Impact of Social Changes on Female Mentally Disordered Offenders from 1980 to 1994 in Japan

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Social change, particularly in mental health policy, may affect the distribution of crime and the legal process. This article presents trends in female crimes during a 15-year period (1980 to 1994) and examines the characteristics of the 1980 and the 1994 group of female mentally disordered offenders (MDOs) in Japan. Data were obtained from the prosecutor's files on a total of 2,094 MDOs who were not prosecuted, or whose criminal responsibility was judged as diminished, or who were exempted due to mental disorders in 1980 and 1994 throughout Japan. Female MDOs accounted for 270 (12.9%) of these cases. A comparison was made between the 1980 group (140 women) and the 1994 group (130 women) in regard to demographic status, criminal variables, psychiatric variables, and legal dispositions. Findings revealed a parallel relationship between female criminals and female MDOs. In both the female criminals and female MDOs, the trend was toward a decrease in homicides and an increase in larceny and drug-related crimes. The 1994 group was more likely to have an even distribution across age groups, have more employment and more job change experience, live more independently, and to have committed more nonviolent crimes, and have more prior crime records than the 1980 group. There was no significant difference in their homicide victims or in the index diagnoses between the two groups. Compared with the 1980 group, the 1994 group was significantly older (40 years versus 36 years on average), had received more outpatient and community mental health services, had been charged more often with larceny, had higher criminal recidivism rates, and had experienced a more simplified legal process as well. The effect of deinstitutionalization is also discussed.

Female offenders have received less research attention, because males are overrepresented among criminal populations in all societies and in all historical periods. Female offenders have frequently been excluded from data analysis, since there were too few of them to support multivariate statistical analysis to avoid confounding the effects of gender.[1] Any specificity is thereby lost when data for males and females are analyzed together.[2]

It has been noted earlier that female offenders, as a group, tend to have a

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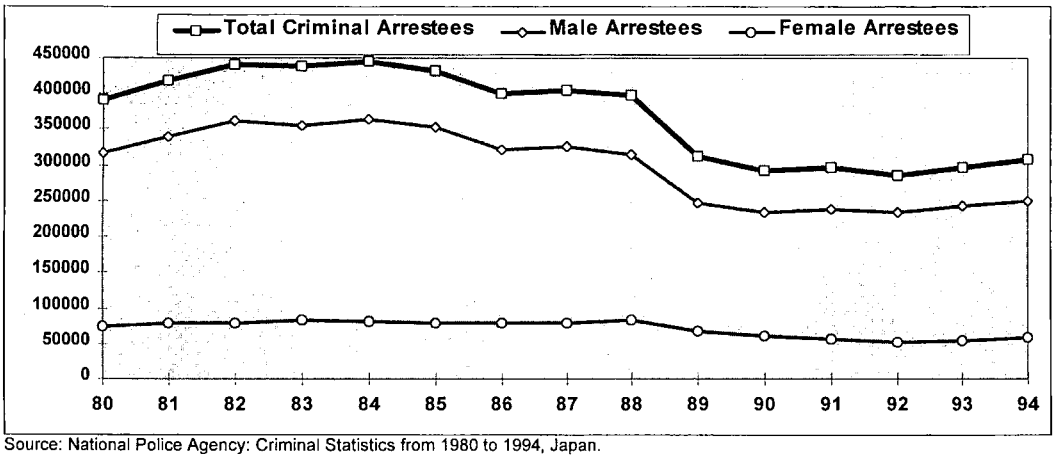
higher prevalence of psychiatric disorders.[3] Many efforts have been made to analyze the relationship between mental disorder and female crimes in recent years. Investigations have been conducted among females remanded for psychiatric evaluation[4–6] and among those judged unfit to stand trial or not guilty by reason of insanity (NGRI).[2, 7–10] However, the influence of psychiatric pathology on female crimes is inconclusive. Some studies have noted that psychotic women committed more crimes against the person,[2, 7, 10–12] while others found no outstanding relationship between the specific mental disorder and the criminal offense category.[4, 5] Detailed analysis revealed other differences. For instance, 30 of 58 homicidal women in a Japanese study[11] suffered from depressive disorders, while none of the homicidal women in Missouri[13] (22 cases) and New York[7] (26 cases) studies were diagnosed as having an affective disorder. In studying mentally disordered offenders (MDOs), the most consistent finding is in the aspect of sociological variables (e.g., females were older, more likely to be married, committed more crimes against the person, had less extensive criminal records, and had lower criminal recidivism rates than males).[2, 5–8, 10–14] Zonana and colleagues[14] conducted logistic regression analyses on females judged NGRI and found that the strongest independent predictors of criminal recidivism were race and having a diagnosis other than psychosis.

Although available evidence suggests that biological and psychological factors are less important in explaining criminal behavior than social factors, there is little solid research examining the role of social structures and social situations that give rise to crime.[15] Four sociological theses that try to understand the etiology of contemporary female criminality are in debate. (1) The masculinity thesis predicts a causal nexus between the women's social movement, changing social roles of women, the masculinization of female behavior, and changes in patterns of female offending.[16] The expectation that women would commit relatively more violent crimes than men has not been supported by arrest data. (2) The opportunity thesis claims that as women acquire more education, enter the labor force full time, assume positions of greater authority and prestige, and gain more technical skills, they will use the opportunities available to them to commit "white collar" property offenses in the same proportions as do their male counterparts.[17] The unsettled topic is why men and women, given the same structural opportunities, will behave differently. This predication is also challenged by the Japanese experience. (3) The economic marginalization thesis attributes increases in female property crime to the convergence of market consumption trends and the worsening economic conditions of women.[18] This thesis argues that as women move into more responsible positions, their propensity to commit property offenses will decline. Official data in the United States show a positive relationship between female upward occupational mobility and higher female property (especially white-collar) arrest rates.[17] (4) The chivalry thesis speculates that criminal justice personnel



Source: National Police Agency: Criminal Statistics from 1980 to 1994, Japan.

Figure 1. Trends in criminal arrestees in Japan, 1980 to 1994.

treat female offenders more leniently. However, whether this observed pattern of police encounters with female offenders has changed over the past decade remains an unexplored issue.[17]

All of the above theses intend to explain the phenomenon of increasing female criminality in Western countries. None of them, however, could account for the opposite phenomenon—a decreasing crime rate—as seen in Japan.

The Japanese experience indicates that social change is not always accompanied by rising crime rates.[15] Japan has a high density of population (124 million), as well as high levels of industrialization and urbanization, but a low crime rate. According to The White Paper on Crime,[19] Japan has maintained a very low crime rate, ranging from 1,159 to 1,427 reported offenses per 100,000 population for penal code offenses other than traffic or professional negligence misdemeanors over the last 15 years. In 1948, 1.6 million penal code offenses were recorded in Japan, but in 1973 that figure had dropped to 1.2 million (see Conklin).[15] As shown in Figure 1, the number of arrests continued to decline steadily from 1980, down to .3 million in 1994.[20] Accompanying social development, more women have received a higher level of education, more are delaying marriage, more are getting divorced, and more are in the labor force full or part time, whereas neither the female/male ratio nor the real arrest numbers have increased. The details of total arrests, female arrests, and female/male ratios by crime types in 1980 and 1994 are illustrated in Table 1. Here, homicide includes murder, manslaughter, and attempted and planned murder. Women accounted for about 19 percent of all arrests. Larceny was the most frequent charge in female arrests (88% in 1980 and 73% in 1994). It is notable that the female/male ratio of arrests remained the same (.23), whereas the type of specific crimes changed: the overall proportion of female arrests for

Table 1
Proportion of Females Among Arrested Criminal Offenders and Female/Male Ratio by Type of Crime[a]

	1980				1994			
Crime Type	Total[b]	Female[c]	%[d]	Ratio[e]	Total[b]	Female[c]	%[d]	Ratio[e]
Felonious crime								
Homicide	1,560 (0.39)[f]	359 (0.48)	23.0	0.30	1,275 (0.41)	227 (0.39)	17.8	0.22
Robbery	2,064 (0.53)	75 (0.10)	3.6	0.04	2,372 (0.77)	109 (0.19)	4.6	0.05
Arson	948 (0.24)	129 (0.17)	13.6	0.16	718 (0.23)	124 (0.21)	17.3	0.21
Rape	2,667 (0.68)	12 (0.02)	0.4	0.00	1,161 (0.38)	6 (0.01)	0.5	0.01
Other violent crime	68,154 (17.38)	2,605 (3.51)	3.8	0.04	38,139 (12.38)	2,460 (4.25)	6.5	0.07
Nonviolent crime								
Larceny	248,389 (63.35)	65,415 (88.13)	26.39	0.36	164,913 (53.55)	42,394 (73.23)	25.7	0.35
Fraud, etc.	36,871 (9.40)	2,705 (3.64)	7.3	0.08	13,029 (4.23)	1,903 (3.29)	14.6	0.17
Other	31,460 (8.02)	2,925 (3.94)	9.3	0.10	86,358 (28.04)	10,672 (18.43)	12.4	0.14
Total offenders (%)	392,113 (100.0)	74,225 (100.0)	18.93	0.23	307,965 (100.0)	57,895 (100.0)	18.79	0.23

[a] Source: National Police Agency: Criminal Statistics, 1980–1994, Japan.
[b] Numbers of total criminal offenders for penal code offenses other than traffic professional negligence.
[c] Number of female criminal offenders.
[d] Percentage of female criminals in different crime types among the total offenders.
[e] Ratio of female versus male criminal offenders.
[f] Shown in parentheses are the percentages of various crime types among the same population.

violent crimes decreased. In every 100 arrests for homicide, women accounted for 23 in 1980, but this number decreased to 18 in 1994, a 5.2 percent decrease. The actual number of female arrests for various crimes declined except for robbery and other crimes (including drug law violations, prostitution, etc.). Why Japan becomes an exception in many criminological theories remains an issue to be addressed.

An investigation focusing on social changes across historical periods in the same population with a homogeneous race would yield a more accurate sociopsychiatric profile of female crime. Although there is no direct measure of periodical difference in social values, analyzing changes in the characteristics of female MDOs could highlight the impact of deinstitutionalization, the biggest social change in mental health policy during the last two decades. The present research was designed to describe the changes regarding demographic, criminal, psychiatric, and legal parameters of female MDOs from 1980 to 1994 in Japan. The objectives are to provide information on the trend of female crimes and female MDOs in Japan where there are different social values than in many Western countries, to discuss the possible effect of social changes, and to broaden our consideration of female criminality.

Subjects and Methods

Mentally disordered offenders are those persons who are treated simultaneously for criminal behavior and mental disorders. In Japan, the term MDO refer to those persons who were not prosecuted, who were acquitted (i.e., not held responsible), or whose sentences were commuted for reasons of insanity or quasi-insanity at the public prosecutors' offices and the courts.[21, 22]

Two nationwide surveys were conducted on MDOs in Japan in 1980 and 1994. Except for those who were not reported or detected in time, all officially admitted MDOs, having been psychiatrically assessed or directly admitted into psychiatric hospitals compulsorily in accordance with the 24th and 25th Articles of the Mental Health Law,[21, 23]* were included in this case series. This provided a relatively complete picture of both criminal offenders and MDOs. However, even though our data are based on a treated population of persons with both mental disorder and criminal behaviors, they are neither representative of all persons with mental disorders nor of all persons with criminal behaviors separately. Two subgroups might have been excluded from our data: (1) the mental patients who committed minor crimes might have been hospitalized voluntarily without reporting to the police; (2) criminal individuals who suffered from nonpsychotic mental disorders might not have been referred for psychiatric assessment or were assessed as criminally responsi-

* Articles 24 and 25 of the Mental Health Law stipulate that police officers, public prosecutors, chiefs of protection, and surveillance stations must notify prefecture governors. Supervisors of mental hospitals must report to prefecture governors. Mentally disturbed persons subjected to these applications, notifications, and reports can be forcibly hospitalized in designated mental hospitals if they are likely to inflict harm on themselves or others if they are not hospitalized or put under protection.[23, 33]

ble based on diagnoses such as sociopathy, alcoholism, drug abuse.

Data were collected from official records, including detailed police investigations, family reports, educational reports, hospital reports, and psychiatric expert reports.[12] Information for the present study was extracted from the database comprising a total of 2,094 MDOs. Female MDOs accounted for 270 (12.9%) cases in total. Two groups of MDOs, composed of 140 cases in 1980 and 130 cases in 1994, who had been charged with a variety of different crimes were studied systematically with reference to demographic variables, alleged crime and victim, psychiatric treatment history, diagnosis, and legal disposition.

Each case was counted only once no matter how many offenses had been charged and how many disorder items had been diagnosed.[12] When a subject had committed two or more criminal offenses, the most severe offense was chosen as her crime. Attempted crimes were included in the substantive crime category (e.g., attempted homicide was counted as homicide). The diagnostic category of each case was coded based on the definitions and criteria of the International Classification of Diseases-Ninth Revision.[24] Only the most serious and direct diagnosis related to the alleged crime was coded for each case.[12]

Percentages of the 1980 and 1994 groups for each discrete variable (χ^2 test) and means and medians for continuous variables (t test) were calculated and then compared using the appropriate test for significance. Data were analyzed using the Statistical Package for the Social Sciences computer program for Windows.

Findings

All of the 270 subjects in this study were Japanese. The distribution was 51.9 percent in the 1980 group and 48.1 percent in the 1994 group. A comparison in demographic characteristics of the two groups at the time of the alleged arrest is shown in Table 2.

Over half of the female MDOs committed crimes while in their thirties and forties. Women in the 1980 group ranged in age from 20 to 66 years with a mean of 36.1 $\pm$ 10.6 years, whereas women in the 1994 group ranged in age from 19 to 77 years with a mean of 39.9 $\pm$ 12.7 years. The mean age of the 1994 group was four years older than the 1980 group ($t = -2.67$, $df = 268$, $p < .01$). With the increase in age groups over 40, the previous peak (30+ years) seen in 1980 disappeared in 1994. An equal distribution across age groups was noted in female MDOs in 1994.

Educational level was not significantly different across the two groups. About 49 percent of the females in the 1980 group and 52 percent in the 1994 group had completed at least 12 years of education (χ^2, $df = 1.99$, NS (not significant)).

Occupation was recorded based on a statement of personal identification. More females in the 1994 group perceived themselves as "unemployed" rather than a "housewife," reflecting a change in both attitude (more independent) and actual marriage status. Over half of the female MDOs in the 1980 group lived with their husbands (53.0%), children (50.7%), or

Table 2
Demographic Status of Female MDOs at Time of Arrest

Demographic Status	1980 FMDOs n	1980 FMDOs %	1994 FMDOs n	1994 FMDOs %	$\chi^{2\,a}$	p
Age in years						
20–29	42	30.0	33	26.2	.52	.47
30–39	54	38.6	35	26.9	4.14	*
40–49	5	17.9	35	26.9	3.21	.07
50–59	13	9.3	15	11.5	.37	.54
60+	6	4.3	11	8.5	1.99	.16
(Mean age)	(M 36.1 ± 10.6)		(M 39.9 ± 12.7)		$t_{(268)} = -2.67$	***
Education					(2) 1.99	.37
< High school	64	45.7	51	39.2		
≥ High school	69	49.3	68	52.3		
Unclear	7	5.0	11	8.5		
Occupation					(4) 25.3	**
Housewife	52	37.1	20	15.4		
Labor	8	5.7	11	8.5		
Office lady	10	7.1	7	5.4		
Self-employed	7	5.0	1	.8		
Unemployed	63	45.0	91	70.0		
Job transfer experience					(2) 11.9	**
Yes	58	41.4	74	56.9		
No	60	42.9	30	23.1		
Unclear	22	15.7	26	20.0		
Cohabitation[b]						
No	24	17.1	24	18.5	.08	.78
Yes	116	82.9	106	81.5		
With parent(s)	45	32.1	39	30.0	.14	.70
With spouse	75	53.6	51	39.2	5.57	*
With child	71	50.7	54	41.5	2.28	.13
With siblings	18	12.9	20	15.4	.36	.55
With others	6	4.3	12	9.2	2.65	.10
Total MDOs	140	100.0	130	100.0		

[a] χ^2 test, $df = 1$, unless otherwise indicated in parentheses.
[b] Some lived with various relatives, so the sum of the individual entries exceeds the total number of subjects.
*$p < .05$; **$p < .01$.

both (42.9%). However, in the 1994 group, less women were married, and many were divorced or separated at the time of the alleged crime and hence had less opportunity of living with their spouses ($p < .05$). Compared with the 1980 group, the 1994 group had more experience of employment and job transfers (χ^2, $df = 11.9$, $p < .01$).

Alleged crimes are displayed in Table 3. Homicide, arson, and larceny comprised the majority of charges in both groups. As reported by other researchers,[7] homicide represented the most frequent charge. Two to three of every five crimes committed by female MDOs were homicides. It is notable that our sample showed the same tendency as the general

Table 3
Alleged Crimes Committed by Female MDOs

Index Offenses	1980 FMODs n	1980 FMODs %	1994 FMDOs n	1994 FMDOs %	χ^2	p
Homicide	74	52.9	58	44.6	1.83	0.18
Arson	28	20.0	18	13.8	1.81	0.18
Robbery	1	0.7	3	2.3	1.17	0.28
Injury to death	1	0.7	1	0.8	0.00	0.96
Bodily injury	8	5.7	7	5.4	0.01	0.91
Kidnap	0		2	1.5	2.17	0.14
Property damage	1	0.7	3	2.3	1.17	0.28
Larceny	13	9.3	25	19.2	5.51	*
Fraud	3	2.1	1	0.8	0.87	0.35
Drugs	4	2.9	6	4.7	0.58	0.44
Others	7	5.0	6	4.7	0.02	0.88
Total MDOs	140	100.0	130	100.0		

χ^2 test: $df = 1$. $^*p < .05$; $^{**}p < .01$.

female criminal population (i.e., less violence than 15 years ago; see Table 1). The number of female MDOs charged with homicide and arson declined from 1980 to 1994 (but not a significant difference (NS)), while larceny doubled ($p < .05$). The majority of female MDOs had no past record of criminal charges or convictions. Female MDOs in the 1994 group had committed more crimes during the preceding 10 years, particularly antiproperty crimes (χ^2 5.81, $p < .05$).

As shown in Table 4, the main targets of female violent crimes are immediate family members. This fact suggests the high level of stress often present in families. Consistent with previous reports,[7] children were victimized most frequently; violent acts with children as victims represented one-third of the violent crimes

Table 4
Victims of Violent Acts Committed by Female MDOs (1980 versus 1994, Japan)[a]

Victims	1980 FMDOs n	1980 FMDOs %	1994 FMDOs n	1994 FMDOs %	χ^2	p
Parent	10	7.1	12	9.2	0.39	0.53
Child	45	32.1	33	25.4	1.49	0.22
Spouse	12	8.6	10	7.7	0.07	0.79
Relatives	4	2.9	2	1.5	0.54	0.46
Acquaintance	8	5.7	6	4.6	0.17	0.68
Stranger	7	5.0	7	5.4	0.02	0.89
Total FMDOs	140	100.0	130	100.0		

[a] Multiple victims were recorded in some homicide cases, so the total number of entries exceeds the subject number.
χ^2 test: $df = 1$. $^*p < .05$; $^{**}p < .01$.

Table 5
Psychiatric Treatment Status of Female MDOs in Japan

Treatment	1980 FMDOs n	1980 FMDOs %	1994 FMDOs n	1994 FMDOs %
Inpatient	8	5.7	1	0.8
Outpatient	41	29.3	65	50.0
Stopped	33	23.6	18	13.8
Never treated	42	30.0	39	30.0
Unclear	16	11.4	7	5.4
Total MDOs	140	100.0	130	100.0

$\chi^2 = 18.58$, $df = 4$. $p < 0.001$.

committed in the 1980 group and one-fourth of those in the 1994 group (χ^2 1.49, NS).

A survey of psychiatric treatment status at the time of arrest indicated that about two-thirds of our subjects had had psychiatric treatment (see Table 5). Females in the 1994 group received significantly more out-patient and community mental health services than in the 1980 group ($p < .001$).

The order of diagnoses listed in Table 6 shows the diagnostic hierarchy applied. Partly because multiple-axis diagnosis has not been widely applied in Japan and, therefore, only one (the most severe) diagnosis was listed in the table, there were very few personality disorders shown. The diagnostic categories with the largest numbers of cases were schizophrenia and depressive disorder, in both groups, although these numbers were tending to decrease. This phenomenon reflected the general tendency in Japan, which has seen a decline in the number of people treated for schizophrenia since 1991. According to the official Japanese report, the number of inpatients diagnosed with schizophrenia was 213,156 in 1991 and 209,914 in 1993. This tendency is projected to continue.[25]

Legal variables are presented in Table 7. Given that less violent crimes were committed by the the 1994 group, it is not surprising that fewer female MDOs than before had been referred by prosecutors or judges to receive formal psychiatric assessments. As a result, more MDOs were processed and managed by prosecu-

Table 6
Diagnosis of Female MDOs According to DSM-III[a]

Diagnoses	1980 FMDOs n	1980 FMDOs %	1994 FMDOs n	1994 FMDOs %	χ^2	p
Schizophrenia	82	58.6	66	51.2	1.66	0.19
Depressive disorder	32	22.9	22	17.1	1.11	0.29
Epilepsy	3	2.1	2	1.6	0.01	0.39
Other psychoses	3	2.1	6	4.7	1.28	0.26
Mental retardation	7	5.0	8	6.2	0.02	0.89
Substance disorders	5	4.3	6	5.4	0.52	0.47
Personality disorders	0		3	2.3	3.27	0.07
Other disorders	8	5.7	17	13.1	4.35	*
Total MDOs	140	100.0	130	100.0		

[a] DSM-III Axis II diagnosis was not commonly applied in Japan.
χ^2 test: $df = 1$. *$p < .05$; **$p < .01$.

Table 7
Psychiatric Assessment and Legal Disposition of Female MDOs[a]

Legal Variables	1980 FMDOs n	1980 FMDOs %	1994 FMDOs n	1994 FMDOs %	χ^2	p
Psychiatric assessment						
No	35	25.0	37	28.5	0.41	0.52
Summary	70	50.0	68	52.3	0.41	0.70
Prosecution-referred	33	23.6	30	23.1	0.01	0.92
Court-referred	12	8.6	5	3.8	2.55	0.11
Disposition on charge					(5) 21.86	**
Not prosecuted						
Irresponsible	97	69.3	67	51.5		
Diminished responsibility	12	8.6	31	23.8		
Others	12	8.6	23	17.7		
Sentenced						
Not guilty	4	2.9	1	0.8		
Probation	8	5.7	6	4.6		
Prison	7	5.1	2	1.5		
Total FMDOs	140	100.0	130	100.0		

[a] Some cases were assessed more than once, so the total number of entries exceeds the subject number.
χ^2 test: $df = 1$, unless otherwise indicated in parentheses. *$p < .05$; **$p < .01$.

tors rather than by judges in the 1994 group, and the legal process was significantly simplified ($p < .01$). In addition, less females were assessed as criminally irresponsible or not guilty in the 1994 group, suggesting that legal disposition has not become more lenient recently.

Discussion

The data presented here are the largest and most comprehensive set of data available on female MDOs. This is the first report that compares the characteristics of female MDOs in two decades. Our data are similar to those found in studies on NGRI,[7] but might not be compatible with studies on the evaluation of fitness to stand trial.[4] It is interesting that the proportion of females in our study is 12.9 percent (270 of 2,091 subjects), which is the same as Pasewark reported.[7] The general findings of our research are consistent with previous studies on NGRI.[2, 7–10, 13]

The statistically significant changes in comparing the 1980 group to the 1994 group are in regard to age (1994 group is older), criminal trend (more larceny), lifestyle (more independent), mental health services received (more have been outpatients), and legal process (simplified). All of these findings reflect certain distinct characteristics of the social changes in Japan during the last two decades.

First, compared with the 1980 group, the 1994 group was significantly older (40 years versus 36 years on average). This finding is in accordance with the increasing proportion of the elderly in the Japanese population as a whole. The ratio of people over age 65 was 7 percent in 1970 and doubled to 14 percent in 1994.[25] Inpatients age 65 or older made up ap-

proximately 25 percent, which is double the ratio of that in the general Japanese population. Of inpatients with schizophrenia, the most common diagnosis under any age group, 68.6 percent were between the ages of 40 and 59.[26]

Second, our data suggest that the female MDOs show the same tendency as the general population of female offenders: an increase in the percentage of nonviolent crimes (see Tables 1 and 3). The increased availability of outpatient service and community care for mental patients have allowed more of them to live in the community, thereby increasing the opportunities to engage in minor crimes such as fraud (most frequently in food and transportation) and larceny. Self-service in markets and department stores also provides an opportunity for shoplifting. In addition, increases in divorces, separations, and unemployment has led to more mental patients wandering in the street, and thereby the opportunities to consume alcohol and street drugs have increased. The decrease in numbers of homicides could be attributed to the improvement in community mental health care, education, and protection of women so as to reduce postpartum depression and family stress, which used to be the main causes of filicide.[11] On the other hand, decreased cohabitation with spouses and children reduced the available targets of homicide.

Third, the legal process applied to the 1994 group was more simplified than in the 1980 group. One explanation may be the less violent nature of the crimes committed by the 1994 group of female MDOs. Daniel and Harris[13] pointed out that, for women, the alleged perpetration of a violent crime is in itself an important factor affecting the likelihood of forensic referral, beyond such factors as a positive psychiatric history, the court's legitimate doubts about defendant's mental status, and other legal rationales. The more serious the criminal charge, the more often formal psychiatric assessment is requested.[12] In addition, the effectiveness of summary assessment for treatment has had widespread application in Japan in recent years.[22] The results of legal dispositions shown in our data did not support the chivalry hypothesis of a more lenient treatment toward female MDOs in recent years.

Finally, the 1994 group used significantly more outpatient and community mental health services than the 1980 group. This is probably the most critical point, highlighting the impact of the social changes in the reform of mental health policy, particularly that of "deinstitutionalization."

Deinstitutionalization is a broad term generally used to describe a series of legal, treatment, and economic developments that have resulted in an increasing emphasis on community mental health treatment and a decreasing use of state mental hospitalizations over the past three decades.[27] The primary aims and motivations of deinstitutionalization are: (1) fewer hospital beds, leading to lower costs; (2) better community-based service; and (3) more human rights and freedom for patients. Despite these ideal goals for deinstitutionalization, empirical research has not yet proved their achievement.[28, 29] In the United States, the num-

ber of inpatient beds in state and county hospitals per 100,000 civilian population decreased 62 percent between 1972 and 1981. In some states, the number of occupied state hospital beds has decreased from 33.9 per 10,000 population to 4.1 per 10,000.[29] During the same period, the average length of stay declined from 421 days to 189 days. While states were reducing the number of mental hospitals, the local communities were not provided with enough funds to create the programs needed to meet the new demands placed on them.[30] Thus, unprepared patients were "dumped" into unprepared communities, former mental patients lived together in enclaves and created new "ghettos," and patients bounced in and out of the hospitals and jails (criminalization of mental patients), frequently through what has been described as a "revolving door."[31] At the same time, according to the U.S. Bureau of Census-1986, the number of inmates in prisons was 185,780 in 1955 and 481,393 in 1985, representing an increase of 10 percent a year (quoted by Palermo *et al.*).[32]

What then happened in Japan? Japanese culture emphasizes traditional values. Japanese people tend to modify Western values with traditional Japanese values rather than adopt them completely. The Protection Act (1900) was valid in Japan until the Mental Hygiene Act (1950) was promulgated in a social milieu in which the traditional family system in Japan was beginning to collapse.[25] While the trend of reducing numbers of hospital beds spread over North America and Europe, Japan was observing instead of following blindly. Thus, by contrast, the availability of psychiatric beds in Japan increased steadily: the average number of psychiatric beds per 10,000 population was 17 beds in 1965, 24.9 beds in 1975, 28 beds in 1985, and 29 beds in 1994. Hospitalization has been the main trend for over 50 decades. By the time Japan reformed its Mental Health Law in 1988, the idea of deinstitutionalization had received more criticism than praise. Having learned lessons from the United States, the Japanese Ministry of Health and Welfare did not call for a reducion in the number of hospital beds in the new Mental Health Law.[33] Instead, emphasis was placed on respecting patients' rights, establishing voluntary hospitalization systems, and strengthening provisions for community-based care, especially in rehabilitation facilities and community care programs. Furthermore, the Amendment of the Mental Health Law in 1993 concerned the establishment of community care service for mentally ill patients and enhanced rehabilitation and community service. The number of clinics, day care centers, social rehabilitation facilities, and sheltered workshops increased rapidly. For example, 49 support houses, 52 welfare homes, 86 group homes, and 373 day/night care centers have been in operation under the private sector since the end of June 1994.[26] The use of outpatient facilities for treatment was encouraged. As a result, the number of inpatients, excluding those diagnosed with senile dementia, has gradually declined in the 1990s. The number of hospitals with psychiatric beds decreased to 1,666 by June 1993. The number of psychiatric beds declined from 361,982 in 1992 to 350,000

in 1994.[25] Meanwhile, the occupancy rate of inpatient beds showed a one percent decline yearly: 96.6 percent in 1991, 95.8 percent in 1992, and 94.8 percent in 1993. The average number of days of stay in mental hospitals also decreased.[25, 26]

Economic consideration was one of the main motivators of deinstitutionalization.[32] However, this had not been a problem in Japan for the last few decades. Political stability and economic development following World War II enabled Japan to finance the nation's health insurance system. The budget for national mental health was 90.4 billion yen in 1979, 64.7 billion yen in 1985, and 63.5 billion yen in the 1987.[25] Currently, there are about 350,000 psychiatric beds (accounting for 22% of the total hospital beds) in Japan, ranging from 16.0 to 57.5 per 100,000 population in 47 prefectures, of which only 10 percent are located in national and public hospitals.[25, 26] There are 1,200 private sector mental hospitals, each responsible for every 100,000 people throughout Japan, which provide widespread community mental health care.[25]

In Canada, the funding situation and its effect illustrate that good community mental health care is expensive.[34] The Canadian government's support for psychiatric programs has been increasing steadily over the years. The average government inpatient grant per institution was $5,879,540 in 1962 and $13,769,260 in 1981, even with inflation taken into account. It is concluded that the deinstitutionalization movement in Canada may not be as great a failure as it appears to have been in the United States because of the Canadian adherence to the principle of universal access to health care through their Medicare systems. Outpatient care and private care by psychiatric and community services have been made available in Canada and are being used.[34] Obviously, adequate planning, coordination, and funding are imperative for successful deinstitutionalization to be accopmlished.

Japanese mental hospitals are criticized from time to time by Western countries for not fully upholding patients' rights. However, community service *per se* is not necessarily more respectful of individual liberty. If the patient is merely moved from a ward in an isolated state hospital to a separate building in the community, little has been accomplished by way of increasing that patient's freedom. Gralnick[35] cited increasing numbers of chronic, homeless, and neglected mentally ill people in the United States as evidence of the failure of deinstitutionalization and community care to live up to their promise to uphold patients' rights. Several researchers have indicated that the phenomenon of criminalization, the process of responding to the nondangerous mentally ill through the criminal justice system rather than through the mental health system, resulted from deinstitutionalization.[28, 29, 36–38] Harry and Steadman[38] compared the arrest rates for groups of mental patients with that of the general population in Missouri and found that the arrest rate for inpatients in the first postadmission year increased from .94 times that of the general population rate for 1975 to 1.96 times that of the general population rate for 1983. The nondangerous mentally ill, who histori-

cally have been civilly committed, are now being arrested for various offenses because inpatient treatment has been limited by available beds, and communities have growing numbers of mentally ill who do not meet admission criteria and who may be denied community treatment due to lack of available programs.[27] Mental patients may also be at risk of decompensating to the point where their behavior does in fact become criminal. Furthermore, the deteriorating condition of the mentally ill may increase their risk of victimization as well. It would indeed be ironic if deinstitutionalization, designed to prevent involuntary hospitalizations, inadvertently resulted in some of the mentally ill being subjected to a more repressive form of hospitalization.[27]

There is no clear general answer as to the superiority of "hospital care" versus "community care".[39] The premise of the community mental health movement—that hospital patients could be treated more effectively and humanely in local programs with an outpatient emphasis—has been challenged repeatedly.[37] The extent that services are available and the way that services are delivered are more important than where these services are provided. Gralnick[35] argues that the hospitalization—early, thorough, and extended—must play a basic role in the care of the mentally ill. In general, Japanese mental hospitals have successfully provided better service and more patients' rights. For example, there were a total of 343,126 inpatients and the rate of utilization of beds was 94.7 percent in June 1994. Compulsory admission was 1.9 percent, involuntary admission 31.3 percent, voluntary admission 64.3 percent, and other types 2.6 percent. The average number of days spent in hospital by newly discharged patients ranged between 60 and 90 days.[25] The Japanese Association of Psychiatric Hospitals declared that psychiatrists have tried to refine the practice of psychiatry in Japan based on the wisdom of the medical branch and a full awareness of human rights, while at the same time making it suitable for the Japanese mentality, culture, and tradition.[26]

It is too early to conclude that Japan has been successful in dealing with the issue of deinstitutionalization. However, one outstanding evidence is that, contrary to the United States, Japan has successfully controlled the crime rate during the period of deinstitutionalization. The obvious comparison in crime rates in the during the same period leads to the question of what differences between the two countries produced this discrepancy. Can this simply be accounted for by the criminalization of mentally patients in the United States? Should this be attributed partly to the different styles, steps, and scales of deinstitutionalization between these two countries? Our study does not allow us to answer these questions.

Needless to say, the cultural differences between the United States and Japan are fundamental. Basically, the United States is characterized by a multiracial, multicultural, and multivalue society, while Japan is a uniform nationality holding relatively identical values. Whereas Americans often claim independent and personal rights, the Japanese emphasize conformity to group ideas and

values.[15] The traditional ideas of familial responsibility, deference to authority, harmony, and sacrifice of individual interests for group interests still prevail. Because of close attachments to such social institutions as the family, school, and company, the Japanese feel that the best interests of the individual are served by conformity to the groups to which one may belong rather than by striking out on one's own. Japanese people identify strongly with one another, feel a sense of mutual interest, share common moral beliefs and common perceptions of their world. The Japanese may feel ashamed if their behaviors are deviant or violate the law. Besides, the majority of Japanese people belong to the middle class, which influences people's expectations and tends to minimize the extent of relative deprivation and the amount of crime in a society. Consequently, Japan has successfully industrialized while also retaining institutions that provide effective informal control of deviant behavior.[15]

Although many changes clearly coincide with the deinstitutionalization process, significant correlations between the changes in defendant characteristics and the rate of deinstitutionalization have not yet been established.[27] Only longitudinal prospective cross-cultural research on both the general population and MDOs could answer these questions.

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