in work, recreation, and social activities can be viewed as important means for coping with stress in prison. For example, Mark Filan (1977) noted the potential physical and psychological damage that can occur from enforced idleness and cited examples of prison riots which were related to lack of suitable work and recreation. Of course for some inmates, enforced involvement may be perceived as a source

of stress.

Older inmates - particularly those serving longer sentences - may be under-served by existing prison programs. For example, Goetting (1984) found that they had low rates of participation in many prison activities. Vega and Silverman (1987) reported that 40% of their subjects (ages 63 and over) did not participate in any prison programs, and a further 32% were involved in only one program.

The literature suggests that many prisons fail to offer programs which are appropriate for inmates in this age group. A number of reasons have been suggested to explain why prison programs tend not to account for the needs of both older inmates and and those with lengthy sentences (Vito and Wilson, 1985; Flanagan, 1986):

1) There has been little research into the program needs of these inmates.

2) Older inmates are considered to be past their prime and therefore unmotivated as well as unteachable.

3) These inmates tend to do their time quietly, making few demands for any special consideration.

4) There is more immediate pay-off in focusing on short-term inmates since a major goal of the system is to facilitate successful release.

5) Long-term inmates are usually in for more serious crimes and

are therefore less valued when priorities are being set.

6) The demands of day-to-day management, with increasing numbers of inmates and decreasing budgets, may take precedence over the needs of any special category of prisoners.

Social Support in Prison

The importance of social support for emotional well-being is a central theme in the philosophy of modern health practitioners. Gottlieb (1985) claimed that people appraise stress more benignly when they have a strong sense of support. This has been demonstrated repeatedly among older populations, in studies of relocation stress, widowhood, and discharge from acute hospitals (Elwell, 1986). A number of interesting factors and issues affect social support networks of prison inmates.

One major factor relates to the "inmate code" which places strong value on "doing your own time", a taboo against acknowledging or sharing feelings (Toch, 1982). There are also stigmas associated with befriending certain types of criminals, particularly sex offenders. Even if they overcome the initial aversion to selecting a friend among thieves, rapists, murderers and homosexuals, inmates find that long-term relationships are difficult to sustain; their associates are frequently relocated or discharged (Cohen & Taylor, 1981). Strains on relationships are also imposed because of close physical proximity and lack of privacy.

According to Cohen and Taylor (1981), alliances with staff

members are frowned upon, in spite of the fact that guards and inmates often come from the same social class. The "us" and "them" split appears to be one form of coping and is perpeptuated by the inmate code. Interestingly, notorious criminals often consider themselves to be superior to the guards and would therefore not want to associate with them even if it was sanctioned (Cohen & Taylor, 1981). It is of interest to know whether older inmates are as reluctant to avoid friendships with the staff as are younger men; no previous studies have appeared to address this question.

Imprisonment also precludes the fulfillment of mutual roles with friends and family on the outside and these alliances tend to deteriorate over time (Parisi, 1982). In the Orientation Manual (1987) developed by inmates in a British Columbia prison, the difficulties encountered by visitors are outlined as follows:

> Most visitors find their experience at the gatehouse a time of high anxiety, mainly because there might be inconsistencies in procedures. Some staff will allow in hairbrushes, lighters, gum or other similar items ... Staff also vary in their treatment of visitors. Some are polite and friendly, while others are not. Many women visitors find they feel the staff look down on them for being prisoners' wives. They find they have to bottle up their emotions, because if they argue, or lose their tempers, or disagree with the staff, it could be said they have a negative attitude. Because of these factors, many visitors can get very frustrated and confused... the V&C area [visiting room] is noisy, confused, crowded, and lacking in privacy...You can't get into an argument or cause a scene or they [the staff] may come out and reprimand you or cancel the visits for a day, or up to a month...

Prisoners' support networks are influenced by other

administrative restrictions. Rules govern who one may write to, visit or telephone; the contents of incoming and outgoing mail are censored and, conversations are monitored. Physical contact during visits may be prohibited. In summary, the factors outlined above make it difficult for many inmates to sustain strong social support networks. Since prisons are apt to contribute to high levels of tension, absence of support from family and friends as a buffer of stress is an important issue.

Some prisoners prematurely terminate relationships with loved ones in order to avoid pain from visits or an anticipated "Dear John" letter (Cohen & Taylor, 1981). And some find that they no longer relate to their former associates. During their imprisonment, they may have undergone changes in their personalities or lifestyles so as to render former friends incompatible. For example, some adopt a new religion, become dedicated to abstinence, or take a college degree. Few opportunities exist for an inmate to make new outside contacts.

In terms of social resources, <u>older inmates</u> often appear to be particularly disadvantaged. They are apt to be separated or divorced, and if they have spent many years behind bars, their contacts with friends on the outside may have dissipated. Although many have children and grandchildren, contacts with them appear to be rare (Reed & Glamser, 1979). Since their serious crimes often involve violence against a family member (e.g. murder or incest), alienation of kin is further enhanced (Vega and Silverman, 1987).

While they appear to have difficulty in maintaining external networks, older inmates have been found to form close ties inside prison. Vega and Silverman (1987) found that only three of their 40 subjects, age 63 and over, claimed to have no friends inside. The researchers noted, however, that "while claiming to have friends in the inmate population, many of the subjects indicated some degree of mistrust and reservations about these friendships" (p.16).

Inmates' Health and Use of Health Services

Many papers related to specific health problems of prisoners appear in the medical literature. But, in general, concern with age as a topic is rare, with attention usually devoted to disease. Examples, which convey the often desperate quality of prison life, include: infections related to tattooing, stress-related disorders and injuries resulting from homosexual rape.

Alcoholism and related disorders have received considerable attention in the literature pertaining to health of prisoners. It appears to be a prevalent disorder among older inmates. In a study of 292 inmates aged 50 and over, selected from a national database, Jennison (1986) found that 59% of the offenders had previously been convicted of a violent crime which was alcohol connected.

While a number of studies have focused on health care utilization patterns in prisons, a general failure to report morbidity by age group is conspicuous (Demers & Walsh, 1981;

Engebretson & Olson, 1973; Young & Carr, 1976; Sheps & Schecter, 1984). Another general limitation is the characteristic bias toward a narrow and traditional definition of health; broader definitions, which include aspects of physical, social and emotional well-being, and high risk behavior - not merely the presence or absence of disease - are desirable.

Only four studies were found which reported findings related to the health needs of older inmates. Adams and Vedder (1961) reviewed prison records of men age 50 and over admitted to a large Southern state prison between 1944 and 1955. They concluded the following:

> Except for a greater amount of malingering, more resentment of authority, and the extremely unnatural environment of custody, the medical problems of the aged prisoner are not vastly different from those of the aged person in the free world (p. 178).

Twaddle (1976) examined the records of 300 men in a large midwestern state prison, compiling information on personal characteristics, length of time in prison, health histories and use of health services. He found that prisoners make use of health services much more frequently than those not in prison; nearly five per cent of the prison population was seen every day. Of particular interest was his finding that prisoners aged 35 and over used the health services less frequently than did younger inmates, despite a higher incidence of reported illness. This relationship appeared to exist regardless of length of sentence.

A comprehensive study of inmates' health at Tennessee State

Penitentiary was conducted by David Jones (1976), encompassing a variety of physical, emotional and functional characteristics. Data collection methods included both interviews and use of prison records. Among prisoners age 45 and over, Jones found that respiratory conditions were the most frequent medical problem; the incidence was 35% higher than in the general population. Compared to younger inmates, they had much higher overall rates of sickness and hospitalization. Differences were found between white and black inmates. Among whites, those aged 45 and over had the highest mortality rates, but for blacks, the highest rates were for inmates who were between the ages of 35 and 44, and were often violence-related.

Vega and Silverman (1987) also examined health problems of 40 older men in prison. Only 20% of their subjects claimed to have no health problems, while nearly 40% cited three or more conditions. Of those with problems, heart conditions were the most prevalent -35%- with hypertension and pulmonary disease tied for second at 10% each. Nearly 60% reported having occasional or frequent headaches. Forty percent claimed to be dissatisfied with the medical care they had received.

It is reasonable to conclude, therefore, that older inmates suffer from age-related disorders similar to those found in the general population. Furthermore, they appear to have increased rates of particular illness, i.e., infectious illnesses and stress-related disorders. Both Edwards (1983) and Hagel (1982) suggest that although they have unique needs, old and infirm inmates are not usually afforded opportunities for specialized

treatment in prison. Few prisons are equipped to provide physiotherapy, cardiac monitoring, equipment for helping handicapped persons with tasks of daily living, wheelchair ramps, etc.

Lifestyle Behaviors and Health Promotion Needs of Men in Prison

There is a growing body of evidence to support the idea that health is determined by both the environment in which people live, and, the patterns of behavior that they adopt (Milio, 1981). The 1979 U.S. Surgeon General's Report claimed that today's leading killers - cardiovascular disease, cancer, lung disease, accidents and violence - are strongly related to both health habits and environments.

A positive relationship between specific health practices and physical health was demonstrated in a series of studies by Beloc and Breslow (1972). Their research involving residents of a California county found that substantial increases in life expectancy appear to be associated with several patterns of behavior. These included obtaining adequate rest and regular exercise, maintaining proper weight, using alcohol in moderation and not smoking. A 45-year-old man who followed three or fewer of these habits could expect to live to age 67. If he followed six or seven, he could expect to live to age 78. Wetzler & Cruess (1985) further demonstrated that mortality was inversely related to these health practices, as were visits to the doctor and days spent in hospital.

It is difficult to prove scientifically that specific behaviors cause specific illnesses. However, there is considerable research to suggest for example, that smoking, lack of exercise and high dietary cholesterol are associated with increased risk of cardiovascular illness. Furthermore, it has been shown that changes in these lifestyle behaviors can change the incidence of cardiovascular illness (Maccoby, N., Farquar, N. Wood, P. et al., 1977; Farquhar, J. Maccoby, P., Wood, P. et al., 1977; Walker, W., 1977).

There has apparently been NO research pertaining to health habits of prison inmates. This is somewhat surprising since the author's personal observations suggest that they are at particular risk for illness as a result of lifestyle behaviors (Gallagher & Beecher, 1987). In one Canadian penitentiary, we observed that many inmates were extremely passive in their attitudes toward medical care, and were apparently unconvinced that personal choices affected their health. Most were heavy smokers, fasts and other fad diets were popular, and many of the men we encountered acknowledged great difficulty in handling stress. Covert drug and alcohol use was clearly prevalent. Clearly, a better understanding of health-related lifestyle factors among inmates is needed.

Attitudes of Prison Personnel Towards Older Inmates

One important factor which influences the quality of life in prison is attitudes of the prison personnel towards the inmates. No empirical studies were found in relation to

attitudes toward older inmates. On the basis of several interviews with prison officials, Krajick (1976) suggested that many prison employees have quite positive stereotypes of these inmates. For example, several officials who he interviewed said that the older men exercise a stabilizing influence over younger ones, and in general, seem to be less difficult to manage. One administrator expressed sympathy for their apparent loneliness and isolation.

However, their positive stereotypes do not appear to have been translated into policies or programs directed towards this segment of the inmate population. As one official noted, "there are other much larger populations that we have to be concerned with" (Krajick, 1979). As well, negative stereotypes towards both criminals and the elderly, which are prevalent in our society in general, undoubtedly influence administrative decisions within correctional facilities.

Conclusions and Implications of the Literature Review

This chapter has provided an overview of literature pertaining to older men in prison. It has highlighted a variety of research findings, issues and unanswered questions.

The vast majority of studies to date have been conducted in the United States. Consequently, the need for Canadian research was firmly established. Secondly, considerable effort has been made to describe personality and social characteristics of older criminals and inmates. However, little is known about their health. Isolated findings do suggest that older inmates may

have unique physical, social and mental health problems, and as well, may have unmet needs for specialized services and programs. Further clarification of these issues is needed.

In the few studies which did investigate health-related issues, only narrow, traditional definitions of health were used, i.e., medical diagnoses. This was reflected in the narrow range of variables under investigation. For example, no previous research was found concerning health-related lifestyle behaviors of men in prison. In Chapter I, a comprehensive definition of health was adopted for this dissertation. As a result, a broader range of social, emotional, behavioral and environmental factors were incorporated in the present study, as described in the remaining chapters of this report.

CHAPTER IV

Methods and Procedures

This chapter outlines the methods and procedures used in the present investigation. It describes the study settings, methods of obtaining samples, and the instruments and procedures used in collecting data.

The Study Settings

Three Federal prisons in British Columbia, each with a medium level of security, were selected as sites for this study. Only one level of security was chosen in order to reduce the number of independent variables. The three prisons were selected because of their geographic proximity to the researcher. Referring to them by number so as to protect anonymity, a brief description of each prison follows. Unique features may help to explain differences found among the prisons on the key variables in the study. In particular, the prisons had different program emphasis with regards to work and educational offerings.

Prison One, located on Vancouver Island, currently houses about 170 inmates. With water on three sides, it is a picturesque and tranquil setting. Deer and rabbits roam on the property and inmates can often be seen salmon-fishing or hauling logs from the ocean for firewood. Most of the inmates have been transferred from other prisons, either to be closer to their families, or because they have done "good time" elsewhere. Work

opportunities here focus primarily on prison maintenance activities: laundry work, kitchen duties, grounds maintenance, etc. Inmates are able to enroll in a variety of high school, university and trades courses, although a number noted that upper level courses or advanced trades training opportunities are very limited.

The hospital, located on the periphery of the compound, is only one year old; it is spacious, housing several beds for inmates requiring 24-hour care. As in other Federal prisons, health care is provided on a contract basis by nurses, one or more physicians, a dentist, an optometrist, and other personnel as deemed necessary. Inmates requiring x-rays or special treatments are transported under guard to local clinics or hospitals. The vast majority of the nurses' time is spent dispensing medicines at "pill parades" and administering first aide.

Prison Two, which houses about 230 inmates, is located on the lower mainland of British Columbia. From the outside, it fits the stereotype of a prison structure, with barbed wire fences on all four sides. However, the clusters of attractive living units, well-equipped gymnasium, and pleasant library reflect a standard in prison design which has been envied by visitors from around the world. There are several large industrial shops, where woodworking, welding and painting are contracted for by various federal government departments. The health clinic, situated close to the living units, is well-equipped but has no beds for 24-hour care and provides only on-

call service during the night. According to the inmates, shackles are used when these inmates are transferred off the premises for specialized medical treatments or examinations.

Prison Three, with about 130 inmates, is also on the lower British Columbia mainland. The living units and many of the administration offices are in long rows of metal trailers. Until recently, the prison was used primarily to house older inmates. As a result of changes in policy, it now houses inmates who do not fit into the general prison population - e.g., sexual offenders and informers. The school is situated within the enclosure, and during the week of the study, appeared to be a hub of activity. The health clinic is also in the centre of the compound. It appears to suffer from space limitations, and, like the clinic at Prison Two, offers no in-patient service or on-site night coverage.

Sample Selection

A total of 92 inmates and 8 senior prison officials participated in this study. While efforts were made to select a representative sample of inmates, the officials who were interviewed were purposefully chosen and may not represent the views of prison officials in general.

Selection of The Inmates

In order to select a representative sample of inmates, the researcher was provided at the outset with alphabetically ordered lists of all inmates - including birthdates and

estimated sentences - in each of the three prisons. All women, and men between the ages of 31 and 44, were excluded from the lists. Commencing at the beginning of the alphabet, every second name was selected, until equal numbers of older and younger men, equal numbers of men with shorter and longer sentences, and equal numbers in each of the three prisons, were obtained. One hundred and thirty-six names were drawn. The sample purposefully had proportionately more older men in it than did the prison populations in the study.

Ninety-two interviews were completed. All eligible and willing subjects were interviewed in prisons One (n=32) and Two (n=30). When thirty interviews were completed in Prison Three, a decision was made to discontinue the survey. Those from the initial pool who were not interviewed included: 6 who refused to participate in the study, 28 who were out on passes or day parole, or were transferred or released, and, 14 who were not interviewed because of the decision to end the survey in Prison 3. Table 16 shows how the interviewed and non-interviewed subjects were distributed among the prisons and age groups. No systematic bias is apparent.

The final sample included similar numbers of older and younger men, 48 and 44 respectively, almost equal numbers of men in each of the three prisons - 32, 30 and 30 - and approximately equal numbers of men who had spent 4 years or less in prison (n=47) versus more than four years (n=45).

TABLE 16 INTERVIEWED AND NON-INTERVIEWED SUBJECTS BY AGE AND PRISON

	AGE GROUPS				
	YOUNGER (30 AND UNDER)		OLDER (45 AND OVER)		
PRISON	INT*	NON-INT**	INT	NON-INT	ROW TOTAL
	(n)	(n)	(n)	(n)	(n)
PRISON 1	16	7	16	6	45
PRISON 2	16	7	14	8	45
PRISON 3	12	10	18	6	46
TOTAL	44	24	48	20	136

INT = INTERVIEWED SUBJECTS

NON-INT = NON INTERVIEWED SUBJECTS

Selection of Senior Officials

In addition to the inmate interviews, 12 interviews with senior prison officials were planned, eight of which were completed. At each of the three prisons, interviews were conducted with the chiefs of Health Care Services and deputy wardens in charge of programs. Attempts were made to also include the warden and one physician at each prison. Because of their time constraints, none of the wardens could be interviewed. The Assistant Warden was interviewed at Prison 2; the warden was involved in trying to resolve a work stoppage by inmates. Also because of their time constraints, only the Prison 3 physician participated, and he did so by mailing the questionnaire to the researcher one week after the interview period. Thus, the total number of officials who participated was eight.

Procedures

Following approval of the Research Committee of the Correctional Service of Canada - Pacific Region - and the Ethics Committee of Simon Fraser University, an information letter was sent to prison officials and potential inmate subjects. (Copies of approval letters and requests for subject participation are included in Appendices A through D.) Prior to commencing with the interviews, the researcher also attended staff and inmate council meetings at each prison in order to explain the study. Complete cooperation was subsequently received from the

administration, staff, and the vast majority of the inmates.

All interviews were conducted by the author. On the day of the inmate interviews, subjects were invited by telephone or intercom to come to the appointed interview room. At Prison Two, the procedure differed slightly in that written notices were required one day in advance in order to allow changes in work schedules. This did not appear to affect the response rate.

At Prison One, the interviews were done in a doctor's office in the health clinic. At Prison Two, an office was provided in the Psychology Department, adjacent to the health centre. An office in the patient classification building was used at Prison Three. The offices were similar in that each afforded complete privacy, however, the differing locations could have produced variations in the inmates' perceptions of the purpose of the study, thereby altering their responses in subtle ways.

Interviewer bias was reduced by conducting the interviews blind as to the nature of the inmate's crime, sentence, or health status. A few moments of casual conversation at the outset of each interview helped put the subjects at ease. A number of men digressed from the interview to discuss highly personal concerns; several broke down in tears.

It is worth noting here that at no time did any of the inmates behave inappropriately towards the female researcher. On the contrary, they seemed anxious to make a good impression.

Seven of the men came back a second time to voluntarily share photographs, newspaper clippings, or examples of handicrafts in which they took pride. One man claimed he enjoyed participating since it provided a chance to show the outside world that "we are not all such bad guys after all".

Written consents were obtained at the time of the interviews (see Appendices E and F). The assurance of confidentiality was an important issue for most of the subjects. Once convinced of this, most seemed to welcome the opportunity for a discussion which they perceived to be "off the record", an apparently rare experience in prison.

The Instruments

Interview schedules, consisting of structured and semi-structured questions, were used to guide the interviews. In order to improve their content validity and clarity, the schedules were reviewed by a panel of three experts in the corrections field and modifications were made. Also, prior to final use in this study, the inmate questionnaire was pre-tested on 20 inmates at the Vancouver Island Correctional Facility, a provincial prison located near Victoria, B.C. Modifications in the order and wording of several questions were subsequently made, and several questions were deleted.

An initial plan to use data from the psychologists' assessments was not feasible, since it was found that they are not routinely done in each prison, and where they do exist, they vary widely in terms of format and content.

The Inmate Survey

Data for the inmate survey, Appendix G, were obtained from page one of the inmates' case files, and from a personal interview. The instrument was developed to collect data on the following:

1) Demographic and incarceration characteristics

2) Independent variables consisting of:
   a. age
   b. length of time spent in prison (total lifetime)
   c. prison

3) Dependent variables consisting of:
   a. involvement in prison programs and activities
   b. social support resources
   c. physical health status
   d. mental health status
   e. use of and satisfaction with health services

Information concerning demographic and incarceration characteristics consisted of the following: marital status, education level, number of children, length of present sentence, nature and number of present offences, and total number of prison sentences (including present sentence). Birthplace and nationality (i.e., citizenship) were also recorded. However, since only four subjects were foreign born, and all claimed to be Canadian citizens, this was omitted from the analysis. The formats for these questions conform with those generally used in

sociological surveys.

Data pertaining to the three independent variables were obtained as follows. The inmate was asked his birthdate, thereby allowing assignment to either the "older" or "younger" age category. Inmates were asked how much time they had spent in prison altogether, and were subsequently divided into those who had spent five or more years in prison and those who had spent less than 5 years. The researcher recorded the prison, assigning a code of 1, 2 or 3.

Data were collected on five dependent variables. First, involvement in prison programs and individual activities was assessed in Questions 1 - 5 of the interview schedule. Paralleling the questions used in Goetting's 1983 study, the questions recorded the hours which inmates spent in an average week engaging in various prison programs and individual activities. Inmates were also asked how many hours they worked in an average week and their daily rate of pay.

Social support resources were assessed in questions 17 through 22. Inmates were asked about the numbers of mail, telephone, and face-to-face contacts they had had with friends and family, in the preceding month. They were also asked how many close friends they had inside the prison and whether or not they had a confidante. These questions are consistent with the literature on social support which asserts that the number of contacts with support network members is a relevant indicator of support and that the presence of a confidant may be the most

singularly beneficial element in a support network (Mueller, 1980; Brown, et. al., 1975).

The inmate's physical health status was assessed in several ways. First, his record of drug and alcohol use on admission was recorded from the prison file (see question 6 - Part One). Second, Question 6 on the interview schedule (Part Two) asked the inmate about health problems encountered in the preceding 12 months. The items in this question corresponded to the major categories in the ICDA 9, an international classification system for reporting acute and chronic disease (Wood, 1975). Both the classification system and time frame are consistent with the methods used by Jones (1976) in his study of Tennessee inmates.

Question 7, also pertaining to health, asked whether inmates had experienced self-mutilation, assault, and/or injuries from work or sports. Richmond (1975) described these as common among inmates, in his book entitled Prison Doctor. None of the inmates claimed to have engaged in self-mutilation, and only one claimed to have been assaulted; consequently, these items were omitted from the analysis. A fourth item relating to vision and hearing problems was added, in light of the prevalence of sensory declines among older people in the general population.

Question 13, a health habits checklist, was adopted from the items on the United States National Health Survey described by Wetzler and Cruess (1975). One additional item was added concerning the use of non-prescribed (i.e., black market) drugs

in prison.

Four indices of mental health were included in the instrument. Question 14 asked the inmates what sorts of things bother them in prison. The responses were later coded for analysis and discussion. Question 15, the Prison Stress Scale, asked about the frequency with which they encountered specific prison-related stresses. The items were based on work by Sykes (1966), Krajick (1979), Goetting (1984), Richmond (1975) and Johnson and Toch (1982). This literature suggests that loss of freedom, loss of usual roles, sexual deprivation and regimentation may be more problematic for younger men in prison. In contrast, among older men, theft, noise, loss of social support and fear of violence may cause more problems.

A third measure of mental health was a scale of symptoms of psychological distress (question 16), adopted from the Omnibus Stress Scale described by Jones (1976). He claimed its main value is in detecting feelings associated with anxiety and depression, the two most common mental health problems among inmates. Inmates were also asked how frequently they experience loneliness (question 22).

Use of health clinics and satisfaction with these services were assessed in questions 8 through 12. Question 8 asked inmates how many visits they made to various personnel in the prison health clinic in the previous month, the time frame used by Sheps and Schechter (1984) in their British Columbia study on prison health care. Inmates were also asked to rate the health

care in prison as poor, good or excellent (question 9). They were also asked to describe difficulties they or others had had in obtaining health care, and to suggest ways of improving prison health services (questions 10 through 12).

A final open-ended question allowed inmates to express views or ideas not previously discussed in the interview.

The Officials' Interview Schedules

The research questions for this part of the study were designed to be hypothesis-generating rather than hypothesis-testing. Information was gathered on the following:

1) Stereotypes of older inmates.

2) Perceived differences between older and younger inmates' stress and adaptation to prison life.

3) Difficulties encountered in delivering services to older inmates.

4) Views regarding the need for, and problems associated with, age-segregated prisons.

5) Among health officials, perceived differences in the types of illnesses among older and younger men.

In order to assess stereotypes, officials were asked an open-ended question about how they would characterize older inmates in general (question 1). Krajick (1979) found that in American prisons, many officials favoured older inmates. He recorded comments such as the following; "those who can work are

good employees," "they help to keep the young ones calm," and "they keep to themselves so they won't get run over".

Perceived differences in stress and adaptation to prison life, between older and younger inmates, were assessed in questions 3, 4 and 8. Question 3 asked whether they thought older men used a variety of services and programs more, the same, or less often than younger men. Several studies have found that they participate much less frequently in health services, educational offerings, recreational programs and work (Goetting, 1984; Krajick, 1979; Jones, 1976; Twaddle, 1976).

Additional aspects of adaptation were assessed in question 4. Krajick (1979) and Goetting (1984) suggested that older men may have more difficulty obtaining parole (item a) and more problems maintaining ties with friends and family (item b). The literature also suggested that they break prison rules less often and may be more reluctant to complain about things (items c and d). Items e and f were suggested by an ex-con's comment that older men are rated low in status and have a harder time adjusting because of their reduced physical prowess. Question 8, also relating to adaptation to prison, asked the officials for their opinions regarding potential causes of stress for older versus younger inmates. The items were identical to those in question 15 on the inmate questionnaire.

Problems of service delivery for older inmates were documented in question 2 of the officials' interview schedule. Krajick (1979) suggested that such problems may arise because of

the inappropriateness for older men of traditional vocational, recreational and educational programs, conflicting budget considerations and difficulty in rallying public interest and support for men who are both old and in prison.

Integration verses segregation was examined in questions 5, 6 and 7. Questions 5 and 6 asked about the ways that older and younger inmates affect each other, since they are presently integrated in each of the study settings. American research suggests that younger inmates tend to harass older ones with theft, noise and bad language, while older prisoners are seen to have a calming influence over younger ones (Krajick, 1979). One study compared the life-satisfaction of inmates living in integrated and segregated settings and found that there was no difference on this measure (Aday, 1976). Question 7 asked directly about the need for and potential difficulties associated with segregating older and younger inmates. The pros and cons of this issue have not been addressed in the Canadian literature.

Health officials were asked one additional question regarding health problems of older inmates. The items covered a range of psychological and medical problems mentioned in the literature on prison health services (Jones, 1976; Richmond, 1975; Scheps & Schecter, 1984). Although subjective in nature, the responses to this question provided additional clues to the unique health needs of older inmates, a major focus of this study.

An open-ended question (Question 9) was also included at the end of this interview schedule, allowing respondents to express opinions or ideas not addressed in previous questions.

The inmate interviews lasted 50 minutes on average; those undertaken with the officials lasted an average of 35 minutes.

CHAPTER V

Data Analysis and Results

Data Analysis

Data analysis was done using the Statistical Package for Social Sciences (SPSS-X). The hypotheses of statistically significant differences between older and younger men, and men who had served shorter and longer sentences, were tested with t and chi-square statistics. Hypotheses of no differences were rejected at a level of significance of $p>.05$. The literature review suggested that there would be differences between older and younger men on a number of the study variables, however, no direction was specified in the statistical analysis, i.e., 2-tailed tests were used.

The ANOVA procedure and chi-square statistic were used to explore possible differences between the three prisons in the study. Correlations among the key dependent variables were examined using the Pearson r statistic, and factor analysis was used to explore underlying variables. The interviews with senior officials were analyzed with descriptive statistics.

Characteristics of the Sample

The demographic and incarceration characteristics of the inmate sample, broken down by age group, are shown in Table 17. There were no statistically significant differences between the older and younger subjects with regards to number of current offences, total aggregate sentence, total lifetime sentences or

TABLE 17

a. SAMPLE CHARACTERISTICS BY AGE GROUP : INMATE SURVEY

CHARACTERISTIC	AGE GROUP: OLDER (N=48) M	SD	YOUNGER (N=44) M	SD	t
AGE	53.5	9.2	24.5	2.9	20.79**
NUMBER OF CHILDREN	2.8	2.5	.5	.9	5.85**
INCARCERATION CHARACTERISTICS					
ESTIMATED AGGREGATE SENTENCE (MONTHS)	141.5	117.9	110.7	103.1	1.34
NUMBER OF OFFENCES	2.2	1.7	2.5	1.4	1.03
TOTAL LIFETIME SENTENCES	4.3	4.6	4.5	8.2	.18
TOTAL TIME SERVED (YRS)	11.8	12.7	4.8	3.1	3.66**
					χ^2
MARITAL STATUS	(n)	(%)	(n)	(%)	
1. MARRIED OR COMMON LAW	17	35	4	9	29.58**
2. WIDOWED OR DIVORCED	23	49	8	18	
3. NEVER MARRIED	8	16	32	73	
MOST SERIOUS OFFENCE					
1. HOMICIDE	15	31	10	22	16.67**
2. SEX-RELATED	10	20	7	15	
3. ASSAULT	8	16	3	6	
4. ROBBERY	5	11	11	25	
5. BREAK AND ENTER	4	8	13	30	
6. FRAUD AND DRUGS	6	13	0	0	
EDUCATION LEVEL					
1. GRADE 8 OR LESS	20	40	14	32	2.12
2. GRADE 9 TO 12	17	35	22	50	
3. OVER GRADE 12	6	13	5	12	
4. NOT KNOWN	5	11	3	6	
TIME SERVED					
1. 4 YEARS OR LESS	23	48	24	52	.67
2. OVER 4 YEARS	25	52	20	48	

** P<.01

b. DISTRIBUTION OF SAMPLE BY AGE

	AGE	FREQUENCY	PERCENT	CUMULATIVE %
YOUNGER INMATES	19	2	2.2	2.2
	20	1	1.1	3.3
	21	3	3.3	6.5
	22	3	3.3	9.8
	23	12	13.0	22.8
	24	5	5.4	28.3
	25	3	3.3	31.5
	26	5	5.4	37.0
	27	2	2.2	39.1
	28	3	3.3	42.4
	29	3	3.3	45.7
	30	3	3.3	48.9
OLDER INMATES	45	6	6.5	55.4
	46	1	1.1	56.5
	47	1	1.1	57.6
	48	2	2.2	59.8
	49	3	3.3	63.0
	50	4	4.3	67.4
	51	4	4.3	71.4
	52	2	2.2	73.9
	53	4	4.3	78.3
	54	3	3.3	81.5
	55	1	1.1	82.6
	56	1	1.1	83.7
	57	2	2.2	85.9
	59	3	3.3	89.1
	60	1	1.1	90.2
	61	2	2.2	92.4
	63	1	1.1	93.5
	64	2	2.2	95.7
	65	2	2.2	97.8
	71	1	1.1	98.9
	85	1	1.1	100.0

educational level.

The two age groups did differ on several factors. The older men had more children and were significantly more likely to be married, widowed or divorced; younger inmates were more likely to be single. The groups also differed according to the most serious crime for which they were presently incarcerated. Homicides, sex-related crimes and assaults accounted for 69% of the crimes of the older men; the comparable figure for the younger men was only 45%. The younger men were much more likely to have been convicted for breaking and entering - 30% of all crimes - than were the older men (8%). The groups differed initially on total time served. However, when this variable was dichotomized into those who had served five or more years versus less than five years, this difference disappeared.

Only one demographic or incarceration factor - crime - differed when the subjects were compared according to the three prisons. As shown in Table 18 a, more of the inmates in Prisons 1 and 2 had homicide-related convictions; those in Prisons 2 and 3 were more likely to have committed assault, and the men in Prison 3 had committed more sex-related crimes.

Demographic and incarceration characteristics were also examined according to length of time served. Those who had served less than five years were more likely to have been convicted of sex-related crimes or assault, while those who had served five or more years had more convictions for homicide,

TABLE 18

a. DISTRIBUTION OF MOST SERIOUS OFFENCE AMONG THE THREE PRISONS

	PRISON						
	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	(n)	(%)	(n)	(%)	(n)	(%)	χ^2
1. HOMICIDE	10	31	13	43	2	7	57.400*
2. SEX-RELATED	0	0	4	13	13	43	
3. ASSAULT	1	3	8	27	10	33	
4. ROBBERY	8	25	6	20	2	7	
5. BREAK AND ENTER	7	22	7	23	3	10	
6. FRAUD AND DRUGS	6	19	0	0	0	0	

b.DISTRIBUTION OF MOST SERIOUS OFFENCE AMONG INMATES ACCORDING TO AMOUNT OF TIME SERVED

	AMOUNT OF TIME SERVED				
	LESS THAN 5 YEARS (N= 47)		5 YRS OR MORE (N=45)		
	(n)	(%)	(n)	(%)	χ^2
1. HOMICIDE	9	19	16	36	16.115*
2. SEX-RELATED	11	23	6	13	
3. ASSAULT	11	23	0	0	
4. ROBBERY	7	14	9	20	
5. BREAK AND ENTER	6	13	11	24	
6. FRAUD AND DRUGS	3	6	3	7	

* $P < .01$

breaking and entering, and robbery (χ^2 = 16.11, p<.01). This is shown in Table 18 b. Although not shown in the tables, men who had served less time served on average 2.1 years altogether, compared with 6.7 years for the longer term inmates (t = =3.44, p<.01). They also had more children - 2.3 - compared with only 1.1 among the longer term inmates (t = 2.91, p<.05).

It is useful to compare the older men in the study with other researchers' descriptions of this population, since the existing research is largely based in the United States. According to Goetting (1984), the typical elderly inmate is male, white, currently unmarried, and lacks a highschool education. He would be a recidivist and would currently be serving a sentence for some type of interpersonal violence. The older men in our sample were similar to this description in terms of race, marital status, and education. And similar to the U.S. profile, the majority were repeat offenders (56%) and their crimes were most apt to involve interpersonal violence (67%), i.e., homicide, sex-related crimes and assault.

Results of the Inmate Survey

The results of the inmate survey are presented in the following section. Under each sub-heading, results pertaining to age differences will be described first. Comparisons between men who have served shorter and longer times in prison (lifetime total) will then be drawn. Thirdly, results showing differences among the three study prisons will be presented. This is followed by a description of interrelationships among the key

dependent variables.

Several observations of a general nature were recorded by the researcher. First, the older men in the study were surprisingly articulate. The vast majority seemed alert and interested in the questions which were addressed to them, showing no sign of flattened affect or withdrawal. In other words, for most, it seemed that "the lights were on and somebody was home". None of the subjects appeared to be overly suspicious, and, with the exception of three younger men, there were no overt signs of hostility or anger. Unrelated to the questions asked for this study, a number of the men appeared anxious to discuss the details of their crimes, often with the apparent motive of convincing the researcher of their innocence. Many gave the impression that they were experiencing varying degrees of guilt or were feeling that they had been victimized by the legal system, or in some cases, witnesses who had lied. It was difficult at times for the researcher to remain objective and focused in relation to the goals of the study.

Participation in prison life

Table 19 compares older and younger inmates' involvement in various prison activities. The three most frequent activities reported by both older and younger inmates were watching TV, attending school, and reading. No significant differences were found in the time spent in many of the activities. It was particular surprising to find that no differences occurred with

TABLE 19

HOURS SPENT PER WEEK IN PRISON ACTIVITIES BY OLDER AND YOUNGER INMATES

ACTIVITY	HOURS OF ACTIVITY PER WEEK				
	OLDER (N=48)		YOUNGER (N=44)		
	M	SD	M	SD	t
PROGRAM ACTIVITY					
SCHOOL	8.4	13.7	10.5	15.1	0.70
ALCOHOL OR DRUG PROG.	.9	1.5	1.3	1.9	1.03
RELIGIOUS ACTIVITIES	1.8	2.7	.8	1.8	2.18*
OTHER GROUP	.9	1.4	1.7	2.8	1.88
INDIVIDUAL ACTIVITY					
VOLUNTEERING	2.6	5.3	2.5	6.0	0.07
GYM	1.8	4.1	5.9	6.6	3.52*
TEAMSPORTS	.9	3.4	3.8	4.6	3.42*
WALKING/RUNNING	4.8	4.0	5.0	5.2	0.24
CARDS	2.3	3.5	1.8	3.0	0.80
READING	9.0	9.0	11.0	10.3	1.00
T.V.	12.1	9.9	10.3	9.1	0.92
OTHER REGULAR ACTIVITY	9.1	15.2	10.7	13.4	0.53
TOTAL PROGRAM ACTIVITY	12.5	15.8	15.8	17.1	0.97
TOTAL INDIVIDUAL ACTIVITY	40.7	18.9	49.3	18.6	2.21*
EMPLOYMENT					
HOURS SPENT WORKING/WK.	24.5	16.57	17.13	17.72	2.06*
DAILY WAGE ($)	5.33	1.32	5.33	.94	0.01
	(n)	(%)	(n)	(%)	χ^2
NO. EMPLOYED	38	79%	29	66%	1.424

* P <.05

regards to time spent in school. However, the older men did spend significantly more time in religious activities, and less time working out in the gym or participating in team sports. The total hours spent in Individual Activities was significantly less for older men, ($t = 2.21$, $p<.05$). However, contrary to expectations, their total time spent in formal Prison Programs was not significantly lower.

Employment was also investigated. Thirty-eight (79%) of the older inmates were employed, compared with 29 (66%) of the younger men. All but two of those who were unemployed - both older men - were attending school fulltime. As a result, older men reported an average of 24.5 hours of work per week, compared with only 17.1 for younger men, ($t = 2.06$, $p<.05$). Several inmates at Prison One commented that while these were the official hours of employment, many of the men actually spent much less time at work.

The inmates were employed in a variety of positions. These included kitchen and laundry duty, yard and office maintenance, clerical and school-related duties, and an assortment of manufacturing and craft-related positions. Several men had fairly specialized jobs such as operation of fire-fighting equipment, operating a radio tower, and maintaining a power plant. The average wage did not differ for the older and younger men. A general observation was that more of the older men had high prestige jobs, such as working in the health clinic or warden's office.

As shown in Table 20, no significant differences emerged on the time spent in any of the individual or program activities, according to length of time served. However, men who had served five or more years were more frequently employed and spent an average of 25 hours per week working, compared with only 17 hours for the others ($t = 2.07$, $p<.05$).

Several interesting differences were found when the prisons were compared. As shown in Table 21, the men in Prison 3 spent an average of 14.5 hours per week in school, compared with 8.8 hours at Prison 1 and only 4.9 hours at Prison 2 ($F [2,89] = 3.61$, $p<.05$). Those in Prison 1 spent much more time engaged in volunteer activities; examples of such activity included teaching in a literacy program, tutoring painting, advising students in the academic program, organizing religious functions, and serving as a volunteer clown at local hospitals.

The Total hours spent in Prison Programs was highest in Prison 3, and lowest in Prison 2, ($F [2,89] = 3.15$, $p<.05$). Conversely, the Total hours spent in Individual Activities was highest in Prison 1 and lowest in Prison 3, ($F [2,89] = 4.88$, $p<.05$). The men in Prison 2 had higher rates of employment - 93% - compared with 69 % in Prison 1, and only 57% in Prison 3. Inmates in Prison 2 worked an average of 27 hours per week, compared to 19 and 17 in the other prisons, ($F [2,89] = 2.54$, $p<.05$).

In summary, the older inmates were more likely to be involved in religious activity, and less likely to engage in

TABLE 20

HOURS SPENT PER WEEK IN PRISON ACTIVITIES BY MEN WHO SERVED SHORTER AND LONGER TERMS

ACTIVITY	HOURS OF ACTIVITY PER WEEK: LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		
	M	SD	M	SD	t
PROGRAM ACTIVITY					
SCHOOL	10.9	14.7	7.8	13.8	1.05
ALCOHOL OR DRUG PROG.	1.0	1.7	1.1	1.8	.31
RELIGIOUS ACTIVITIES	1.3	2.4	1.3	2.3	.01
OTHER GROUP	.9	1.4	1.7	2.8	.45
INDIVIDUAL ACTIVITY					
VOLUNTEERING	2.7	6.0	2.5	5.2	.13
GYM	4.6	6.3	2.7	5.0	1.57
TEAMSPORTS	2.8	5.0	1.6	3.2	1.37
WALKING/RUNNING	4.9	4.7	4.9	4.5	.12
CARDS	2.0	3.1	2.1	3.4	0.16
READING	9.8	9.8	10.1	9.5	0.16
T.V.	9.8	9.2	12.6	9.8	1.35
OTHER REGULAR ACTIVITY	9.2	12.8	10.6	15.9	0.47
TOTAL PROGRAM ACTIVITY	15.5	17.3	12.6	15.4	0.84
TOTAL INDIVIDUAL ACTIVITY	44.0	18.4	45.7	20.0	0.42
EMPLOYMENT					
HOURS SPENT WORKING	16.8	17.5	25.3	16.4	2.07*
DAILY WAGE ($)	5.12	1.20	5.54	1.07	1.76
	(n)	(%)	(n)	(%)	χ^2
NO. EMPLOYED	28	62%	39	87%	7.212*

* P <.05

TABLE 21

HOURS SPENT PER WEEK IN PRISON ACTIVITIES BY INMATES IN THE THREE STUDY PRISONS

ACTIVITY	HOURS OF ACTIVITY PER WEEK						
	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	M	SD	M	SD	M	SD	F
SCHOOL	8.8	12.5	4.9	9.6	14.5	18.4	3.61*
ALCOHOL OR DRUG PROG.	1.6	1.9	1.0	1.6	1.0	1.7	.08
RELIGIOUS ACTIVITIES	.7	.3	1.6	2.7	1.7	2.4	1.75
OTHER GROUP	.8	1.1	1.4	2.6	1.7	2.6	1.49
VOLUNTEERING	5.0	8.0	1.8	4.0	.8	1.7	5.37*
GYM	4.2	6.5	3.9	6.3	3.0	4.4	.34
TEAMSPORTS	2.9	4.8	3.0	4.9	.8	2.0	2.80
WALKING/RUNNING	5.3	4.8	4.5	4.4	4.9	4.7	.17
CARDS	1.9	3.1	2.0	3.4	2.3	3.4	.13
READING	11.7	11.2	10.1	9.9	7.9	7.1	1.21
T.V.	11.7	8.6	12.6	9.5	9.3	10.6	.98
OTHER REGULAR ACTIV.	12.3	16.5	9.0	13.5	8.2	12.8	.71
TOTAL PROGRAM HRS.	13.7	15.1	9.1	10.7	19.4	20.7	3.15*
TOTAL INDIVIDUAL HRS.	49.9	17.1	47.9	21.1	36.3	16.7	4.88*
EMPLOYMENT							
HOURS WORK	19.3	18.4	26.6	12.3	17.1	19.7	2.54
DAILY WAGE ($)	5.27	.78	5.60	.68	5.11	1.71	1.50
							χ^2
	(n)	(%)	(n)	(%)	(n)	(%)	
NO. EMPLOYED	22	69%	28	93	17	57	10.602*

* $P < .05$

individual or team sports, when compared with their younger counterparts. Men who were involved in work activities were most likely to be older, incarcerated in Prison Two, and were more likely to have served five or more years in prison. An obvious emphasis on school in Prison 3 was observed, as was a greater amount of volunteer activity in Prison 1.

Social support

A number of interesting differences between older and younger inmates, most of which contradict previous research findings, were found on the social support variables in the study. The results are presented in Table 22. Surprisingly, no significant differences were observed in terms of contacts with friends or family, by either letter or phone. Furthermore, the older men reported more personal visits, ($t = 2.83$, $p<.05$). They also had significantly more friends in prison, ($t = 2.18$, $p<.05$), and were much more likely to have a confidant inside the prison, ($\chi^2 = 4.26$, $p<.05$). Among those who had a confidant, more of the older men confided in a prison staff member than was the case for younger men; the latter chose another inmate more frequently, ($\chi^2 = 5.69$, $p<.05$).

As shown in Table 23, no significant differences were found on the social support variables when length of time served was considered. This is surprising; it was anticipated that phone calls, letters and visits from persons outside of the prison would be significantly lower among inmates who had spent five years or more behind bars. Although not statistically

TABLE 22

SOCIAL SUPPORT AMONG OLDER AND YOUNGER INMATES

TYPE OF SUPPORT	AGE GROUP				
	OLDER (N=48)		YOUNGER (N=44)		
	M	SD	M	SD	t
NO. PHONE CALLS (IN PREV. MO.)	4.6	7.02	4.2	4.62	0.29
NO. LETTERS (IN PREV. MO.)	6.1	13.35	4.1	5.99	0.99
NO. VISITS (IN PREV. MO.)	5.7	9.47	1.8	2.18	2.83*
NO. FRIENDS IN PRISON	2.9	2.74	1.8	1.96	2.18*
SOCIAL SUPPORT SCORE**	20.06	21.53	12.23	10.31	2.26*
	(n)	(%)	(n)	(%)	χ^2
NO. WHO HAVE A CONFIDANT	31	(64%)	18	(41%)	4.26*
TYPE OF CONFIDANT					
1. INMATE	21	(67%)	14	(90%)	5.69*
2. STAFF MEMBER	10	(33%)	4	(10%)	

* P <.05 ** COMPOSITE SCORE = TOTAL CONTACTS + NO. FRIENDS + CONFIDANT.

TABLE 23

SOCIAL SUPPORT BY AMOUNT OF TIME SERVED

TYPE OF SUPPORT	LENGTH OF TIME SERVED: LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		
	M	SD	M	SD	t
NO. PHONE CALLS (IN PREV. MO.)	4.4	4.95	4.6	6.92	0.16
NO. LETTERS (IN PREV. MO.)	3.9	7.47	6.5	12.87	1.21
NO. VISITS (IN PREV. MO.)	4.9	9.11	2.7	4.42	1.42
NO. FRIENDS IN PRISON	2.0	2.06	2.8	2.77	1.45
SOCIAL SUPPORT SCORE**	15.60	16.70	17.07	18.38	.40
	(n)	(%)	(n)	(%)	χ^2
NO. WHO HAVE A CONFIDANT	22	(48%)	27	(60%)	1.12
TYPE OF CONFIDANT					
1. INMATE	15	(68%)	20	(73%)	1.81
2. STAFF MEMBER	7	(32%)	7	(27%)	

* P <.05 ** COMPOSITE SCORE = TOTAL CONTACTS + NO. FRIENDS + CONFIDANT.

significant, the longer term inmates had received, on average, nearly double the number of letters; however, this figure was strongly influenced by one inmate who claimed to have received 62 letters in the preceding month.

Among the prisons, no differences were found for contacts with friends and family by phone, letter, or personal visits (see Table 24). However, the men in Prison 2 reported having fewer friends in prison than inmates in the other two prisons ($F[2,89] = 3.336$, $P<.05$). And, among those who had a confidant, significantly more of the men in Prison 3 chose another inmate than in either of the other two prisons, ($\chi^2 = 9.74$, $p<.05$).

Physical health

Table 25 compares the older and younger inmates' reports of physical health problems in the previous year. Infectious diseases, such as colds and influenza, accounted for the highest percentage of illness among both groups. Only two of the differences found between age groups attained the required level of statistical significance. First, older inmates were significantly more likely to report vision or hearing difficulties, ($\chi^2 = 9.12$, $p<.05$). Other disorders, namely musculo-skeletal illness, circulation disorders, and urinary difficulties, while not significant, were also found to be higher among older inmates. The second statistically significant finding was that younger inmates had more work or sports-related injuries, ($\chi^2 = 6.19$, $p<.05$).

When all health problems were summed, the average total

TABLE 24

SOCIAL SUPPORT BY PRISON

TYPE OF SUPPORT	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	M	SD	M	SD	M	SD	F
NO. PHONE CALLS (IN PREV. MO.)	4.2	6.11	5.4	6.05	3.8	5.81	.541
NO. LETTERS (IN PREV. MO.)	6.8	15.40	4.0 0	5.27	4.5	7.72	.644
NO. VISITS (IN PREV. MO.)	3.8	8.36	3.9	6.71	3.7	6.72	.004
NO. FRIENDS IN PRISON	2.7	2.83	1.4	1.77	2.9	2.39	3.336*
SOCIAL SUPPORT SCORE**	18.0	21.43	15.23	13.20	15.60	16.92	.228
	(n)	(%)	(n)	(%)	(n)	(%)	χ^2
HAVE A CONFIDANT	14	(44%)	15	(50%)	20	(67%)	3.457
TYPE OF CONFIDANT							
1. INMATE	8	(57%)	9	(60%)	18	(90%)	9.738*
2. STAFF MEMBER	6	(43%)	6	(40%)	2	(10%)	

* P <.05

** COMPOSITE SCORE = TOTAL CONTACTS + NO. FRIENDS + CONFIDANT.

TABLE 25

HEALTH PROBLEMS REPORTED BY OLDER AND YOUNGER INMATES

TYPE OF HEALTH PROBLEM	NO. & PERCENT WHO REPORTED PROBLEM				
	OLDER (N=48)		YOUNGER (N=44)		
	(n)	(%)	(n)	(%)	χ^2
INFECTIOUS ILLNESS	34	71	30	68	1.72
VISION OR HEARING DISORDERS	28	58	11	25	9.12*
MUSCULOSKELETAL DISORDERS	18	38	9	20	2.44
CIRCULATORY DISORDERS	14	29	6	13	2.41
INJURY FROM WORK OR SPORTS	11	23	22	50	6.19*
TUMORS	9	19	6	13	1.06
DIGESTIVE DISORDERS	9	19	6	13	0.15
SKIN DISEASES	9	19	4	9	1.06
RESPIRATORY SYSTEM DISORDERS	8	17	12	27	.328
ENDOCRINE DISORDERS	5	10	5	11	0.02
URINARY DISORDERS	5	10	0	0	3.03
NERVOUS SYSTEM DISORDERS	4	8	9	3	1.87
BLOOD DISORDERS	2	4	1	20	0.00
ADDITIONAL DISORDERS	14	29	13	30	0.00
	M	SD	M	SD	t
TOTAL HEALTH PROBLEMS	3.62	3.6	3.20	1.9	0.88

* P <.05

problems for older inmates exceeded that of their younger counterparts by only a small margin. The standard deviation for the older group was, however, nearly double that of the younger men.

Another health-related variable examined in the study was drug and alcohol use on admission. This information was not recorded for 27% of the older men and 9% of the younger ones. For the remaining 75 inmates, the data showed some interesting trends. As outlined in Table 26, 34% of the older men had recorded NO drug or alcohol problems, compared with only 8% of the younger men. And although 50% of the older men had a record of alcohol problems - compared with only 20% of the younger ones - only 11% had combined drug and alcohol difficulties. This compared with a figure of 57% for the younger men.

Results concerning older and younger inmates' positive health practices are presented in Table 27. Forty percent of the older men, and 25% of the younger inmates, said that they avoided smoking. Only 35% of both groups reported regularly eating breakfast. Only one statistically significant difference was observed between the older and younger men; more of the older inmates avoided using drugs, ($\chi^2 = 3.79$, $p<.05$).

The physical health variables, analyzed by length of time served, are presented in Tables 28, 29, and 30. No significant differences were found on any of these variables. Thus, there was no indication that longer time in prison was associated with

TABLE 26

DRUG AND ALCOHOL USE ON ADMISSION BY OLDER AND YOUNGER INMATES

	NO. & PERCENT WITH KNOWN PROBLEM				
	OLDER (N=48)		YOUNGER (N=44)		
	(n)	(%)	(n)	(%)	χ^2
1. SOFT DRUGS	1	3	3	8	23.78**
2. HARD DRUGS	1	3	3	8	
3. ALCOHOL	17	50	8	20	
4. ALCOHOL AND DRUGS	4	11	23	57	
5. NONE	12	34	3	8	
TOTAL	35	100	40	100	
NOT RECORDED	13	27	4	9	

*P < .05

TABLE 27

NUMBER OF POSITIVE HEALTH PRACTICES REPORTED BY OLDER AND YOUNGER INMATES

TYPE OF HEALTH HABIT	NO. & PERCENT WHO PRACTICE HABIT				
	OLDER (N=48)		YOUNGER (N=44)		
	(n)	(%)	(n)	(%)	χ^2
AVOIDING ALCOHOL	45	94	41	93	0.00
AVOIDING ILLICIT DRUGS	41	85	29	66	3.79*
EXERCISE	39	81	34	77	0.46
OBTAIN ADEQUATE SLEEP	30	63	25	57	0.12
MAINTAIN NORMAL WEIGHT	27	56	28	64	0.26
NOT SMOKING	19	40	11	25	1.61
EATING BREAKFAST	17	35	15	34	0.00
	M	SD	M	SD	t
TOTAL POSITIVE HABITS	4.5	1.3	4.1	1.2	1.49

* $P < .05$

TABLE 28

HEALTH PROBLEMS REPORTED BY MEN WHO SERVED SHORTER AND LONGER TERMS

TYPE OF HEALTH PROBLEM	NO. & PERCENT WHO REPORTED PROBLEM				
	LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		
	(n)	(%)	(n)	(%)	χ^2
INFECTIOUS ILLNESS	35	75	29	64	0.66
VISION OR HEARING DISORDERS	23	50	16	46	1.18
MUSCULOSKELETAL DISORDERS	15	32	12	27	0.11
CIRCULATORY DISORDERS	10	22	10	22	0.00
INJURY FROM WORK OR SPORTS	19	40	14	31	0.51
TUMORS	6	13	7	16	0.01
DIGESTIVE DISORDERS	7	15	8	18	0.01
SKIN DISEASES	9	19	4	9	1.24
RESPIRATORY SYSTEM DISORDERS	11	24	9	20	0.33
ENDOCRINE DISORDERS	6	13	5	11	0.00
URINARY DISORDERS	2	5	3	7	0.01
NERVOUS SYSTEM DISORDERS	7	15	6	13	1.87
BLOOD DISORDERS	0	0	3	7	1.47
ADDITIONAL DISORDERS	13	28	14	31	0.02
	M	SD	M	SD	t
TOTAL HEALTH PROBLEMS	3.68	2.3	3.16	2.3	1.10

* P <.05

TABLE 29

DRUG AND ALCOHOL USE ON ADMISSION BY MEN WHO SERVED SHORTER AND LONGER TERMS

	NO. & PERCENT WITH KNOWN PROBLEM				
	LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		
	(n)	(%)	(n)	(%)	χ^2
1. SOFT DRUGS	3	7	1	3	2.108
2. HARD DRUGS	2	5	2	6	
3. ALCOHOL	13	32	12	35	
4. ALCOHOL AND DRUGS	13	32	14	41	
5. NONE	10	25	5	15	
TOTAL	41	100	34	100	
NOT RECORDED	6	15	11	24	

*P < .05

TABLE 30

POSITIVE HEALTH PRACTICES REPORTED BY MEN WHO SERVED SHORTER AND LONGER TERMS

TYPE OF HEALTH HABIT	NO. & PERCENT WHO PRACTICE HABIT				
	LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		
	(n)	(%)	(n)	(%)	χ^2
AVOIDING ALCOHOL	46	98	40	88	1.74
AVOIDING ILLICIT DRUGS	37	79	33	73	0.13
EXERCISE	37	79	36	80	0.00
OBTAIN ADEQUATE SLEEP	28	60	27	60	0.00
MAINTAIN NORMAL WEIGHT	25	53	30	67	1.22
NOT SMOKING	15	32	15	33	0.00
EATING BREAKFAST	14	30	18	40	0.65
	M	SD	M	SD	t
TOTAL POSITIVE HABITS	4.3	1.3	4.4	1.2	0.47

* $P < .05$

increased physical health risks.

There was some variability among the three prisons with regard to the physical health variables. As shown in Table 31, 60% of the men in Prison 3 reported hearing or vision difficulties, compared with 40% at Prison 2, and only 28% at Prison 1, ($\chi^2 = 6.55$, $p<.05$). Table 32 shows that alcohol appeared to be more of a problem on admission for the men in Prison 3 (40%), while drug and alcohol combinations were found more often on the records of men in the other two prisons. Finally, as shown in Table 33, the men in Prisons 2 and 3 reported avoiding alcohol in prison, compared with those in Prison 1.

Emotional health

Several measures of emotional health were included in this study. First, subjects were asked what sorts of things bother them in prison. The 92 subjects expressed a total of 115 complaints; the number of complaints per inmate ranged from 0 to 4. Initially, the data were of a qualitative nature. In order to code them for comparison purposes, the individual complaints were independently classified into five categories by a panel of three nursing professors, plus the author. One hundred percent agreement was attained on the coding of 61 of the responses, and 75% agreement was reached on the remaining 53 responses. Table 34 shows how the responses were distributed according to the classification categories and age groups.

TABLE 31

HEALTH PROBLEMS REPORTED BY MEN IN THREE STUDY PRISONS

TYPE OF HEALTH PROBLEM	NO. & PERCENT WHO REPORT PROBLEM						
	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	(n)	(%)	(n)	(%)	(n)	(%)	χ^2
INFECTIOUS ILLNESS	22	68	23	77	19	63	1.274
VISION OR HEARING DISORDERS	9	28	12	40	18	60	6.546*
MUSCULOSKELETAL DISORDERS	9	28	6	20	12	40	2.929
CIRCULATORY DISORDERS	6	19	6	20	8	27	.650
INJURY FROM WORK OR SPORTS	10	32	11	37	12	40	.528
TUMORS	3	9	5	17	5	17	.915
DIGESTIVE DISORDERS	5	16	7	23	3	10	1.971
SKIN DISEASES	5	16	5	17	3	10	.640
RESPIRATORY SYSTEM DISORDERS	6	19	10	33	4	13	3.784
ENDOCRINE DISORDERS	2	6	4	13	5	17	1.676
URINARY DISORDERS	1	3	2	7	2	7	.510
NERVOUS SYSTEM DISORDERS	5	16	5	17	3	10	.639
BLOOD DISORDERS	2	6	1	3	0	0	.991
ADDITIONAL DISORDERS	9	28	10	33	8	27	.357
	M	SD	M	SD	M	SD	F
TOTAL HEALTH PROBLEMS	3.09	2.4	3.70	2.2	3.5	2.3	.555

* P <.05

TABLE 32

DRUG AND ALCOHOL USE ON ADMISSION BY PRISON

	NO. & PERCENT WITH KNOWN PROBLEM						
	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	(n)	(%)	(n)	(%)	(n)	(%)	χ^2
1. SOFT DRUGS	2	6	2	7	0	0	8.738
2. HARD DRUGS	1	3	2	7	1	3	
3. ALCOHOL	7	22	6	20	12	40	
4. ALCOHOL AND DRUGS	12	38	10	33	5	17	
5. NONE	6	19	3	10	3	10	
TOTAL	28	100	23	100	24	100	
NOT RECORDED	4		7		6		

*P < .05

TABLE 33

POSITIVE HEALTH PRACTICES REPORTED BY PRISON

TYPE OF HEALTH HABIT	NO & PERCENT WHO PRACTICE HABIT						
	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	(n)	(%)	(n)	(%)	(n)	(%)	X^2
AVOIDING ALCOHOL	27	84	30	100	29	97	6.943*
AVOIDING ILLICIT DRUGS	23	72	23	77	24	80	.570
EXERCISE	27	84	21	70	25	83	2.384
OBTAIN ADEQUATE SLEEP	20	63	18	60	17	57	.220
MAINTAIN NORMAL WEIGHT	20	63	19	63	16	53	.774
NOT SMOKING	7	22	11	37	12	40	2.648
EATING BREAKFAST	10	32	13	43	9	30	1.445
	M	SD	M	SD	M	SD	F
TOTAL POSITIVE HABITS	4.21	1.2	4.47	1.1	4.3	1.5	.299

* $P < .05$

TABLE 34

TYPES OF STRESS REPORTED BY OLDER AND YOUNGER MEN

SOURCE OF STRESS	NO. & RATE OF COMPLAINTS					
	OLDER (N=48)		YOUNGER (N=44)		TOTAL	
	(n)	rate	(n)	rate	(n)	%
1. RELATIONSHIPS WITH GUARDS AND OFFICERS	17	.354	17	.386	34	31%
2. RELATIONSHIPS WITH OTHER INMATES	10	.208	16	.363	26	23%
3. PRISON RULES AND PAROLE ISSUES	16	.333	9	.205	25	22%
4. INTRAPERSONAL ISSUES	9	.188	8	.182	17	15%
5. AFFAIRS OUTSIDE OF PRISON	6	.125	7	.159	13	11%
TOTAL	58	1.208	57	1.295	115	100%

Age-specific response rates were calculated by dividing the number of concerns expressed by the inmates in a group, by the total number of subjects in that age group. (The procedure was repeated for length of time served and prison.) A brief description of the types of complaints in each category is useful.

The most frequent cause of stress among both young and older inmates centered around relationships with guards and other prison staff. Specific comments in this category included the following: "they play head games with us," "they like to throw their power around," "they expect us to be independent yet make us dependent on them for everything," and " they really stereotype you here."

The second most frequent source of stress was relationships with other inmates - about one quarter of all complaints. Inmates were bothered by "the childishness of new fish", "fear and dislike of informers and child molesters," "the hypocritical inmate code," and "irrational behavior of other inmates." One noted the irritation caused by straight johns - "educated newcomers who walk around singing and whistling".

Concerns about prison rules and parole issues accounted for 22% of the total. Here, men were troubled by "the policy of having to confess your guilt," "the slowness of the system in responding to a request," "petty rules about visits and telephone use," and "unfair treatment by the parole board." On the day following his interview, one inmate brought the researcher a list of 11 rules pertaining to use of the

telephone, in order to illustrate the points he had made about petty prison rules.

Intrapersonal concerns accounted for about 15% of these responses. Inmates described "missing their freedom," "lack of privacy," "feeling bored," "feeling shame from my crime and trial." Interestingly, worries about family and other affairs outside of prison were cited least often as causes for stress - only 11% of the concerns were of this type.

As shown in Table 34, the younger men had proportionately more concerns stemming from relationships with prison staff, relationships with other inmates, and affairs outside of prison, than did the older men. The older men had proportionately more concerns concerning prison rules and parole issues.

Table 35 shows the responses to this question according to time served. Major differences were found to exist between the two groups of inmates. Those who had served five or more years in prison expressed more than double the number of concerns as did the men who had served less time. In each of the possible categories, those with more time behind bars had a greater number (and rate) of concerns related to stress. So, while no evidence of increased physical decline or diminished social support was found among these inmates, these data suggest that a greater amount of psychological distress existed.

Interesting differences were found when responses were analyzed according to prison (see Table 36). The men in Prison

TABLE 35

TYPES OF STRESS REPORTED BY MEN WHO SERVED SHORTER AND LONGER TERMS

SOURCE OF STRESS	NO. & RATE OF COMPLAINTS: LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		TOTAL	
	(n)	rate	(n)	rate	(n)	%
1. RELATIONSHIPS WITH GUARDS AND OFFICERS	9	.191	25	.556	34	31%
2. RELATIONSHIPS WITH OTHER INMATES	12	.255	14	.311	26	23%
3. PRISON RULES AND PAROLE ISSUES	6	.128	19	.432	25	22%
4.INTRAPERSONAL ISSUES	3	.064	14	.311	17	15%
5. AFFAIRS OUTSIDE OF PRISON	5	.106	8	.182	13	11%
TOTAL	35	.745	80	1.778	115	100%

TABLE 36

TYPES OF STRESS BY REPORTED BY MEN IN THE THREE STUDY PRISONS

NO. & RATE OF COMPLAINTS

SOURCE OF STRESS	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		TOTAL	
	n	rate	n	rate	n	rate	n	%
1. RELATIONSHIPS WITH GUARDS AND OFFICERS	12	.375	14	.467	8	.267	34	31
2. REL OTHER INMATES								
2. PRISON RULES AND PAROLE ISSUES	7	.219	14	.467	4	.133	25	22
4.INTRAPERSONAL ISSUES	4	.125	9	.300	4	.133	17	15
5. AFFAIRS OUTSIDE OF PRISON	4	.125	7	.233	2	.066	13	11
TOTAL	36	1.125	54	1.800	15	.833	115	100

2 expressed a total of 54 complaints, compared with 36 at Prison 1, and only 15 at Prison 3. The Prison 2 inmates were particularly bothered by concerns stemming from relationships with prison staff and issues regarding prison rules and parole, although in each category, these men had the highest numbers and rates of concerns. In contrast, the men in Prison 3 had the fewest complaints in four of the five categories.

Another measure of stress was the checklist of 13 potential sources of stress which had been identified in the literature. As shown in Table 37, four of the five most common stressors for both younger and older inmates were loss of freedom, loss of usual roles, loss of sexual outlets and boredom. Differences between older and younger inmates were statistically significant for 7 of the 13 items. The older men reported noise as a concern significantly more often than the younger ones, (χ^2 = 4.26, $p<.05$). In contrast, they were significantly less bothered by boredom, being observed, theft of personal belongings, poor food, harassment from staff and inconsistent messages from the staff. Interestingly, no significant differences were observed in terms of missing sexual outlets. When responses to this set of questions were totaled, the mean for the younger men was 11.7, compared with only 7.6 for the older men, ($t = 4.42$, $p<.05$).

When length of time served was used as a dependent variable, no significant differences were found on the stress checklist items. These results are presented in Table 38. Likewise, the

TABLE 37

PRISON STRESS SCALE RESPONSES OF OLDER AND YOUNGER INMATES

SOURCE OF STRESS	NO. WHO RESPONDED "SOMETIMES" OR "OFTEN"				
	OLDER (N=48)		YOUNGER (N=44)		
	(n)	(%)	(n)	(%)	X^2
LOSS OF FREEDOM	33	69	35	80	0.88
ROLE LOSS	33	69	32	73	0.04
NOISE AND BAD LANGUAGE	31	65	18	41	4.26*
MISSING SEXUAL OUTLETS	30	63	35	80	2.45
BOREDOM	25	52	33	75	4.24*
LOSS OF FAMILY SUPPORT	19	40	20	45	0.13
INCONSISTENT MESSAGES	19	40	29	66	5.36*
REGIMENTATION	18	38	24	55	2.05
BEING OBSERVED	16	34	33	75	14.38*
HARRASSEMENT FROM STAFF	13	27	23	53	5.10*
TROUBLE WITH FOOD	12	25	25	57	8.39*
THEFT OF BELONGINGS	11	23	20	45	4.26*
VIOLENCE FROM INMATES	10	21	12	27	0.23
	M	SD	M	SD	t
TOTAL STRESS SCORE**	7.6	4.1	11.7	4.7	4.42*

**CODE: NEVER=1, SOMETIMES=2, OFTEN=3.
* P < .05

TABLE 38

PRISON STRESS SCALE RESPONSES OF MEN WHO SERVED SHORTER AND LONGER TERMS

SOURCE OF STRESS	NO. WHO RESPONDED "SOMETIMES" OR "OFTEN"				
	LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		
	(n)	(%)	(n)	(%)	χ^2
LOSS OF FREEDOM	36	77	32	71	0.13
ROLE LOSS	36	77	29	64	1.10
NOISE AND BAD LANGUAGE	21	45	28	62	2.18
MISSING SEXUAL OUTLETS	35	74	30	67	0.35
BOREDOM	34	72	24	53	2.79
LOSS OF FAMILY SUPPORT	23	50	16	36	1.18
INCONSISTENT MESSAGES	24	51	24	53	0.00
REGIMENTATION	23	50	19	42	0.19
BEING OBSERVED	28	60	21	47	1.06
HARRASSEMENT FROM STAFF	18	38	18	40	0.00
TROUBLE WITH FOOD	21	45	16	36	0.46
THEFT OF BELONGINGS	15	32	16	36	0.22
VIOLENCE FROM INMATES	11	23	11	24	0.00
	M	SD	M	SD	t
TOTAL STRESS SCORE**	9.57	4.1	9.57	5.5	0.000

**CODE: NEVER=1, SOMETIMES=2, OFTEN=3.
* P < .05

results comparing the three prisons also failed to yield any significant differences, as shown in Table 39.

The third measure of emotional well-being was extent of psychological distress; subjects were asked whether or not they had experienced any of seven symptoms of distress, and the "yes" responses were summed to achieve a distress score. The results, analyzed according to age group, are shown in Table 40. The mean score for older men was 2.1 compared with 2.5 for younger men, a difference which was not statistically significant. Results of the question concerning frequency with which inmates experienced loneliness are also shown in this table. Thirty-nine percent of the younger men claimed that they often felt lonely, compared with only 23% of the older men, but this difference was not statistically significant.

The mental distress scores, analyzed according to time served, are shown in Table 41. In sharp contrast with the first measure of emotional stress, those who had served less than five years reported significantly more symptoms of emotional distress, ($t=2.22$, $p<.05$). They were also significantly more likely to acknowledge frequent feelings of loneliness, ($\chi^2 = 3.617$, $p<.05$). Forty percent said they often felt lonely, compared with only 20% of the men who had served 5 or more years. This is interesting in relation to the fact that no differences were observed between the two groups on any of the social support variables.

On the measure of psychological distress, significant

TABLE 39

PRISON STRESS SCALE RESPONSES OF MEN IN THE THREE STUDY PRISONS

SOURCE OF STRESS	NO. WHO RESPONDED "SOMETIMES" OR "OFTEN"						
	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	(n)	(%)	(n)	(%)	(n)	(%)	χ^2
LOSS OF FREEDOM	26	81	22	73	20	67	1.716
ROLE LOSS	23	72	21	70	21	70	0.353
NOISE AND BAD LANGUAGE	20	63	13	43	16	53	2.285
MISSING SEXUAL OUTLETS	27	84	20	67	18	60	4.778
BOREDOM	21	66	19	63	18	60	0.212
LOSS OF FAMILY SUPPORT	12	38	13	43	14	47	0.549
INCONSISTENT MESSAGES	14	44	21	70	13	43	5.670
REGIMENTATION	17	53	14	47	11	37	1.709
BEING OBSERVED	18	56	14	47	17	57	0.779
HARRASSEMENT FROM STAFF	15	47	11	37	10	33	1.305
TROUBLE WITH FOOD	16	50	9	30	12	40	2.577
THEFT OF BELONGINGS	8	25	15	50	8	27	5.316
VIOLENCE FROM INMATES	7	22	6	20	9	30	0.936
	M	SD	M	SD	M	SD	F
TOTAL STRESS SCORE**	9.8	4.6	9.6	4.8	9.3	5.3	.109

**CODE: NEVER=1, SOMETIMES=2, OFTEN=3.
* P < .05

TABLE 40

MENTAL DISTRESS SCORES BY AGE

	OLDER (N=48)		YOUNGER (N=44)		
	M	SD	M	SD	t
DISTRESS (RANGE=0-7)	2.1	1.6	2.5	1.7	1.27
LONELINESS	(n)	(%)	(n)	(%)	χ^2
NEVER OR SOMETIMES	37	77	27	61	1.988
OFTEN	11	23	17	39	

TABLE 41

MENTAL DISTRESS SCORES OF MEN WHO SERVED SHORTER AND LONGER TERMS

	LESS THAN 5 YRS (N=47)		MORE THAN 5 YRS (N=45)		
	M	SD	M	SD	t
DISTRESS (RANGE=0-7)	2.6	1.5	1.9	1.8	2.22*
LONELINESS	(n)	(%)	(n)	(%)	χ^2
NEVER OR SOMETIMES	28	60	36	80	3.617*
OFTEN	19	40	9	20	

differences were observed among the prisons, ($F [2,92] = 5.7$, $p<.05$). As shown in Table 42, the mean scores were 1.6, 2.2 and 3.0 for prisons 1, 2 and 3 respectively. No differences were found in relation to loneliness.

Use of and satisfaction with health care

Contrary to the findings of both Jones (1976) and Twaddle (1976), in this study, older and younger subjects reported similar patterns of health care use. As shown in Table 43, the older men reported an average of 8.7 visits to the health clinic in the preceding month, compared with a mean of 8.0 visits for younger inmates, a difference which was not statistically significant. The inmates were also asked to rate the quality of the health care which they had received in prison (see Table 43). Only 32% of the younger subjects rated the health care as good or excellent, compared with 56% of the older men, ($\chi^2 = 4.60$, $p<.05$).

No significant differences were found in health care use between those who had been in prison a shorter time (less than 5 years) and those who had served 5 or more years (see Table 44). Nor were there significant differences in their rating of the quality of health care in prison.

Table 45 shows the breakdown of visits by prison. The inmates in Prison 1 reported an average of 10.4 visits for health care, compared with 6.4 at Prison 2, and 8.1 at Prison 3; these differences were not statistically significant. No

TABLE 42

MENTAL DISTRESS SCORES OF MEN IN THE THREE STUDY PRISONS

	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	M	SD	M	SD	M	SD	F
DISTRESS (RANGE=0-7)	1.6	1.4	2.2	1.7	3.0	1.6	5.701*

							χ^2
LONELINESS	(n)	(%)	(n)	(%)	(n)	(%)	
NEVER OR SOMETIMES	21	66	20	67	23	76	1.068
OFTEN	11	34	11	33	7	23	

* $P < .05$

TABLE 43

USE AND RATING OF QUALITY OF HEALTH CARE BY OLDER AND YOUNGER INMATES

	OLDER (N=48)		YOUNGER (N=44)		
	M	SD	M	SD	t
VISITS TO PRISON CLINIC	8.7	10.5	8.0	12.1	0.30
RATINGS OF HEALTH CARE					χ^2
	(n)	(%)	(n)	(%)	
POOR OR FAIR	21	44	30	68	4.60*
EXCELLENT OR GOOD	27	56	14	32	

TABLE 44

USE AND RATING OF QUALITY OF HEALTH CARE BY MEN WHO SERVED SHORTER AND LONGER TERMS

	LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		
	M	SD	M	SD	t
VISITS TO PRISON CLINIC	8.5	11.6	8.4	11.2	0.45

RATINGS OF HEALTH CARE

	(n)	(%)	(n)	(%)	χ^2
POOR OR FAIR	26	55	25	45	0.000
EXCELLENT OR GOOD	25	56	20	44	

TABLE 45

USE AND RATING OF QUALITY OF HEALTH CARE BY MEN IN THE THREE STUDY PRISONS

	PISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		
	M	SD	M	SD	M	SD	F
VISITS TO PRISON CLINIC	10.4	12.8	6.4	9.8	8.1	11.0	.965

RATINGS OF HEALTH CARE

	(n)	(%)	(n)	(%)	(n)	(%)	χ^2
POOR OR FAIR	18	56	17	57	16	53	.081
EXCELLENT OR GOOD	14	44	13	43	14	47	

* $P < .05$

differences between prisons were found in the rating of the quality of health care received.

The subjects were also asked to describe problems which they had encountered in obtaining health care in prison. Initially, again, these data were of a qualitative nature. The panel consisting of three nursing professors and the author independently assigned the responses to four categories:

1) problems of APPROPRIATENESS of health care
2) those relating to ACCESSIBILITY to health care
3) problems of ACCEPTABILITY of the care received, and,
4) NO problems.

One hundred percent agreement was attained on the coding of 50 of the 71 responses, and 75% agreement was reached on the remaining 21 responses. Response rates were again calculated; the number of complaints from a sub-group of the subjects, i.e., younger men, were divided by the total number of subjects in that group.

Table 46 summarizes the inmates' responses according to age group. Of the total sample, 39% said that they had NO difficulties with respect to health care. Forty-two percent of the older men had no complaints, compared with 36% of the younger men.

The most frequent type of complaint concerned "accessibility" to health care, accounting for 39% of all of the complaints. The absence of night coverage in the health centres

TABLE 46

HEALTH CARE COMPLAINTS BY OLDER AND YOUNGER INMATES

COMPLAINT TYPE	NO. & RATES OF COMPLAINTS					
	OLDER (N=48)		YOUNGER (N=44)		TOTAL	
	n	rate	n	rate	n	%
1. ACCESSIBILITY TO CARE	14	.281	14	.318	28	39
2. ACCEPTABILITY OF CARE	10	.208	12	.272	22	31
3. APPROPRIATENESS OF CARE	7	.146	14	.318	21	30
TOTAL	31	.645	40	.909	71	100
	(n)	(%)	(n)	(%)	(n)	(%)
NO. WITH NO COMPLAINTS	20	42	16	36	36	39%

was mentioned frequently by inmates in Prisons 2 and 3. Other concerns in this category included: "difficulty getting an appointment with doctor/dentist/ optometrist," "lack of access to AIDS testing," and "very slow service."

The second most frequent type of complaint was related to the "acceptability" of the health care - about 30% of the complaints. The vast majority of these related to the attitudes of the medical staff. Inmates complained of being stereotyped as "pill-seekers". For example, a drug addict complained that because of his history, he was denied laxatives or aspirins. He noted that these would be of little help for his heroin addiction. A number expressed the opinion that the medical staff really do not care about the inmates; specific nurses or doctors were identified as being unsympathetic or even abusive.

Table 46 also reports the inmates' complaints related to "appropriateness" of health care. This category accounted for 30% of the problems mentioned. The most frequent concern here was the difficulty in obtaining suitable pain medication - particularly for headaches. Unmet needs for vitamins and special orthopedic shoes were also mentioned with some regularity.

When age-specific response rates were compared, the results showed that younger men expressed proportionately more concerns of each type than did older men. Their total rate of complaints was .909, compared with only .645 for the older men.

Health care complaints by inmates who served shorter and

longer sentences are shown in Table 47. Those who had served less than five years had a higher total rate of complaints, i.e., .808, than did the men who had served more time, (rate=.733). Complaints regarding acceptability of care were the only ones for which the longer-term inmates had higher rates.

Table 48 shows the health care complaints of men in each of the three prisons. Those in Prison 1 reported only 14 complaints, compared with 19 in Prison 3 and 38 in Prison 2. This resulted in complaint rates ranging from .437 in Prison 1 to 1.10 in Prison 2.

Appendix I lists the inmates' suggestions for improving the health care inside prison. A number of worthwhile and concrete suggestions were made by both older and younger men. The ideas included improved physiotherapy services, better screening, better communications between staff and inmates, and more staff for more hours of the day. One creative idea was that since many of the men go to the clinic just to talk, someone could be there just for that purpose. Many of the men indicated that the system of contracting medical service was open to abuse, and therefore, independent evaluation is needed.

Relationships Among the Variables

Table 49 shows a correlation matrix of the 9 major variables in the study. For this analysis, total scores were

TABLE 47

HEALTH CARE COMPLAINTS BY INMATES WHO SERVED SHORTER LONGER TERMS

COMPLAINT TYPE	NO. & RATES OF COMPLAINTS					
	LESS THAN 5 YRS (N=47)		5 YRS OR MORE (N=45)		TOTAL	
	n	rate	n	rate	n	%
1. ACCESSIBILITY TO CARE	17	.361	11	.244	28	39
2. ACCEPTABILITY OF CARE	6	.128	16	.356	22	31
3. APPROPRIATENESS OF CARE	15	.319	6	.133	21	30
TOTAL	38	.808	33	.733	71	100
	n	%	n	%	n	%
NO COMPLAINTS	18	38	18	40	36	39%

TABLE 48

HEALTH CARE COMPLAINTS BY MEN IN THE THREE STUDY PRISONS

	NO. & RATES OF COMPLAINTS							
	PRISON 1 (N=32)		PRISON 2 (N=30)		PRISON 3 (N=30)		TOTAL	
COMPLAINT TYPE	n	rate	n	rate	n	rate	n	%
1. ACCESSIBILITY TO CARE	4	.125	18	.600	6	.200	28	39
2. APPROPRIATENESS OF CARE	5	.156	11	.367	5	.166	21	30%
3. ACCEPTABILITY OF CARE	5	.156	9	.300	8	.267	22	31%
TOTAL	14	.437	38	1.100	19	.633	71	100
	n	%	n	%	n	%	n	%
NO COMPLAINTS	18	56	7	23	11	36	36	39

TABLE 49

CORRELATION MATRIX OF KEY STUDY VARIABLES - TOTAL SAMPLE (N=92)

	TOTHRS	THEALTH	CLVISITS	HEALTHC	HABITS	STRESS
TOTHRS	1.00000					
THEALTH	-.06393	1.00000				
CLVISITS	-.16812*	.35225**	1.00000			
HEALTHC	-.02718	-.10868	-.04697	1.00000		
HABITS	-.18695*	-.02342	.02139	-.01432	1.00000	
STRESS	.24035*	-.06272	-.00676	-.14852	-.04519	1.00000
SS	.03506	.18304*	-.07339	.01521	.21582*	-.18683*
MENT	.21663*	.17166*	-.00249	-.02851	.03496	.32735**
LONELINESS	.09571	.14576*	-.10156	-.16531	.08664	.29937**

	SS	MENT	LONELINESS
SS	1.00000		
MENT	.04806	1.00000	
LONELINESS	.06281	.45147**	1.00000

*P < .05, **P< .01, 2-TAILED TESTS.

KEY TO TABLES 49-53

TOTHRS: TOTAL HRS SPENT IN PRISON PROGRAMS AND INDIVIDUAL ACTIVITIES
THEALTH: TOTAL NUMBER OF HEALTH PROBLEMS
CLINIC VISITS: TOTAL NUMBER OF CLINIC VISITS
HEALTHC: SATISFACTION WITH PRISON HEALTH CARE
HABITS: TOTAL NUMBER OF POSITIVE HEALTH HABITS
STRESS: TOTAL OF RESPONSES TO PRISON STRESS SCALE
SS: TOTAL SOCIAL SUPPORT SCORE
MENT: TOTAL NUMBER OF SYMPTOMS OF MENTAL DISTRESS
LONELINESS: AMOUNT OF LONELINESS

used for the various scales, rather than individual scale items. A number of significant associations were observed, and while these will be highlighted below, the reader is cautioned that the magnitude of many of the associations was fairly weak.

1) Greater involvement in program and individual activities (TOTHRS) was associated with fewer Clinic Visits. But interestingly, this variable was also associated with higher Stress, more symptoms of Mental Distress, and fewer positive Health Habits.

2) The composite measure of Social Support (SS) was negatively associated with Stress and positively associated with Health Habits. But, contrary to expectations, it was also associated with more Health Problems.

3) The total number of Health Problems (THEALTH) was positively associated with Clinic Visits, Mental Distress, and Loneliness. But as previously mentioned, it also correlated with higher levels of Social Support.

4) Loneliness had a strong and highly significant correlation with symptoms of Mental Distress, Stress and number of Health Problems.

5) Stress was correlated with Mental Distress, Loneliness, less Social Support, and, as previously mentioned, more Involvement in Programs.

6) Mental Distress (MENT) was positively associated with number of Health Problems, Stress and Total Hours of involvement.

7) Health Clinic Visits (CLVISITS) was positively associated with Health Problems, and negatively associated with Involvement in programs.

8) Health Habits (HABITS) was negatively correlated with Involvement, but contrary to expectations, did not relate to Physical Health Problems or Clinic Visits.

Separate correlation matrices were constructed for older and younger subjects. These are shown in Tables 50 and 51. Six statistically significant associations were found for younger men, and seven for older ones. It is interesting that only two similar associations were found when the matrices were compared, suggesting that the groups do differ in some fundamental ways.

For both older and younger inmates, Clinic Visits (CLVISITS) was associated with number of Physical Health Problems; the correlation coefficient was smaller among older inmates. And for both groups, Loneliness was associated with Mental Distress (MENT).

For younger men only, the following associations were found:

1) Total number of Health Problems (THEALTH) had a weak but significant association with Mental Distress, as well as with Loneliness and Clinic Visits as outlined above.

TABLE 50

CORRELATION MATRIX OF KEY STUDY VARIABLES - YOUNGER INMATES (N=44)

	TOTHRS	THEALTH	CLVISITS	HEALTHC	HABITS	STRESS
TOTHRS	1.0000					
THEALTH	-.1566	1.0000				
CLVISITS	.0116	.4915**	1.0000			
HEALTHC	.0265	.0034	.0658	1.0000		
HABITS	-.1067	-.0514	-.1467	.0865	1.0000	
STRESS	.0794	.2158	.1862	-.2107	.0409	1.0000
SS	.0568	-.1663	-.2616*	-.0824	.1034	-.0001
MENT	.3298**	.2481**	-.0845	.0588	.1278	.2372
LONELINESS	.1226	.2029	-.0450	-.1412	.0666	.3353*

	SS	MENT	LONELINESS
SS	1.0000		
MENT	.1131	1.0000	
LONELINESS	.1244	.6052**	1.0000

* p < .05
** p < .01, 2-TAILED TESTS

TABLE 51

CORRELATION MATRIX OF KEY STUDY VARIABLES - OLDER INMATES (N=48)

	TOTHRS	THEALTH	CLVISITS	HEALTHC	HABITS	STRESS
TOTHRS	1.0000					
THEALTH	.0499	1.0000				
CLVISITS	-.3276*	.2657*	1.0000			
HEALTHC	.0542	-.2296	-.1477	1.0000		
HABITS	-.1996	-.0298	.1369	-.1668	1.0000	
STRESS	.2250	-.2194	-.1518	.1036	.0055	1.0000
SS	.1350*	.2852*	-.0188	-.0290	.2344*	-.1676
MENT	.0400	.1443	.0727	-.0443	-.0057	.3725*
LONELINESS	-.0299	.1391	-.1481	-.1187	.1661	.1583

	SS	MENT	LONELINESS
SS	1.0000		
MENT	.0739	1.0000	
LONELINESS	.1101	.2576*	1.0000

*P < .05, **P< .01, 2-TAILED TESTS

2) Mental Distress (MENT) was positively associated with Total Hours of Involvement.

3) Social Support (SS) had a negative association with Clinic Visits.

4) Loneliness had a positive association with Stress.

In addition to the two relationships already mentioned, the following associations were found among older men:

1) Clinic Visits (CLVISITS) were negatively associated with Total Hours of Involvement in prison programs. It is likely the case that men who were unable to be involved in many of the programs because of poor health, were also the ones who used the clinic services more often. However, it is also possible that being more involved in programs keeps a man healthier so he doesn't need to use the health services as often.

2) A positive association was found between Social Support and Total Hours of Involvement.

3) Mental Distress was positively associated with Stress. This was not true for younger men, suggesting that older men are perhaps less psychologically able to handle prison stresses.

4) Social Support (SS) was positively correlated with both Health Habits and number of Health Problems. Those with more support should have suffered fewer health problems, if a clear causal relationship existed between social support

and physical health.

In summary, among younger men, Total number of Health Problems was positively associated with three other variables. Among older men, Social Support was associated with three factors. Only two common associations were found.

Contrary to expectations, no association was found between Health Habits and the Total Number of Health Problems, for either of the older or younger men. A further analysis was carried out to see if specific health behaviors would correlate with specific health problems. Each of the seven health habits was correlated with the following disorders: infectious illness, circulatory disorders, digestive problems, problems with the nervous system, and, musculo-skeletal difficulties. Only one statistically significant association was found. Among younger men, circulatory difficulties were negatively associated with weight maintenance, ($r=-.3739$). Therefore, the simple relationships reported on the non-inmate subjects in California were not supported by these data pertaining to inmates (Beloc & Breslow, 1972). Different results may have emerged if the sample size had been larger or if different indices of health had been used.

Results of Factor Analysis

The 9 major variables were subjected to a principle component factor analysis, in order to determine the number and nature of underlying variables. Table 52 shows the unrotated and rotated results. Variables with loadings of less than 0.3

are omitted from the table.

Four factors were identified in the rotated analysis; they accounted for about 63% of the variance. Factor I, which accounted for 21% of the variance, was comprised primarily of Loneliness, Mental Distress and Stress, an interesting and reasonable measure of mental health. Loadings on this measure also included poorer ratings of Health Care, and interestingly, more Total Hours of involvement in activities.

Factor II was mainly determined by two variables - Health Problems and Clinic Visits. This factor appears to be a composite indicator of physical health status.

Factor III consisted of three main variables - Social Support, reduced Stress, and, higher ratings of Health Care. This factor certainly supports Gotlieb's (1984) contention that perceptions of stress are highly influenced by the presence or absence of a strong support network.

Factor IV consisted of low Health Habits scores and increased hours of involvement in Activities. It would be difficult to assign a label to this factor without further investigation.

TABLE 52

FACTOR MATRIX OF KEY STUDY VARIABLES: PRINCIPAL COMPONENTS ANALYSIS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
MENT	.75936			
LONELINESS	.73690			
STRESS	.67263			
THEALTH		.73913		.35552
SS		.42889	.64698	.37197
CLVISITS		.57953	-.58910	
HABITS		.38166	.55228	-.51939
TOTHRS	.45372	-.40938		.50943
HEALTHC				.39492

ROTATED FACTOR MATRIX : VARIMAX ROTATION

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
LONELINESS	.78289			
MENT	.75223			
STRESS	.63313		-.44605	
HEALTHC	-.33476		.32056	
THEALTH		.81059		
CLVISITS		.79523		
SS			.84723	
HABITS				-.77868
TOTHRS	.33831			.67470

FINAL STATISTICS:

VARIABLE	COMMUNALITY	*	FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
		*				
TOTHRS	.63485	*	1	1.91007	21.2	21.2
THEALTH	.77448	*	2	1.51543	16.8	38.1
CLVISITS	.69037	*	3	1.27432	14.2	52.2
HEALTHC	.31699	*	4	1.05219	11.7	63.9
HABITS	.72128	*				
STRESS	.62692	*				
SS	.74090	*				
MENT	.61552	*				
LONLINES	.63069	*				

The factor analysis was repeated for the older and younger inmates separately. Table 53 shows that for older inmates, the first factor consisted of Physical Health Problems and increased Clinic Visits. Unexpectedly, it also included higher Social Support and lower Stress. Factor Two strongly linked together the mental health variables, i.e., Mental Distress, Stress and Loneliness. Factor Three for the older men consisted of more Involvement in activities, higher Social Support, and reduced Clinic Visits.

A different factor structure emerged for the younger men. The first factor was highly weighted by Mental Distress, Loneliness, and Stress, along with weaker loadings on Physical Health Problems and Involvement. Factor Two was comprised mainly of higher Clinic Visits and more Physical Health Problems, along with less Social Support. This factor is more in keeping with the general literature pertaining to Social Support than was the case for older men, where unexpectedly, increased Social Support was tied to increased Physical Health Problems; this may not have been true had internal and internal support been analyzed separately since the prison literature pointed to the potential stressfulness of contacts with friends and family on the outside.

It would be difficult to challenge existing theories of factors related to health, on the basis of this small study. However, the results of this factor analysis do suggest that different conditions may contribute to health of older and younger inmates, an area which warrants further investigation.

TABLE 53

ROTATED FACTOR MATRIX BY AGE GROUPS

a. ROTATED FACTOR MATRIX: YOUNGER INMATES (AGE 30 AND UNDER)

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
MENT	.88148			
LONELINESS	.80762			
CLVISITS		.82697		
THEALTH	.32396	.74983		
SS		-.57089		
HEALTHC			.88091	
STRESS	.47816		-.49351	
TOTHRS	.36627			-.76066
HABITS				.69708

b. ROTATED FACTOR MATRIX: OLDER INMATES (AGE 45 YEARS AND OVER)

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
THEALTH	.87429			
SS	.53424		.40376	.44583
HEALTHC	-.41832			
MENT		.81102		
STRES	-.34717	.75694		
TOTHR			.76762	
CLVISITS	.36803		-.74037	
HABITS				.84029
LONELINESS		.48247		.51367

Results of the Survey of Senior Prison Officials

In presenting the results of the interviews with eight senior prison officials, attention will be drawn to the questions for which there was 50% or more agreement. Where appropriate, comparisons will be made between the views of the officials, and the data obtained from inmates.

Stereotypes of older inmates

In general, the officials spoke positively about older men in their prison. When asked how they would characterize older inmates, one half of the officials stated that they are easier to deal with, compared with younger inmates. They elaborated on this view with comments such as the following: "not so punky," "more mature," "less aggressive," and "more settled." Three officials characterized them as been isolated from families and friends. One said that they were often neglected in terms of programs and overall case-management. Another claimed that they were more sociable with the staff and less manipulative. They were also typified as being unlikely to repeat their crimes upon release. Three officials expressed the view that some older men become more difficult to manage as they near release, often breaking petty rules in an apparent attempt to avoid facing life on the outside.

Several officials characterized older inmates' health problems as stemming mainly from chronic illnesses. A high prevalence of alcohol and drug-related disorders was noted. Three officials claimed that older men tend to use health

services more judiciously, i.e., only when they have a legitimate need. One claimed that they underuse health services because they have difficulty articulating their needs.

In summary, the majority of the comments were favorable, suggesting that similar to Krajick's (1979) findings, the older men are prized inmates. The staff seemed to be less suspicious of their motives, and in general, found them easier to manage. One exception to this concerned long-term inmates in the period immediately prior to their release date. These men were described as anxious, difficult to manage, and disobedient of prison rules.

Views concerning older inmates' involvement in prison life

The officials' responses concerning differences between older and younger inmates' involvement in prison life are summarized in Table 54. On five of the eight items, the officials' views differed markedly from results obtained on the inmate survey.

Seventy-five percent of the officials believed that older inmates use educational programs less often than younger inmates. The inmate survey did not support this. While the older men did report fewer hours of school involvement per week - an average of 8.4 hours per week compared with 10.5 hours for the younger men - the difference was not statistically significant.

TABLE 54

OFFICIALS' RATINGS OF OLDER INMATES PARTICIPATION IN PRISON ACTIVITIES AND SERVICES (COMPARED TO YOUNGER INMATES) - N=8

TYPES OF ACTIVITIES/SERVICES	USE BY OLDER INMATES					
	MORE OFTEN		SAME		LESS OFTEN	
	(n)	(%)	(n)	(%)	(n)	(%)
EDUCATIONAL OFFERINGS	0	00.0	2	25.0	6	75.0*
PRISON WORK/VOCATIONAL PROGRAMS	3	37.5	3	37.5	2	25.0*
RECREATIONAL PROGRAMS	0	00.0	1	12.5	7	87.5
VOLUNTEER ACTIVITIES	3	37.5	2	25.0	3	37.5*
ALCOHOL TREATMENT PROGRAMS	3	37.5	4	50.0	1	12.5
RELIGIOUS ACTIVITIES	6	75.0	1	12.5	1	12.5
INDIVIDUAL HOBBIES	5	62.5	2	25.0	1	12.5*
HEALTH SERVICES	5	62.5	2	25.0	1	12.5*

* RESULTS DIFFER FROM DATA OBTAINED ON INMATE SURVEY

The officials were divided in their views regarding older mens' participation in work and vocational training, as compared with that of younger men. According to the inmate survey, however, there were significant age differences. Older men reported an average of 24.5 hours per week of work, compared with only 17.3 for the younger men.

Seven of the eight officials believed that older inmates use recreational programs less frequently than younger inmates. This does concur with the accounts of the inmates. Older men were significantly less involved in both teamsports and gymnastic programs.

The officials were divided in their impressions of older mens' involvement in volunteer activities. The inmate data did not produce any significant age differences on this measure. It is interesting that of the eight officials, only two were in a sense "correct", since the remaining six either over-estimated or underestimated involvement in this area.

Half of the officials thought that involvement of older and younger inmates in alcohol or drug programs was about equal. The inmate data supported this in that no significant differences were found between older and younger men on this activity.

There was strong agreement (87.5%) among the officials that older inmates are more involved than younger inmates in religious activities and programs. This was substantiated in the inmate survey.

A majority of the officials (62.5%) believed that older men are more involved than younger men in individual hobbies. No evidence of this was found in the inmate survey.

Sixty-two percent of the officials thought that older men use the prison health services more often than younger men. According to the inmate survey, there is little support for this. While older inmates in the study reported 8.7 visits for health care in the previous month, compared with an average of 8.0 visits for the younger men, the difference was not statistically significant.

Age-related differences in adapting to prison

The officials' views concerning older and younger inmates' adaptation to prison are summarized in Table 55. Only one of these items - social support - was included in the inmate survey, and a notable discrepancy was found. While 62% of the officials thought that older inmates had fewer available social supports when compared with their younger counterparts, the inmate survey in fact suggested that the opposite was true. The older inmates reported significantly greater numbers of visits, and more extensive friendship patterns inside the prison.

Of the remaining five areas of adaptation, at least one half of the officials thought that older men are more likely to obey prison rules, better adapted generally in prison, and are less likely to make formal complaints. This suggests that one reason their needs may be overlooked by administrators is that

TABLE 55

OFFICIALS' RATINGS OF OLDER INMATES ADAPTATION TO PRISON LIFE

(COMPARED WITH YOUNGER INMATES) - N=8

	OCCURANCE AMONG OLDER INMATES					
	MORE		SAME		LESS	
AREAS OF ADAPTATION	(n)	(%)	(n)	(%)	(n)	(%)
HAVING AVAILABLE SOCIAL SUPPORTS	0	00.0	3	37.5	5	62.5*
EASILY OBTAINING PAROLE	3	37.5	4	50.0	1	12.5
FILING FORMAL COMPLAINTS	0	00.0	2	25.0	6	75.0
OBEYING PRISON RULES	8	100.0	0	00.0	0	00.0
SECURING RESPECT FROM OTHER INMATE	2	25.0	3	37.5	3	37.5
ADAPTING IN GENERAL TO PRISON LIFE	7	87.5	0	00.0	1	12.5

* Results differ from those obtained on inmate survey

they are more passive and less likely to complain about things which are troubling them.

Age-related Differences in Sources of Stress

Table 56 shows the officials' impressions related to sources of stress among inmates. The officials' views coincided with the inmates reports on only three of the sources of stress. Similar to reports of the inmates, they thought that older men were more bothered by noise and bad language, less bothered by being continually observed, and about equally bothered by loss of freedom to come and go.

According to the inmate survey, there were no differences between older and younger inmates' concerns related to either loss of usual roles, sexual deprivation, or violence from other inmates. However, only three of the eight officials believed that older and younger men were similarly affected by these three types of stress. Half thought that older men were less bothered by sexual deprivation, similar to the view held by society in general regarding diminished interest in sexual activity with advanced age.

The officials (75%) believed that older inmates were less troubled by regimentation of daily life, and more troubled by theft of their belongings. According to the inmate survey, there was no significant age difference in stress from regimentation, and in the case of theft of belongings, it was the younger men who expressed difficulty significantly more often.

TABLE 56

OFFICIALS' RATINGS OF SOURCES OF STRESS FOR OLDER INMATES (COMPARED WITH YOUNGER INMATES) - N=8

SOURCES OF STRESS	FREQUENCY AMONG OLDER INMATES					
	MORE OFTEN		SAME		LESS OFTEN	
	(n)	(%)	(n)	(%)	(n)	(%)
NOISE AND BAD LANGUAGE	6	75.0	1	12.5	1	12.5
CONTINUOUS OBSERVATION	1	12.5	1	12.5	5	62.5
LOSS OF FREEDOM TO COME AND GO	1	12.5	4	50.0	3	37.5
LOSS OF USUAL ROLES	3	37.5	3	37.5	2	25.0*
SEXUAL DEPRIVATION	1	12.5	3	37.5	4	50.0*
VIOLENCE FROM OTHER INMATES	2	25.0	3	37.5	3	37.5*
REGIMENTATION OF DAILY LIFE	1	12.5	1	12.5	6	75.0*
THEFT OF PERSONAL BELONGINGS	5	62.5	3	37.5	2	25.0*
BOREDOM	2	25.0	4	50.0	1	12.5*
LOSS OF SOCIAL SUPPORTS	5	62.5	1	12.5	3	37.5*

*Results differ from data obtained on inmate survey

Half of the officials thought that older men were no more troubled by boredom than were younger men, however, the inmate survey showed that boredom was significantly more often a problem for younger men.

The officials appeared to overestimate the degree of difficulty which older men experience in terms of loss of emotional support. Sixty-two percent thought they were more troubled than younger inmates by loss of social support, whereas, the inmate survey found them to be no more troubled by this than were the younger men.

Age-related differences in types of medical problems

Table 57 shows the views of health officials (n=4) concerning the types of disorders presented by older and younger inmates. The health officials' views coincided with the inmate survey which showed a higher incidence of vision and hearing disorders and lower incidence of sports or work-related injuries among older prisoners. Whereas half of the officials thought older men suffered from more infectious illness, the inmate survey failed to show evidence of this.

Two of the four officials (50%) thought that the incidence of alcohol-related problems and psychiatric illness was about equal among older and younger inmates, and that older men were more likely to have stress-related disorders. All four said that older men were less likely to present with self-inflicted wounds or manipulative behavior, and more likely to experience

TABLE 57

HEALTH OFFICIALS' RATINGS OF DISORDERS PRESENTED BY OLDER INMATES (COMPARED WITH YOUNGER INMATES) - N=4

	OCCURANCE AMONG OLDER INMATES					
	MORE		SAME		LESS	
TYPE OF DISORDER	(n)	(%)	(n)	(%)	(n)	(%)
VISION OR HEARING DIFFICULTIES	4	100.0	0	00.0	0	00.0
WORK OR SPORTS INJURIES	0	00.0	0	00.0	4	100.0
ACUTE INFECTIOUS DISEASE	2	50.0	1	25.0	1	25.0
ALCOHOL-RELATED PROBLEMS	1	25.0	2	50.0	1	25.0
OVERT PSYCHIATRIC ILLNESS	0	00.0	2	50.0	2	50.0
MANIFESTATIONS OF STRESS	2	50.0	1	25.0	1	25.0
SELF-INFLICTED WOUNDS	0	00.0	0	00.0	4	100.0
MANIPULATIVE BEHAVIOR TO GET DRUGS OR A TRANSFER	0	00.0	0	00.0	4	100.0
CHRONIC HEALTH PROBLEMS	4	100.0	0	00.0	0	00.0
ACUTE MEDICAL EMERGENCIES E.G. STROKE OR HEART ATTACK	3	75.0	0	00.0	1	25.0

chronic health problems. Three officials claimed that older men presented with acute medical emergencies more often than younger ones. There was no parellel to this latter question in the inmate survey.

Difficulties in service delivery

A number of service-related difficulties were noted by the officials. A major issue concerned the difficulty of establishing effective rehabilitation plans for older men. Successful release was seen to be complicated by their poor interpersonal skills, unrealistic expectations about life on the outside, poor work skills and in some cases, poor physical condition.

Several organizational issues were mentioned. These included "too many inmates," " not enough time and resources," and, "inadequate knowledge and skill on the part of staff for dealing with aging persons". The difficulty of scheduling activities such as movies was noted, since older and younger men may have very different tastes. One official noted that many of the older men could be sent to minimum security prisons, but because the emphasis in many of those settings is on strenuous work, they would tend to be "lost in the shuffle," with few program alternatives.

Several difficulties associated with providing health care were identified. The officials claimed that non-compliance with medical regimes was a major problem among the older inmates. Failure to take prescribed medicines or treatments was

attributed to "low intelligence levels, unrealistic expectations of instant results, and long-term habits which are difficult to break". The health officials also believed that while the prison was adequately prepared to deal with acute illness and medical emergencies, it was not equipped to handle chronic illness if 24-hour care, physiotherapy, and other specialized treatments are needed. One official noted the reluctance of older men to discuss emotionally charged medical concerns, e.g., about AIDS or herpes.

Segregation versus integration

The officials were about equally divided regarding the benefits of having segregated facilities for older inmates. Reasons given for opposing segregation were:

1) Segregation could result in geographic isolation of older men from their local communities and support networks.

2) With segregation, there would be no younger men to help the older ones out.

3) It would have a destabilizing effect on the younger men.

4) Integration is more like the real world and therefore facilitates better adjustment upon release.

On the other hand, segregation was seen to have some distinct advantages. These included the following:

1) Segregation would allow more streamlined programs to meet the needs of the older men.

2) Segregation would reduce the stress on older inmates emanating from loud radios and rough language.

3) The older inmates would not be outnumbered in the struggle for power.

4) The older men would develop more cohesive relationships among their peers, rather than the isolation which currently exists.

In conclusion, the officials spoke positively about older inmates, but their response to specific questions suggested a number of negative stereotypes. On many of the questions, their impressions differed from information obtained from inmates. This will be discussed further in Chapter VI.

CHAPTER VI

Interpretation and Discussion of the Results

The results of this study provided some interesting insights into differences and similarities between older and younger inmates. Overall, in terms of their physical health, older and younger inmates were found to be more similar than what had been expected on the basis of previous research (see Jones, 1976; Twaddle, 1976). The older men demonstrated surprisingly higher levels on some of the study variables, e.g., social support resources and responses to stress. When compared with younger inmates, the older men appeared to be disadvantaged on only a few of the health-related variables, e.g., participation in physical activities.

Participation in Prison Programs and Work

The study found that older inmates were more involved in religious activities than were younger men. This included both formal church services as well as individual worship. Reed and Glamser (1979) also found that, even in the absence of formal religious opportunities, many older inmates engaged in private worship and bible reading. In the prisons used for this study, basic prison chapel services were non-denominational; it was interesting to note that outside religious groups held periodic services inside the prison, however, four inmates of religious minorities expressed concern about the lack of opportunities for formal worship in their chosen faith.

The results pertaining to educational involvement differed from those found by other researchers. Goetting (1984) found older men to be less involved than younger men in educational programs. She contended that while educational programs are usually available in most prisons, they are not well-suited to the needs of older inmates. She further claimed that older men are unmotivated to participate in school activities, and, are discouraged by the staff from doing so.

The majority of the officials who were interviewed for this study were also of the opinion that older men were less involved in educational programs. However, the interviews with the inmates did not demonstrate that these views were justified.

This study showed that older inmates were quite involved in educational activities. They participated an average of 8.4 hours per week in school, compared with 10.5 hours for younger men, a difference which was not statistically significant. They enthusiastically described involvement in primary and secondary education, correspondence courses, and to a lesser extent, vocational trades training. A number were learning to read for the first time. The researcher was genuinely impressed with the number of older men who said they were viewing their imprisonment as an opportunity to improve their minds, suggesting a fairly healthy form of coping behavior.

In general, these results refuted the idea that older inmates are unmotivated to participate in educational activities. The origins of this stereotype may lie in the

broader society, where older persons are often viewed as either unwilling or unable to "learn new tricks". It may be the case that educational offerings in B.C. prisons have attracted more older men because either the programs here are viewed as more attractive by these men, or, they because they perceive a greater emphasis on education by parole boards in this jurisdiction.

In this study, older inmates were equally involved in alcohol or drug treatment programs and other group programs, when compared with younger inmates. On the basis of time alone, this would suggest that overall, older inmates' needs are as well-served by the structured programs offered within prison, as are younger mens' needs. However, the effectiveness of these programs in meeting older mens' needs was not evaluated. A more comprehensive treatment of this issue would entail examination of not only USE of the various program alternatives, but also satisfaction with, and effectiveness of, the programs, for inmates of different ages.

In relation to more individual types of activity, the study uncovered interesting patterns of involvement in volunteer work. Thirty-one percent of the older men and 25% of the younger ones had found creative opportunities for various volunteer activities, an aspect of prison life which was not addressed in the literature.

Volunteer activities seemed to enhance the lives of many of the inmates. One white-haired man graphically described his

transition from being on the country's ten most-wanted list to his present role as a clown for children in hospitals and at parades. Another was recently featured on television for his efforts in introducing a reading program for illiterate inmates. Two of the prisons had programs which matched inmate volunteers, on a one-to-one basis, with mentally handicapped persons who were brought into the prison. Research into the benefits of such activity would be useful. It would also seem that more opportunity for, and recognition of, such endeavors could be extended by the correctional system. For inmates of all ages, such activity may serve as retribution for guilt stemming from previous harm done to others; community diversion programs requiring community service appear to operate somewhat on this model. Volunteering also may serve to enhance an inmates' self-esteem by providing a sense of purpose or meaning. For older inmates, volunteering may serve to meet the desire to leave a legacy, one of the hypothesized developmental tasks of later life (Butler & Lewis, 1973).

The study showed that compared with younger inmates, older men in prison engage much less often in physical recreation programs including both teamsports and gym activities. "Walking around the exercise yard" was the only physical activity in which most of the older men took part. In particular, there appeared to be no structured physical activities for those with either reduced energy reserves or mobility restrictions. In light of the importance of maintaining strength and flexibility in later life, more effort should be made to provide fitness

programs which are geared to older inmates' needs. Several men mentioned that they would like to see non-contact sports offered, and an aerobics class for people with some arthritis was suggested by one man. Introduction of such programs should be founded on a detailed needs assessment in this area, since inmate interests and limitations undoubtably differ over time and from prison to prison.

The study investigated inmates' involvement in prison work. The results indicated that most of the older men were actively employed. Seventy-nine percent of those aged 45 and over had jobs; only two older men claimed to be neither working nor attending school. A number of these older inmates held positions of trust and prestige, e.g., accounting, coordinating education and religious programs, maintenance work in the hospital and warden's office, and operating a power plant. Their reliability as employees was noted by several officials, so that similar to the case in the United States, they seem to be viewed as "select and prized inmates" (Krajick, 1979), commanding the greatest amount of trust from the administration (Jones, 1976). It is interesting to speculate on the extent to which their competence in these jobs is a result of the higher expectatations placed them by the staff, as opposed to being a causal factor. In other words, would younger men perform equally as well in these positions of trust if the staff conveyed the message that this was what was expected in terms of the "norm". It would also be of interest to determine the influence of this factor on morale and self-esteem, i.e., positive mental health.

Several inmates, who came into prison with professional backgrounds or specific trades skills, expressed concern that they had no opportunity in prison to keep these skills up-to-date.

One interesting aspect of prison life is the lack of forced retirement. There seems to be no set age at which a man is expected to quit his prison job. Only two of the older men in the study were actually "retired"; the rest either worked or attended school.

While this study did not directly measure the attitudes of younger men towards the older ones, there was no evidence that they resented the greater prestige and "better" jobs which the older men held. In fact, the older men, particularly those who had committed major crimes such as murder, appeared to be respected by the inmates as well as the staff. They were refered to as the "oldtimers", and several younger men noted that they had received considerable help from these inmates when they first came into the prison. (The exception here were those who had committed sex-related offences.) And, unlike the situation in nursing homes, two older inmates said that they were still receiving their full Canada pension benefits. One man who had been receiving his pension during 20 years of incarceration claimed to have a nest-egg in excess of $25,000.

Among those with no previous job skills, the general feeling was that prison did not afford meaningful opportunities for retraining, a view which was shared by the prison officials.

This has implications for both institutional adjustment as well as successful application for - and adjustment to - release. Consider the employability of a man who is 55, untrained in any specific field, and, in addition, has a criminal record. Even the man's criminal skills may have become obsolete. For example, a 61-year old inmate confided that it had become extremely difficult to make a living as a safe-cracker. He said, "you don't stand a chance if you aren't into dealing drugs these days, and that just isn't my area of expertise."

Social support

The officials in the study contended that older inmates suffer disproportionate decrements in social support contacts. Previous research suggested as well that this may be typical (Goetting, 1984). However, this was not substantiated by the inmates in this study. Compared with younger inmates, the older men had more contacts with friends and family by letter and personal visits, nearly double the number of friends in prison, and they were twice as likely to have a person in whom they could confide. Of course there were exceptions; one older man said that the letter he received regarding this study was the only correspondence he had had in thirteen years of imprisonment!

It is interesting to consider why the inmates' reports differed so markedly from the views of the officials on this and other questions in the study. It is possible, of course, that the officials' views were more accurate - that the inmates were

being dishonest in order to create a good impression or had fabricated an ideal reality as a way of coping with dispair caused by rejection by friends and family on the outside; several of the inmates commented that a man really begins to distort reality after several years "in the joint". And as mentioned earlier in this dissertation, a number of the men seemed anxious to impress the researcher and may therefore have been overestimating the amount of contact that they had with people outside of the prison.

It is also possible that the discrepancies would disappear with a larger, randomly selected sample of officials. However, it is also possible that the officials' stereotypes were inaccurate, formed on the basis of their attitudes concerning older people in general. Their views may also be conditioned by reports in the literature which describe American prisons. Canadian prisons and prisoners may be different from their American counterparts, a speculation which could be verified through cross-cultural investigations. There was evidence in this study which suggested that prison staff do not appear to be equipped with any particular knowledge or skills which relate to the normal biological and psycho-social processes associated with aging. Such information should be included in every staff training program, and provisions should be made for interested staff members to specialize in this area.

The older inmates appeared to pay less attention to the inmate code which prohibits close personal interaction with guards and other staff members. They sometimes selected these

people as confidants rather than another inmate. They undoubtably were more similar to the guards and living unit officers in terms of age, and in some cases, had similar backgrounds in relation to military service, employment (one inmate was a former prison guard), and attitudes towards the "punky young cons". The men who were "career criminals," having come and gone from prison a number of times in their lives, may have established long-term relationships with some of the staff.

Interestingly, several older inmates with professional backgrounds claimed that it was difficult to find peers among either inmates or staff. One man was a lawyer, one an engineer, and two were teachers. Perhaps more effort could be made to encourage these inmates to maintain ties with their normative groups; permission could be granted for them to attend meetings of their professional associations, trade unions, etc., instead of assuming that their primary identity should be derived from their role as a criminal.

Mental health

Overall, the mental health of the inmates, as measured in the study, was surprisingly good. More of the older men acknowledged stress from noise and bad language, compared with the younger men. However, 6 of 12 additional possible sources of stress were significantly less problematic for the older men. Their total stress scores were almost half those of the younger men, they had fewer symptoms of distress, and they claimed to be less lonely. These findings are similar to those which Jones

(1976) found for older white inmates. There was no evidence to suggest that the older men were being victimized or preyed upon by the younger ones.

In summary, the older men seemed to have adapted remarkably well to prison life. It may be that when compared with what their lives would be like outside of prison, older inmates have more opportunity for identification with a sub-culture, for establishing a high-status role in relation to employment, and for identifying with a social group - important factors in determining social and psychological well-being (Rubenstein, 1982). And because those age 65 and over continued to receive their old age pension, they were afforded economic stability superior to that found among younger inmates.

These findings have implications regarding the factors which must be considered if these men are to be successfully released back into society. Unless intensive efforts are made to provide quality options for older men following imprisonment, there is a good chance that at least some of them will re-offend, in order to return to the "sanctuary" of prison.

Physical health and related findings

Physical health status was also examined in this study. Apart from more hearing and visual difficulties, and fewer sports or work-related injuries, the health of the older men did not differ significantly from their younger counterparts. This undoubtedly reflects the relatively young average age of the older inmates - 54. It also may demonstrate survival of the

fittest; the inmate who received the highest scores on all of the measures in the study was 85 years old! Criminals with poor health status may either have died or been sent to other facilities. The apparent good health of the older men may also reflect the benefits of good food and medical care in prison.

A high incidence of alcohol use prior to admission was found among the older men in the study. Among those for whom this information was recorded, 60% were found to have alcohol or alcohol and drug problems on admission to prison. Others have noted the high incidence of alcoholism among elderly inmate populations as well (Krajick, 1979; Peterson and Braiker, 1980). The older men in this study were as likely to be attending an alcohol treatment group as were younger inmates. However, a number of them complained of the lack of sincerity on the part of younger inmates, who they claimed often came to meetings simply because attendance would look good on their prison record. Burnett and Kitchen (1987) noted that general alcohol programs are often inappropriate for older people. For example, older alcoholics take longer to detoxify, and they tend to speak a "different language" from the younger people who attend traditional programs. Greater efforts should be made to provide older men with passes to attend senior-focused alcohol and drug treatment programs in the community, and as well, to provide more specialized help to these men inside the prison.

Another important finding concerned the health habits of the men in prison. While the majority avoided alcohol and drug use and claimed to have some type of regular exercise, a

surprisingly large number of men of all ages smoked, many had problems maintaining normal weight and adequate sleep, and the majority did not regularly eat breakfast. These results were compared with the age-specific rates for men, reported by Wilson and Elinson (1981), whose data were obtained from adult residents of Alameda County, California.

The younger inmates' scores were identical to those of the Almeida County (noninmate) subjects of the same age, in terms of sleep patterns and weight maintenance and compared to the American residents, the younger inmates were less likely to be drinking (at present). But the young inmates were less apt to have regular exercise, less likely to eat breakfast regularly and much more likely to smoke. For older men, the scores of the Canadian inmates in this study and the Almeida County residents were similar regarding sleep patterns and alcohol use, and interestingly, the inmates were less likely to smoke. But the older inmates had greater difficulty maintaining their weight, were less likely to have regular exercise, and were much less likely eat breakfast on a regular basis. It would appear, therefore, that there are a number of opportunities for health promotion activities inside prison. These findings confirmed some of the author's earlier observations related to high risk behaviors of inmates (Gallagher & Beecher, 1987).

Use of and satisfaction with health services

The study also examined use of and satisfaction with prison health services. Although differences were not statistically

significant, there were indications that the older men used the health services slightly less often than younger men. It was interesting that the officials thought that they used these services more often. This is in keeping with general stereotypes of older people as having more physical health problems.

The older men rated the health care as being better than did the younger inmates. This may be a reflection of more positive attitudes of health care staff towards older inmate as compared with younger ones; the staff members who were interviewed in this study expressed the opinion that older people were much less likely to be manipulative in their requests for medical attention.

The sub-group who expressed the most complaints about health care were the older men in Prison 2. And among the types of complaints, accessibility to care was mentioned most frequently. The men had fears about the lack of health coverage at night, describing specific incidents which they thought were mishandled. A lack of compassion on the part of a number of the staff was also noted with regularity, by inmates in Prison 2. Further study is needed to determine the specific factors which may have contributed to these findings but there were indications that staff morale was low at this particular health clinic, in contrast to the other two prisons. Additional between-prison differences are discussed in the next section.

The difficult roles of medical staff, with conflicts

related to security versus health goals, are described in an article by Alexander-Rodiguez (1983). Undoubtedly, prison health care workers are subjected to many unique stresses, making them at risk for emotional and physical strain. The needs of these workers for support, education and ongoing evaluation must be thoroughly addressed by the correctional system.

The health officials, from all three prisons, noted several problems which they encountered in giving care to the older men. In particular, they noted the tendency of these men towards non-compliance with required medical regimes. They claimed that the older men often failed to take prescribed medicines or stick to recommended diets. Interestingly, many of the inmates said that they did not know enough about their illnesses, and would like more information about their disease and the treatments that had been prescribed. It is unlikely that with 10 minute appointments, the physicians have much time for detailed patient education; non-compliance CAN be associated with lack of information. This is a legitimate nursing function. It would be useful to design a study to determine whether improved patient education, on the part of nurses, would improve inmates' behavior in response to compliance.

Differences Among the Prisons

There is substantial evidence to show that administrative and physical environments of institutions have important consequences for the attitudes and behavior of the inhabitants.

For example, a study by Street, Vinter and Perron (1966) showed that differences in institutional goals can influence staff attitudes about inmates, relationships between staff and inmates, and the patterns of social relations and leadership that emerge among inmates. A number of interesting contrasts were found among the three prisons in the present study.

The inmates in Prison One were engaged in more individual hobbies and activities than those in the other two prisons, and in particular, spent more time engaging in volunteer activities. They had the fewest symptoms of psychological distress; much more study would be needed to explain this finding. It could be a result of their engagement in hobbies etc. or perhaps it is a result of the less restrictive physical environment. This prison has walls on one side only, since water surrounds the other three sides; the inmates are free to wander about the grounds. In addition, these inmates were most apt to admit to drinking alcohol in prison. They also reported significantly more visits to the prison health clinic; this likely relates to the practice in the other two prisons of providing weekly or monthly supplies of selective medicines, alleviating the need for daily visits.

The inmates in Prison Three had the most symptoms of psychological distress, related perhaps to the nature of their crimes (i.e. sex offences or other crimes causing them to be unpopular in the general prison population). Interestingly, they also were more apt to have a confidant, and more often selected another inmate for this purpose. These inmates were

more apt to be attending school, an activity which the living unit officers encouraged, according to the inmates.

In terms of health difficulties, those in Prison Three were more likely to suffer from problems of hearing and vision than the men in the other two prisons. Insufficient information was gathered for even the most rudimentary explanation for this finding, but it does arouse ones' interest regarding possible contributory factors. In order to address this, one would want to know specifics of the diagnoses, time of onset of disease, prevalence rates, environmental characteristics such as lighting, seasonal patterns, etc.

The inmates in Prison Two were unique in terms of being more involved in work, an area which the deputy warden claimed was a strong program emphasis in that institution. They also expressed more concerns about health care than inmates in the other settings.

It would be inappropriate to draw any firm conclusions about policy or other administrative differences amongst these prisons, on the basis of this study alone. However, there were indications that each of these prisons emphasized different program alternatives, and that the kinds of problems which inmates presented were unique. The practice of giving out multiple doses of medications, as carried out in two of the prisons, did reduce the number of visits to the health clinics. Again, the increased number of complaints about health care in one of the prisons may have implications for further

investigation.

Short-term Versus Long-term Incarceration

The present study uncovered very few differences between men who had served less than five years and those with lengthier incarcerations. The men with longer prison histories worked more hours on average and claimed to be lonely less often, but otherwise, they did not differ on any of the variables in this study. There was no evidence of apathy or withdrawal and no sign of social or physical deterioration among those with lengthy stays.

Two men referred to themselves as being "institutionalized", and, when pressed for particulars, said that they had lost all interest in the world outside of prison, and would not wish to leave even if offered the option to do so. Others may have shared this perception as well, but it was not directly measured in this study. According to Mackenzie and Goodstein (1985),

> Prisoners and correctional staff use this term to describe a process involving the following: losing interest in the outside world, viewing prison as home, losing the ability to make independent decisions, and, in general, defining oneself totally within the institutional context. This constellation of reactions is assumed to be traumatic to the individual's personality and sense of self and to be a particular source of difficulty when the individual is ready to leave the institution (p.398-399).

This study also highlighted a number of difficulties associated with release of long-term inmates. For example, it

was observed by several officials that they tend to become much more difficult to manage as they get closer "to the gate." These inmates, many of whom are older, could benefit from an innovative release program, cooperatively engineered by probation officers and corrections officials. A more comprehensive approach could result in earlier and more successful release, and could serve to prevent the onset of institutional dependency.

It is beyond the scope of this study to draft details of a comprehesive release program for older men, however, Flanagan (1986) suggests that planning for release should begin at the time a man is admitted. He advocates three basic objectives which would enable long-term inmates to build effective "prison careers". These include maximization of choices based on real opportunities in prison, facilitating a sense of meaning and personal worth, and maintenance of a measure of permeability of the prison walls in order to reduce social isolation. Implementation of these three objectives would appear highly valuable in the case of the older inmate.

Caution must be exercised in drawing conclusions, on the basis of this study, about the effects of long-term incarceration on physical, social and mental health. However, there were indications that the most stressful time for inmates may be early in their sentence; this could be confirmed with a longitudinal investigation.

Summary and Recommendations

This study, based on interviews with 92 inmates and 8 senior officials in three medium security penitentiaries, illustrates some interesting details about the health of older and younger men in prison. It was unique in that its focus was on Canadian inmates and in contrast with previous studies, was based on a comprehensive definition of health encompassing social, emotional and physical components.

The study demonstrated a need for continued research in this area. In particular, there is a need for longitudinal research documenting the needs of older men before, during, and, following imprisonment. The present study could be replicated in both minimum and maximum security settings, and with a larger sample of officials and/or inmates. For example, with a larger sample of inmates, one could perform a variety of additional comparisons; repeat offenders could be compared with lifers and first-time offenders, those over age 60 could be contrasted with inmates between the ages of 45 and 59, and, relationships between the health-related variables could be explored in greater depth.

In addition to the need for further study, a number of recommendations emerged from this study. These are summarized below:

Policy and Program Recommendations

1) Prison and parole officials should collaborate to introduce a concentrated and specialized program of release for older inmates. Such a program must be based on a thorough understanding of the roles, status, and social network benefits which many of these men are afforded inside the prison walls.

2) A thorough evaluation of health services should be undertaken in Canadian Federal prisons. The vast array of inmate suggestions, summarized in Table I, strongly suggested that current resources may be inadequate, particularly for inmates with chronic illnesses or disabilities. One particular area which warrants examination is the ability of the health service to provide emergency medical attention, especially during times when there are no medical personnel on the premises. It would seem advisable to introduce a standardized program of quality control throughout the country, particularly since each of the prisons contracts privately for its health services.

3) The benefits associated with volunteer work in prison should be thoroughly investigated. Many of the inmates who were interviewed in this study did not think that such activities were particularly valued by corrections personnel or parole officials. This has implications for both prison programs and parole policies.

4) The physical environment of all Canadian prisons should be evaluated in relation to their appropriateness for older inmates. Issues such as accessibility for those with physical impairments, visual cues for those with sight problems, temperature and lighting factors and noise control mechanisms should be examined. It may be the case that certain prisons are more appropriate for housing older people and should therefore be used more frequently for this purpose.

5) All prison programs should be reviewed in relation to their suitability for older inmates. In particular, a specialized program of physical activity should be introduced for older inmates, particularly for those with physical limitations.

6) Opportunities and incentives should be provided for staff members to learn more about the management of older inmates. For example, a course could be introduced for guards, living unit officers and case management personnel which would provide an overview of normal aging and focus in on the needs of both older and long-term inmates. Opportunities for selected personnel to specialize in this area should be made available.

7) A major effort should be undertaken by prison health services with regards to inmates' needs for health promotion. In particular, they should be offering the same types of programs available to the general public in relation to smoking cessation, weight management, and stress

management.

8) Medical personnel should become more sensitized to and knowledgeable about the specialized needs of older inmates with alcolol and drug problems. A specialized treatment program should be available inside the prison. As an alternative, consideration should be given to more frequent use of passes to allow these men to attend special programs for older persons outside of the prison.

While this study did not directly address the issue of appropriate punishment for various crimes, the remarkable adjustment of older men to prison would suggest that perhaps a select few of these men pose little risk to society in terms of their chances of re-offending. This suggests that the courts should fully consider a variety of alternatives to incarceration when selecting the most appropriate sentence for an elderly offender. As Newman and Newman (1984) suggested, a system of minimum restriction for (some) older offenders may demonstrate that such approaches can work for selective types of criminals.

Limitations of the Study

Several limitations in this study should be noted at the conclusion of this report. First, a cross-sectional design was used to compare older and younger inmates. The implicit assumption is that the groups differ only in terms of age. However, this type of design tends to confuse cohort (i,e., generational) effects with those attributable to age.

Another of the independent variables, length of time spent

in prison, poses similar difficulties since the inmates were not followed over time. However, additional methodological problems are introduced with longitudinal designs. For example, Cohen (1975) found that repeated testing of inmates generated "open expressions of resentment" (p.81), and advised against this if possible. Longitudinal research in prisons would also entail problems associated with high attrition rates due to discharges and transfers.

The third independent variable in this study, the prison setting, also presents difficulties when interpreting the results. The men were not randomly assigned to the prisons, and therefore, were subject to preselection bias at the time of admission.

One variable which was not included in the analysis was length of time remaining in the sentence. This is likely an important factor in relation to mental distress, stress, etc. While the official estimated date of release is often subject to change, an estimate should be included in any future studies of this sort.

Another potential bias arises from the use of subjective self-reports to measure health, program participation, and other variables in the study. The use of more objective tests and data could reduce the subjectivity of some of the information.

Although the older men in the study ranged in age from 45 to 85, the average age was only 54. Consequently, the study is not typical of research on aging populations, where a starting

age of 65 is more common. The lower age was selected in keeping with the prison literature, and was necessary in order to obtain an adequate sample size for the thesis; it is worthy of note that inmates aged 45 and over comprise an even smaller percentage of the prison population than do persons aged 65 and over in the general population. The assumption that the sample constituted a homogenous group is also a limitation of this study.

Conclusions

As a group, older criminals have commanded little attention from either researchers or prison administrators in this country. For example, as has been noted throughout this report, there is presently little published research in this area. Newman and Newman (1984) also note that media coverage on this topic is sparse as well; when compared with the magnitude of the general crime problem, elderly crime is a "drop in the bucket." Older people themselves may not wish to be identified with criminal activity, so while they have become active in advocating on behalf of many of their peers with special needs, they have not generated any publicity about older criminals (Newman & Newman, 1984).

Indeed, it is hard to argue that emergency attention should be directed towards elderly criminals on the basis of numbers. In Chapter II, figures were presented to show that older people commit many fewer crimes than do middle-aged or younger persons. Furthermore, while the numbers of older persons admitted to

prison continued to grow from 1961 to 1979, the rates of admission declined for this age group.

It may well be the case that as economic benefits, societal attitudes and housing improve for older people, their need for involvement in crime will continue to decrease. On the other hand, if opportunities for quality life in old age do not continue to improve, an escalation of their criminal activity may emerge.

While emergency attention may not be warranted at this time, there is one important reason why the special characteristics of older inmates are important. The main relevance of the issue lies not in the magnitude of the problem, but rather in its uniqueness. As criminals, older persons are anomalous, both in relation to their peers as well as within correctional centres. Accordingly, traditional approaches to working with elderly persons, and general approaches for dealing with those typically involved in criminal behavior, seem to be inappropriate.

This study began the process of sorting out facts from fallacies. Hopefully, it will stimulate interest in trying out innovative approaches in the management of older inmates. Pro-active approaches, based on factual information, would be more desirable than the laisse-faire style which is currently in operation.

EPILOGUE

Following the writing of this dissertation, it was of interest to assertain whether the results and recommendations would make sense to someone who had recently served time in the prisons involved. It was possible, for example, that the inmates had answered the questions so as to create a favorable impression with the interviewer, thereby biasing the study results.

During this study, the writer met Stephen Reid, an inmate at one of the study prisons who had just published his first novel. The novel, Jackrabbit Parole, is being turned into a screen play. Stephen is out on parole and he agreed to be interviewed. He was asked whether the results of this study appeared to be valid and whether the recommendations made sense to someone who had just spent 14 years in both Canadian and American prisons. His comments follow:

"What you have observed here about older inmates is absolutely valid. The older cons can and often do establish themselves very well in prison. The inmate population like to have older guys in all of the key positions of trust - like running the store. They may scam a little, like everyone else, but they know their limits. They stick up better for the whole population. In the kitchen, for example, they will keep a better eye on the quality of the food being served and when there's a dispute between two inmates, they will serve as mediators to get the guys to work it out. Because of the

respect they command, a 35 year-old will often associate with these guys, rather than the younger men, acting older than his age or older than he would on the street.

The prisons you visited, however, were not "real" prisons. They are more like highschools. You would find a different picture if you did this study in maximum security prisons. You would also find things very different in American prisons. They tend to be run by the inmates with Mafia connections. Canadian prisons are more decent; they are more conservative and inmates are less on the fringes - more like Canadian society in general. For example, you hardly ever here of a rape in a Canadian prison, even in max. An older man has a chance here.

Your study really hit at the main issues in terms of stress. Its a crazy system. After a while, both inmates and staff realize that in order to survive, you have to stop dealing with people and start dealing with the system. Everyone has to appear as though they have gone through the right motions, filled out the right forms, attended the right programs - whether its release you are after or a job promotion. It doesn't take long to become dehumanized under these conditions; it wears you down as an individual.

Your suggestions about teaching inmates how to eat, exercise and deal with stress better are worthwhile. There are so few things that you have control over on the inside, but you do have control over smoking, exercise, and dealing with stress. Your other recommendations are also worthwhile. But perhaps the most

important outcome of your study will be to raise people's awareness of the fact that these men are there, since they often do their time quietly and don't make waves. There are going to be a lot more of them in the future and its a good time to start thinking about about what their needs will be."

In conclusion, the study suggested that one feature of the aging process may be the development of a keener social conscience. In Chapter Two, data on admissions to prison illustrated that there is a dramatic reduction of crime with advancing age. And in Prison, older inmates were shown to be more trusted, by peers and staff alike. They uniformly were more involved in religious activities and were engaged in low profile volunteer work for which they neither seemed to expect nor receive recognition. This poses interesting avenues for further exploration and research.

Appendix A

Letter of Approval of Simon Fraser University Ethics Committee

SIMON FRASER UNIVERSITY

VICE PRESIDENT
RESEARCH AND INFORMATION SYSTEMS

BURNABY, BRITISH COLUMBIA
CANADA V5A 1S6
Telephone: (604) 291-4152

February 3, 1987

Elaine M. Gallagher
Gerontology Program
Simon Fraser University
Burnaby, B.C.
V5A 1S6

Dear Ms. Gallagher:

Re: Physical, Emotional and Social Needs of Older Men in Prison

This is to advise that the above-referenced application has been approved on behalf of the University Ethics Review Committee conditional on your receiving approval from the Ministry of Corrections Research Commission and conditional on your indication to subjects that any complaints about the project may be expressed to Dr. Gloria Gutman, Co-ordinator, Gerontology Program. Once written permission has been received from the Ministry of Corrections Research Commission, please forward a copy to this office.

Yours sincerely,

Thomas W. Calvert, Chairman
University Ethics Review
Committee

/bjr

Appendix B

Letter of Approval of Regional Research Committee

Correctional Service Canada | Service correctionnel Canada

Deputy Commissioner,
Regional Headquarters (Pacific),
P.O. Box 4500,
32315 South Fraser Way,
Abbotsford, B.C.
V2T 4M8

Your file / Votre référence

Our file / Notre référence
1430-1

1987-02-12

Ms. Elaine M. Gallagher,
1765 Teakwood Road,
Victoria, B.C.
V8N 1E3

Dear Ms. Gallagher:

Re: RESEARCH PROJECT: EMOTIONAL, SOCIAL & PHYSICAL NEEDS OF OLDER MEN IN PRISON

The Regional Research Committee has reviewed your research proposal. They find the research project acceptable and within CSC guidelines. Therefore, this office provides its approval to proceed with this research.

Please make all necessary arrangements to conduct your research with the appropriate institutional head at Mountain, Mission, and William Head Institutions. This letter will serve as your introduction.

Yours truly,

James M. Murphy,
Deputy Commissioner

Appendix C

Letter to Prison Officials

Gerontology Center and Program
Simon Fraser University
Burnaby, B.C.
Date

Name of Official
Title
Address

Dear Sir:

This letter is to inform you of a study which I am doing, in partial fulfillment of the requirements for a PhD at Simon Fraser University. In consultation with Regional Headquarters in Abbotsford, your prison has been selected as one of three medium security study sites. You are one of twelve officials who have been selected for an interview. I would like to briefly describe the purpose of the study and explain the nature and importance of your participation.

The topic of this study is Emotional, Social and Physical Health Needs of Older Men in Prison. Existing studies suggest that these inmates may present unique challenges in terms of their program and health care needs. And while they are currently few in number, their numbers are expected to increase in the near future. This study will explore these issues through interviews with prison officials and inmates in the Pacific Region. The results are expected to be of practical value in developing policies and planning programs for this group.

Interviews with prison officials are expected to take about thirty minutes. Confidentiality of all responses will be assured, as will your right to refuse to participate in the study or refuse to answer any of the questions asked during the interview.

I will be contacting you by telephone in the near future to arrange for a suitable time for a meeting. I appreciate your attention to this request and strongly encourage your participation in this interesting and worthwhile project.

Regards,

Elaine M. Gallagher, R.N., MSc.
Ph.D Candidate - S.F.U.

Appendix D

Letter to Inmates Selected for the Study

Gerontology Center and Program
Simon Fraser University
Burnaby, B.C.
Date

Name of Inmate
Address

Dear Sir:

This letter is to inform you of a study which I am doing, in partial fulfillment of the requirements for a PhD at Simon Fraser University. In consultation with Regional Headquarters in Abbotsford, your prison has been selected as one of three medium security study sites. Your name was selected at random from a list of all the inmates in the three prisons. I would like to briefly describe the purpose of the study and explain the nature and importance of your participation.

The topic of this study is Emotional, Social and Physical Health Needs of Men in Prison. Existing studies suggest that inmates of different age groups may present unique challenges in terms of their program and health care needs. This study will explore these issues through interviews with prison officials and inmates in the Pacific Region. The results are expected to be of practical value in developing policies and planning programs.

Interviews with inmates are expected to take about one hour. Confidentiality of all responses will be assured, as will your right to refuse to participate in the study or refuse to answer any of the questions asked during the interview.

You will be contacted in the near future to arrange for a suitable time for a meeting. I appreciate your attention to this request and strongly encourage your participation in this worthwhile project.

Regards,

Elaine M. Gallagher, R.N., MSc.
Ph.D Candidate - S.F.U.

Appendix E

Officials Consent Form - Prison Health Study

Purpose of the Study

The purpose of this study is to identify issues related to the health and program needs of men in prison. Interviews are being conducted with a variety of prison officials and inmates. The results will be used to make recommendations and will serve as partial fulfillment for requirements for a PhD at Simon Fraser University, by the investigator, Elaine M. Gallagher. Your responses should reflect your own opinions; no attempts will be made to generalize these to others employed in similar jobs.

Time Required

Your participation will require an interview lasting about one half hour.

Confidentiality and Right of Refusal

You have the right to refuse to participate in the interview or to answer any question during the interview and you may stop at any time should you so wish. The answers you give will remain confidential with regards to your identity and the prison where you work will not be identified in any reports. Do you have any questions about the study that you would like to ask?

Consent

This is to certify that I, _____, hereby agree to participate as a volunteer in a study undertaken by Elaine M. Gallagher, a Doctoral student at Simon Fraser University. I understand that the study has been approved by the Ministry of Corrections - Pacific Zone.

The purpose of this study has been explained to me by the investigator and I understood the explanation. I have been given an opportunity to ask questions about the study and am satisfied with the responses given.

I understand that I am free to refuse to participate and may refuse to answer any of the questions or terminate the interview at any time. I understand that my responses will remain confidential with regards to my identity.

Date _____ Signature of Participant _____

I, the undersigned, have defined and fully explained the above to the participant in detail, and to the best of my knowledge it was understood.

Date _____ Signature of Investigator _____

Appendix F

Inmate Interview Consent Form - Prison Health Study

Purpose of the Study

The purpose of this study is to identify issues related to the health and program needs of men in prison. Interviews are being conducted with a variety of prison officials and inmates. The results will be used to make recommendations and will serve as partial fulfillment for requirements for a PhD at Simon Fraser University, by the investigator, Elaine M. Gallagher. Your responses should reflect your own opinions.

Time Required

Your participation will require an interview lasting about one hour.

Confidentiality and Right of Refusal

You have the right to refuse to participate in the interview or to answer any question during the interview and you may stop at any time should you so wish. The answers you give will remain confidential with regards to your identity. Do you have any questions about the study that you would like to ask?

Consent

This is to certify that I, _____, hereby agree to participate as a volunteer in a study undertaken by Elaine M. Gallagher, a Doctoral student at Simon Fraser University. I understand that the study has been approved by the Ministry of Corrections - Pacific Zone.

The purpose of this study has been explained to me by the investigator and I understood the explanation. I have been given an opportunity to ask questions about the study and am satisfied with the responses given.

I understand that I am free to refuse to participate and may refuse to answer any of the questions or terminate the interview at any time. I understand that my responses will remain confidential with regards to my identity.

I also grant permission to the investigator to access my confidential prison file, in order that she may validate information about my criminal record and prison involvement.

Date _____ Signature of _____
Participant

I, the undersigned, have defined and fully explained the above to the participant in detail, and to the best of my knowledge it was understood.

Date _____ Signature of _____
Investigator

Appendix G

Inmate Survey

Current Institutional ID Number _____

Prison: _____

Age Group: 1) 35 or under____ 2) 50 or older ___

Sentence group: 1) 1-4 years ____ 2) 5 or more years ____

Part One: From Penitentiary Placement Report

1. Date of birth. Day____ Month____Year____ Age ____

2. Place of birth _____ Nationality_____

3. Current Offences Sentence

_____	_____
_____	_____
_____	_____

4. Estimated Aggregate Sentence _____

5. Educational level attained _____

6. Drug/Alcohol involvement:

none	___
drugs	___
alcohol	___
combination	___
unknown	___

Part Two:Interview Schedule

A. Involvement in Prison Programs

1. Are you currently employed or involved in vocational training?

1) Yes ____
2) No ____(Skip to #5)

2. What type of work do you do? _____

3. How many hours do you work in an average week?

_____

4. What is your daily wage for this work?

_____

5. On average, how many hours a week do you engage in the following:

a. educational courses ____
b. work or vocational training ____
c. recreational activities:
- working out or playing sports____
- card-playing ____
- reading ____
- watching television ____
- movies ____
- walking or running ____
d. volunteer activities ____
e. alcohol treatment programs ____
f. religious activities ____
g. any other regular activity ____ (Specify)

Total Hours _____

B. Physical Health

6. Now I'd like to ask you some questions about your health. In the past year, have you suffered from any of the following health problems?

a. flu, pneumonia or other infection Y___ N___

b. tumors, either benign or cancerous Y___ N___

c. diabetes, thyroid disease, liver disease or other endocrine disorders Y___ N___

d. blood disease of any type Y___ N___

e. mental disorders e.g.depression Y___ N___

f. disease of the nervous system Y___ N___

g. diseases of the heart or circulation system: [e.g. heart attacks, strokes, high blood pressure, poor circulation] Y___ N___

h. respiratory disease such as asthma, bronchitis, emphysema Y___ N___

i. disease of the stomach or intestines Y___ N___

J. disease of genitals or urinary system Y___ N___

k. skin disease Y___ N___

l. disease of muscles or bones Y___ N___

m. other symptoms or undiagnosed ills Y___ N___

7. In the past year, have you:

- cut or injured yourself on purpose Y___ N___
- experienced assault from another inmate or guard _____ Y___ N___
- had an injury from work or sports Y___ N___
- had trouble with your vision or hearing Y___ N___

C. Health Service Use

8. In the past month, how many times have you had contact with each of the following health workers?

		# of Visits
a.	nurse	___
b.	doctor	___
c.	eye specialist	___
d.	dentist	___
e.	other health personnel inside prison _____	___
	_____	___
	_____	___

9. Overall, how would you rate the health care which is given

here in this prison? Would you say it is

a. excellent ___
b. good ___
c. poor ___

10. Have you experienced any difficulties in obtaining health care here in prison? Please explain.

11. Do you know of any difficulties that other inmates may have experienced in obtaining health care? Please explain.

12. Do you have any suggestions for improving the health services here in this prison?

D. Health Habits

Now I'd like to ask a few questions about your habits.

13. In general, which of these habits do you follow here in prison?

Do you:

	Yes	No
a. Sleep 7-8 hours at night	___	___
b. Maintain normal weight	___	___
c. Smoke	___	___
d. Get regular exercise	___	___
e. Eat breakfast	___	___
f. Drink alcohol	___	___
g. Use non-prescribed drugs (i.e. black-market drugs)	___	___

E. Mental Health

14. Life in prison is thought to be quite stressful for some people. What sorts of things bother you in this prison? [Describe]

15. I'm going to read a list of some of the sources of stress which many prisoners experience. Please tell me whether you are troubled by each of these never, sometimes or very often.

	never	sometimes	often
a. loss of freedom to come and go	____	____	____
b. loss of usual roles-e.g. wage-earner	____	____	____
c. sexual deprivation	____	____	____
d. violence from other inmates	____	____	____
e. loss of social supports	____	____	____
f. regimentation of daily life	____	____	____
g. continuous observation	____	____	____
h. noise and bad language	____	____	____
i. boredom	____	____	____
j. theft of personal belongings	____	____	____

16. In the past year, have you experienced any of the following emotional difficulties:

	Yes	No
a. feeling really sad and depressed	_____	_____
b. feeling very nervous or jumpy	_____	_____
c. having severe nightmares	_____	_____
d. feeling like taking your own life	_____	_____
e. worrying about things all the time	_____	_____
f. feeling overly concerned with your body or your health	_____	_____
g. feeling afraid that others are trying to harm you	_____	_____

F. Social Support

Last, I would like to ask you a few questions about your contacts with friends and family.

17. What is your present marital status?

a. married ___
b. divorced ___
c. separated ___
d. common law ___
e. widowed ___
f. or never married ___

18. How many children do you have at this time?

_____

19. How many close friends do you have here in the prison? ___

20. In the past month, how many times did you have contact with a friend or family member

    a. by telephone _____
    b. by letter _____
    c. by visit or on a pass _____

    Total _____

21. Do you have anyone you can really open up to inside the prison?

    No ____
    Yes____
        Is that person another inmate ___
                a regular staff member ___
                a special staff person ___
                other ___

22. How often would you say you felt really lonely here. Would you say you feel lonely

    a. never ___
    b. sometimes ___
    c. or most of the time. ___

That is the end of the formal interview. Thank you for participating. Do you have any questions or comments you wish to make? Note comments, etc.

Appendix H

Officials Interview Schedule

Job Title:_____

Prison:_____

1. While it is hard to make generalizations, how would you characterize the typical inmate over age 50, in one or two sentences.

2. Are you aware of any particular difficulties or special problems involved in planning and delivering programs to meet older inmates' needs? (Specify)

3. In your opinion, do older inmates use the following services more often, less often or with the same frequency as younger inmates?

	more often	same	less often
a. health services	____	____	____
b. educational offerings	____	____	____
c. prison work/vocational programs	____	____	____
d. recreational programs	____	____	____
e. volunteer activities	____	____	____
f. alcohol treatment programs	____	____	____
g. religious activities	____	____	____
h. individual hobbies	____	____	____

4. In general, how would you rate older inmates, compared with younger ones, on each of the following:

	more	same	less
a. easily obtaining parole	____	____	____
b. having available social supports	____	____	____
c. filing formal complaints	____	____	____
d. obeying prison rules	____	____	____
e. securing respect from other inmates	____	____	____
f. adapting in general to prison life	____	____	____

5. What type of an effect do you think older inmates have on the younger prisoners? (Explain)

6. What effect do you think younger inmates have on the older

ones?

7. In the United States, several segregated facilities have been created for older prisoners. Do you think this would be practical in Canada? Do you see any major advantages or disadvantages?

8. I'm going to read a list of some of the sources of stress which many prisoners experience. Please tell me whether you think older inmates experience these more often, less often or with the same frequency as younger ones.

	more often	same	less often
a. loss of freedom to come and go	____	____	____
b. loss of usual roles-e.g. wage-earner	____	____	____
c. sexual deprivation	____	____	____
d. violence from other inmates	____	____	____
e. loss of social supports	____	____	____
f. regimentation of daily life	____	____	____
g. continuous observation	____	____	____
h. noise and bad language	____	____	____
i. boredom	____	____	____
j. theft of personal belongings	____	____	____

9. Is there anything else that comes to your mind regarding the

management of older inmates?

Additional Question for Physician and Chief: Health Care Service

10. Compared with younger inmates, how often do older prisoners prese the following types of health problems:

	more	same	less
a. alcohol-related problems	____	____	____
b. self-inflicted wounds	____	____	____
c. manifestations of stress	____	____	____
d. acute infectious disease	____	____	____
e. chronic health problems	____	____	____
f. manipulative behavior to get drugs or a transfer	____	____	____
g. overt psychiatric illness	____	____	____
h. injury from assault	____	____	____
i. vision or hearing difficulties	____	____	____
j. work or sports injuries	____	____	____
k. acute medical emergencies e.g. stroke or heart attack	____	____	____

Appendix I
Inmate Suggestions for Improved Health Care

Older Inmates' Suggestions

-should only be giving medicine to people with serious problems.
-get rid of the slot in the wicket and let us talk to staff.
-need more English-speaking doctors
-need external investigation or evaluation of health care.
-Drs. are great but nurses should be replaced.
-need physiotherapy services
-should pay more attention to guy's previous history.
-need Dr. more than 2 mornings a wk and sometimes more than 10 min.
-stop assembly medicine
-treat inmates like people
-make the staff come and live here for two weeks so they see what its like to be on the other side
-better first aide, for heart attacks and stuff.
-need to talk more and give out fewer pills.
-staff need to get rid of their fear
-shoudn't assume everyone is lying
-rotate staff with outsiders - long-time staff become callous
-need coverage at night
-should be working WITH inmates towards health goals, not against
-need 24-hour nursing staff.********
-nurses should go more by the book instead of their own diagnoses.
-more efficient people, I've been waiting for boots for two years.
-should give you more information about your disease, drugs, etc.
-should stop stereotyping everyone as con-artists.
-after 5 years, all staff should have psychological assessment done; they get burned out, too much like inmates
-more trusting of inmates complaints: I refuse to go there now unless I'm nearly dying.
-need more staff for 230 guys; nurse shouldn't have to screen out Drs. visits.
-wanted to order hair-growth medicine, I'd pay; they said no, it was not needed.

Younger Inmates' Suggestions

-need more staff and supplies.
-hospital should be closer to living units.
-should give out 2-week supply of medicines e.g. antiobiotic
-need at least 2 doctors so you would have a choice.
-need x-ray machines on-site.
-should speed up appointments if a guy is in pain.
-easier to get referrals.
-better treatment needed for headaches.
-replace staff with people who care.
-need Dr. on call 24 hrs./day
-more continuity between prisons.
-should get rid of window at the wicket - more accessable
-shouldn't be so scared to give a guy an aspirin.
-at least half the guys go to the clinic just to talk, they could have someone there for that purpose.
-shouln't have to wear shackles for appointments outside
-should be more accountability
-should be more flexible, e.g. allow guys to get tested for AIDS if they want.
-should treat guys like humans.
-get rid of one male nurse.
-more info about illness, drugs
-more concern with health, less with security.
-should have blister packs.
-shouldn't be so miserly, e.g. with bandaides.
-staff should take Life Skills.
-need to do unannounced performance evaluations.
-reduced hostility and red tape
-make vitamins available
-Drs. here are so biased, they think eveyones' scamming.

REFERENCES

Adams, M., & Vedder, C. (1961). Age and crime: Medical and sociologic characteristics of prisoners over 50. Geriatrics, 16, 177-181.

Aday, R. (1976). Institutional dependency: A theory of aging in prison. Ph.D. dissertation, Oklahoma State University.

Aday, R., & Webster, E. (1979). Aging in prison: The development of a preliminary model. Offender Rehabilitation, 3, 271-282.

Alexander-Rodriguez, T. (1983). Prison-health: A role for professional nursing. Nursing Outlook, 31, 115-118.

Belloc, N., & Brislow, L. (1972). Relationship of physical health status and health practices. Preventative Medicine, 1, 409-421.

Brody, H., & Sobel, D. (1981). A systems view of health and disease. In P. Lee, N. Brown & I. Red (Eds.), The nation's health. San Francisco: Boyd and Fraser Publishing Co.

Brown, G., Bhrolehain, N., & Harris, J. (1975). Social class and psychiatric disturbance among women in urban population. Sociology, 9, 225-235.

Burnett, C., & Kitchen, A. (1987). More than a case number: older offenders on probation. Presented at International Conference on Aging Offenders, San Bernadino, CA.

Butler, R., & Lewis, M. (1973). Aging and mental health: Positive psychosocial approaches. St. Louis: C. V. Mosby.

Chaneles, S. (1987). Growing old behind bars. Psychology Today, October, 47-51.

Cohen, S., & Taylor, L. (1981). Psychological survival. Markham, Ontario: Penguin Books.

Cohen, C., Teresi, J., & Holmes, D. (1985). Social networks and adaptation. Gerontologist, 25(3), 297-303.

Cormier, B., Boyer, R., Morf, G., Kennedy, M., Boulanger, P., Barriga, C., & Cvejic, J. (1971). Behavior and ageing: Offenders aged 40 and over. Laval Medical, 42, 15-21.

Cormier, B., Kennedy, M., Sangowicz, J., & Trottier, M. (1961). The latecomer to crime. Canadian Journal Of Corrections, 3, 3-17.

Correctional Services of Canada (1961-1979). Annual reports to the Director of Penitentiaries, Ottawa: Corrections Branch, The Correctional Services of Canada.

Correctional Services of Canada (1985). Population profile report. Ottawa: Analysis and Information Services.

Demers, R., & Walsh, K. (1981). Use of medical services during a 2-month period in the Seattle-King County Jail. Public Health Reports, 96(5), 452-457.

Edwards, D. (1983). Special problem offenders. In A. R. Roberts (Ed.), Social work in juvenile and criminal justice settings (pp. 349-361). Springfield, IL: Charles C. Thomas, (349-361).

Engebretson B., & Olson, J. (1975). Primary care in a penal institution, a study of health care problems encountered. Medical Care, 13, 775-781.

Erikson, E. (Ed.) (1978). Adulthood. New York: W. W. Norton.

Farquhar, J., Maccoby, N., & Wood, P. et al., (1977). Community education for cardiovascular health. The Lancet, 1, 1192-1196.

Feinberg G., Glugover, S., & Zwetchkenbaum, I. (1984). In E. Newman, D. Newman, L. Gewirtz & Associates (Eds.), Elderly criminals. Cambridge, MA: Oelgeschlager, Gunn & Hain, 177-18

Filan, M. (1977, December 13-15). Employment, labour and industry in Australian prisons. Paper presented to Workshop on Minimum Standard Rules for Australian Prisons, Australian Institute of Criminology, Canberra, Australia.

Flanagan, T. (1986). Sentence planning for long-term inmates. Federal Probation, 51(3), 23-28.

Freeman-Longo, R., & Wall, R. (1968). Changing a lifetime of sexual crime. Psychology Today, March, 58-64.

Gallagher, E. (1986). Support networks, aging and health: A comprehensive examination paper. Unpublished manuscript.

Gallagher, E., & Beecher, P. (1987). Health promotion in prisons: An adjunct to the pill parade. The Canadian Journal of Public Health, 78(2), 95-97.

Gillespie, M,. & Galliher, J. (1972). In D. Kent, R. Kastenbaum & S. Sherwood (Eds.), Research planning and action for the elderly. New York: Behavioral Publications, 465-483.

Goetting, A. (1984). The elderly in prison: A profile. Criminal Justice Review, 9(2), 14-24.

Gore, S. (1978). The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.

Gottlieb, B. (1985). Social support and the study of personal relationships. Journal of Social and Personal Relationships, 2, 351-375.

Greenburg, D. (1979). Delinquency and the age structure of society. In S. Messenger & E. Bittner (Eds.), Criminology review handbook. Beverly Hills, CA: Sage.

Greene, M., & Stollmark, S. (1981). Estimating the number of criminals. In J. Fox (Ed.), Models in quantitative criminology. Toronto: Academic Press.

Hagel-Seymour, J. (1982). Environmental sanctuaries for susceptible prisoners. In R. Johnson & H. Toch (Eds.), The Pains of imprisonment. Beverly Hills, CA: Sage Publications, 267-284.

Ham, J.N. (1976). The forgotten minority - An exploration of long-term institutionalized aged and aging male prison inmates. Unpublished doctoral dissertation, University of Michigan.

Healthy People: The Surgeon General's report on health promotion and disease prevention. (1979). DHEW Pub. No. 79-55071, Washington, D.C. U.S. Dept. of Health , Education and Welfare.

Hicks, D., & Alpert, G. (1978). Patterns of change and adaptation in prison. Social Science Quarterly, 59, 37-59.

Hirschi, T., & Gottfredson, M. (1983). Age and the explanation of crime. American Journal of Sociology, 89, 553-585.

Inmate orientation handbook (1987). Unpublished handbook prepared by inmates of Mission Institution, Mission, B.C.

Jackson, M. (1981). Criminal deviance among the elderly. Canadian Criminology Forum, 4, 45-54.

Jennison, K. (1986). The violent older offender: A research note. Federal Probation, 52, 60-65.

Johnson, R. (1976). Culture and crises in confinement. Toronto: Lexington Books.

Johnson, R., & Toch, H. (1982). The pains of imprisonment. Beverly Hills: Sage Publications.

Jones, D. (1976). The health risks of imprisonment. Toronto: Lexington Books.

Keller, O., & Vedder, C. (1968). The crimes that old persons commit. Gerontologist, 8, 43-50.

Kelsey, O. (1986). Elderly inmates: Providing safe and humane

care. Corrections Today, May, 56,58.

Krajick, K. (1979). Growing old in prison. Corrections Magazine, 5, 33-46.

Lazarus, R., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer.

Lazarus, R., & Launier, R. (1978). Stress-related transactions between persons and environments. In L. A. Pervin & M. Lewis (Eds.), Perspectives in interactional psychology. New York: Wiley.

Lipman, A., Lowery, S., & Sussman, M. (1985). Crime and the elderly. Tampa, FL: International Exchange Center on Gerontology, University of South Florida.

Maccoby, N., Farquhar, & Wood, P. et al., (1977). Reducing the risks of cardiovascular disease: Effects of a community based campaign on knowledge and behavior. Journal of Community Health, 3(2), 100-114.

MacKenzie, D., & Goodstein, L. (1985). Long-term incarceration impacts and characteristics of long-term offenders. Criminal Justice and Behavior, 12(4), 395-414.

McCarthy, M. (1980). An assessment of the unique needs of the elderly offender. Unpublished paper.

McCelland, A. C., & Marks, E. (1982). The need for power, stress, immune function, and illness among male prisoners. Journal of Abnormal Psychology, 91(1), 61-68.

McCreary, C., & Mench, I. (1977). Personality differences associated with age in law offenders. Journal of Gerontology, 32, 164-167.

McKay, H.,Jayewardene, C., & Reedie, P. (1979). The effects of long-term incarceration and a proposed strategy for future research. Ottawa: Ministry of the Solicitor General of Canada.

Moberg, D. (1953). Old age and crime. Journal of Criminal Law and Police Science, 43, 764-776.

Mueller, D. (1980). Social networks: A promising direction for research on the relation of the social environment to psychiatric disorder. Social Science and Medicine, 14, 147-161.

Panton, J. (1974). Characteristics of aging inmates. Raleigh, NC: North Carolina Department of Corrections.

Panton, J. (1977). Personality characteristics of aged inmates within a state prison population. Offender Rehabilitation,

1, 203-208.

Parisi, N. (1982). Coping with imprisonment. Beverly Hills, CA: Sage.

Penitentiary Service Regulations. C.R.C., 1978, c.1251 s16.

Puri, T. (1986). Standards of health care in Alberta prisons: A research proposal. Unpublished manuscript.

Rasch, W. (1981). The effects of indeterminate detention: A study of men sentenced to life imprisonment. International Journal of Law and Psychiatry, 4, 417-431.

Reed, M., & Glamser, F. (1979). Aging in a total institution: The case of older prisoners. The Gerontologist, 19, 354-360.

Rubinstein, D. (1984). The elderly in prison: A review of the literature. In Newman, E., Newman, D. & M. Gerwitz & associates. Elderly Criminals. Cambridge, Mass: Oelgeschlager, Gunn & Hain, 153-168.

Schmeck, H. (1985, November 17). Brain Defects Seen in Those Who Repeat Violent Acts. The New York Times, 17-18.

Scott, G. (1970). Drugs and reality in captive society: Some observations on chemical adaptation. Canadian Psychiatric Association Journal, 15(2), 215-222.

Scott, G. (1983). Political cop-out or destruction on the installment plan? Paper presented to Second Annual World Congress on Prison Health, Ottawa, Ont.

Sheps, S., & Schechter, M. (1984). Utilization of health care services in the Pacific Region federal prisons. Vancouver, BC: Department of Health Care and Epidemiology, Faculty of Medicine, University of British Columbia.

Shichor, D. (1984). The extent and nature of lawbreaking by the elderly: A review of arrest statistics. In E. Newman, D. Newman & M. Gerwitz (Eds.), Elderly criminals (pp. 17-29). Cambridge, MA: Oelgeschlager, Gunn & Hain.

Shichor, D., & Kobrin, S. (1978). Note: Criminal behavior among the elderly. Gerontologist, 18, 213-218.

Spielberger, C. (1979). Preliminary manual for the state-trait personality inventory (STPI) Unpublished Manuscript.

Spielberger, C., Johnson, E., Russel, S., Crane, R., Jacobs, G. & Worden, T. (1985). The experience and expression of anger. In M. Chesney & R. Rosenman (Eds), Anger and hostility in behavioral medicine. New York: Hemisphere/McGraw-Hill.

Stanhope, M., & Lancaster, J. (1984). Community health nursing:

Process and practice for promoting health!. Toronto: C. V. Mosby.

Street, D., Vinter, R., & Perrow, C. (1966). Organization for treatment: A comparative study of institutions for delinquents. New York: Free Press.

Sykes, G. (1966). The society of captives. New York: Atheneum.

Teller, F., & Howell, R. (1979). Criminal and psychological characteristics of older prisoners. Salt Lake City: Utah Division of Corrections.

Toch, H. (1975). Men in crises: Human breakdowns in prison. Chicago: Aldine Publishing.

Toch, H. (1977). Living in prison. New York: Macmillan.

Twaddle, A. (1976). Utilization of medical services by a captive population: An analysis of sick call in a state prison. Journal of Health and Social Behavior, 17, 236-248.

Vega, M., & Silverman, M. (1987). Stress and the elderly convict. Paper presented at Conference on Elderly Offenders, San Bernardino, Calif., April, 1987.

Vito, G., & Wilson, G. (1985). Forgotten people: Elderly inmates!. Federal Probation, 49 (1), 18-24.

Walker, W. (1977). Changing United States life-style and declining vascular mortality: Cause or coincidence? New England Journal of Medicine, 297, 163.

Weiss, J. (1973). The natural history of antisocial attitudes: What happens to psychopaths? Journal of Geriatric Psychiatry, 6(2), 236-242.

Wetzler, H., & Cruess, D. (1975). Self-reported physical health practices and health care utilization: Findings from the national health survey. American Journal of Public Health, 75, 1329-1330.

World Health Organization (1958). The first ten years of the World Health Organization. New York: WHO.

Wiegand, N., & Burger, J. (1979). Elderly offender and parole. Prison Journal, 59, 48-57.

Wilbanks, W. (1985). The elderly offender: Relative frequency and pattern of offences. International Journal of Aging and Human Development, 20(4), 269-281.

Wilson, R., & Elinson, J. (1981). National survey of personal health practices and consequences: Background, conceptual issues and selected findings. Public Health Reports, 96(3),

218-225.

Wooden, W. S., & Parker, J. (1980). Age, adjustment and the treatment process of criminal behavior. Presented at annual meetings of National Gerontological Society, San Diego.

Young, T., & Carr, P. (1976). Utilization of physician services in a prison population. Canadian Journal of Public Health, 67, 295-299.

Zeegers, M. (1978). Sexual delinquency in men over 60 years old. Department of Psychiatry, University of Leyden Papers, Leyden, Holland.

Zubreki, R. (1983). Policy and legislative change: The effects of long-term incarceration. Paper presented to Second World Congress on Prison Health Care, Ottawa, Ont.